Attachment E-1. Data Summary Tables

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Abercrombie, R., E., Brune, J., N.,	1994	Evidence for a constant b-value above magnitude 0 in the southern San Andreas, San Jacinto and San Miguel fault zones, and at the Long Valley caldera, California	Geophys. Res. Let.	An analysis of microseismicity indicates that the San Andreas fault and San Jacinto fault have similar b-values to those predicted by extrapolating seismicity from higher magnitudes.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Abrahamson, N., A.,	2000	State of the practice of seismic hazard evaluation	GeoEng Melbourne AU	Essentially a two-part paper that outlines many of the common misconceptions and bad practices of those performing and or utilizing PSHA work and also outlines state of the art methods for high-end SHA work.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Abrahamson, N., A.,	2000	Effects of rupture directivity on probabilistic seismic hazard analysis	Proc. 6th Int. Conf. Seis. Zon.	Paper shows the effect of rupture directivity on PSHA and concludes that directivity should be included in hazard analysis as a source of variability of the long period ground motion. Provides support for considering directivity and includes potentially important calculation and equations for PSHA work.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Abrahamson, N., A., Blanpied, M.,	2003	Appendix G: Moment-Balancing the Fault Rupture Models (USGS OFR 03-214)	U.S. Geol. Surv. Open File Rpt.	This appendix of the WG02 OFR-03-214 presents the moment-balancing method used to handle the issue of rate determination for multiple, overlapping rupture sources. This includes computing the mean rate of occurrence of earthquakes produced by every rupture source, the relative rates for each rupture source, and adjusting the scenario frequencies to balance moment rate. The authors comment on the method and state that future efforts at moment balancing perhaps should address the rupture-stopping potential of segmentation points rather than relative scenario frequency. This method may be useful in developing the relative rates of fault rupture sources in the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Abrahamson, N., A.,	2006	SEISMIC HAZARD ASSESSMENT: PROBLEMS WITH CURRENT PRACTICE AND FUTURE DEVELOPMENTS	1st Europ. Conf. Eq. Eng. Seis.	This extended abstract compiles a number of practical issues with PSHA as identified by the author. The author first describes concepts that can often be misunderstood in PSHA, then continues to identify various problems in current practice including: exclusion/truncation of ground motion variability/uncertainty; improvements to deaggregation bin selection; more common use of UHS; misconceptions or misuse of epistemic uncertainty in logic trees; smoothed seismicity; Mmin in background sources. Finally, the author concludes with various paths forward to help address these potential issues. The concepts could be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Abrahamson, N., A., Silva, W.,	2008	Summary of the Abrahamson & Silva NGA ground-motion relations	Earthq. Spectra	Provides updated NGA ground motion model that is parameterized by average shear-wave velocity instead of "generic site categories" such as soil and rock. Depth to top-of-rupture is also considered. Article also provides recommendations regarding the applicability of the model. The updated NGA model in this article may be useful in PSHA work.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☑	Abrahamson, N., A.,	2011	Diablo Canyon LTSP Hazard Update: Introduction and Project Objectives	SSC Workshop	In this Kickoff Workshop presentation, Abrahamson provided introductions and review of background, discussion of the project plan, and reviewed hazard sensitivities. The hazard sensitivities shown in this presentation provided an initial assessment of which faults in the DCPP area contribute to hazard.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Abrahamson, N., A.,	2014	WAACY Magnitude PDF Model (Wooddell, Abrahamson, Acevedo-Cabrera, and Youngs)	SSC Workshop	In this SSHAC SSC Workshop 3 presentation, the WAACY magnitude PDF model is presented as a simpler way of addressing the larger magnitudes resulting from linking rupture segments. Steps to building this magnitude PDF include: selecting a displacement as a function of magnitude model; assuming a magnitude PDF (tail model); computing the distribution of slip at a point; computing the CV of the "observed" slip at a point; and rejecting or allowing a model based on if it falls within the range from Hecker et al. (2013. This model was considered as an alternative to the exponential, simplified maximum magnitude, and characteristic magnitude PDF models.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Adeli, H.,	1982	The Sirch (Kerman, Iran) earthquake of 28 July 1981-a field investigation	Bull. Seis. Soc. Am.	Paper describes the location and ground motion effects of the July 1981 Sirch Iran earthquake. Provides a brief description of earthquake timing and location, and places it within context of the regional strike-slip system with mention of other 20th-century damaging earthquakes along this transform boundary. The majority of the paper describes damage to buildings and infrastructure, casualties, and groundwater phenomena related to strong ground shaking.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Akçiz, S., O., Ludwig, L., G., Arrowsmith, J., R.,	2009	Revised dates of large earthquakes along the Carrizo section of the San Andreas Fault, California, since A.D. 1310 ± 30	J. Geophys. Res.	In order to better constrain the age of the last five earthquakes on the Carrizo section of the SAF, the authors dated 28 organic samples from the Bidart Fan site and used Bayesian statistics to decrease age uncertainties. These data showed the penultimate earthquake in this section of the SAF occurred A.D. 1640 at the earliest, with the three earlier earthquakes occurring at A.D. 1540-1630, A.D. 1360-1425, and A.D. 1280-1340, which suggests an average recurrence interval of 137 ± 44 years since A.D. 1310 ± 30. The authors caution, though, that more data is needed to determine if this 137 year mean average represents a short-term or long-term recurrence rate.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Akçiz, S., O., Ludwig, L., G., Arrowsmith, J., R.,	2010	Century-long average time intervals between earthquake ruptures of the San Andreas fault in the Carrizo Plain, California	Geology	This paper presents paleoseismic results from a recently developed site on the San Andreas fault at Bidart fan. Results indicate a high variability in recurrence intervals at that site at 88 +/- 41 years. The authors note that the interval from this site is significant smaller than the 200+ year interval from other sites on the S. San Andrea fault. Finally, they argue that earthquakes on the S. San Andreas may not always behave characteristically. Results of this paper have potential implications for characterization of the S. San Andreas fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Aki, K., Richards, P., G.,	1980	Quantitative Seismology: Theory and Methods, Vol. 1	W.H. Freeman and Co.	This book describes the basic elements of modern (up through 1980) seismology. Chapters include: Basic theorems in dynamic elasticity, representation of seismic sources, elastic waves, plane waves, reflection and refraction of spherical waves, surface waves, free oscillations, body waves, and principles of seismometry. This book was used to define styles of fault in the SSC model based on rake.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Aki, K.,	1989	Geometric features of a fault zone related to the nucleation and termination of an earthquake rupture	U.S. Geol. Surv. Open File Rpt.	Work in this paper explores the nucleation and termination points of earthquake surface ruptures. The authors found the majority of nucleation points is associated with straight fault sections (less than 5 deg bend), and termination points with significant bends (10 deg or greater) or branches.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Al Atik, L., Abrahamson, N., A., Bommer, J., J.,	2010	The variability of ground-motion predictions models and its components	Seis. Res. Let.	This study identifies, compiles and compares from different studies sources of randomness in GMPs (listed in Table 1), noting that it can accounted for with epistemic uncertainty, and with better data, removed. The author argues that unless these data are available, epistemic uncertainty needs to be accounted for in the logic tree. Little to no information here is useful for the DCPP SSC, but would be useful in GMC studies.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Allen, C., R., Zhuoli, L., Hong, Q.,	1989	Segmentation and recent rupture history of the Xianshuihe fault, southwestern China	U.S. Geol. Surv. Open File Rpt.	Due to its exposure and number of historic large earthquakes with documented surface ruptures, the authors focus on segmentation of the Xianshuihe fault in southwestern China. They describe historic events and state that the historic record suggests that shorter rupture length characteristic earthquakes appear to have occurred rather than a single large earthquake rupturing the entire 220 km long fault section that otherwise appears continuous. Additionally, the authors note evidence for creep along several (but not all) sections of the fault, and note the spatial and temporal discontinuities in creep rates may be indicative of segmentation. This article is of little direct use to the DCPP SSC except that some segmentation concepts could be applied to analogous faults; however, segmentation concepts are more thoroughly described in other papers.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Allmendinger, R., W., Zapata, T., Manceda, R.,	2004	Trishear kinematic modeling of structures, with examples from the Neuquén Basin, Argentina	Am. Assoc. Petrol. Geol.	In this study, the previously developed trishear model for fault propagation folds is modified to allow for more complexity. Figures 5 and 6 illustrate the primary conclusion, that fold shape in their model is most sensitive to the propagation-to-slip ratio, while other parameters, such as trishear angle and slip, have smaller effects. Figure 12 provides a direct comparison of their models results with folding in Argentina. Little here is of direct use to the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Ambraseys, N., N., Jackson, J.,	1998	Faulting associated with historical and recent earthquakes in the Eastern Mediterranean region	Geophys. Jour. Intl.	This paper compiles surface rupture data for 150 pre- and post-1900 earthquakes. From these data, the authors develop surface-wave magnitude scaling regressions for rupture length and displacement (eq. 2-7). They also construct a regression for the fault length-moment magnitude (Mw) regression with the assumption that depth = 15 km on a vertical strike-slip fault (eq. 11). Aside from the Mw-L relationship, no separation of strike slip, normal, or reverse faults is considered. Figure 3 shows a plot of the data. The regressions in this paper, while built from a smaller catalog than others (e.g., WC95), could be useful for the DCPP SSC and merit review.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	AMEC Geomatrix, Inc.,	2011	Draft Summary of Southwestern Boundary Zone Preliminary Geomorphic Studies and Subsurface Data Compilation	Unpub. Tech. Rpt.	This consulting report completed for PG&E included a compilation of previous fault mapping and trench results, lineament analyses, topographic profiles, terrace mapping and analyses, and analysis and review of borehole and cross section data. Results included in this report are described as preliminary. A new lineament map is included with figures. The report suggests that there is no Quaternary uplift rate change across the Edna-Newsome Ridge subblock, and an uplift rate gradient in the Irish Hills subblock (higher rates to the north), in slight contradiction to earlier work by Lettis and Hall, 1994. A number of marine terraces were reevaluated for elevation and correlation in the Southwest Boundary Zone and Irish Hills, and some tectonic implications are summarized. Estimates of total offset across the Southwest Boundary zone are made (400 m), as well as a slip rate estimate for the Wilmar Ave fault (0.38 mm/yr lateral); interactions and styles of the Oceano, Wilmar, and Los Berros faults are considered. This paper contains abundant useful data for DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	AMEC,	2012	Compilation of Geologic Maps and GIS Databases for the Irish Hills and Surrounding Areas, Diablo Canyon Power Plant, LTSP Update	Unpub. Tech. Rpt.	This report presents methods to compile geologic maps and GIS databases for the Irish Hills and preliminary results and recommendations for future work. The GIS files were incorporated into the PG&E LTSP GIS database and helped update the original mapping and compilation of Quaternary faults presented in the 1988 LTSP.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	AMEC,	2012	Preliminary Reevaluation of Emergent Shoreline Angles, San Luis Range, Diablo Canyon Power Plant, San Luis Obispo, California,	Unpub. Letter Rpt.	This report presents a reevaluation of emergent shoreline elevations in the San Luis Range near the DCPP based on coastal LiDAR data acquired by PG&E in 2010. Terrace correlations are proposed across the Wilmar Avenue fault and San Luis Bay fault zone.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Anastasakis, G., Piper, D., J.,	2013	The changing architecture of sea-level lowstand deposits across the Mid-Pleistocene Transition: South Evoikos Gulf, Greece	Quat. Sci. Rev.	This article presents seismic profiles from the South Evoikos Gulf in the Aegean Sea, Greece, that show a progradational sequence of lowstand deposits associated with the Mid-Pleistocene Transition. These deposits were recognized to range from MIS 2 to MIS 16, and possibly as old as MIS 38. This reference is applicable to the development of age constraints on channels buried beneath the continental shelf in Estero Bay and near Point Sal.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Ancheta, T., D., Darragh, R., B., Stewart, J., P.,	2013	PEER NGA-West2 Database (PEER Report 2013, 3)	c Earthquake Engineering Research (	This report presents the updated NGA-West2 PEER NGA ground-motion database that includes several recent large magnitude events. In the SSC Report, the earthquake dataset presented in this report was compared to the Hanks and Bakun (2008) dataset and to several magnitude-area relations for reverse and reverse-oblique-slip.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Anderson, J., G.,	1979	Estimating the seismicity from geological structure for seismic-risk studies	Bull. Seis. Soc. Am.	Using slip rates determined from geological data in southern California, Anderson estimates geological seismicity (defined as seismicity estimated from geological structures). Additionally, geological seismicity for the Basin and Range is estimated from strain rates. These estimates are compared to historical seismicity and are found to be in good agreement. Anderson concludes that these consistencies suggest geological seismicity can be used to approximate secular seismicity in small regions where the historical record is lacking.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Anderson, J., G., Luco, J., E.,	1983	Consequences of Slip Rate Constraints on Earthquake Occurrence Relations	Bull. Seis. Soc. Am.	This paper describes an assessment of earthquake occurrence relations near Mmax. These relations relate M and return period to magnitude of reference, b value and Mmax. The authors find that slip rate helps constrain the parameters that characterize the relation. Most of the concepts here have benefited from greater understanding and have been superseded.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Anderson, J., G., Wesnousky, S., G., Stirling, M.,	1996	Earthquake Size as a Function of Fault Slip Rate	Bull. Seis. Soc. Am.	The authors perform a least squares log-linear regression of 43 earthquakes on faults with know slip rates using a Monte Carlo approach and find a reduction in misfit between predicted and observed values of Mw (relative to regressions based on L alone). The Monte Carlo simulations showed virtually no correlation between rupture length and slip rate. The authors conclude that faults with slower slip rates tend to fail in earthquakes with higher static stress drop and that fault slip rate should be considered when estimating potential earthquake size on active faults. There are several limitations and uncertainties (such as variation in slip rate through time relative to recurrence interval) associated with this regression as well as sometimes poorly constrained slip rates on faults in the DCPP vicinity that make applicability of this regression limited.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Anderson, J., G., Brune, J., N.,	1999	Probabilistic seismic hazard analysis without the ergodic assumption	Seis. Res. Let.	In this paper, the authors argue that because GMPEs capture uncertainty with regression of observed values only, PSHAs incorporate an ergodic assumption because they incorporate spatial, but not temporal variability. Thus, hazard maps tend to overestimate ground motion and suggest that, based on examination of precariously balanced rocks, aleatory uncertainty is commonly treated incorrectly as epistemic uncertainty. Concepts here may be applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Anderson, R., Stirling, M.,	2011	Preliminary information on the M 7.1 September 4, 2010 Darfield Canterbury earthquake and Mw 6.3 February 22, 2011 Christchurch aftershock, New Zealand	AEG News	This article provides a broad summary of strong ground shaking effects, estimated losses, landslides, liquefaction, recovery operations, and descriptions of the geology of the region and Greendale fault. Articles published subsequently and cite in this database provide more information that may be useful in the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Ando, R., Shaw, B., E., Scholz, C., H.,	2009	Short Note: Quantifying Natural Fault Geometry: Statistics of Splay Fault Angles	Bull. Seis. Soc. Am.	Authors demonstrate that dextral strike slip faults in California exhibit common plan-view geometries and that these geometries persist across a suite of scales. They find that at intersections with fault splays, primary faults tend to be aligned (i.e. 180°), while splays tend to verge between 12° and 18° depending on scale. Across all scales, the median is 17°, regardless of left or right branching direction, which seems unexpected considering that only dextral faults comprise the sample. Paper is entirely observational, with no explicit model application. For example, splay angles are not presented with respect to likelihood of multiple fault rupture.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Andrews, D., J.,	1989	Mechanics of fault junctions	U.S. Geol. Surv. Open File Rpt.	This paper presents results from a simple model of sharp fault bends. The author concludes that sharp bends must be part of a triple junction, geometric complexity increases and fault geometry change at each slip event, and that at some point (50 events in the model case), enough energy is absorbed at the junction that ruptures terminate there.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Antonelis, K., Johnson, D., Miller, M.,	1999	GPS determination of current Pacific–North American plate motion	Geology	This brief paper presents geodetically determined (campaign style) NA-Pacific Plate motion at the latitude of about Baja California. Four stations are considered, three of which lie on the North American Plate, to determine a 50.4 +/- 3.4 mm/yr relative velocity with an azimuth of N59.0W +/- 2.7 degrees. These results may have implications for characterizing slip on the S. San Andreas fault and fault zone.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Aochi, H., Madariaga, R., Fukuyama, E.,	2002	Effect of normal stress during rupture propagation along nonplanar faults	J. Geophys. Res.	This paper describes a numerical dynamic rupture propagation model on three-forked fault. The authors find that the compressional branch is often preferred, and rupture on that branch depends on the direction of the primary fault plane, peak fault strength and initial stress. The authors conclude that rupture propagation is as dependent on fault continuity and discontinuity as it is to fault structure and orientation. Concepts from this paper may be applicable to the DCCP SSC when considering fault branching/linkage.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Argus, D., F., Gordon, R., G.,	2001	Present tectonic motion across the Coast Ranges and San Andreas fault system in central California	Geol. Soc. Am. Bull.	Comprehensive paper calculating regional plate motion vectors between the Pacific plate, North American plate, and Sierran microplate. The SAF and coast range faults combine to accommodate 39 mm/yr of SAF-parallel plate motion. Up to 3.3 mm/yr of SAF-normal, dominantly convergent, plate motion is accommodated in the coast ranges. The pacific plate vector is rotated several degrees relative the linear SAF trace within the coast ranges, supporting a minor component of SAF-normal convergence.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Argus, D., F., Gordon, R., G., Heflin, M., B.,	2010	The angular velocities of the plates and the velocity of Earth's centre from space geodesy	Geophys. Jour. Intl.	This study presents new global GPS velocities with the primary update being the use of a new center of mass for the Earth. Results are significantly different from previous studies (up to about 3 mm/yr). California sites are listed in Table 4c and North American velocities shown in Figure 5b. Section 5.6.2 contains useful information for North American-Pacific Plate boundary velocities, including a 3.5 mm/yr GPS-derived slip rate for the San Gregorio-Hosgri fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Aron, A., Hardebeck, J., L.,	2008	Seismicity rate changes along the Central California Coast due to Coulomb stress changes from the 2003 M6.5 San Simeon and 2004 M6.0 Parkfield earthquakes	Bull. Seis. Soc. Am.	This paper uses seismicity rate changes and modeled Coulomb stress changes to develop a series of stress loading and unloading following the 2003 San Simeon earthquake. The San Simeon earthquake, the authors suggest, loaded the San Andreas, Hosgri, and Rinconada faults as well as faults within the southern Los Osos domain and resulted in increased rates of seismicity. The Parkfield earthquake was likely a response to loading, which subsequently unloaded other faults corresponding to a decrease in seismicity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Aster, R.,	2012	Expecting the Unexpected: Black Swans and Seismology	Seis. Res. Let.	Aster states that there are increasing unpredictable social effects associated with earthquakes, including (1) potentially more chaotic response to disruptive events, (2) expectations of near-immediate expert information yet inaccurate information is easily accessible, (3) dissatisfaction with governments and their competence, and (4) increased population/population density and the associated risk. Aster presents these social effects in the context of what he describes as surprising "Black Swan" events; Ellsworth (2012), however, states that while these events are rare, they are not necessarily surprising. This article should be considered with the Ellsworth (2012) SRL article in how to best represent the probability of large, rare earthquakes. However, this article is likely not directly useful in the logic tree.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Atkinson, G., M.,	2006	Single-station sigma	Bull. Seis. Soc. Am.	In this study, site corrected ground motion prediction equations are developed for a group of 21 sites in LA, as well as at each individual site. Results indicate that ground motion prediction equation sigma for a single station may be 90% of that for regional predictions for multiple sources, and for single sources may be 60%. The author concludes that more work is required to understand if this relationship holds outside of the limited dataset used. Little here would be of use to the DCPP SSC, but may be useful for the ground motion characterization.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Atkinson, G., M., Bommer, J., J., Abrahamson, N., A.,	2014	Alternative Approaches to Modeling Epistemic Uncertainty in Ground Motions in Probabilistic Seismic-Hazard Analysis	Seis. Res. Let.	This paper is a description of the typical methods for using ground motion prediction equations (GMPEs) in PSHA projects. It concludes that a mulitple-GMPE approach does not always satisfy the goal of describing the center, body, and range of defensible interpretations of the data.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Atwater, T.,	1970	Implications of plate tectonics for the Cenozoic tectonic evolution of western North America	Geol. Soc. Am. Bull.	Landmark paper utilizing the (at the time) rapidly evolving ideas of seafloor spreading and plate tectonics to understand western North America evolution.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Atwater, T., Stock, J.,	1998	Pacific-North America Plate Tectonics of the Neogene Southwestern United States: An Update	Int. Geol. Rev.	The authors update global plate circuit reconstruction using new information to refine North America-Pacific Plate interactions and relative movement from 33 Ma to present. Results indicate a that a point on the Pacific Plate near the Mendocino Triple Junction was displaced along an azimuth of ~N60°W, at a rate of ~33 mm/yr from 30 to 12 Ma the point; the rate increased to ~52 mm/yr with a similar azimuth from 12 Ma to ~8 Ma; the rate remain similar at ~52 mm/yr with an azimuth of N37° W from ~8 Ma to present. The authors develop locations, shapes, and sizes of the slab window and find a good spatiotemporal correlation with volcanism that initiated in the Mojave and continued north to about Sutter Buttes. They also find a strong correlation between oceanic and continental reconstructions and strain budgets. This paper contains significant useful data for the DCPP TI team.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Austin, J., A., Fulthorpe, C., S., Mountain, G., S.,	1996	Continental-margin Seismic Stratigraphy Assessing the Preservation Potential of Heterogeneous Geological Processes Operating on Continental Shelves and	Oceanography	This paper contains a description of the detailed stratigraphy imaged in seismic data in offshore California. This stratigraphy was linked to coastal transgression.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Aydin, A., Schultz, R., A.,	1989	The effect of fault interaction on the stability of echelon strike-slip faults	U.S. Geol. Surv. Open File Rpt.	This study measured a relatively large sample of separations and overlaps in en-echelon-stepping strike-slip faults. The authors find a relationship between these two parameters, and using a simple model note that the growth of overlap is impeded at a measurable distance.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bakun, W., H.,	1999	Seismic Activity of the San Francisco Bay Region	Bull. Seis. Soc. Am.	this work describes a possible frequency magnitude distribution for the San Francisco bay area.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Bakun, W., H.,	2000	Seismicity of California's North Coast	Bull. Seis. Soc. Am.	This paper points out seismic gap after 1906 in northern California.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Bakun, W., H.,	2003	Appendix B: The Seismogenic Scaling Factor, R (USGS OFR 03-214)	U.S. Geol. Surv. Open File Rpt.	This appendix describes the seismogenic scaling factor R which accounts for aseismic slip, where R = 0 indicates all plate motion slip rate is accounted for by aseismic slip and R = 1 indicates all plate motion slip rate is accounted for by earthquakes. Values previously determined by experts are updated through modeling of geodetic data and tabulated in this appendix. This method is not relevant to offshore faults due to a lack of geodetic data.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bakun, W., H.,	2006	Estimating locations and magnitudes of earthquakes in southern California and modified Mercalli intensities	Bull. Seis. Soc. Am.	Thirteen instrumented and well-documented moderate to large earthquakes are used to create a method of locating pre-instrumental earthquake epicenters using MMI values. The locations of 14 pre-1930 large earthquakes are located on southern California faults. Most notably, two large events are most likely associated with low slip-rate faults in the ECSZ.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Barall, M.,	2012	Data Transfer File Formats for Earthquake Simulators	Seis. Res. Let.	This paper explains what file formats are to be used in the Southern California Earthquake Center (SCEC) Earthquake Simulator Comparison Project, which has a goal of demonstrating earthquake simulator reliability. No information here is applicable the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Barka, A., A., Kadinsky-Cade, K.,	1989	Effects of restraining stepovers on earthquake rupture	U.S. Geol. Surv. Open File Rpt.	This study investigated the effects of restraining stepovers on earthquake ruptures. The authors find that stepovers less than 5-km-wide are shallow features that may arrest ruptures at the surface, or delay slip, but not at depth. Large stepovers, however, may terminate rupture, or have unique rupture characteristics despite not being independently seismogenic.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Barka, A., A.,	1996	Slip distribution along the North Anatolian fault associated with the large earthquakes of the period 1939 to 1967	Bull. Seis. Soc. Am.	Describes the east to west sequence of fault ruptures along the North Anatolian fault between 1939 and 1968. Outlines the location and slip distribution for each event, including descriptions of rupture boundaries. Notes the systematic westward decrease in coseismic and postseismic displacements and defines areas of where slip was less than surrounding areas, indicating strain release was incomplete and that additional earthquake could be possible before the initiation of the next rupture cycle.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Barnes, P., Sutherland, R., Delteil, J.,	2005	Strike-slip structure and sedimentary basins of the southern Alpine Fault, Fiordland, New Zealand	Geol. Soc. Am. Bull.	This paper uses bathymetry and seismic reflection to constrain the location and structure of the offshore segments of the Alpine fault in New Zealand. Together with data from previous paleoseismic studies, the authors posit possible earthquake scenarios on the fault based on step-overs, basin structures, and fault segmentation. Little here is of use to the DCPP SSC except to note that some segmentation concepts could be applied to analogous faults; however, segmentation concepts are more thoroughly described in other papers.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Barth, A., P., Wooden, J., L., Grove, M.,	2003	U-Pb zircon geochronology of rocks in the Salinas valley region of California: A reevaluation of the crustal structure and origin of the Salinian block	Geology	U-Pb zircon ages from three plutons in the Salinas Valley range in age from 88 to 82 Ma and Ar/Ar of micas from nearby schist indicate cooling ages of 72 to 68 Ma. Indicates schist was thrust under the Salinian Magmatic arc on a yet (2003) unrecognized thrust fault. Implies Salinian block originated as a klippe of basement rocks derived from the Mojave.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bayarsaryhan, C., Bayasgalan, A., Enhtuvshin, B.,	1996	1957 Gobi-Altay, Mongolia, earthquake as a prototype for southern California's most devastating earthquake	Geology	The authors compare the seismic setting of the Los Angeles area to the Gobi-Altay region of Mongolia.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Bayasgalan, A., Jackson, J., Ritz, J-F.,	1999	Field examples of strike-slip fault terminations in Mongolia and their tectonic significance	Tectonics	Manuscript explores the terminations of segments of large intra-continental strike slip faults, focused on major faults in Mongolia. This study is used as an analog to the outward-vergent geometry of the San Luis-Pismo Block fault geometry model. Specific application to thrusts that form in a regional strike-slip system.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	BCHydro,	2012	Dam Safety: Probabilistic Seismic Hazard Analysis (PSHA) Model, Volume 3: Ground Motion Characterization (GMC) Model (Engineering Report E658)	Unpub. Consult. Rpt.	This volume describes the GMC Model component of the PSHA model for the BC Hydro facility region (dam sites in British Columbia), including documentation of the evaluation, selection, and/or development of ground motion prediction models required for PSHA. This volume is more applicable to the DCPP GMC than SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Beal, C., H.,	1915	The Earthquake at Los Alamos, Santa Barbara County, California, January 11, 1915	Bull. Seis. Soc. Am.	Provides eyewitness accounts on damage, duration, timing, and noise of the 1915 Los Alamos earthquake. Discusses possible sources, direction, and duration. No probable surface fault rupture features were accounted for. Maximum Rossi-Forel intensity was measured at VIII near the town of Los Alamos. Also notes an earthquake in 1902 that almost completely destroyed the town of Los Alamos.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Beavan, J., Tregoning, P., Bevis, M.,	2002	Motion and rigidity of the Pacific Plate and implications for plate boundary deformation	J. Geophys. Res.	This study uses campaign and continuously recorded GPS data from the Pacific Plate and margins to assess motion and rigidity of the Pacific Plate. Velocities suggest that that the Pacific, North American, and Australian Plates are rigid, additional active faults may be located southwest of San Nicholas Island, and that plate motions appear to have been steady for the last 3 Myr. This paper may be useful for the DCPP SSC team.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Becker, T., W., Hardebeck, J., L., Anderson, G.,	2005	Constraints on fault slip rates of the southern California plate boundary from GPS velocity and stress inversions	Geophys. Jour. Intl.	This article presents a joint inversion of a decade of geodetic velocities (crustal block model) and stresses inverted from focal mechanisms to better constrain present-day slip/deformation partitioning of the SAF in southern California. The authors determined that stress orientations from the seismicity inversion are in agreement with the predicted stressing rate. They also present the distribution of slip on the southern SAF as determined by the joint inversion and the effects of varying locking depths and fault geometry on model misfit. In regions where geodetic data is insufficient to characterize deformation, stress from focal mechanism inversions can be used. Although this article focuses on the SAF in southern California, the inversion methods presented are similar to those proposed for the Stress/Strain Inversion Project which will better characterize slip/deformation partitioning in the DCPP vicinity.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Begnaud, M., L., McNally, K., C., Stakes, D., S.,	2000	A Crustal Velocity Model for Locating Earthquakes in Monterey Bay, California	Bull. Seis. Soc. Am.	This study uses data from new instrumentation to develop a crustal velocity model. Their model observes shallow sediments, sheared granite (Salinian block), continental crust, tectonic underplating, and upper mantle. Little to no data here are applicable to DCPP SSC since more site-specific velocity models have been developed.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Behl, R., J., Ingle, Jr,, J., C.,	1995	The Sisquoc Formation-Foxen Mudstone boundary in the Santa Maria Basin, California: sedimentary response to the new tectonic regime	U.S. Geol. Surv. Bull.	This study constrains the timing of deposition of the Foxen Mudstone to 3.8 to 3.4 Ma, and relates its deposition to anticlinal ridge and synclinal basin systems that developed near the end of the transition from a transform to transpressive tectonic regime. Angular unconformities, changes in sedimentation patterns, paleobathymetric changes, and accumulation of biosiliceous and dolomitic sediments mark the boundary between the Sisquoc Formation and overlying Foxen Mudstone in these synclinal troughs. The troughs were likely somewhat isolated and oxygen deprived, at least during their incipient phases, as demonstrated by the dark brown color, high organic carbon content, laminations, phosphate content, dolomite, and lack of megafauna of the basal Foxen Mudstone. Paper presents no data directly applicable to the SSC; tectonic implications of this paper only apply to early Pliocene regional tectonics.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bell, J., W., Caskey, S., J., Ramelli, A., R.,	2004	Pattern and rates of faulting in the Central Nevada Seismic Belt, and paleoseismic evidence for prior beltlike behavior	Bull. Seis. Soc. Am.	Manuscript investigates the paleoseismic record within the central Nevada seismic belt. Used as support for long recurrence intervals in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Ben-Avraham, Z., Zoback, M., D.,	1992	Transform-normal extension and asymmetric basins: An alternative to pull-apart models	Geology	This paper presents case studies of transform faults that are bound on one side by predominantly normal faults. This suggests that transtensional basins for at the same time as strike slip motion is taking place. One of the case studies described is at the southernmost San Andreas-Imperial-Cerro Prieto-Gulf of California transform margin.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Benioff, H.,	1967	Seismic Evaluation of the Diablo Canyon Site (Appendix to PSAR for Diablo Canyon units 1 and 2)	USNRC	This report presents a historical summary of earthquake activity and estimates of earthquake size expected to occur in the immediate vicinity of the reactor (which?) site. Although the Nacimiento fault is incorrectly described as the nearest seismically significant fault system to the site, the descriptions of historical seismicity in the site region and earthquake epicenter map may be relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Bennett, M., J., Wernicke, B., P., Niemi, N., A.,	2003	Contemporary strain rates in the northern Basin and Range province from GPS data	Tectonics	Using campaign and continuous GPS networks, the authors analyze the contemporary deformation and strain field and identify three relatively undeforming blocks within the Pacific-North America plate boundary zone (Colorado Plateau, central Great Basin, and the Sierra Nevada-Great Valley). Using the relative motion of these blocks and relative Pacific-North American plate motion, right lateral slip of 37 ± 2 mm/yr and 3 ± 2 mm/yr of orthogonal shortening on the SAF is implied. Additionally, two strain fields are identified: (1) E-W extension about N-striking basin-bounding normal faults in the eastern Basin and Range; and (2) NW-directed right lateral shear on a combination of NW-striking, right lateral strike-slip faults, NE-striking left lateral strike slip faults, and N-NE-striking normal and detachment faults. This article focuses on GPS stations and strain estimates north and east of the DCPP vicinity and therefore is not directly applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Bent, A., L., Helmberger, D., V.,	1991	Seismic Characteristics of Earthquakes Along the Offshore Extension of the Western Transverse Ranges, California	Bull. Seis. Soc. Am.	Uses short and long-period body waves for five moderate earthquakes off the south-central California coast to ascertain source parameters. All earthquakes yielded focal mechanisms consistent with known styles of faulting for each of their fault sources. Four earthquakes were characterized by reverse/thrust fault mechanisms and one by a strike-slip mechanism.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Ben-Zion, Y., Lyakhovsky, V.,	2006	Analysis of aftershocks in a lithospheric model with seismogenic zone governed by damage rheology	Geophys. Jour. Intl.	RefIDEvaluatorEvalDatePotentialUseHosgri FaultSan Simeon FaultLos Osos FaultWilmar Ave FaultSan Luis Bay Fault ZoneShoreline FaultSan Miguelito FaultOther FaultsNoneAll FaultsAbstractDescRelevCombo550YearAut01Aut02CriticalUsed in SSC Model?Blind RampDataEvalIDRegional Tectonic SettingSeismotectonic SettingFault Geometry ModelFault Slip RateRupture Source ModelRecurrence ModelOtherEarthquake Magnitude Model 1172Lewandowski, Nora2/2/20150000000000-1The authors study aftershock sequences following abrupt steps of strain in a rheologically layered lithosphere model (weak sedimentary layer over a seismogenic zone over a viscoelastic uppper mantle). Increasing the assumed geothermal gradient is found to decrease the depth of simulated earthquakes, and increasing the thickness of the weak sedimentary cover reduces the number of events and duration of the simulated aftershock sequences. Additionally, the maximum depth of aftershocks is initially high and decreases over time which is consistent with transient deepening of the brittle-ductile transition depth generated by the mainshock. This reference is relevant to constraining the depth of seismicity.Analysis of aftershocks in a lithospheric model with seismogenic zone governed by damage rheologyAbdrakhmatov0-10115600-100000	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Ben-Zion, Y., Rockwell, T., K., Shi, Z.,	2012	Reversed-polarity secondary deformation structures near fault stepovers	J. Appl. Mech.	Paper discusses work to model stress at rupture terminations; both abrupt and gradual. Abrupt terminations on relatively high slip rate faults often yield persistent geomorphic features inconsistent with overall stepover/fault bend geometries. For example, small pressures my be present adjacent to large stepovers, especially those that would typically arrest rupture (i.e. > 5 km wide). Stepovers to faults of lower slip rate generally do not produce these persistent anomalous features. Geologic examples from southern CA are given to support the modeling work.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Berberian, M., Jackson, J., Ghorashi, M.,	1984	Field and teleseismic observations of the 1981 Golbaf-Sirch earthquake in SE Iran	Geophys. J. R. astr. Soc.	Describes the style, location, and distribution of slip related to the 1981 earthquakes on the Gowk fault in SE Iran. The Gowk fault is part of a larger (>400 km long) dextral fault zone. Two earthquakes, one in June and one in July 1981, ruptured most of the length of the Gowk fault, excepting a 7 km gap between the southern June and northern July earthquakes. Rupture appears to have propagated away from the rupture gap during both events.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Berberian, M., Jackson, J., Fielding, E., J.,	2001	The 1998 March 14 Fandoqa earthquake (Mw 6.6) in Kerman province, southeast Iran: re-rupture of the 1981 Sirch earthquake fault, triggering of slip on	Geophys. Jour. Intl.	Describes the style, location, and distribution of slip related to the 1998 Fandoqa, Iran earthquake. Provides discussion of and slip distribution plot for the entire Gowk fault and relates the 1981 earthquakes and slip distribution to the 1998 event. Interestingly, the 1998 event re-ruptured portions of the July 1981 surface rupture, with considerably greater displacement during the second event.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Bernreuter, D., L., Savy, J., B., Mensing, R., W.,	1989	Seismic Hazard Characterization of 69 Nuclear Plant Sites East of the Rocky Mountains. Report NUREG/CR-5250	USNRC	This provides the results of the systematic NRC study of seismic hazard for the Eastern United States. These 8 volumes of results are independent of the similar EPRI studies. This report provides a database of seismicity and ground motion attenuation models, as well as a seismic hazard model for determining ground motion at 69 sites of nuclear power plants in the United States.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Berryman, K., Webb, T., Hill, N.,	2002	Seismic loads on dams, Waitaki system: Fault scaling and Sources (Section 3.0 Derivation of Fault Scaling Relations)	Inst. Geol. & Nuc. Sci. Ltd.	The authors use a dataset of strike-slip to reverse events on low slip rate faults (28 earthquakes) to derive a moment-duration relation through linear least-squares regressions. Figure 3.3 compares the authors' derived magnitude-length regression to that of Wells and Coppersmith (1994); for subsurface rupture lengths of ~2.5 km and greater, the Berryman et al. regression predicts larger magnitudes than Wells and Coppersmith.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Biasi, G., P., , Fumal, T., E.,	2002	Paleoseismic Event Dating and the Conditional Probability of Large Earthquakes on the Southern San Andreas Fault, California	Bull. Seis. Soc. Am.	This paper presents statistically refined earthquake event ages based on data from the Pallet Creek and Wrightwood trench sites on the San Andreas. These refined event ages are used to develop conditional probabilities and recurrence intervals, and correlate events between the two sites. The results of this paper have been incorporated into later seismic source models, such as UCERF-2 and -3.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Biasi, G., P., ,	2009	San Andreas Fault Rupture Scenarios from Multiple Paleoseismic Records: Stringing Pearls	Bull. Seis. Soc. Am.	This study models rupture scenarios on the southern San Andreas fault with paleoseismic data used as inputs. The authors find that south of Wrightwood, ruptures are less consistent in terms of length and timing, while north of Wrightwood, earthquakes tend to produce 1857-style events.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Biasi, G., P., Weldon, R., J., Dawson, T., E.,	2013	Appendix F: Distribution of Slip in Ruptures (USGS OFR 2013-1165)	U.S. Geol. Surv. Open File Rpt.	This appendix presents an analysis of the distribution of slip applied to ruptures in the Grand Inversion of UCERF3, which includes three possible model rupture shapes: boxcar, triangle, and empirical. The triangle distribution was found to poorly predict data and also required knowledge of the rupture direction, therefore making this rupture shape less preferable. The major drawbacks of the empirical approach are that the database of well-mapped ruptures is small and the variability among ruptures, which implies that statistically meaningful representations cannot be constructed; therefore, the ruptures must be normalized in order to develop an "averaged" dataset. In implementing the boxcar distribution, the shape must match the slip-rate gradients at fault ends and step-overs. The preferred choice is the "tapered-slip" (square-root-sine) model of Weldon et al. (2008). The analyses and results presented in this appendix may be useful in determining the earthquake rate model for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Biasi, G., P., Parsons, T., Weldon, R., J.,	2013	Appendix J: Fault-to-Fault Rupture Probabilities (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	The authors assess empirical fault-to-fault probabilities from several approaches: empirical observations (including steps in strike-slip faults, branching, and changes in slip sense), Coulomb static stress interactions (described in Appendix T of OFR2013-1165), slip vector divergence, distance measures, and rupture complexity (based on joint jumping distance and angle divergence penalties). Three sets of empirical data were analyzed: (1) strike-slip earthquakes and faults from Wesnousky (2008), (2) fault-to-fault measurements for the reverse and normal mechanism events from Wesnousky (2008), and (3) fault-to-fault data from UCERF3 Appendix F. Regarding slip vector divergence, slip vectors more than 65° apart on adjacent sections are considered impossible. The analyses and criteria for determining fault-to-fault probabilities presented in this appendix may help inform weighting decisions for fault-to-fault ruptures in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Biasi, G., P.,	2013	Appendix H—Maximum Likelihood Recurrence Intervals for California Paleoseismic Sites (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix presents a maximum likelihood method of estimating long-term mean recurrence intervals, rates, uncertainties, and maximum likelihood estimates for log-normal and exponential distributions for 32 paleoseismic California fault sites. The potential bias of missing longer-than-average intervals in a short paleoseismic record is discussed. The database presented in Appendix G of this report is the primary data source for this analysis; therefore, the results are not directly relevant to faults in the DCPP vicinity, though the methodology may be applicable.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bierman, P.,	2013	Terrace dating and basin scale erosion rates - Proof of Concept, San Luis Obispo area	Unpub. Letter Rpt.	This report provides a proof of concept of cosmogenic isotope dating of samples collected in San Luis Obispo, citing the presence of quartz that can be sufficiently purified for isotopic analysis in the San Luis Obispo area. Concentrations of 10Be in sediment resulted in reasonable estimates of erosion/uplift rates of 0.2-0.6 mm/yr for two drainage basins (See Canyon Islay Creek). Cosmogenic dating of samples from the Jespersen Road Cut indicate the terrace has been a stable geomorphic surface for 30-40 ky. Because this work was a proof of concept, it has limited applicability to the DCPP SSC; however, the erosion and assumed uplift rates for the two drainage basins may be relevant.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Bilham, R., King, G.,	1989	Slip distribution on oblique segments of the San Andreas fault, California: observations and theory	U.S. Geol. Surv. Open File Rpt.	The authors describe slip modeling of fault segments oriented parallel and oblique to the primary strain vector, using the San Andreas fault as their subject. They find that slip is reduced on segments oriented obliquely to the strain vector, with off fault deformation accommodating the deficit. These results also apply to observations of the San Andreas fault, in which the authors indicate that the creeping segment has the highest slip rate, and is also oriented most parallel to plate motion.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Bilham, R., Bodin, P.,	1992	Fault zone connectivity: slip rates on faults in the San Francisco Bay Area, California	Science	Fault slip rate is in part related to the length of the fault zone which it is part of and its structural relationship to other faults accommodating slip within the same fault zone. Bay area fault slip rates were modeled based on fault length and connectivity with other faults. Can use connectivity and length relations in conjunction with precision measurements on one fault to model poorly-constrained slip on others; a method which may be relevant in the SLO area.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bintanja, R., van de Wal, R., S.W.,	2008	North American ice-sheet dynamics and the onset of 100,000-year glacial cycles	Nature	Rather than utilizing benthic δ18O records to determine the onset of major glaciations, the authors use a modeling-based method to reconstruct mutually consistent 3 Myr time series of surface air temperature, ice-sheet volume, and sea level. The authors state that the marine isotope signal and amplitude increased over the past 3 Myr, with large changes ~2.7 Ma, coincident with the onset of Northern Hemisphere glaciation, and ~1 Ma (MPT). The MPT was marked the transition between a period of deglaciations of small ice sheets linearly following temperature (pre-MPT), to huge ice sheets actively involved in the rapid and nonlinear deglaciations ending 100-kyr glacials (post-MPT).	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Bird, P., Kagan, Y., Y.,	2004	Plate-tectonic analysis of shallow seismicity: apparent boundary width, beta, corner magnitude, coupled lithosphere thickness, and coupling in seven tectonic	Bull. Seis. Soc. Am.	Study uses a global 52-plate model to analyze seismicity for the seven major types of plate boundaries. Large shallow earthquakes are used to define corner magnitudes and model the coupled lithosphere thickness for the seven plate boundaries. Authors note that this was done with marginal success and that attempting this method for a single plate boundary would be impossible without significantly more data than currently exists for any individual plate boundary. Given its global scale, this paper probably has little application for detailed DCPP studies.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bird, P., Liu, Z.,	2007	Seismic Hazard Inferred from Tectonics: California	Seis. Res. Let.	The authors present a model ("SHIFT") for predicting long-term shallow seismicity for all fault geometries. They define the "shallow" seismicity domain as 0 to 70 km depth and state that poor depth resolution in teleseismic catalogs (rather than a flaw in their approach). They assume the average elastic strains are negligible relative to permanent strains and treat the long-term average strain rate as purely anelastic. When comparing their model to others submitted for the five-year RELM test, the authors concede that because they do not consider aftershocks, other models are superior in the short term, with SHIFT becoming more useful as the length of testing-time increases. The authors also present their model NeoKinema, which subsequently was included in UCERF3. However, there are several limitations and possible flaws in the models presented in this article that should be considered before applying them to the DCPP SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Bird, P.,	2009	Long-term fault slip rates, distributed deformation rates, and forecast of seismicity in the western United States from joint fitting of community geologic,	J. Geophys. Res.	In this study, the author uses primarily geodetic and stress direction data, combined with geologic input, to evaluate the long-term velocity field and slip rates of the western U.S., as well as produce a seismicity forecast. The author experiments with alternative data and rates to create a suite results based on acceptable community models. Results suggest that about one-third of deformation is taken up in off-fault processes, or on faults not included in the model. The author notes that 44% of fault slip rates in the model are consistent with published rates, while 48% have discrepancies <1 mm an 8% have larger discrepancies. The model described in this paper was used in UCERF3 and contains important information for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Bird, P., Kagan, Y., Y., Jackson, D., D.,	2009	Linear and Nonlinear Relations between Relative Plate Velocity and Seismicity	Bull. Seis. Soc. Am.	In the paper, the authors test whether earthquake rate is proportional to seismic moment rate, which is proportional to plate velocity. Results indicate that earthquake and seismic moment rates (i.e. plate velocity) have linear relationships in continental rifts and transform faults, but non-linear in all other plate boundary types; however, only marginal nonlinearity is observed in non-subduction plate boundaries. Temperature at the brittle-ductile transition, viscosity of subducted material and pore pressure at depth are given as possible mechanisms for nonlinearity. Concepts of this study may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Black, N., M., Jackson, D., D.,	2008	Short Note: Probability of Multifault Rupture	Bull. Seis. Soc. Am.	This paper uses empirical rupture data to develop models of multifault ruptures, and develops an estimate of magnitude-frequency distribution that accounts for the additional complexity. The authors note the abundance of faults within close proximity in California, observing that 20% of 846 possible multifault rupture pairs have a greater than 50% probability of rupturing together based on their model results. Model results also indicate that faults as far as 10 km apart have up to roughly 10% to 15% probability of rupturing together, contradicting a considerable amount of previous work that found ruptures do not transcend 4 km step-overs or jump faults spaced farther than 4 km apart (e.g., Wesnousky, 2006). The authors concede that their work is “arbitrary and simple,” and that their model is non-unique, but conclude that their results indicate that multifault ruptures will increase earthquake magnitudes, they can be expected, and deserve greater attention in hazard models.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Blaser, L., Kruger, F., Ohrnberger, M.,	2010	Scaling Relations of Earthquake Source Parameter Estimates with Special Focus on Subduction Environment	Bull. Seis. Soc. Am.	The authors present scaling relations for the relationships of rupture length/width and moment magnitude derived from linear least squares and orthogonal regressions with a focus on subduction zone environments. These relations are compared to those derived by Wells and Coppersmith (1994) and the authors find marginal differences in the normal and strike-slip faulting regressions but more substantial differences with the thrust faulting regressions. The dataset used consisted of 33% reverse, 14% normal, and 53% strike-slip faulting focal mechanisms (total of 283 earthquakes). This dataset is reduced, however, to see if excluding all events prior to 1964 had an effects on the regressions. The reduced dataset resulted in an increase in rupture area of large strike-slip events (relative to WC94; this observation is in direct contrast with the Hanks and Bakun bilinear model for large events). The authors also disagree with WC94's assessment that the scaling relations for different slip types are not statistically different at a 95% significance level; rather, one scaling relation should not be applied to all slip types.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Bleibinhaus, F., Hole, J., A., Ryberg, T.,	2007	Structure of the California Coast Ranges and San Andreas Fault at SAFOD from seismic waveform inversion and reflection imaging	J. Geophys. Res.	Details a seismic reflection and refraction survey across the SAF at Parkfield. Resolved top of Salinian granite, 2-km-wide SAF zone (including two addition local faults), the KJF/KGV contact at 2-4 km depth, horizontal midcrustal shear zones at 10 km depth, and the interpreted crust/mantle boundary at 25km. Discusses methods of waveform inversion and imaging. Useful in understanding deep regional bedrock structure near the SAF and methods for deep seismic imaging.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Blisniuk, K., Rockwell, T., K., Owen, L., A.,	2010	Late Quaternary slip rate gradient defined using high-resolution topography and ^{10}Be dating of offset landforms on the southern San Jacinto Fault zone, California	J. Geophys. Res.	This paper presents a late Quaternary slip rate study of the southern San Jacinto fault zone (SJFZ), in particular, the Clark fault at the southern end of the SJFZ. Using cosmogenic dating of offset channels and alluvial deposits, measured with the aid of high-resolution LiDAR data, the authors calculate slip rates on the Clark fault that decrease from ~8.9 ± 2.0 mm/yr in the north to ~1.5 ± 0.4 mm/yr in the south. This slip rate gradient is attributed to transfer of slip onto the Coyote Creek fault on the northern part of the Clark fault, and to distributed deformation (e.g., folding and horsetailing) on the southern part. The authors conclude that the slip rate of the southern SJFZ at ~10 to 14 mm/yr has been similar to, or less than that of the San Andreas fault since ~30 to 50 ka and that the SJFZ slip rate has decreased through time, or its initiation age is earlier than previously thought. Paper contains useful data for characterization of the SJFZ.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Bolt, B., A., Miller, R., D.,	1971	Seismicity of northern and central California 1965-1969	Bull. Seis. Soc. Am.	Summarizes seismicity in Northern and Central CA for the period 1965-1969. Discusses the spatial and temporal distribution of earthquake by region and overall temporal distribution of seismicity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Bommer, J., J.,	2012	Challenges of Building Logic Trees for Probabilistic Seismic Hazard Analysis	Earthq. Spectra	State of the practice paper summarizing uses, pitfalls, paths forward, and obstacles of PSHA methods and practice. While no data are presented that are directly applicable to the DCPP SSC, topics addressed in this paper may help sculpt best practices for SSHAC methods.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Bonner, J., L., Blackwell, D., D., Herrin, E., T.,	2003	Thermal Constraints on Earthquake Depths in California	Bull. Seis. Soc. Am.	Uses 140,000 well-located earthquakes and thermal data to quantify the relationship between heat flow and the base of the seismogenic zone. Data show a good correlation between heatflow and seismogenic depth with two distinct temperatures defining cutout depths in California; 450 C for areas of higher heat flow and 260 C for areas of lower heat flow (Mojave Block).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Boore, D., M., Lindh, A., G., McEvilly, T., V.,	1975	A search for travel-time changes associated with the Parkfield, California, earthquake of 1966	Bull. Seis. Soc. Am.	The authors studied P-wave travel times at a station near (0.5 km) the 1966 Parkfield earthquake and found no systematic variations for a time period of 8 months before and 13 months after the mainshock. This article provides little information directly applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Boore, D., M., Fletcher, J.,	1982	Preliminary study of selected aftershocks from digital acceleration and velocity recordings	U.S. Geol. Surv. Prof. Paper	This reference documents ~30 aftershocks of the Imperial earthquake mainshock and finds faulting is predominantly strike-slip on plane oriented ~45 degrees from north. Additionally, between the Brawley fault zone and Imperial fault, significant lateral variation in velocity structure is observed. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Boore, D., M., Atkinson, G., M.,	2008	Ground-motion predication equations for the average horizontal component of PGA, PGV, and 5%-damped PSA at spectral periods between 0.01 s and 10.0 s	Earthq. Spectra	The paper summarizes Boore and Atkinson (2007), a more detailed report submitted as part of PEER's NGA study. In an apparent departure from other NGA teams, all of which used the same strong ground-motion database, Boore and Atkinson used data from several additional sources. These additional data were used only for certain distance attenuation coefficients, but not the final regression. The authors noted a strong dependence on data from the 1999 Chi Chi earthquake, especially at periods over 5 s, and noting that at 10 s, the Chi Chi earthquake accounts for 64% of available data. Therefore, the Chi Chi earthquake tends to control PSA at periods greater than 5 s. Several guidelines are provided indicating that the equations should only be used for magnitude 5 to 8, distance less than 200 km, and VS30 180 to 1,300 m/s. The authors note only one potential improvement to their equations, which would be to account for regional distance attenuation, especially beyond 80 km, by including data from outside of central and southern California. Although a very important paper for western GrMPEs, this paper has little relevance for a seismic source characterization.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Boyle Engineering Corp.,	1991	Final Report: Ground Water Basin Evaluation (consulting report for the County of San Luis Obispo)	Unpub. Consult. Rpt.	This consulting report documents an evaluation of the San Luis Obispo ground water basin boundary, its associated hydrogeology, and to assess the movement of ground water within the basin. In the "Geologic Formations and Their Water-Bearing Properties" section of the report, the Squire Member of the Pismo Formation, the Paso Robles Formation, terrace deposits, and alluvium are described. The Edna fault is described as cutting the Squire Member as well as juxtaposing Paso Robles Formation with "rocks of the non-water bearing series". The report contains several geologic cross sections that include the Madonna fault and an unnamed fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Bradley, W., C., Griggs, G., B.,	1976	Form, genesis, and deformation of central California wave-cut platforms	Geol. Soc. Am. Bull.	Landmark paper describing the typical form and genesis of the Ben Lomond wave cut platforms north of Santa Cruz, CA. Discusses identification and measurement methods, common morphologies (roughness, gradients), suggests effect wave depths, and quantifies uplift rates. Critical paper in Helping establish morphologic constraints for identification of WCPs offshore of DCPP.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Brady, A., G., Perez, V., Mork, P., N.,	1982	Digitization and processing of main-shock ground-motion data from the U.S. Geological Survey accelerograph network	U.S. Geol. Surv. Prof. Paper	This report describes the digitization and processing of main-shock ground-motion data from the Imperial Valley earthquake. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Briggs, I., C.,	1974	Machine Contouring Using Minimum Curvature	Geophys. J. R. astr. Soc.	Describes methods for contouring geophysical data. Applies to the collection of such data in the Irish Hills.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

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☐	Brocher, T., M.,	2003	Detonation charge size versus coda magnitude relations in California and Nevada	Bull. Seis. Soc. Am.	A catalog of 322 detonation events were compiled for this study. From this catalog, a magnitude-charge size regression equation was developed, which validates an earlier regression by Khalturin et al. (1998) for coda magnitude 0.5 to 3.9 events.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Brown, N., N., Sibson, R., H.,	1989	Structural geology of the Ocotillo Badlands antidilational fault jog, southern California	U.S. Geol. Surv. Open File Rpt.	This article assesses the structure, style of deformation, and mechanism forming the shortening jog at the Ocotillo Badlands, the depth to which the fault irregularity persists, and the longevity of the structure relative to the slip history on the Coyote Creek fault. This article is of little direct use to the DCPP SSC except that some segmentation concepts could be applied to analogous faults; however, segmentation concepts are more thoroughly described in other papers.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Brune, J., N., Vernon III, F., L., Simons, R., S.,	1982	Strong-motion data recorded in Mexico during the main shock	U.S. Geol. Surv. Prof. Paper	This report presents strong-motion data from the Imperial Valley earthquake recorded at nine stations in the northern Baja California array and compares the performance of digital and conventional accelerographs. Strong motion data indicated displacement may have been nonuniform along the fault rupture. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Brune, J., N.,	2002	Precarious-Rock Constraints on Ground Motion from Historic and Recent Earthquakes in Southern California	Bull. Seis. Soc. Am.	This paper documents several locations of precariously balanced rocks. The author estimates approximate toppling acceleration for these rocks and incorporates observations from the rock-toppling Hector Mine earthquake, leading to acceleration estimates for several locations in southern California and Turkey. Little here is likely to be of use to the DCPP SSC since implications are for ground accelerations and attenuation relations, not source parameters.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Bruns, T., R., Cooper, A., K., Carlson, P., R.,	2003	Structure of the Submerged San Andreas and San Gregorio Fault Zones in the Gulf of the Farrallones off San Francisco, California, from High-Resolution Seismic-	U.S. Geol. Surv. Prof. Paper	This paper could have implications for fault linkage of the San Andreas and San Gregorio-Hosgri faults, and thereby for overall fault length and magnitude of these faults, although effect at the site is unclear/questionable. Paper presents discussions and interpretations of 550 km of seismic reflection data collected between Bolinas and Half Moon Bay (Gulf of the Farrallones) with the goal of examining potential continuation of faults across the Golden Gate. The authors map the Golden Gate, San Andreas and San Gregorio faults, which cross the gulf; the Potato Patch fault, which likely extends between the San Andreas and San Gregorio faults; and the San Gregorio structural zone, which is an offshore zone of mostly compression-related structures. The San Andreas and Potato Patch faults have a relatively significant normal component, bounding or interacting with a roughly 2-km-deep <1.8 Ma basin. Modern sediments in the northern part of the basin are not disturbed by these faults. Similarly, the San Gregorio fault bounds and interacts with the west margin of the basin, indicating a strong normal component. Slip is believed to transfer from the San Gregorio fault to the Golden Gate fault along structures beneath the basin. Slip on the San Andreas is also believed to transfer to the Golden Gate fault between Daly City to the south and the Golden Gate to the north. The Potato Patch is only one structure recognized that transfers slip, and the zone is posited to be far more complex.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Budnitz, R., J., Apostolakis, G., Boore, D., M.,	1997	Recommendations for Probabilistic Seismic Hazard Analysis: Guidance on Uncertainty and Use of Experts—Main Report (NUREG/CR-6372)	USNRC	This NUREG on SSHAC guidance covers site-specific and regional applications of PSHA at nuclear plants and other critical facilities in the eastern and western U.S. This reference was critical to the development of the SSC model in accordance with the SSHAC Level 3 process.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Burch, S., H., Durham, D., L.,	1970	Complete Bouguer gravity and general geology of the Bradley, San Miguel, Adelaida, and Paso Robles quadrangles, California	U.S. Geol. Surv. Prof. Paper	Gravity and crude geologic map for four 30x30' quads near the southern Salinas Valley. The regional gravity field yields insights into: The Hames valley low (10-15,000' deep basin), San Ardo Oil Field high with shallow basement, the Vinyard Canyon low (10,000' deep basin), shallow basement in the Cholame Hills, and the Indian Valley fault (Miocene).	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Burch, S., H.,	1971	Complete Bouguer gravity and general geology of the Cape San Martin, Bryson, Piedras Blancas, and San Simeon quadrangles, California	U.S. Geol. Surv. Prof. Paper	Gravity and crude geologic map for four 30x30' quads on the central CA coast. The regional gravity field yields insights into: ultramafic bodies at more local scales, a regional decrease in gravity coastward which is likely reflective of deep continental margin structure, locations of deep basin fill, and a fault trending NW through the Bryson quad (Rinconada fault) . Gravity map does not include offshore region.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Burford, R., O., Harsh, P., W.,	1980	Slip on the San Andreas fault in central California from alinement array surveys	Bull. Seis. Soc. Am.	Although interesting and somewhat corroborative with other contemporary slip rate studies, this paper has been superseded by a number of more recent studies. This study presents results from 25 monument alignment surveys set up across the San Andreas fault zone along a 193 km reach from Watsonville in the north, to Cholame in the south (Watsonville-Cholame segment). Timespans of first and last measurements at each monument alignment vary from 2 to 13 years. The monument alignments, arranged perpendicular to the local fault strike, ranged from 32 to 223 m in length, designed to capture the majority of fault-related creep or deformation. Slip rates determined from the surveys range from 0.8 to 33.3 mm/yr, with the highest rates focused on the center of the study reach. Slip rates decreased rapidly toward the ends of the study reach, where the 1906 and 1857 earthquakes ruptured historically. Rates decrease over a longer distance to the north than south, which the authors relate to a higher rate of moderate seismicity in the north. The south, on the other hand, is characterized by a lower rate of seismicity, but larger events and, thus, greater stress accumulation and less creep.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Burger, R., L., Fulthorpe, C., S., Austin, J., A.,	2002	Lower Pleistocene to present structural deformation and sequence stratigraphy of the continental shelf, offshore Eel River Basin, northern California.	Marine Geol.	Using multi-channel seismic data collected in the southern portion of the offshore Eel River Basin, the authors studied sequence development on an actively deforming margin that has high sedimentation rates and well-formed seismic stratigraphic geometries. Two types of unconformities defining shelf sequences were mapped: smooth surfaces mappable across most of the shelf, and irregular, incised surfaces mappable over limited distances (< ~5 km). A sequence stratigraphic model was developed using the morphologies, spatial relationships, and facies associated with both types of unconformities. The irregular, incised surfaces were interpreted to have formed by subaerial exposure and fluvial erosion during sea-level lowstands. The smooth surfaces were interpreted as regional unconformities that represent transgressive ravinements.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Burgette, R., Weldon, R., J., Schmidt, D., A.,	2009	Interseismic uplift rates for western Oregon and along-strike variation in locking on the Cascadia subduction zone	J. Geophys. Res.	The authors use tide gauge data from six sites to estimate vertical deformation along the central Cascadia margin for the past 80 years. Their method allows and accounts for variations in uplift rate along strike, which were observed where the western and southern ends of the Siletza block in for arc meet the subduction zone interface. The methodology presented here may be useful in looking at tide gauge data closer to DCPP but is otherwise not directly relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Byerly, P., E.,	1930	The California earthquake of November 4, 1927	Bull. Seis. Soc. Am.	Describes effects of the Lompoc earthquake from numerous CA communities, grouped by intensity (Rossi-Forel, not modified Mercalli). Map with contoured intensity is shown with the highest value near point Arguello. Two sea quakes were reported by a captain of a vessel several miles offshore and a tsunami as high as 6' reported along the coast. Describes the most probable epicenter of the earthquake.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Byerly, P., E.,	1939	Near earthquakes in Central California	Bull. Seis. Soc. Am.	Analyzes seismicity from 1932 to 1937 in central California (latitude of the North Bay to Monterey). Calculates p-wave crustal velocities and describes intensities for each of the earthquakes.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Byerly, P., E.,	1966	Interpretations of gravity data from the central Coast Ranges and San Joaquin Valley, California	Geol. Soc. Am. Bull.	Paper discusses Bouger gravity anomaly profile from the coastline, through King City in the Salinas Valley, to the San Joaquin Valley. Most notably, gravity lows are observed in the two Miocene sedimentary basins crossed. Gravity data suggest the Diablo Range is isostatically compensated.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	California Department of Water Resources,	2002	Water Resources of the Arroyo Grande—Nipomo Mesa Area, Southern District Report,	lifornia Department of Water Resourc	This report presents information about water resources in the Arroyo Grande-Nipomo Mesa area of San Luis Obispo County. The geology section of the report includes descriptions of rock types and faults (Santa Maria River, West Huasna, Edna, Wilmar Avenue, and Oceano faults) in the area. Mapping of the Santa Maria fault and vertical separation of the Careaga Formation and Squire Member/Pismo Formation across the Oceano fault shown in this report are considered in the SSC model.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	California Energy Commission,	2008	An Assessment of California's Nuclear Power Plants: AB 1632 Report, Commission Report CEC-100-2008-009-CMF)	Commission Report	This report includes the results and recommendations of the AB1632 bill, including "seismic vulnerabilities" of nuclear plants, the potential consequences of disruption of these plants, and relevant policy areas. This bill provides the basis for new data that was acquired post-2011 and analyzed/considered in the SSC model (e.g., CCCSIP).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	California Public Utilities Commission,	2004	Testimony of Jay Namson on behalf of the San Luis Obispo Mothers for Peace, Sierra Club, Public Citizen, Greenpeace and Environment California (Appendix C-2)	Cal. Pub. Util. Com.	This testimony describes potential seismic issues, mitigation measures, and costs for the DCPP that Jay Namson believed were not, at that time, addressed by PG&E, with focus on the location, dip, and sense of slip on the Hosgri. Namson describes the Hosgri as east-dipping rather than vertical and states that the characterization of the Hosgri as a purely strike-slip fault is incorrect. He also states that a thrust earthquake on a blind thrust fault near DCPP is possible. This reference should be reviewed; however, mapping of the Hosgri has been refined (e.g., Johnson and Watt, 2012; Seismic Stratigraphy Project [PG&E, 2013]) since this testimony.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Campbell, K., W.,	1989	Empirical Prediction of Near-Source Ground Motion For the Diablo Canyon Power Plant Site, San Luis Obispo County, California	U.S. Geol. Surv. Open File Rpt.	Independent USGS report commissioned by the NRC to assess near-source ground motions concurrent with late 80's LTSP. Describes the near-source attenuation relationships and uses those relationships to estimate peak acceleration, peak velocity, and 5% damped pseudorelative velocity response spectra for several earthquake scenarios for the Hosgri. USGS ground motions exceeded PG&E values for some periods and were exceeded by PG&E values for other periods.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Campbell, K., W., Bozorgnia, Y.,	2008	NGA ground motion model for the geometric mean horizontal component of PGA, PGV, PGD and 5% damped linear elastic response spectra for periods	Earthq. Spectra	This paper presents details of an NGA ground motion model. The authors developed relations for median and standard deviations of geometric mean horizontal ground motions for magnitudes 4.0 to 8.5 for strike slip events, 4.0 to 8.0 for reverse slip events, and 4.0 to 7.5 for normal slip events. The equations are appropriate for earthquakes to 200 km closest distance to site. The authors note that is important to understand that these prediction equations do not necessarily account for epistemic uncertainty and point to the 2008 USGS NSHMP for guidelines to implement this uncertainty.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Campbell, K., W., Bozorgnia, Y.,	2013	Updated Near-Source Ground-Motion (Attenuation) Relations for the Horizontal and Vertical Components of Peak Ground Acceleration and Acceleration Response	Bull. Seis. Soc. Am.	This analysis used strong-motion data from 1957 to 1995 to develop near-source horizontal and vertical ground-motion (attenuation) relations. These relations are most applicable to shallow crustal earthquakes in western North America and in similar seismically active regimes.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Carder, D., S.,	1973	Trans-California seismic profile, Death Valley to Monterey Bay	Bull. Seis. Soc. Am.	This paper presents an early continental-scale crustal structure paper. Of primary focus of the paper is the structure of the Sierra Nevada, on which two profiles were surveyed. Results indicate a thinning of crust from 25 to 35 in the Sierra and Ranges of Basin and Range, to 20 km toward the coast. Data here have been superseded by a number of studies, so are not likely of use to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Carlson, A., E.,	2008	Why there was not a Younger Dryas-like event during the Penultimate Deglaciation	Quat. Sci. Rev.	Using deglacial records and other evidence, Carlson shows that a lack of Younger Dryas-like event during the penultimate deglaciation is due to the magnitude of deglacial forcing and the climate setting relative to the last deglaciation is not a unique trigger. This article includes a figure of the Lisiecki and Raymo benthic δO18 stack, a proxy of sea level and global ice volume, scaled to LGM sea level lowering to produce the equivalent change in sea level.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Carpenter, B., M.,	2012	Fault Strength and Stability: Lessons Learned from the San Andreas Fault in Central California	Penn. State. Univ.	This is a PhD dissertation that conducted a large number of laboratory studies near the central SAFZ to determine: 1.) the strength of the crust surrounding the SAF, 2.) The frictional behavior of the material returned from hypocentral depths, 3.) the controls of the observed frictional behavior, and 4.) the role of mineralogy controlling the healing behavior of faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Carter, J., N., Luyendyk, B., P., Terres, R., R.,	1987	Neogene clockwise tectonic rotation of the eastern Transverse Ranges, California, suggested by paleomagnetic vectors	Geol. Soc. Am.	Paleomagnetic study of Neogene Volcanic rocks from the eastern Transverse Ranges. Documents 41.4 +\- 7 degrees of counterclockwise rotation since the late Miocene. Checked by using ~50km cumulative slip on west-trending Transverse Range faults indicates ~35 degrees rotation is required. Argues for less and later inception of rotation of eastern transverse ranges than western Transverse ranges. Paper helps define S. Cal tectonics but describes little with respect C. CA coastal tectonics.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Catchings, R., D., Rymer, M., J., Goldman, M., R.,	2002	High-resolution seismic velocities and shallow structure of the San Andreas fault zone at Middle Mountain, Parkfield, California	Bull. Seis. Soc. Am.	This paper presents results that are primarily useful only near the local study site. The authors describe a seismic imaging survey near the San Andreas Observatory at Depth site, and develop a velocity model for the site. The model suggests that crystalline rock lies at depths of 600 m or deeper, overlain by relatively competent sedimentary rock of 20 to 300 m thickness. A roughly 400-m-thick section of poorly consolidated rock extends from the surface. The authors also recognize a low velocity zone, lower than typical San Andreas fault gouge and inconsistent with other geophysical measurements, which they interpret as a sliver of highly fractured rock between two primary strands of the San Andreas fault, and other highly fractured rock outside of these primary strands. The low velocity zone extends from the surface to a depth of about 600 m at a width of roughly 1.5 km, and tapers to 600 m at 750 m.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Champion, D., E., Howell, D., G., Gromme, C., S.,	1984	Paleomagnetic and geologic data indicating 2500 km of northward displacement for the Salinian and related terrenes, California	J. Geophys. Res.	Paleomagnetic data from Cretaceous rocks within the Salinian block at Pigeon Point CA suggest a mean geomagnetic latitude of 21.2 +\- 5.3 degrees. North America Cratonic rocks show a geomagnetic latitude of 46 +/- 2.3 degrees. These data suggest mean slip rates of 8.5 cm/yr northward an 3 cm/yr southward for the Salinian terrane and NA, respectively. Provides plate tectonic framework for LTSP studies.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Chavez, D., Gonzales, J., Reyes, A.,	1979	Main-shock location and magnitude determination using combined U.S. and Mexican data	U.S. Geol. Surv. Prof. Paper	This reference presents a resolved hypocentral solution with nearly complete azimuthal coverage of the 1979 Imperial Valley earthquake, which was initially located inaccurately. Locating earthquake hypocenters has since been refined which makes this article of little direct relevance to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Chaytor, J., D., Goldfinger, C., Meiner, M., A.,	2008	Measuring vertical tectonic motion at the intersection of the Santa Cruz-Catalina Ridge and Northern Channel Islands platform, California Continental Borderland,	Geol. Soc. Am. Bull.	Study uses submerged paleoshorelines to understand rates of vertical tectonic displacement in the offshore continental borderland east and north of the Santa Crus basin. Paleoshorelines were observed to occur at depths of 30 to 144 m with ages with ages ranging from 27,000 to 11,500 years bp. Uplift rates of ~1.5 mm/yr are close to those determined from slip along the channel islands thrust.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Chen, Y-H., Tsai, C-C., P.,	2002	A new method for estimation of the attenuation relationship with variance components	Bull. Seis. Soc. Am.	This paper presents a new strong motion attenuation relation that includes fixed effect coefficients and random effect deviations. The residual variance of the model is divided into site, earthquake and remainder components. The model is has smaller computation time and less bias than other comparable studies. The relation described in this study may not be useful for the DCPP SSC, but may benefit ground motion characterization.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Chester, J., S., Chester, F., M.,	1988	Fault-propagation folds above planar thrusts: applications to thin-skinned and basement cored folds [abstract]	Geol. Soc. Am. Abst. Prog.	This abstract describes a model of fault-propagation folds developing at any location along a thrust ramp of a constant dip and its application to the Absarokas, Idaho-Wyoming thrust belt, and folds in the Wyoming foreland. If a blind ramp were considered in the SSC, the model presented in this abstract may provide a potential process for its development.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Chester, J., S., Logan, J., M., Spang, J., H.,	1991	Influence of layering and boundary conditions on fault-bend and fault propagation folding	Geol. Soc. Am. Bull.	This paper presents the results of two mechanical thrust fault models, each roughly identical, but deformed with different loading conditions. These experiments were performed to examine 1) effects of interlayer heterogeneity and 2) boundary conditions (which block is fixed) on deformation, in particular, fault-bend folding, fault-propagation folding. Results of the model indicate that style of deformation is dependent on which block is held fixed. There is very little to no information in this paper that is useful to seismic source characterizations.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Chiocci, F., L., Ercilla, G., Torres, J.,	1997	Stratal architecture of Western Mediterranean Margins as the result of the stacking of Quaternary lowstand deposits below 'glacio-eustatic fluctuation base-level'	Sed. Geol.	Manuscript describes the middle- to late-Pleistocene sequence stratigraphy of the western Mediterranean Sea. They report Pleistocene sections dominated by high frequency (100 ka) signature of the glacio-eustatic sea-level curve, similar to observations along the central California coast.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Chiou, B., Youngs, R., R.,	2008	An NGA model for the average horizontal component of peak ground motion and response spectra	Earthq. Spectra	The paper, which contains little to no information useful for seismic source characterization, summarizes Chiou and Youngs (2008), a more detailed report submitted as part of PEER's NGA study. The authors note that their new equations represent an update to Sadigh et al. (1997). The equations were developed primarily for shallow crustal earthquakes in active tectonics regions. They use only recordings within 70 km of the rupture, which results in 1,950 records from 125 earthquakes. Supplemental data from the California TriNet system were used to provide guidance on functional forms and help constrain coefficients. At short periods, the new equations produce similar ground motions compared Sadigh et al. (1997), and lower ground motions at long periods. Ground motions increase at 10 to 50 km from rupture, but decrease at longer distances. The authors also indicate that aleatory uncertainty is dependent on earthquake magnitude and the degree of non-linearity in soil response.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Chipping, D., H.,	1987	The Geology of San Luis Obispo County: A Brief Description and Field Guide	Cal. Poly. State U.	This is a field guide written for someone with a light background in the earth sciences. It provides some background on local units, but does not present any new findings.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Chu, A., Schoenberg, F., P., Bird, P.,	2011	Comparison of ETAS parameter estimates across different global tectonic zones	Bull. Seis. Soc. Am.	Analyzes patterns of seismicity in different global tectonic zones (as defined through geophysical characteristics) by fitting space-time branching point process (ETAS) models to data within zones. Article states that earthquakes on oceanic transform faults have more foreshocks and fewer aftershocks which may be potentially useful information in characterizing seismicity in the SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Clark, B., L.,	1932	Age of primary faulting in the Coast Ranges of California	J. Geol.	Clark states that of the known faults south of San Francisco, 10.3% are pre-Pliocene in age, 20.6% are pre-Miocene, 6.8% are pre-Eocene, and many are pre-Cretaceous in age. Given the age of this article and lack of discussion of Quaternary activity of any of the faults described, this article is not considered relevant to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Clark, D., McPherson, A., Collins, C.,	2011	Australia's seismogenic neotectonic record: a case for heterogeneous intraplate deformation	Geosci. Australia	This volume evaluates a number of potentially active or Neogene-active structures in the stable continental region of Australia. Included are summaries of paleoseismic trench investigations, seismic reflection data, cross sections, digital topographic data evaluations, and statistical analyses of source characteristics. The authors define six neotectonic domains based on physical and neotectonic characteristics. The analysis of fault lengths methods may be useful for the DCPP SSC, but the remainder of material is Australia-specific and concepts are not new.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Clark, D., G., Slemmons, D., B., Caskey, S., J.,	1994	Seismotectonic Framework of Coastal Central California	Geol. Soc. Am. Spec. Paper	This paper provides a comprehensive look at the structural and seismic framework of central coastal California. It includes discussion of the 5 major tectonic domains and bounding faults, styles of deformation, and discussion of temporal relationships.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Clark, D., H., Hall, N., T., Hunt, T., D.,	1988	Style and timing of slip on the San Miguelito fault, San Luis Obispo County, California [abstract]	Geol. Soc. Am. Abst. Prog. Cord. Sec	This abstract provides a high level description of the three strands of the San Miguelito fault, including possible horizontal separation estimates on the main fault strand, observations of 11 Quaternary marine terraces (83 ka to > 500 ka in age) that have not been displaced vertically or laterally, and evidence of strike slip and reverse slip components of slip on the fault strands.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Clark, D., H., Hall, N., T., Hamilton, D., H.,	1991	Structural Analysis of Late Neogene Deformation in the Central Offshore Santa Maria Basin, California	J. Geophys. Res.	This paper presents a structural study of the Queenie structure located offshore of Point Sal in the Santa Maria basin. Sediment analysis and seismic data are used to determine that the Queenie structure was formed in a relatively brief period in the Miocene in response to North American-Pacific Plate boundary compression. The structure represents the surface expression of a reverse-activated pre-Miocene normal fault. Seismic data indicate a 30° to 50° dip to about 12 km depth. Much smaller folds in post-late Pliocene material on the southwest side of the structure are interpreted to represent possible ongoing compression. Several maps, cross sections and data are provided that may be of use to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Clark, J., C., Rietman, J., D.,	1973	Oligocene stratigraphy, tectonics, and paleogeography southwest of the San Andreas fault, Santa Cruz Mountains and Gabilan Range, California Coast Ranges	U.S. Geol. Surv. Prof. Paper	The Zayante-Vergeles fault has bounded the crystalline rocks of the Ben Lomond and Gabilan Ranges since the Eocene and accommodated uplift of Eocene basins relative to this crystalline basement. Activity on the Zayante-Vergeles essentially ceased by the early Miocene. This paper may be used as analog to structures accommodating late Cenozoic uplift of the Pismo basin sediments.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Clark, J., C., Brabb, E., E.,	1978	Stratigraphic Contrasts Across the San Gregorio Fault, Santa Cruz Mountains, West Central California	Cal. Div. Mines Geol. Spec. Rpt.	This reference summarizes and compares onshore geologic sections across the San Gregorio fault in the Santa Cruz Mountains (figure 4 shows a simplified map with geologic units labeled on either side of the fault). Correlations across the fault indicate substantial lateral displacement. Descriptions of geologic sections have likely been refined in subsequent publications.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Clark, J., C., Brabb, E., E., Greene, H., G.,	1984	Geology of the Point Reyes Peninsula and implications for San Gregorio fault history	Pacific Sec. SEPM Soc. Sed. Geol.	This article presents mapping that indicates 150 km of right slip occurred on the San Gregorio fault, a part of the San Andreas fault system.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Clark, J., C.,	1998	Neotectonics of the San Gregorio fault zone: Age dating controls on offset history and slip rates (Pacific Section Meeting, Ventura, California) [abstract]	Am. Assoc. Petrol. Geol. Bull.	In this abstract, the authors estimate ~150-160 km of cumulative right-slip on the San Gregorio fault, with slip initiating ~10 Ma. Slip rate estimates for the late Miocene, late Miocene-lower Pliocene, and late Pliocene-Holocene are also estimated, with the post-late Pliocene estimate similar to previous estimates of Quaternary slip rate.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Clark, M., M.,	1972	Collapse fissures along the Coyote Creek fault	U.S. Geol. Surv. Prof. Paper	Using observations on the Coyote Creek fault during and after the earthquake, Clark describes and explains the formation of the collapse fissures that formed along the 1968 Borrego Mountain rupture. Development of these fissures along faults is found to be closely related to fault creep, though distinguishing between fissures formed by ruptures versus creep was found to be straightforward. Clark concludes the presence of new collapse fissures in a fault zone indicate new fractures formed either during an earthquake or afterward from creep. Although this reference was cited in Tom Rockwell's WS2 Presentation (2012) on earthquake recurrence, there is little information directly applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Clark, M., M., Harms, K., K., Lienkaemper, J., J.,	1984	Preliminary slip-rate table and map of late-Quaternary faults of California	U.S. Geol. Surv. Open File Rpt.	Table (low quality pdf image) with explanatory text. Table gives information on location, strike, style, slip, slip rate, features used to measure offset, methods of estimation, comments, and compiler's initials. Data were preliminary when published and many of the slip rates have undoubtedly been updated.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Cleath & Associates,	2003	Geologic Structure of the Los Osos Valley Ground Water Basin	Unpub. Consult. Rpt.	This consulting report compiles and interprets a considerable amount of previous work (logs, wells, maps, etc.) aimed at constraining the geologic structure of the Los Osos Valley. Six horizons were defined based on prominence and movement of groundwater. The structure is described as an east-west-trending synclinal trough. Structure contour maps and cross sections are provided but little detail is provided; however, some data may be useful for structural interpretations in the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Cleath & Associates,	2005	Sea Water Intrusion Assessment and Lower Aquifer Source Investigation of the Los Osos Valley Ground Water Basin, San Luis Obispo County, California	Unpub. Consult. Rpt.	This consulting report provides primarily groundwater quality (seawater intrusion) data and assessment. However, pg. 19 includes structural interpretations based on the Spooner oil well, which is interpreted to intersect the Los Osos fault between 805 and 840 feet depth acting as a groundwater barrier. Additionally, they identify a Strand B of the Los Osos fault, which is shown on the Figure 2 map. A summary of intrabasin faults is provided in Part 3 which are described in relation to groundwater levels. Mapping and data in this report may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Cleath, T., S.,	1978	Ground Water Geology of the San Luis Obispo Area	Cal. State U. Los Angeles	This thesis describes characteristics of groundwater, geologic units (Table 1), structure, and faults associated with Edna and Los Osos Valleys. Includes several geologic and well log cross sections, a physiographic map, a generalized geologic map of the San Luis Obispo area, and several maps related to groundware in the area.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Cleath-Harris Geologists, Inc.,	2010	Edna Valley Water System Groundwater Study	Unpub. Consult. Rpt.	This report describes the geology (including three cross sections) and groundwater conditions of Edna Valley and options for groundwater development in the area, citing the decline in groundwater levels at existing wells. The report describes and shows in cross section the "Hacienda-Los Ranchos fault" which appears to be part of the Los Osos fault zone.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Cohn, S., N., Allen, C., R., Gilman, R.,	1982	Preearthquake and postearthquake creep on the Imperial fault and the Brawley fault zone	U.S. Geol. Surv. Prof. Paper	This study uses creepmeter, survey and nail file data to measure aseismic and coseismic slip on the Imperial fault. Aseismic creep events were observed in the months prior to the 1979 earthquake but are not interpreted as predictors. The authors predict that aseismic surface slip will continue for 6 years after the earthquake at a rate greater than before the event. Data from this study may benefit characterization of the Imperial fault, and concepts may be useful for characterization of aseismic slip.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Cole, R., B., Stanley, R., G.,	1998	Volcanic Rocks of the Santa Maria Province, California	U.S. Geol. Surv. Bull.	This paper presents a stratigraphic study of volcanic rocks in the Santa Maria province. The study employs primarily geochemistry to identify two suites of volcanics, an late Oligo-early Miocene suite that comprises multiple complexes, and a younger suite of early- to mid-Miocene volcanics including the Obispo Formation and intra Lospe Formation tuffs. No new geochronology data presented, but an extensive list is compiled for the region. Interpretations of edifice provenance, paleogeography, and temporal association with tectonics events are made.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Colgan, J., P., McPhee, D., K., McDougall, K.,	2012	Superimposed extension and shortening in the southern Salinas Basin and La Panza Range, California: A guide to Neogene deformation in the Salinian block of the	Lithosphere	This paper synthesizes several earlier studies, and builds on, or refutes older interpretations; additionally, the paper presents a relatively well-detailed geologic map for an area ~30 km east-northeast of DCPP. The authors use a suite of new, or non-published data to constrain timing of extensional and compressional strain regimes in the Salinian Block, specifically near the Salinas Basin. New interpretation of seismic reflection and gravity data led the authors to identify the Red Hills fault, which intersects the San Andreas and San Juan faults, and does not deform the Paso Robles Fm. The authors posit, however, that this fault reflects contemporary compressional tectonics. New thermochronologic data help develop a deposition-exhumation history, which the authors use to develop a regional space-time tectonic model. They posit that waning rotation of the Transverse Range block from 15 to 5 Ma led to extension within the Salinian block, while later stages of rotation from 5 Ma to present have driven compression. The authors estimate a total of about 2% extension and 10% compression. The authors suggest that models by previous authors employ dips that are too shallow, relating to roughly 50% compression in the Salinian block. The authors argue that faults in the Salinian block are Andersonian (i.e. vertical strike slip, 60° normal, and 30° thrust faults).	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Compton, J., S.,	2001	Holocene sea-level fluctuations inferred from the evolution of depositional environments of the southern Langebaan Lagoon salt marsh, South Africa	The Holocene	Includes a good description of sea level over the last 6.8 ka. Work indicates only minor fluctuation (<1 meter) over the past 5 ka.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Compton, R., R.,	1966	Analyses of Pliocene-Pleistocene deformation and stresses in the northern Santa Lucia Range, California	Geol. Soc. Am. Bull.	Plio-Pleistocene deformation forming the Santa Lucia range is primarily the result of cumulative slip on numerous faults directed by relict Cretaceous foliation. Folds flatten up-section and faults appear to die out up section. Major reverse faults lie within the belts of metamorphic rocks. The σ1 direction is oriented 030 degrees plunging 30degrees N. Provides regional Plio-Pleistocene principal stress orientation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Coppersmith, K., J., Griggs, G., B.,	1978	Morphology, Recent Activity, and Seismicity of the San Gregorio Fault Zone	Cal. Div. Mines Geol. Spec. Rpt.	Describes the San Gregorio as a complex fault zone that contains a number of subparallel fault traces and is up to 3 km wide. The authors present evidence for fault activity in the Holocene and late Pleistocene (~120,000 yrs). They also state that fault creep has not yet been observed and no statistically significant strain or slip was detected from 1931-1947. However, short time periods and a lack of triangulation precision prevents the authors from extrapolating long-term strain rates. Finally, the authors indicate the fault is currently active with earthquakes due to regional right-lateral shear and compressive stress. While slip rate for the San Gregorio is not provided, this article provides relevant information regarding the fault's slip sense and evidence supporting the fault is currently active.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Coppersmith, K., J., Bommer, J., J., Kammerer, A., M.,	2010	Implementation Guidance for SSHAC Level 3 and 4 Processes	Prob. Saf. Asses. Management	Manuscript describes the implementation of the SSHAC Levels 3 and 4 process. Is used in the SSC report to support the current implementation of the DCPP SSHAC study.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Coppersmith, K., J., Bommer, J., J.,	2012	Use of the SSHAC methodology within regulated environments: Cost-effective application for seismic characterization at multiple sites	Nuc. Eng. Design	Manuscript demonstrates that a regional SSHAC Level 3 or 4 study augmented with a site-specific SSHAC Level 2 study is a satisfactory, cost-effective approach to a study that encompasses multiple sites. This manuscript is used to support the approach to the SSC of the DCPP.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Coppersmith, R., T.,	2008	Structural analysis of the San Simeon fault zone, California: Implications for transform tectonics	UT Austin	This master's thesis focused on onshore outcrop exposures of the San Simeon fault and San Gregorio-Hosgri fault zone. The author finds a broad distribution of sense of slip, including normal, reverse, oblique and strike-slip. Density of faulting is calculated in each surface unit cut by the fault, then related to major tectonic events along the transform boundary. A mid- to late-Miocene initiation age of the San Gregorio-Hosgri fault system is proposed.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Cornell, C., A.,	1968	Engineering seismic risk analysis	Bull. Seis. Soc. Am.	This paper outlines a method for assessing ground motions parameters and their average return period for a specific site. While this is a fundamental PSHA paper, the majority of methods are outdated, superseded, and not appropriate for direct application in modern PSHA.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☑	Cornell, C., A., Van Marke, E., H.,	1969	The major influences on seismic risk	ird World Conf. Earthq. Eng., Santiag	General paper on seismic hazard or risk. More frequent, smaller earthquakes located nearer the site are usually the largest contributors to risk.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Cornell, C., A., Winterstein, S., R.,	1988	Temporal and Magnitude Dependence in Earthquake Recurrence Models	Bull. Seis. Soc. Am.	The authors compare Poissonian and non-Poissonian earthquake recurrence models. Non-Poissonian models evaluated include a time-predictable model, a slip-predictable model, and a combined time-slip-predictable model. The authors conclude that the Poisson model is generally reasonable as long as the mean interevent time between significant events is greater than either the seismic gap or the length of the historical record. Specifically, the model is problematic only if the fault displays strongly regular "characteristic time" behavior. This article may be useful in determining which recurrence models are appropriate in the logic tree.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	County of San Luis Obispo,	2008	Appendix F: Geology (Draft Environmental Impact Report: Los Osos Wastewater Project)	Unpub. Consult. Rpt.	This engineering geology report was conducted in eastern Los Osos for the County of San Luis Obispo. The report includes typical geologic and tectonic review, and cursory seismic source characterization of nearby faults. New data collected for the study include several hand auger and CPT tests. In the review of previous work, lineaments mapped by Lettis and Hall are dismissed as anthropogenic, with little discussion for that conclusion. Nevertheless, the project site is considered susceptible to surface fault rupture hazard from the Los Osos fault. Little here would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Covault, J., A., Normark, W., R., Romans, B., W.,	2007	Highstand fans in the California borderland: The overlooked deep-water depositional systems	Geology	The authors use seismic reflection and core data to study highstand fan deposition along the southern California Coast near San Diego. The authors find that large amounts of coarse-grained sediment are deposited in deep water fans in narrow-shelf areas. While the wide-shelf Oceanside and Carlsbad Canyons have not actively deposited fans since at least ~10 ka (roughly the end of the last lowstand), the narrow-shelf La Jolla Canyon continues to deposit in a large fan with sediment sourced from longshore currents along the wider shelf. Data and concepts here are likely not useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Cowan, D., S.,	1978	Origin of blueschist-bearing chaotic rocks in the Franciscan Complex, San Simeon, California	Geol. Soc. Am. Bull.	Blueschist inclusion within the Franciscan have undergone two stages of deformation: an earlier ductile deformation characterized by northwest-striking northeast-dipping cleavage planes, and a later brittle deformation characterized by subparallel fractures cross-cutting the earlier cleavage planes. Blueschist blocks were likely shed from the accretionary prism, re-accreted and incorporated into the proto-mélange.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Cowan, D., S.,	1985	Structural styles in Mesozoic and Cenozoic mélanges in the western Cordillera of North America	Geol. Soc. Am. Bull.	This paper defines criteria for classification of mélanges into one of four types: Type 1 includes interbedded sand- and siltstones, and Type 2 includes tuff, chert, and minor sandstone. Both these types deformed by imbricated faulting in wedges, or gravitational movement. Type 3 includes block-in-matrix-style rocks that likely reflect olistostromes or mud diapirs and are mechanically analogous to typical serpentinites. Type 4 is similar but with lenticular inclusions from anastomosing subparallel fault deformation. Of these types, however, the author concludes that none can be singled out a unique subduction mélange. Little here is of use to the DCPP unless an attempt at classification of mélanges for correlations of offset units is made.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Cowgill, E.,	2007	Impact of riser reconstructions on estimation of secular variation in rates of strike–slip faulting: Revisiting the Cherchen River site along the Altyn Tagh Fault, NW	EPSL	Cowgill reviews previous fluvial riser reconstructions in order to highlight epistemic uncertainties that have been previously overlooked, including six geomorphic relationships that are evidence for incomplete riser refreshment. Cowgill also presents geomorphic observations that can be used to figure out which terrace age most closely approximates true riser age, including new mapping, survey data, and excavations from the Cherchen He site on the Altyn Tagh fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Cox, A., Engebretson, D.,	1985	Change in motion of Pacific plate at 5 Myr BP	Nature	This paper describes the tectonic evolution of the Pacific plate boundary in California. This landmark paper is cited to understandign the evolution of the San Andreas fault and California tectonics.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☑ Tectonic setting
☐	Crain, W., E., Mero, W., E., Patterson, D.,	1985	Geology of the Point Arguello discovery	Am. Assoc. Petrol. Geol. Bull.	This article describes the history and development of the 8 wells in the Point Arguello oil field as well as a description of the stratigraphy of the oil field, including the Espada Fm, Jalama Fm, Tranquillon Volcanics, Point Sal Fm, Monterey Fm, lower Sisquoc Fm, and Pico Fm. Seismic reflection profiles and geologic cross section are also included. The oil field is described as a large, complex, NW-trending anticlinal fold ~9 mi long and ~2 mi wide that can be divided into two faulted, doubly plunging anticlines cut by reverse faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Crone, A., J., Haller, K., M.,	1989	Segmentation of Basin-and-Range normal faults: examples from east-central Idaho and southwestern Montana	U.S. Geol. Surv. Open File Rpt.	The authors use geologic evidence and segmentation criteria to define segments on the range front faults of the Lost River and Lemhi Ranges and the Beaverhead and Tendoy Mountains in Idaho and Montana as well as describe four general geologic segmentation characteristics. The authors use morphologic data from multiple-event fault scarps to make age estimates as well as define fault segments. This article is of little direct use to the DCPP SSC except that some of the general segmentation characteristics could be applied to faults in the DCPP vicinity; however, the validity of using these characteristics to define fault segments is questionable.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Crone, A., J., Personius, S., F., Craw, P.,	2004	The Susitna Glacier Thrust Fault: Characteristics of Surface Ruptures on the Fault that Initiated the 2002 Denali Fault Earthquake	Bull. Seis. Soc. Am.	Manuscript describes surface rupture structures associated with the 2002 Denali earthquake. This rupture is used an analog for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Crook, C., N., Mason, R., G., ,	1982	Geodetic measurements of horizontal deformation on the Imperial fault	U.S. Geol. Surv. Prof. Paper	This report describes the geodetic measurements made prior to and post Imperial Valley earthquake to assess coseismic and postseismic deformation both on and away from the fault. Right-lateral shear parallel to the fault with slip of > 50 cm over 2.5 km of fault length is implied. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Crouch, J., K.,	1979	Neogene tectonic evolution of the California Continental Borderland and western Transverse Ranges	Geol. Soc. Am. Bull.	Paper outlines a model to reconstruct the Pacific-NA plate margin using belts of Franciscan and Great Valley rocks. Much of what is included in this paper has been refined by subsequent work.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Crouch, J., K., Bachman, S., B.,	1984	Regional post-late Miocene thrust faulting in offshore central California; implications for wrench-style tectonics	Am. Assoc. Petrol. Geol. Bull.	This abstract describes thrust faults observed in high-resolution seismic reflection data in the offshore Santa Maria Basin. The authors interpret the Hosgri as a thrust fault rather than a strike slip fault, citing fold asymmetry and axes paralleling faults as an example of additional evidence supporting this interpretation. They conclude that these folds and faults in the Santa Maria Basin suggest post-late Miocene NE-SW compression. Subsequent work has shown more evidence supporting the characterization of the Hosgri fault as a strike slip fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Crouch, J., K., Bachman, S., B.,	1984	Seismic reflection profiles from offshore central California; evidence for post-Miocene imbricate thrust faulting [abstract]	Am. Assoc. Petrol. Geol. Bull.	This abstract describes down to the west imbricate thrust systems observed in the Santa Maria basin, the northern Santa Barbara Channel, and near Point Conception, on high-resolution seismic data. Much of what is included in this abstract has been updated by subsequent work.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Crouch, J., K., Bachman, S., B.,	1987	The nature of the offshore Hosgri fault zone [abstract]	Geol. Soc. Am. Abst. Prog. Cord. Sec	Using well data, deep-penetration seismic-reflection profiles, and offshore seismicity and focal mechanisms, the authors present their interpretation of the Hosgri fault zone as a series of NE-dipping reverse faults that coalesce into a thrust fault at depth and evidence that the Hosgri does not exhibit strike slip motion. Subsequent work has shown more evidence supporting the characterization of the Hosgri fault as a strike slip fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Crouch, J., K., Bachman, S., B.,	1987	Structural character of Hosgri fault zone and adjacent areas in offshore central California [abstract]	Am. Assoc. Petrol. Geol. Ann. Conv.	This abstract describes the Hosgri fault as a zone of thrust and high-angle reverse fault and state that minimal, if any, strike slip offset has occurred on the fault post-Miocene. The abstract also describes Miocene Monterey and volcanic rocks east and west of the Hosgri, as well as overlying Pliocene and younger sediments west of the fault. Subsequent work has shown more evidence supporting the characterization of the Hosgri fault as a strike slip fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Cummings, D., Johnson, T., A.,	1994	Shallow Geologic Structure, Offshore Point Arguello to Santa Maria River, Central California	Geol. Soc. Am. Spec. Paper	Using seismic reflection data collected offshore between Point Arguello and the Santa Maria River, the authors interpret bathymetry, Pleistocene erosional surface, offshore unconsolidated sediment, offshore extensions of the major onshore folds and faults, the Hosgri fault zone and its southern terminus.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Cunningham, W., D., Mann, P.,	2007	Tectonics of strike-slip restraining and releasing bends	Geol. Soc. London Spec. Pub.	This paper is an introduction to a special volume, and provides a brief synopsis of the studies of bends in strike-slip faults contained in the volume. Focus is given to origin, characteristics, and settings of bends, as well as their societal relevance, surface structure and expression, and down-dip structure. This review paper contains no original data or concepts and has little to no use for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	d'Alessio, M., A., Johanson, I., A., Burgmann, R.,	2005	Slicing up the San Francisco Bay Area: Block kinematics and fault slip rates from GPS-derived surface velocities	J. Geophys. Res.	This paper uses a compilation of campaign and continuous GPS horizontal velocities (collected 1993 to 2003 at over 200 stations) to determine kinematics of faults in the SF Bay Area. Results indicate a 39.7 ± 0.6 mm/yr rate between the Pacific plate and the Sierra Nevada microplate, directed about N30.4°W with little negligible convergence. Based on their block model, a number of fault slip rates are determined that generally lie within uncertainty of geologic rates and fit better than WCCEP2002 rates. Results of this paper may help characterize fault slip rates in the Bay Area.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Daley, T., M., McEvilly, T., V.,	1990	Shear-wave anisotropy in the Parkfield Varian well VSP	Bull. Seis. Soc. Am.	The authors use vertical seismic profiling and stress-induced shear-wave anisotropy as an indicator of accumulated stress on the San Andreas fault near Parkfield (using the 1.5 km deep Varian well). Their model assumes fault-controlled velocity anisotropy, with the highest concentration of shear near the fault and fabric oriented parallel to the fault. This reference is not directly relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Dalguer, L., A., Miyake, H., Day, S., M.,	2008	Surface Rupturing and Buried Dynamic-Rupture Models Calibrated with Statistical Observations of Past Earthquakes	Bull. Seis. Soc. Am.	In this research-oriented paper exploring dynamic rupture modeling, the authors propose that the relationship between ground motion and dynamic rupture models can be simplified with parameterization and comparison of results with empirical data. The authors find a significant difference in stress drop between surface and buried ruptures. Negative stress drops surround asperities in surface ruptures, whereas neutral or positive stress drops are characteristic of buried ruptures. They also find that in surface ruptures, stress drop scales with earthquake magnitude, while in buried ruptures, stress drop is independent of magnitude. Their model produces higher ground motions with buried earthquakes than surface ruptures at high frequency.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Davis, T., L., McIntosh, K., D.,	1987	A retrodeformable structural solution across the southern Coast Ranges and implications for seismically active structures [abstract]	Geol. Soc. Am. Abst. Prog. Cord. Sec	This abstract describes a retrodeformable cross section across the southern Coast Ranges that is largely controlled by a regional detachment fault at ~15 km, with several major thrust faults and fault bend/fault propagation folding as the dominant process building the antiformal structures of the southern Coast Ranges. The characterization of these faults as Quaternary active thrust is questionable and alternative geometric models exist.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Davis, T., L., Lagoe, M., B., Bazeley, W., J.M.,	1988	Structure of the Cuyama Valley, Caliente Range, and Carrizo Plain and its significance to the structural style of the southern Coast Ranges and Western	Pacific Section SEPM	This paper describes a detailed petroleum industry investigation in the western Transverse Ranges-southern Coast Ranges. Using seismic reflection and oil well data, along with more traditional geologic mapping methods, the authors describe a number of structural and tectonic characteristics of the study area: the Caliente range front reverse faults likely merge and flatten at depth, then intersect or truncate the San Andreas fault; these faults are approximately pure reverse, with the Morales displaying 13.7 km of displacement; folding in the range is likely the result of fault propagation folding that started about 3 Ma; the Cuyama Basin was formed in the late Oligo-early Miocene by growth faulting. The authors conclude the structures are indicative of a developing fold and thrust belt that comprises a small part of southern Coast Ranges and Transverse Ranges compression. This paper contains data and concepts that may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Dawson, T., E., Weldon, R., J., Biasi, G., P.,	2008	Appendix B: Recurrence Interval and Event Age Data for Type A Faults	U.S. Geol. Surv. Open File Rpt.	Defines the recurrence interval and event age data for Type A faults in the California WGCEP 2007 fault rupture forecast. Includes text with notes on event ages, dating methods etc. and tables for individual faults with defined events and recurrence.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Dawson, T., E., Rockwell, T., K., ,	2008	Appendix F: Summary of Geologic Data and Development of A Priori Rupture Models for the Elsinore, San Jacinto, and Garlock Faults	U.S. Geol. Surv. Open File Rpt.	The authors present recurrence models for the San Jacinto, Elsinore and Garlock faults for characterization in the UCERF2 seismic source model. Previous paleoseismic studies are evaluated and summarized for each segment of the faults, and minimum, maximum, and geologic insight models are constructed for each fault. Data presented here is likely to aid the DCPP SSC with characterization of these faults.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Dawson, T., E., Weldon, R., J.,	2013	Appendix B—Geologic-Slip-Rate Data and Geologic Deformation Model (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This report describes the UCERF3 deformation model, including the development of the geologic-slip-rate database from UCERF2, previous WGCEPs, and new data, as well as the re-evaluation of UCERF2 deformation-model rates and assignments of rates for fault sections without site specific data. Slip rates on faults in the DCPP vicinity that are included in this database should be compared to other slip rate estimates.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Dawson, T., E.,	2013	Appendix A—Updates to the California Reference Fault Parameter Database—Uniform California Earthquake Rupture Forecast, Version 3 Fault Models	U.S. Geol. Surv. Open File Rpt.	This report summarizes updates to the California Reference Fault Parameter Database that was originally developed for UCERF2. Two alternative fault models were used and alternative geometries were included in the Statewide Community Fault Model. The report also includes descriptions and assumptions of fault endpoints (related to defining multi-fault ruptures) and fault-zone polygons (which defines a region across which a slip rate in a deformation models pertains and associates events with sources).	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	De Hoogh, G., L.,	2012	Structural and Stratigraphic Evolution of the Central and Southern Outer California Continental Borderland	Cal. State Long Beach	This master's thesis focused on interpretation of seismic reflection lines in the southern California borderland. A regional Miocene unconformity is recognized that the author interprets as a paleo-sea-level reference that reflects the transition to a transform plate boundary. Another unconformity is interpreted to represent oblique rifting of the outer borderland from the peninsular ranges. Modern bathymetry is associated with Pliocene to present transpression. A number of faults identified and compiled in the study are shown on Figure 16, although little discussion is given to the age or activity of these faults. Little here would be of use to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	De Paola, N., Holdsworth, R., E., Collettini, C.,	2007	The structural evolution of dilational stepovers in regional transtensional zones	Geol. Soc. London Spec. Pub.	This paper presents results of a 3D structural model of a releasing bend stepover and compares them with real world examples. The authors find a correlation of angle of displacement and strike of the fault with resulting structures. Structure typically seen in strike slip fault zones are not common in dilational stepovers. With greater strain, structure becomes more complex with localized zones of accommodation including subsidence and a broader zone of fault mesh. This is in contrast to other studies that suggest multiple phases of extension with migrating zones of strain accommodation and development of a through-going fault. This paper may contain relevant concepts for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Dehlinger, P., Bolt, B., A.,	1987	Earthquakes and associated tectonics in a part of coastal central California	Bull. Seis. Soc. Am.	Paper analyses seismicity along a 100 km long by 65 km wide zone crossing the coast ranges with its western margin coincident with the SAF. Three distinct tectonic zones are defined: a zone of pure RL slip on the SAF, an intermediate zone of lower activity with more p-axes rotated ~45 clockwise relative to SAF, and a more active zone characterized by compression on dominantly NE-dipping faults along the coast.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Dehlinger, P., Bolt, B., A.,	1994	Seismotectonic Patterns Across a Part of the Central California Coast Ranges	Geol. Soc. Am. Spec. Paper	Uses data from Dehlinger and Bolt 1987 to refine interpretation of the 3 seismogenic zones (SAF, 40-50 km-wide quiescent zone, and 40-50 km-wide compressive province along coast. Seismically active regions correspond to low strength rocks while quiescent region corresponds to high-strength Salinian granitics. Authors looked for but did not observe evidence for a detatchment either within or below seismogenic zone (in contrast to Namson and Davis, 1990 who argue for buried thrusts). Provides additional background and rationale tectonic framework for SSC however is not useful for direct SSC input.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Delattre, M., P., Wiegers, M., O.,	2014	Preliminary geologic map of the Nipomo 7.5' quadrangle, San Luis Obispo County, California: A digital database	Cal. Dept. Nat. Res. Div. Mines	A digital map of a quadrangle that includes portions of the Wilmar Avenue fault and the West Huasna Fault Zone.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	DeMets, C., Gordon, R., G., Argus, D., F.,	1990	Current plate motions	J. Geophys. Intl.	The paper describes the development and Euler vectors of a global rigid plate motion model, NUVEL-1. Rates of the model fit data well, everywhere within 3 mm/yr, which the authors suggest greatly supports the rigid block model. Minor misfits of the model can generally be attributed inappropriate data or inappropriate plate geometries. The NUVEL-1 model was superseded by the NUVEL-1A model, however, concepts here may be useful for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	DeMets, C., Gordon, R., G., Argus, D., F.,	1994	Effect of recent revisions to the geomagnetic reversal time scale on estimates of current plate motions	Geophys. Res. Let.	This paper applies new data from the revised geomagnetic time scale to modify and refine the NUVEL-1 plate motion model. New rates from geomagnetic data indicate that the NUVEL-1 angular velocities should be multiplied by a constant factor of 0.9562, yielding a 4% reduction (from 6%) between NUVEL-1 and GPS-derived plate motion rates. The results of this study may be useful for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	DeMets, C., ,	1999	New kinematic models for Pacific-North America motion from 3 Ma to present, I: Evidence for steady motion and biases in the NUVEL-1A model	Geophys. Res. Let.	This study uses 21 continuous GPS velocities collected of 2 to 4.5 years along with NUVEL-1A plate motion vectors to assess North American-Pacific plate motions. Results indicate that relative plate motion has been steady since about 3.2 Ma at about 52 ± 2 mm/yr, which exceeds the NUVEL-1A model; spreading rate between NA and the Baja peninsula increased between about 3.2 and 1.0 Ma. Results are similar to very long term plate motion rate estimates of 52 to 57 mm/yr. This paper contains information that is likely useful for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	DeMets, C., Gordon, R., G., Argus, D., F.,	2010	Geologically current plate motions	Geophys. Jour. Intl.	This paper introduces the MORVEL plate motion model, an update to the NUVEL-1a model that covers 25 plates. A number of new data were used including new transform fault azimuths and spreading rates, earthquake data, bathymetric and magnetic data, and GPS data. Velocities of MORVEL are significantly different than NUVEL-1a, and include reduction in GPS-angular rate discrepancy from the older model. For the North American-Pacific plate pair, the reduction is 25% (2.6 ± 1.7 mm/yr), with the difference attributed to a wider zone of deformation between the North-South American plates, small counterclockwise change in North American-Pacific plate motion over the last 1 to 3 Myr, or deformation of one of the plates in the global circuit. Results of this paper may be useful for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	DeMets, C.,	2012	Final report: Kinematics of coastal California inferred from GPS geodesy	Unpub. Tech. Rpt.	DeMets presents a GPS velocity field for central coastal California in a Pacific plate reference frame and finds that GPS stations along the coast move 3±1 mm/yr to the southwest (relative to the Pacific plate), consistent with right-lateral shear. DeMets proposes two end member explanations for this slip deficit: (1) internal deformation of the Pacific plate, making the deficit independent of kinematics in California, or (2) elastic and permanent deformation of faults and folds southwest of the SAF, with negligible elastic effects of frictional coupling across the SAF. DeMets prefers the latter interpretation, giving an upper limit of slip (3±1 mm/yr) integrated across faults west of the central California coast	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	DeMets, C., Marquez-Azua, B., Cabral-Cano, E.,	2014	A new GPS velocity field for the Pacific Plate – Part 1: constraints on plate motion, intraplate deformation, and the viscosity of Pacific basin asthenosphere	Geophys. Jour. Intl.	Analysis of GPS data provides estimates of Pacific plate tectonic velocity.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	DeMets, C., Marquez-Azua, B., Cabral-Cano, E.,	2014	A new GPS velocity field for the Pacific Plate – Part 2: implications for fault slip rates in western California	Geophys. Jour. Intl.	Uses GPS data to estimate slip rates on the San Andreas and other regional faults.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	dePolo, C., M., Clark, D., G., Slemmons, D., B.,	1989	Historical Basin and Range province surface faulting and fault segmentation	U.S. Geol. Surv. Open File Rpt.	The authors summarize observations of 17 historical earthquakes associated with surface faulting in the Basin and Range province and discuss segmentation of the larger surface ruptures. They describe different indicators of fault zone discontinuities, and make distinctions in rupture geometries possible structural segments based on earthquake magnitude. The authors state that geometric, geomorphic, and structural discontinuities are not necessarily indicators of rupture endpoints and that multiple lines of evidence should be considered when attempting to define fault segment boundaries in the Basin and Range. This article is of little direct use to the DCPP SSC except that some segmentation concepts could be applied to faults in the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	dePolo, C., M., Clark, D., G., Slemmons, D., B.,	1991	Historical surface faulting in the Basin and Range province, western North America: implications for fault segmentation	J. Struct. Geol.	This paper assesses historical earthquake surface ruptures in the Basin and Range. The authors compare rupture termination points with suspected rupture-arresting structures to find that only about half of the fault zone discontinuities coincided with rupture terminations. Thus, the authors conclude that Basin and Range future ruptures are likely to be more complex than mapped fault zones, and rupture end points difficult to forecast. Concepts from this paper are applicable to the DCPP SSC with respect to fault length/linkage.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	dePolo, C., M.,	2012	Fault Segmentation and Earthquake Rupture Length	SSC Workshop	In this SSHAC SSC Workshop 2 presentation, dePolo describes different types of fault trace discontinuities, previously published evidence for segmentation, and required criteria to consider if/when segmenting a fault. This presentation is considered within the range of technically defensible models for estimating rupture dimensions, particularly on faults that have paleoseismic data.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Dibblee, T., W.,	1976	The Rinconada and related faults in the southern Coast Ranges, California, and their tectonic significance	U.S. Geol. Surv. Prof. Paper	Relatively early study describes mapping, spatial constraints, and tectonic interpretations of the Rinconada other regional faults. Results from this study laid groundwork for several subsequent studies, most of which have been superseded. This study identified the extent of the Rinconada fault as well as right-lateral strike-slip, and estimations of total slip in various stratigraphic markers. The author makes tectonic interpretations related to the eastern side of the Rinconada fault, including the Gabilan uplift and Salinas Valley to the north, and the La Panza, Sierra Madre and Caliente Ranges, which acted as relatively rigid blocks. The western side includes the San Rafael, Santa Lucia, and related mountains, which resulted from a parallel fold axes and reverse/thrust faults. The author suggests this compression absorbed some right-lateral strike slip, which dies out to the north. The Big Pine fault to the south subsequently left-laterally offset the Rinconada fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Dickinson, W., R.,	1981	Plate tectonics and the continental margin of California	e Geotectonic Development of Califor	This work describes the Cenozoic evolution of the contientnal margin of coastal California.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting

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☐	Dickinson, W., R.,	1983	Cretaceous sinistral strike slip along the Nacimiento fault in coastal California [abstract]	Assoc. Petrol. Geol.	This abstract describes inferred Cretaceous sinistral strike slip deformation along the Nacimiento fault, the fault's relation to the Salinian block, and draws comparisons to Neogene deformation on the SAF. Given the focus on Mesozoic tectonic processes, this abstract is of little direct use in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Dickinson, W., R., Armin, R., A., Beckvar, N.,	1987	Geohistory analysis of rates of sediment accumulation and subsidence for selected California basins	Cenozoic Basin Dev. Coast. Cal.	This paper presents geohistory plots and discussions of several basins in California, the closest to DCPP being the Ventura Basin. The authors relate results of the geohistory plots to major tectonic events, and posit several tectonic processes recorded in the basins. This paper covers primarily pre-Quaternary events and basins that are relatively distant from the site and, therefore, little to no data here are applicable to the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Dickinson, W., R.,	1996	Kinematics of transrotational tectonism in the California Transverse Ranges and its contribution to cumulative slip along the San Andreas transform fault system	Geol. Soc. Am. Spec. Paper	This special paper evaluates the impact of transrotational deformation on the evolution of the SAF. This includes discussion of (1) the structural kinematics of rotating domains within the California Transverse Ranges and (2) the contribution of transrotation to net transform displacements.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Dickinson, W., R.,	1997	Tectonic implications of Cenozoic volcanism in coastal California	Geol. Soc. Am. Bull.	This paper uses paleogeographic, tectonic, and petrologic data to relate suites of volcanic rocks along the California coast to major tectonic events. Additionally, the author links volcanism along the California coast to eruptions of the Columbia River, Steens, and northern Nevada basalts. This paper focuses on pre-Quaternary volcanism and tectonics and, therefore, little to no data are applicable to the DCPP SSC with the exception that compiled ages of volcanics might be used to constrain long term fault slip rates.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Dickinson, W., R., Ducea, M., Rosenberg, L., I.,	2005	Net dextral slip, Neogene San Gregorio-Hosgri fault zone, coastal California: Geologic evidence and tectonic implications	Geol. Soc. Am. Spec. Paper	Comprehensive paper provides review of entire Hosgri-San Gregorio fault system, concludes 154 km of Neogene net dextral slip with slip rates decreasing from inception to present day. The fault systems serves as the primary link between "transrotation of the in the western Transverse Ranges and strike slip within the SAF transform system of central CA." Paper provides critical basis for understanding Hosgri-San Simeon tectonics.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	DiSelvestro, L., A., Hanson, K., L., Lettis, W., R.,	1990	The San Simeon/Hosgri pull-apart basin, south-central coastal California [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes a transfer of slip from the offshore Hosgri fault to the onshore San Simeon fault across a right step-over and a 15-18.5 km long, 3-5 km wide Quaternary aged basin within the stepover area. The subsiding basin is a SW-tilted half graben that has a maximum sediment thickness of 280 m, with sediments along the eastern margin down-warping into the stepover region.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Dixon, T., H., Miller, M., Farina, F.,	2000	Present-day motion of the Sierra Nevada block and some tectonic implications for the Basin and Range province, North American Cordillera	Tectonics	This paper presents a geodetic study of the Sierra Nevada microplate and its relationship with the Basin and Range. Results indicate that microplate translates to the northwest at 13 to 14 mm/yr relative to North America with no resolvable vertical motion. The microplate also moves at about 11 mm/yr relative to the western edge of the Basin and Range (across the Owens Valley, White Mtn, and Fish Lake Valley faults) with the remainder of relative motion taken up by Basin and Range faulting, primarily the Wasatch front. However, this deformation budget varies a few mm/yr from the north to south. This paper contains information that may be useful to the DCPP SSC for characterization of the eastern Sierra Nevada front.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Dokka, R., K., Ross, T., M.,	1995	Collapse of southwestern North America and the evolution of early Miocene detachment faults, metamorphic core complexes, the Sierra Nevada orocline,	Geology	The authors present evidence from the Mojave Desert area for regional structures that imply direct linkage between extension in southeastern California and southern Arizona and the plate boundary. Over time, the Pacific plate migrated W-NW relative to North America, causing gravitational collapse of the edge of North America east of the plate boundary. Transtension along this plate boundary caused fragmentation of coastal California and Mexico by the SAF, with portions of the western edge of the North American continent truncated and transferred to the Pacific plate. This article provides background for the tectonic setting of the DCPP vicinity but the focus on the Miocene makes this of little direct use in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Dokken Engineering,	2009	Seismic Evaluation: U.S. 101/Los Osos Valley Road Interchange Improvements Project, San Luis Obispo, California	Unpub. Consult. Rpt.	This report documents a consulting seismic evaluation study of a CA 101 improvement project for Caltrans south of San Luis Obispo. The report includes a review of previous studies performed in the project area. Based on these previous studies, field reconnaissance, and new borings, the site is suggested to overlie sheared rock of the Los Osos fault and the fault zone is suggested to be wider than anticipated, comprising several en echelon strands. Specifics of the fault (e.g., location, age) at the site are minimal, and as such, little here is useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Dolan, J., F., Gath, E., Grant, L., B.,	2001	Active Faults in the Los Angeles Metropolitan Region	SCEC Spec. Pub. Ser.	This SCEC document summarizes a wealth of then-current information on Los Angeles area faults. The document was put together to assemble geometric and kinematic data for the SCEC Community Fault Model. Very little in this document is new data, however, the summaries are concise and filled with useful references and data. This document would be useful for characterization of Los Angeles area faults by the DCPP SSC team.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Doser, D., I.,	1989	The character of faulting processes of earthquakes in the intermountain region	U.S. Geol. Surv. Open File Rpt.	Doser presents source parameters and characteristics of intermountain earthquakes, including a lack of correlation between heatflow and focal depth and the preponderance of unilateral rather than bilateral faulting. Doser suggests that comparing source parameters and rock type, age, and physiographic province as well as studying mechanisms and timing of foreshocks and aftershocks may increase understanding of an earthquake sequence. The correlations presented in this article may provide some insight to the earthquake rate model in the DCPP SSC; however, these observations are likely more thoroughly described in other papers.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Doubrovine, P., V., Tarduno, J., A.,	2008	A revised kinematic model for the relative motion between Pacific oceanic plates and North America since the Late Cretaceous	J. Geophys. Res.	This paper reevaluates the fixity of the Pacific and Indo-Atlantic hot spots and its effects on plate reconstructions. The authors suggest that the Kula and Farallon plates were much smaller than previously thought, with ridges about 600 to 1,000 km closer to North America in the late Cretaceous-middle Eocene. The authors also suggest the Pacific plate motion was likely more northerly during this time than previously thought, indicating a greater more oblique convergence. The paper provides two alternative models of rotation parameters and defines relative movements, displacements and timing of major changes back to about 84 Ma. This paper may be useful to the DCPP SSC team for characterizing plate motion.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Dowrick, D., J., Rhoades, D.,	2004	Relations Between Earthquake Magnitude and Fault Rupture Dimensions: How Regionally Variable Are They?	Bull. Seis. Soc. Am.	The authors compare regressions for individual regions and multi-region averages and find all are statistically different from each other when considering magnitude against subsurface rupture length, width, area, and displacement. They state that this implies rupture styles differ with geological region in a manner that is not yet understood. They also present magnitude-area relations for individual regions, including California, by utilizing data subsets from Hanks and Bakun (2002) (WC94). The scaling relation presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Duan, B., Oglesby, D., D.,	2005	The Dynamics of Thrust and Normal Faults over Multiple Earthquake Cycles: Effects of Dipping Fault Geometry	Bull. Seis. Soc. Am.	This general rupture modeling study examines effects of normal fault ground motions in comparison to those of thrust faults. The authors observed that normal faults slip less frequently than thrust faults of equivalent dip; however, at 45° dips, event frequency is very similar. Interestingly, shallow normal faults (20°) produce greater slip per event than thrust faults, with both fault types producing roughly similar numbers of small- and moderate-slip events. At high and moderate dip angles (70° and 45°, respectively), biggest events are larger on thrust faults, while normal faults produce larger moderate- and small-slip events. The authors find that in both normal and thrust faults, horizontal ground motion dominates on the footwall, and vertical ground motion dominates the hanging wall.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Ducea, M., House, M., A., Kidder, S.,	2003	Late Cenozoic denudation and uplift rates in the Santa Lucia Mountains, California	Geology	Paper uses (U-Th)/He ages to quantify late Miocene-present uplift rates of the coastal Santa Lucia range near Big Sur. Exhumation rate is 0.35 mm/yr between 6 and 2.3 Ma and 1 mm/yr 2.3 Ma to present. Authors suggest the primary means of denudation is landsliding, not fluvial incision.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Duman, T., Y., Emre, O., Dogan, A.,	2005	Step-over and bend structures along the 1999 Duzce earthquake surface rupture, North Anatolian Fault, Turkey	Bull. Seis. Soc. Am.	Paper discusses the geometry and distribution of the stepovers involved in the 1999 Duzce, Turkey earthquake. Paper finds that stepovers less than 2.5 km wide did not arrest rupture whereas rupture was arrested east and west by stepovers with widths greater than 4 km. Findings are in line with work completed by Lettis et al. (2002) and later work by Wesnousky.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Dumont, M., P., Barron, J., A.,	1995	Diatom biochronology of the Sisquoc Formation in the Santa Maria Basin, California, and its paleoceanographic and tectonic implications	U.S. Geol. Surv. Bull.	Study uses diatom biostratigraphy to correlate the Sisquoc Formation between outcrops, subdivide the unit, and recognize the Mio-Pliocene boundary. Based on these characterizations, the authors present an age of 6.0 Ma for the Sisquoc Fm. They also note that diatom deposition in the early Pliocene was restricted to the central, or deepest part of basins as the filled and uplifted. Deposition of diatoms ceased by 4 Ma. Data from this may be used to construct very long term slip rates through correlation and depositional timing constraints, but otherwise, little information is of use here.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Durham, D., L.,	1965	Evidence of large strike-slip displacement along a fault in the southern Salinas Valley, California	U.S. Geol. Surv. Prof. Paper	Early study of the Rinconada fault (unnamed in the paper) that used offset basin deposits to calculate total strike slip offset of 11 miles. The author concludes from stratigraphic relationships that this offset occurred post-Pliocene. Results of this paper have been improved upon, and superseded.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Dwyer, G., S., Chandler, M., A.,	2009	Mid-Pliocene sea level and continental ice volume based on coupled benthic Mg/Ca palaeotemperatures and oxygen isotopes	Phil. Trans. R. Soc. A	The authors reconstruct ice volume and sea level for the Mid-Pliocene warm period (~3.3-3.0 Ma) using Mg/Ca-based bottom-water temperatures and benthic foram δ^18O data. At MIS M2 (~3.3 Ma), following a lowstand of ~65 m below present, sea level fluctuated by 20-30 m above and below a mean value similar to current sea level. Additionally, the authors observed four highstands of ≥ 10 m above current sea level and three lowstands of ≥ 40 m below current sea level during this warm period.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Earth Systems Consultants,	1997	Soils Engineering Report: Eagle Garden and Hardware Portion of Lot 68, Rancho Canada de Los Osos, County of San Luis Obispo, California	Unpub. Consult. Rpt.	This soils report includes general site reconnaissance, soil borings, and testing and analysis of soil data on the west side of Los Osos Valley Road (Froom Ranch). In a follow up fault study, no evidence of the Los Osos fault was found in the study area.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Earth Systems Consultants,	1998	De Vaul Ranch, San Luis Obispo, California: Supplemental Fault Investigation	Unpub. Consult. Rpt.	This consulting report supplements an earlier trench investigation by placing an additional trench at the southwest corner of the DeVaul Ranch site (southwest of San Luis Obispo). The south end of the trench exposed what the authors conclude is a trace of the Los Osos fault. This paper does not provide any new information on the age of the faults, however the location information may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Earth Systems Consultants,	2007	Updated soils engineering report: Hampton Inn, Calle Joaquin, San Luis Obispo, California	Unpub. Consult. Rpt.	This consulting report documents a soil engineering report performed for a proposed hotel south-southwest of San Luis Obispo. Several soil borings and soil trenches were excavated without the goal of locating faults; as such, no faults were identified in this report, and little to nothing in this engineering report is useful to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Earth Systems Pacific,	1997	Geologic and soils study: De Vaul Ranch, Madonna and Los Osos Valley Roads, San Luis Obispo, California	Unpub. Consult. Rpt.	This consulting report presents a geologic and soil investigation for a proposed development at De Vaul Ranch, southwest of San Luis Obispo. The report includes cursory characterizations of regional geology and faults. Eight fault trenches and five soil borings were excavated on the site. Several features (tonal lineaments and secondary Los Osos fault strands) previously hypothesized to be faults were ruled out as faults based on trench exposures, and no faults were identified on the site. However, strike-slip or reverse fault related features were observed in a trench outside of the proposed development leading the authors to conclude that the site may overlie a (south-dipping?) reverse fault that would daylight to the north of the site. This paper does not provide useful information on the age of the faults, however the location information may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Earth Systems Pacific,	2000	Supplemental Fault Investigation Report: Irish Hills Estate, Tentative Tract 2270, San Luis Obispo, California	Unpub. Consult. Rpt.	This consulting report documents a study designed to locate a low angle thrust fault observed in previous consulting trenches for San Luis Obispo proposed developments, but not observed in a nearby trench excavated for a proposed development. The report summarizes local geology and tectonics, and the results of completed fault trenches. The trenches exposed secondary thrust faults associated with the Los Osos fault, and their age is concluded to predate the Holocene. No evidence of the high-angle strands of the Los Osos fault observed in previous studies was observed. Because the low angle reverse faults are suspected to move in some, but not all Los Osos fault ruptures, their pre-Holocene age does not help refine the age of the Los Osos fault, and little here, except fault location, would be useful to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Earth Systems Pacific,	2008	Geological Fault Investigation Report, Highland Ranch, 7515 Los Osos Valley Road, San Luis Obispo, California	Unpub. Consult. Rpt.	This report documents a consulting study performed southwest of San Luis Obispo. The study included aerial photograph review and lineament mapping, shallow cross section, and fault trenching. Several faults were observed in trenches, but their relationship to regional faulting generally is not addressed, nor is their interpreted age of activity. One exception is a thrust fault that was previously mapped by Hall and Prior was reassessed as a landslide based on field mapping and trench exposures. Little to no data here would be useful to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Eaton, J., P.,	1984	Focal mechanisms of near-shore earthquakes between Santa Barbara and Monterey, California	U.S. Geol. Surv. Open File Rpt.	Paper describes focal mechanisms determined for the six largest earthquakes between Santa Barbara and Monterey from 1978 to 1984. Focal mechanisms display dominantly reverse motion on NW-striking NE-dipping fault planes from Santa Barbara to Point Sal, transpression on NW-striking NE-dipping plane for an earthquake on the San Simeon, and purely strike slip mechanism for two earthquakes to the north (one on the southern end of the San Gregorio).	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Eaton, J., P., Rymer, M., J.,	1990	Regional seismotectonic model for the southern Coast Ranges	U.S. Geol. Surv. Prof. Paper	The authors analyze seismicity in the southern Coast Ranges during the 11 years prior to the Coalinga earthquake to discern whether seismicity may have indicated the potential for this earthquake. Their analysis includes two cross sections at the latitude of San Francisco and Coalinga. Near San Francisco, the majority of relative movement between plates is accommodated by strike slip faults that parallel the direction of relative plate motion. Near Coalinga, the SAF accommodates the majority of motion between plates but also causes extension of the upper crust. Earthquakes are concentrated along the edges of the Coast Range on thrust and high-angle reverse faults.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Ebel, J., E., Chambers, D., W., Kafka, A., L.,	2007	Non-Poissonian Earthquake Clustering and the Hidden Markov Model as Bases for Earthquake Forecasting in California	Seis. Res. Let.	The authors present two short-term (non-Poissonian earthquake clustering model and the hidden Markov model [HMM]) and a set of long-term earthquake forecasts for California and adjacent areas. The HMM forecast model allows for a variety of forecast maps compared to the non-Poissonian earthquake clustering model. The authors used these models to determine if extrapolations from past seismicity history could be used to identify times of increased probabilities of earthquake mainshocks in California. These models were developed because of the observation that mainshocks in California and western Nevada of M >= 4 are more temporally clustered than predicted by the Poissonian earthquake distribution. Aftershocks were not the main focus of the article and therefore a widely used aftershock model with average parameter values found previously for the region was used.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Eberhart-Phillips, D., Haeussler, P., J., Freymueller, J., T.,	2003	The 2002 Denali Fault Earthquake, Alaska: A Large Magnitude, Slip-Partitioned Event	Science	s study present a case study of the 2002 7.9 Denali earthquake. The study pertains little to this SSC model other than a somewhat relevant case study that could relate to a major event on the San Andreas.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Electric Power Research Institute,	1988	Seismic Hazard Methodology for Central and Eastern United States (EPRI Report NR-4726), volumes 1-10	USNRC	This report includes 10 volumes on seismic hazard methodology and applications and six sets of input parameters for calculating the likelihood and ground motions for a given time window for the Central and Eastern U.S. Although not directly applicable to the DCPP SSC, this report provides background on pre-NUREG/CR-6372 methodology.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Electric Power Research Institute,	2004	CEUS Ground Motion Project Final Report (EPRI Report 1009684)	Unpub. Consult. Rpt.	This report provides the results of a study aimed at finding an applicable ground motion attentuation model defined by a set of equations and coefficients for estimating ground motion measures and their aleatory variability as a function of earthquake magnitude and source-to-site distance. These eaquations are applicable to two general regions in the CEUS: Mid-continent US and the Gulf Coast.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Electric Power Research Institute,	2006	Truncation of the lognormal distribution for ground motion models	Unpub. Consult. Rpt.	This report addresses the truncation of the lognormal distribution by limiting the number of standard deviations (epsilon) and identifies the appropriate value of sigma (standard deviation of the natural logarithm of the ground motion) for use in the eastern United States. Although a maximum epsilon of ~3 has been previously used, no technical basis for truncating at this epsilon level was found. Additionally, intra-event standard deviation from the Western U.S. was found to be applicable to the Central and Eastern US with an increase in epistemic uncertainty. This report is more relevant to the GMC than the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Electric Power Research Institute,	2012	Central and Eastern United States (CEUS) Seismic Source Characterization for Nuclear Facilities (EPRI Report 1021097/ DOE/NE 0140/ NUREG-2115)	USNRC	This report documents the SSC completed for the Central and Eastern United States Nuclear Facilities. This SSC was completed following the SSHAC Level 3 process. Chapters in this report include: Introduction; SSHAC Level 3 Assessment Process and Implementation, Earthquake Catalog, Conceptual SSC Framework, SSC Model Overview and Methodology, SSC Model RLME Sources and Mmax Zones Branch, SSC Model Seismotectonic Zones Branch, Demonstration Hazard Calculations, Use of the CEUS SSC Model in PSHA, References, and Glossary. This report helped establish precedence for a SSHAC Level 3 study and is a useful resource in constructing, executing, and documenting the SSC model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Ellsworth, W., L., Matthews, M., V., Nadeau, R., M.,	1999	A physically-based earthquake recurrence model for estimation of long-term earthquake probabilities	U.S. Geol. Surv. Open File Rpt.	The authors describe a Brownian passage time recurrence model, for which failure rate is zero for a finite time following an event. It is based on a Brownian relaxation oscillator that considers mean recurrence time with an aperiodicity function. Their analysis of earthquake sequences suggests an aperiodicity factor of 0.5. They apply the model to the Parkfield section of the SAFZ and calculate a 1:10 to 1:13 annual probability for M 6. This model represents an alternative for earthquake recurrence calculations and may be applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Ellsworth, W., L.,	2003	Appendix D: Magnitude and Area Data for Strike Slip Earthquakes (USGS OFR 03-214)	U.S. Geol. Surv. Open File Rpt.	The datasets of the magnitudes and dimensions of large-magnitude strike slip earthquakes as well as magnitude-area regression models are included in this appendix. Sources for earthquake data include Wells and Coppersmith (1994), Sommerville et al. (1999), as well as other published literature and unpublished sources. Because of poor constraint on data errors, Ellsworth used a regression method that is insensitive to outliers, required a slope of 1 and 4/3, and restricted the fit to A > 500 km^2. Ellsworth also explores the aleatory variability of magnitude for a given area. This appendix contains the "Ellsworth-B" magnitude-area scaling relation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Ellsworth, W., L., Weldon, R., J.,	2010	A Discussion of Elastic Rebound,Earthquake Recurrence and Characteristic Earthquakes	SSA Mtg.	Part 1 of this presentation explores the relationship between elastic rebound and recurrence models. Several recurrence models are summarized and compared with respect to repeating earthquakes. Time-predictable, slip-predictable and exponential models do not provide accurate recurrence behavior for repeating earthquakes. Factors that complicate a repeating earthquake model include residual stress, post-seismic transient effects, stress transfer, fault geometry and rheology. This presentation may provide the DCPP SSC team with a useful summary of recurrence models with respect to elastic rebound and repeating earthquakes.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Ellsworth, W., L.,	2012	Heavy Tails and Earthquake Probabilities	Seis. Res. Let.	In light of recent large earthquakes, Ellsworth discusses the need to properly characterize the tail of earthquake distributions such that these events, although rare, are still accounted for. He states that earthquakes induced by industrial activities must also be better characterized such that large events are not "surprising". This article may be useful when considering what kind of magnitude distribution is most appropriate in the logic tree and how to best represent the probability of large earthquakes.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Emery, K., O.,	1958	SHALLOW SUBMERGED MARINE TERRACES OF SOUTHERN CALIFORNIA	Geol. Soc. Am. Bull.	The author describes submerged marine terraces off the coast of California. The data used to construct profiles for this study are lacking compared with modern bathymetry. Furthermore, the tectonic implications suggested by the author predate the understanding of plate tectonics, and the only tectonic process associated with paired terraces at different elevations is warping. The only data that may be of use represent the identification of the terraces.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Emery, K., O.,	1960	The Sea Off Southern California: A Modern Habitat of Petroleum	Scripps Inst. Ocean. Lib.	This book is a compilation of descriptions of the physiography, lithology, structure, water (i.e., currents, waves, and tides), organisms, sediments, and economic aspects of the ocean offshore of southern California. In general, material presented in this book provides a broad overview of coastal southern California with limited, if any, detailed information directly applicable to the SSC deformation model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Espinosa, A., F.,	1982	ML and Mo determination from strong-motion accelerograms, and expected-intensity distribution	U.S. Geol. Surv. Prof. Paper	This report presents the size of the 1979 Imperial earthquake in terms of local magnitude, ML, and seismic moment, Mo, an evaluation of the expected intensity of ground shaking on the MMI scale, and a comparison to the strong-motion accelerograms recorded at the same site for the 1940 Imperial earthquake. Lower intensities were observed for the 1979 event (compared to the 1940 event) likely due to lower frequency, shorter duration of ground shaking, and less energy released. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Ewing, J., Talwani, M.,	1991	Marine Deep Seismic Reflection Profiles Off Central California	J. Geophys. Res.	This study discussed the findings of a seismic study spanning the Santa Lucia Escarpment to the Hosgri Fault. Evidence for the existence and geometry of a subducted oceanic crust underneath the outer half of the central California continental shelf is the principal finding of this study. Three explanations for the strong landward dipping event under the outer shelf are presented with relatively little preference for one model versus another.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Fagereng, A., Toy, V., G.,	2011	Geology of the earthquake source: an introduction	Geol. Soc. London Spec. Pub.	General paper on the mechanics of faulting. Used in the SSC to support estimates for depth to base of seismogenic zone.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Faugeres, J-C., Stow, D., A.V., Imbert, P.,	1999	Seismic features diagnostic of contourite drifts	Marine Geol.	This paper compiles various criteria that can be used to distinguish between turbidite and contourite (i.e., bottom current) deposits, which can be similarly complex and imbricated. These characteristics are given for a variety of scales, and several seismic lines and cartoons present the diagnostic characteristics. The conclusions section provides a concise definition of each of the characteristics. This paper may be useful for interpretation of seismic reflection data for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Fay, N., P., Humphreys, E., D.,	2008	Forces acting on the Sierra Nevada block and implications for the strength of the San Andreas fault system and the dynamics of continental deformation in the western	J. Geophys. Res.	This numerical modeling study calculated vertically integrated shear stress along the San Andreas fault, finding much higher values north of San Francisco. Shear stress coupling tapers down with distance east from the plate boundary to nearly zero in central Nevada. Little to no information here is of use to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Feigl, K., L., Jordan, T., H., King, R., W.,	1988	Geodetic measurement of tectonic deformation in the Santa Maria Basin, California	Eos Trans. Am. Geophys. Un.	Feigl et al. estimate the maximum compressive strain to be oriented N16°-48°E and the rate of shortening across the Santa Maria basin to be 6-22 mm/yr. Although a wider range than more recent studies, the NE-directed estimates of maximum compressive strain are consistent with more regional estimates.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Feigl, K., L., King, R., W., Jordan, T., H.,	1989	The Santa Maria fold and thrust belt as a transition zone in southern California tectonics [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes measurements of deformation in the Santa Maria Fold and Thrust Belt made using geodetic data. Right-lateral shear with a secondary component of fault normal compression was measured in the southern Coast Ranges, whereas SE of the Santa Maria Fold and Thrust Belt in the western Transverse Ranges, deformation is primarily NS compression. The authors describe the Santa Maria Fold and Thrust Belt as a zone of transforming motion from the Coast ranges to the western Transverse Ranges and the Santa Barbara Channel. Geodetic data has been updated since this abstract was published and therefore vector magnitude and orientation may differ from values listed here.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Feigl, K., L., Agnew, D., C., Bock, Y.,	1993	Space Geodetic Measurement of Crustal Deformation in Central and Southern California, 1984-1992	J. Geophys. Res.	The authors combine 7 years of VLBI and GPS measurements to map the velocity field in central and southern California with precision and accuracy to 2-3 mm/yr. They remove the velocity field of the SAF and find significant shear remains in much of the network ("SA Discrepancy"); however, they caution that this magnitude of shear may be due to inappropriate choice of model parameters, oversimplified model, and/or strain accumulation due to unmodeled structures such as the San Gregorio-Hosgri fault system. They also find the residual velocity field implies significant compressive strain and provide rates throughout central and southern California. This article may be useful in forming tectonic models and understanding how slip is distributed throughout the domain.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Felzer, K., R., Brodsky, E., E.,	2005	Testing the stress shadow hypothesis	J. Geophys. Res.	The authors describe previous methods for analyzing stress shadows and present a new method using time ratios. They apply their new method to look for stress shadows following the 1906 San Francisco Bay, 1989 Loma Prieta, 1992 Landers, 1994 Northridge, and 1999 Hector Mine earthquakes and find that stress shadows are most likely absent, suggesting "little strong" evidence stress shadows exist. This article is relevant to the recurrence section of the SSC model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Felzer, K., R.,	2008	Appendix M: Empirical Estimation of Regional Time Variation in Seismicity Rates	U.S. Geol. Surv. Open File Rpt.	In this appendix to UCERF2 documentation, regional and temporal variation of seismicity rates is assessed. The authors point out that 1) rate uncertainty is higher for longer terms, due to higher completeness threshold; 2) the long term rate is higher than contemporary rates, due to large historic earthquakes, 3) high magnitude completeness threshold and low contemporary seismicity rate in areas like the Mojave or northeast California may artificially pull down the statewide average and 4) that any changes in stress, such as a large earthquake would require revision to their estimate of short term seismicity. This documentation likely provides useful information for assessing background seismicity in the DCPP SSC.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting
[x]	Felzer, K., R., Cao, T.,	2008	Readme for Catalog "ca2006.txt" and Excel file of Catalog(from Appendix H: WGCEP Historical California Earthquake Catalog)	U.S. Geol. Surv. Open File Rpt.	In this appendix to UCERF2 documentation, the authors describe compilation of an earthquake catalog for California. For 1932-2006, the catalog includes events with M>=4 earthquake, and for 1850-1932, the catalog covers events M>=5.5. The appendix describes source catalogs, magnitude rounding and conversion, and format. A readme is included with this appendix that briefly summarizes topics addressed in the appendix.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting
[ ]	Felzer, K., R.,	2008	Appendix I: Calculating California Seismicity Rates	U.S. Geol. Surv. Open File Rpt.	In this appendix, the methods for developing a- and b-values for California are documented. The methods follow the 1996 and 2002 USGS National Hazard maps, and incorporate some revisions. These revisions include correcting for magnitude rounding prior to a-value calculation, considering only modern instrumentation for b-values, and new assessment of magnitude completeness. A 3.8 +/- 1.2 M>=5 earthquakes/year rate at 98% for the declustered catalog is computed. This documentation likely provides useful information for assessing background seismicity in the DCPP SSC.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Felzer, K., R., Cao, T.,	2008	Appendix H: WGCEP Historical California Earthquake Catalog	U.S. Geol. Surv. Open File Rpt.	This appendix to the UCERF2 documentation briefly describes the earthquake catalog compiled for that project. The catalog covers historical events >= 5.5 for the years 1850 to 1932 and instrumental events >=4.0 for 1932 to 2006. Section 4 covers the treatment of uncertainties and rounding.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Felzer, K., R.,	2013	Appendix K—The UCERF3 Earthquake Catalog (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix presents an updated earthquake catalog that was presented in UCERF2. The catalog extends through 2011, includes earthquakes post-1984 down to a M 2.5, distinguishes aftershocks and foreshocks, and includes the magnitude source.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Felzer, K., R.,	2013	Appendix L—Estimate of the Seismicity Rate and Magnitude-Frequency Distribution of Earthquakes in California from 1850 to 2011 (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	Using different minimum magnitude thresholds and different time periods of seismicity averaged across California, this UCERF3 appendix presents different estimates of Gutenberg-Richter b values. For the different magnitude thresholds and time periods tested, b values ranged from 0.95 1.05. The appendix includes a number of tables summarizing magnitude-of-completeness for eight different California regions, average rates for different conditions, and fraction of UCERF3 earthquakes defined as aftershocks or foreshocks. This appendix provides b values and rates useful on a regional or statewide level; however, they are of limited site-specific use for the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Felzer, K., R.,	2013	Appendix M—Adaptive Smoothed Seismicity Model (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix presents a preferred smoothed seismicity model for the state of California using a value of n=8 for the smoothing kernel and M ≥ 2.5 earthquakes from 1984 to 2011. This map is compared to the smoothed seismicity model used in UCERF2, noting uncertainty in which will be more accurate over 50 years and the inconsistencies of the previous map with precariously balanced rocks. This map is relevant to characterizing the moment rate for a large fault like the SAF, but is less useful on the site-specific level needed for the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Feng, R., McEvilly, T., V.,	1983	Interpretation of seismic reflection profiling data for the structure of the San Andreas fault zone	Bull. Seis. Soc. Am.	This paper presents early seismic reflection profiling to obtain crustal structure near the San Andreas fault at the latitude of Monterey Bay. The authors employ the inverse ray method to obtain structure in the 2-dimensionally heterogeneous materials surveyed. The profile images a 3 to 4 km-wide low-velocity zone, a low-velocity wedge on the west side of the fault at 8 km depth, and no correlation between rocks on either side of the fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Field, E., H., Jackson, D., D., Dolan, J., F.,	1999	A Mutually Consistent Seismic-Hazard Source Model for Southern California	Bull. Seis. Soc. Am.	This paper describes an early source model for California that attempted to decrease the unrealistically high rate of magnitude 6 and 7 events from earlier WGECP modeling. The authors adjust a suite of SSC parameters (e.g.., minimum magnitude, characteristic moment release, time dependency, etc.) to successfully decrease the rate of these magnitude 6 to 7 events such that the rate more closely matches historical observations. Many of the concepts used here were carried into the later UCERF models, which effectively supersede the work presented here.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Field, E., H., Gupta, V.,	2008	Appendix N: Conditional, Time-Dependent Probabilities for Segmented Type-A Faults in the WGCEP UCERF 2	U.S. Geol. Surv. Open File Rpt.	This appendix to the UCERF 2 documentation describes how time-dependent probabilities, which represents a preferred alternative (0.7 wt.) to the empirical model (0.3 wt.) used for a-faults, were developed for A-faults. The time-dependent probabilities are primarily driven by elastic-rebound theory and Brownian passage time. Probabilities are given for each segment combination of the model. This appendix contains information that could be useful for characterization of regional faults in the DCPP SSC.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Field, E., H., Dawson, T., E., Felzer, K., R.,	2008	The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2)	U.S. Geol. Surv. Open File Rpt.	This journal article presents a summary of UCERF 2, which developed rupture probabilities for Quaternary faults in California. Data and methods from this study are more thoroughly documented in CGS/USGS reports.	[x] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [x] Rupture Model [x] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [x] Los Osos fault [ ] Wilmar Ave fault [x] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Field, E., H., , Parsons, T.,	2008	Data (in Excel file) from "Appendix G: Development of Final A-Fault Rupture Models for WGCEP/NSHMP Earthquake Rate Model 2"	U.S. Geol. Surv. Open File Rpt.	This excel file contains the rupture-model data for the seven "Type A" faults included in UCERF2, 30 and 5 year rupture probabilities for fault segments, total fault length, and for magnitudes ≥ 6.7. Sheets for "Type B" faults and regional polygons or background seismicity are also included in this file.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [x] Rupture Model [x] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Field, E., H., , Parsons, T.,	2008	Appendix G: Development of Final A-Fault Rupture Models for WGCEP/NSHMP Earthquake Rate Model 2	U.S. Geol. Surv. Open File Rpt.	In this appendix to the UCERF2 documentation, the authors describe the development of rupture models for the seven a-type faults. Alternative deformation models are developed that trade off slip rate between the SAFZ and SJFZ. The logic tree in Figure 17 depicts the implementation of the characterizations. This appendix contains abundant information for characterization of the subject faults that could be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Field, E., H., Dawson, T., E., Felzer, K., R.,	2009	Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2)	Bull. Seis. Soc. Am.	This article summarizes the UCERF2 model, which applied to Quaternary faults across the state of California. Although the UCERF3 time-independent model has since been released, the four components of the UCERF2 model (Fault, Deformation, Earthquake Rate, and Probability Models) and associated logic tree structure, are relevant to he SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Field, E., H., Page, M., T.,	2011	Estimating earthquake-rupture rates on a fault or fault system	Bull. Seis. Soc. Am.	Attempts to "relatively objectively" assess rates of earthquakes on a given fault (i.e., does not make assumptions about segmentation), through inverse modeling. Although inconclusive, results indicate a G-R distribution may be applicable to the southern SAF and may apply to the entire fault system. May be useful in developing magnitude pdfs or in assigning weight to different distributions.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Field, E., H., Biasi, G., P., Bird, P.,	2013	The Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3)-The Time-Independent Model (U.S. Geological Survey Open-File Report 2013–1165,	U.S. Geol. Surv. Open File Rpt.	This report summarizes the UCERF3 model, including definitions and descriptions of the fault, deformation, and earthquake rate models and results of the "Grand Inversion". Improvements over UCERF2 (including relaxing fault segmentation assumptions and including multifault ruptures), as well as model limitations and potential future improvements are described. The model currently assumes a Poisson probability model, though future work will incorporate time-dependent probability models. The structure, input, and results of this model should be considered and compared with the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Field, E., H., Arrowsmith, J., R., Biasi, G., P.,	2014	Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3) —The Time-Independent Model	Bull. Seis. Soc. Am.	This article summarizes the UCERF3 model, including definitions and descriptions of the fault, deformation, and earthquake rate models and results of the "Grand Inversion". The authors describe improvements over UCERF2 (including relaxing fault segmentation assumptions and including multifault ruptures), as well as model limitations and potential future improvements. The article also includes links to data and resources used in/resulting from the model.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Finger, K., L.,	1995	Recognition of Middle Miocene Foraminifers in Highly Indurated Rocks of the Monterey Formation, Coastal Santa Maria Province, Central California	U.S. Geol. Surv. Bull.	This paper documents a primarily foraminifera study of the Monterey formation. Important results include paleodepths depositional environs. Little to no data here are useful for seismic source characterization.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Finkbeiner, T.,	1998	In-situ stress, pore pressure, and hydrocarbon migration and accumulation in sedimentary basins	Stanford Univ.	This PhD dissertation focused on the influence of state of stress and pore pressure on fluid flow and rock deformation. Field areas included the Santa Maria basin and the Gulf of Mexico. In the Santa Maria basin, the author found that, despite a uniform NE-oriented maximum horizontal stress field and borehole breakouts consistent with this stress field, televiewer logs image considerable variation in fracture orientation, dip and frequency. The author found that variations can be correlated with specific lithologies and physical properties of rock. However, the author isolates active, small-scale strike-slip and reverse faults and rotational borehole breakouts consistent with the present stress field from fractures and faults from earlier tectonic regimes. The author concludes that active faults provide important conduits for fluid migration. This dissertation may contain useful data for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Fitzenz, D., D., Ferry, M., A., Jalobeanu, A.,	2010	Long-term slip history discriminates among occurrence models for seismic hazard assessment	Geophys. Res. Let.	Manuscript illustrates the benefits of combining cumulative slip information with other high-resolution data for PSHA. The authors demonstrate some degree of time-dependence for the Jordan Valley fault; used in the SSC as support for non-Poissonian approach.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Fletcher, J., Teran, O., J., Rockwell, T., K.,	2014	Assembly of a large earthquake from a complex fault system: Surface rupture kinematics of the 4 April 2010 El Mayor–Cucapah (Mexico) Mw 7.2	Geosphere	The authors describe the 2010 Mw 7.2 El Mayor-Cucapah earthquake that rupture a previously unidentified fault system that contains >= 7 major faults. The earthquake involved a bilateral rupture that propagated through 3 distinct kinematic and geomorphic domains. Other features include a change in the sense of slip as rupture propagated; a broad region of fracturing, liquefaction, and discontinuous faulting; and partitioning of some slip onto the Laguna Salada fault. This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Fossen, H., Tikoff, B.,	1998	Extended models of transpression and transtension, and application to tectonic settings	Geol. Soc. London Spec. Pub.	In this structural research-oriented modeling paper, the authors develop simple mathematical models that relate to a suite of transpressional and transtensional tectonic settings, primarily addressing continental-scale plate boundaries. The authors present the model such that results can be used to determine the angle of convergence and different kinds of transpression or transtension. The results seem to contradict intuitive expectations, such as 1) in areas of oblique convergence, plate motion vector is not parallel to stress direction and 2) strain features are not parallel to plate motion or slip vectors. They also find that boundaries between convergent terranes are likely to be characterized by vertical foliation, and either vertical or horizontal foliation. They also conclude that transpression is likely to generate narrow zones of deformation, oriented parallel to margins.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Fracassi, U., Di Bucci, D., Ridente, D.,	2012	Recasting historical earthquakes in coastal areas (Gargano Promontory, Italy): insights from marine paleoseismology	Bull. Seis. Soc. Am.	This study uses marine paleoseismology, essentially high resolution seismic reflection and bathymetric data, to evaluate an 1894 earthquake in coastal Italy, and develop source parameters. The methods used in this study are typical of offshore fault mapping for seismic hazard assessment, and data here are not applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Frankel, A., D., Petersen, M., D.,	2008	Appendix L: Cascadia Subduction Zone	U.S. Geol. Surv. Open File Rpt.	This appendix to the UCERF 2 documentation describes the characterization of the Cascadia subduction zone, including alternative characterizations for depth of rupture, recurrence of large events, Mmax, and time-dependent and -independent probabilities. If the Cascadia subduction is included in the DCPP SSC, then this appendix contains useful information for the source's characterization.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Frankel, A., D., Lee, J., Dawers, N.,	2010	Miocene - Quaternary tectonic evolution of the northern eastern California shear zone	acific Sec. SEPM Soc. Sed. Geol. 201	This field trip guide describes field trip stops to accompany the authors' related studies in the eastern California shear zone. Focus areas in the guide are the Coso Range tectonics, exhumation of the Inyo Mountains, the Poverty Hills and the conflicting models of their origin, the Fish Lake Valley fault zone, slip transfer mechanisms in Queen Valley, the Long Valley caldera Volcanic tableland, and the Sierra Nevada Frontal fault zone. Each of these sections of the guide has concise and relatively complete summaries of previous work (tectonics, slip rates, geomorph, etc.) and recent work at the time of publication. While these faults are a relatively large distance away from the DCPP, if faults in this region are characterized, this paper contains nice summaries of previous work.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Fugro West, Inc., County of San Luis Obispo,	1997	Review of potentially problematic faults in San Luis Obispo County	Unpub. Consult. Rpt.	This document summarizes for San Luis Obispo County planners the local faults that should be considered in zoning/planning based on state of knowledge in 1997. Nothing in this report represents new data. However, some figures and summary data are from consulting reports that may otherwise be difficult to obtain. For example, groundwater studies seem to suggest the presence of the Strand B splay of the Los Osos fault and that its relationship to groundwater in what are likely young aeolian deposits suggest youthful activity. This report presents a useful summary of the Los Osos fault at the time of publication that includes some data that could useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Fuis, G., S.,	1982	Displacement on the Superstition Hills fault triggered by the earthquake	U.S. Geol. Surv. Prof. Paper	This reference compares ruptures of the Superstition Hills fault after both the Borrego Mountain earthquake and the 1979 Imperial Valley earthquake, which are similar in location, length, maximum displacement, and style of faulting. For both events, the end of the fault most distance from the earthquake had the maximum displacement. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Fuis, G., S., Mooney, W., D., Healey, J., H.,	1982	Crustal structure of the Imperial Valley region	U.S. Geol. Surv. Prof. Paper	This reference documents the results of modeling five seismic profiles across the Imperial Valley, gravity profile, and rock compositions, These results can be used to constrain crustal structure in the region, including consideration of velocity discontinuities. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Fuis, G., S.,	1998	West margin of North America - a synthesis of recent seismic transects	Tectonophys.	This paper summarizes results from nine seismic reflection transects focusing on deep structure of the western U.S. Section 2.6 summarizes the transect nearest the DCPP site, in the San Luis Obispo region. This transect imaged the Mesozoic prism in direct contact with the Salinian terrane, with no forearc rocks. Lower crust comprises 6 to 9 km-thick oceanic-like crust, Pacific oceanic crust to the west of the continental slope, and a tectonic underplating to the east. Thick crust is observed near the Hosgri fault, which the authors interpret as a region of plate convergence. Data here are continental in scale, and may be useful for characterization of crustal or seismogenic thickness for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Fuji, Y., Matsu'ura, M.,	2000	Regional Difference in Scaling Laws for Large Earthquakes and its Tectonic Implication	Pure Appl. Geophys.	Using data from 67 different earthquakes, the authors examine scaling relations for four types of events: intraplate strike-slip, interplate-strike-slip, underthrust events at island-arc subduction zones, and underthrust events at continental-margin subduction zones. They also derive a scaling relation dependent upon mean stress drop, fault width and depth, and two derived parameters. From their analysis, the authors determined the seismogenic width of the crust for three of the settings, but determined the seismogenic width at continental margin subduction zones is substantially deeper than at island-arc subduction zones. The scaling relation presented here may be useful in the Magnitude-Area Model branch of the logic tree when applied to strike-slip faults where both the fault length and width are well constrained .	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Fumal, T., E., , Biasi, G., P.,	2002	Evidence for Large Earthquakes on the San Andreas Fault at the Wrightwood, California, Paleoseismic Site: A.D. 500 to Present	Bull. Seis. Soc. Am.	This paper presents results from paleoseismic studies of the San Andreas fault zone at Wrightwood, CA. Trenching here revealed the most complete earthquake record for the S. San Andreas, with 14 earthquakes and a mean recurrence of 105 years. Correlation between events at the Wrightwood site and other previous paleoseismic study sites are considered. This paper plays prominently into the characterization of the S. San Andreas fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Furlong, K., Lay, T., Ammon, C., J.,	2009	A Great Earthquake Rupture Across a Rapidly Evolving Three-Plate Boundary	Science	This study discusses the 2007 M8.1 Solomon Islands earthquake. This rupture crossed a rapidly evolving three plate boundary with very young, hot crust. Previous to this event it was thought that crust that young and ductile was not capable of producing large earthquakes.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Galehouse, J., S.,	1967	Provenance and Paleocurrents of the Paso Robles Formation, California	Geol. Soc. Am. Bull.	The relatively early study provides a depositional history of the Paso Robles Formation during the late Cenozoic. The author uses paleocurrent indicators, such as foreset beds, channels, or imbricated pebbles, to determine that the Paso Robles Formation was deposited by a southeast-flowing stream that drained into the San Joaquin Valley. Deposition of heavy minerals was sampled at various locations to identify stream and depositional characteristics, and also to sediment sources. With these methods, the author ties deposition of the Paso Robles Formation to sediment sources in Santa Lucia and La Panza Ranges, which were actively uplifting in Pliocene time. Cessation of Paso Robles Formation was related to uplift of the Temblor Range and regional tilting. Finally, the author notes that lithologic differences in the Paso Robles Formation across the San Andreas fault indicate about 25 miles of post-depositional (post late Pliocene) right-lateral displacement.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Gan, W., Zhang, P., Shen, Z.-K.,	2003	Initiation of deformation of the Eastern California Shear Zone: constraints from Garlock fault geometry and GPS observations	Geophys. Res. Let.	In this study, GPS velocities are used to evaluate the arcuate geometry of the Garlock fault with respect to the Eastern California Shear Zone. By applying a GPS velocity to previous estimated total shear, the authors suggest shear began 5.0 ± 0.4 Ma in the eastern portion, which displays greater total shear, and the western portion initiated about 1.6 Myr later. A two stage deformation model accurately predicts the observed curvature of the Garlock fault. This study may be useful to the DCPP SSC for characterizing the ECSZ.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Gardner, J., K., Knopoff, L.,	1974	Is the sequence of earthquakes in Southern California, with aftershocks removed, Poissonian?	Bull. Seis. Soc. Am.	Manuscript demonstrates Poissonian behavior of main-shock earthquakes. Their declustering technique was used for the earthquake catalog in UCERF 3.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Gawthrop, W., H., Engdahl, E., R.,	1975	The 1927 Lompoc earthquake and the 1969 San Luis Bank earthquake sequence, a comparative study [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes and compares the location and focal mechanisms of the 1927 Lompoc earthquake and two events of the Santa Lucia Bank earthquake sequences. The focal mechanism for the M = 5.8 earthquake indicates right-lateral oblique slip along the Santa Lucia Bank fault, which the authors suggest may represent a potential faulting model for the Lompoc earthquake.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Gawthrop, W., H.,	1975	Seismicity of the central California coastal region	U.S. Geol. Surv. Open File Rpt.	Describes historical seismicity of the California coast between Goleta and Big Sur. Outlines completeness of the catalog, methods for earthquake relocation and determination of focal mechanisms, velocity model used, and plots relocated earthquakes with magnitude and relative quality assessment.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Gawthrop, W., H.,	1978	The 1927 Lompoc, California earthquake	Bull. Seis. Soc. Am.	Relocates the 1927 Lompoc earthquake to a location much nearer the coastline at Point Sal. The Hosgri fault is proposed as a possible source of the earthquake, as are unnamed near-shore reverse faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Gawthrop, W., H.,	1978	Seismicity and Tectonics of the Central California Coastal Region	Cal. Div. Mines Geol. Spec. Rpt.	The article begins by describing several large historic earthquakes in the 1900s and cites an insufficient amount of data to definitively determine the maximum magnitude in the area. However, based on previous events, earthquakes in the upper 7s are feasible. Previous events of note include the 1927 Lompoc earthquake, which Gawthrop believes to be caused by a 50- to 70- km rupture of the Hosgri fault. Gawthrop speculates that if the Hosgri-San Simeon-San Gregorio fault system is continuous, the system may be long enough to produce a magnitude 8 earthquake, rupturing in excess of 200 km, with 4 m of displacement, and recurrence interval of 250 years. The article defines regional seismicity in terms of which fault systems are active (mostly NW-trending faults), but notes a lack of data for large earthquakes and poor depth control on relocations. These faults likely relieve some of the 2.3 cm/yr relative plate motion that is not attributable to the SAF. Focal mechanisms for regional earthquakes were created and indicated crustal shortening in the NE-SW direction occurred along the plate boundary (in addition to strike-slip transform faulting). Consequently, plate motion between the Pacific and North America plates is oblique to	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Gawthrop, W., H.,	1981	Comments on "The Lompoc, California earthquake (November 4, 1927; M=7.3) and its aftershocks" by Thomas C. Hanks	Bull. Seis. Soc. Am.	A rebuttal to points made by Hanks (1979) discounting methods used by Gawthrop 1978 to locate the 1927 earthquake. Gawthrop suggests his methods are correct and that the earthquake is very likely located on a near-shore source, including the Hosgri.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	GeoSolutions, Inc.,	2000	Engineering Geology Investigation: Jack Ranch, Crestmont Road, Edna Valley Area, County of San Luis Obispo, California	Unpub. Consult. Rpt.	This consulting report describes a geologic hazard investigation at Jack Ranch, near San Luis Obispo, CA that included review of existing data, aerial photos, trench excavations, and mapping. Trenches excavated for the study at the southwest portion of the study site revealed strands of the Lopez Reservoir segment of the Los Osos fault, and Quaternary activity was identified (cutting Paso Robles Fm) in contrast to earlier studies. A number of other faults, and other hazards, are briefly characterized. Logs and maps included. Results of this study may be useful for defining the length and activity of the Los Osos fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	GeoSolutions, Inc.,	2000	Geologic Fault Investigation: Irish Hills Development, Los Osos Valley Road and Madonna Road, San Luis Obispo Area of San Luis Obispo County, California	Unpub. Consult. Rpt.	This consulting report documents a fault location study aimed at locating the Irish Hills segment of the Los Osos fault for a planned subdivision southwest of San Luis Obispo. The fault was not observed in the trench exposure, despite tonal and slight topographic expression suggestive of a fault. This paper may be useful for constraining the trace of the Los Osos fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	GeoSolutions, Inc.,	2001	Fault Location Investigation: Proposed East Cluster, Biddle Ranch Subdivision, Lopez Drive, Arroyo Grande Area of San Luis Obispo County, California (Project	Unpub. Consult. Rpt.	This consulting report documents a fault location study aimed at locating strands of the Los Osos fault for a planned subdivision. The study included review of existing data, new fault trenching, and interpretation of aerial photos. The report briefly summarizes local site geology and existing data. A detailed discussion of the Los Osos fault is included, summarizing previous studies and presenting new data from trench exposures. Despite a lack of direct evidence for recent activity, the faults are conservatively considered potentially active. Three branches of the fault are identified and setbacks designed based on style of faulting. This paper does not provide any new information on the age of the faults, however the location information may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Goldfinger, C.,	2012	Segment Boundaries: It May be a Matter of Time [abstract and slidecast]	SSA Mtg.	Presentation defines segments, provides examples of segmented and non-segmented faults using a variety of criteria. The presenter concludes that faults likely display segmentation in some cases, however, model-based boundaries should be used with caution and examples of ruptures that did not follow boundaries are provided. Concepts in this presentation would likely benefit the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Graham, S., A., Dickinson, W., R.,	1976	The San Gregorio Fault as a major right-slip fault of the San Andreas fault system [abstract]	Geol. Soc. Am. Abst. Prog.	This abstract describes the geometry and sense of slip on the San Gregorio fault as well as previous interpretations of the projection of the fault. The authors propose the San Gregorio fault trends into the SAF near Bolinas to the north and into the Hosgri-San Simeon fault zone to the south. Later studies concur with this abstract, which has implications for potential fault linkages.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Graham, S., A., Dickinson, W., R.,	1978	Apparent Offsets of On-Land Geologic Features Across the San Gregorio-Hosgri Fault Trend	Cal. Div. Mines Geol. Spec. Rpt.	Argues that the San Gregorio fault is continuous through the Sur fault zone and the San Simeon-Hosgri fault zone rather than returning on land as the Palo Colorado fault. The authors determine there has been 115 m of Neogene right-lateral slip on the San Gregorio fault based on offset geologic features. Additionally, the authors suggest that the San Gregorio-Hosgri fault zone and the San Andreas faults have accommodated the majority of post-Oligocene Pacific and North American plate motion. This paper constrains displacement, location, and continuity of the San Gregorio fault.	[ ] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [x] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Graham, S., A., Dickinson, W., R.,	1978	Evidence for 115 km of right-lateral slip on the San Gregorio-Hosgri trend	Science	This paper presents early work on the total slip and tectonic significance of the San Gregorio-Hosgri fault. The authors use offset markers from 7 sites to determine a total of about 115 km of right lateral, post-Miocene offset on the fault. The authors conclude that the San Andreas and San Gregorio-Hosgri faults have accommodated nearly all North American-Pacific Plate movement. Little to no data from this paper would be applicable to the DCPP SSC since later studies and characterizations have improved upon and superseded this work.	[x] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Graham, S., A.,	1978	Role of Salinian block in the evolution of the San Andreas fault system, California	Am. Assoc. Petrol. Geol. Bull.	This article focuses on faults within the Salinian block and better characterizing their respective roles in the evolution of the SAF system by measuring offset piercing points and paleogeographic reconstructions of the central Salinian block. Using offset early Miocene paleo-isobaths, Graham estimates ~43 +/- 4 km of right slip on the Rinconada-Reliz fault and states that movement on the fault has been episodic. The Sur-Nacimiento fault was estimated to have been reactivated by 40-48 km of Neogene to Holocene strike-slip on the Rinconada-Reliz south of their confluence; additionally, the Sur-Nacimiento may have been modified locally near Point Sur by Neogene slip of the San Gregorio-Hosgri fault system.	[ ] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Grandori, G., Guagenti, E., Petrini, L.,	2008	Statistical grounds for favoring the characteristic magnitude model: a case study	Bull. Seis. Soc. Am.	Authors attempt to provide statistical evidence of whether the characteristic model or the exponential model is more reliable in determining the estimation of a "specific quantity" (synthetic measure of local hazard, % of g). They determine the hybrid (characteristic) model is more reliable for the two sites tested (with reference to the PGA with a 500-yr return period). These two test sites are theoretical. The statistical methods here may be useful in developing the earthquake rate model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Grant, L., B., Waggoner, J., T., Rockwell, T., K.,	1997	Paleoseismicity of the North Branch of the Newport-Inglewood Fault Zone in Huntington Beach, California, from Cone Penetrometer Test Data	Bull. Seis. Soc. Am.	This fault study uses CPT soundings and borings in a paleoseismic study of the Newport-Inglewood fault. CPT cross sections are used with boring data for confirmation to recognize vertical displacements in relatively flat strata, finding at least 3 and up to 5 previous earthquakes since 11.7 ± 0.7 ka that were probably larger than the 1933 MW 6.4 event. Recurrence is believe to be clustered, but poor age constraint does not permit more accurate assessment. A slip rate of 0.34 to 0.55 is estimated, but considered a minimum do to structural complexity at the project site. This study provides valuable information for characterization of the Newport Inglewood fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Grant, L., B., Mueller, K., J., Gath, E.,	1999	Late Quaternary Uplift and Earthquake Potential of the San Joaquin Hills, Southern Los Angeles Basin, California	Geology	The authors used terrace mapping, elevations of shorelines and terrace platforms, and coral ages to help measure uplift rate of the San Joaquin Hills (~0.24 m/ky as a preferred). This uplift is thought to have continued during the middle to late Holocene, as based on the location and thickness of Holocene sediments in the San Joaquin Hills. The authors also suggest that the uplift of the San Joaquin Hills is the surface expression of a fold formed through a potentially seismogenic blind thrust fault, with estimates of a maximum magnitude earthquake up to Mw 7.3. This article focuses on faults south of DCPP and provides little information of direct use in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Grant, L., B., Rockwell, T., K.,	2002	A Northward-Propagating Earthquake Sequence in Coastal Southern California?	Seis. Res. Let.	Evidence for sequential or coeval earthquakes along a > 300 km length of the predominantly strike-slip Coastal Fault Zone is presented. The Coastal Fault Zone includes the Agua Blanca, Rose Canyon, San Joaquin Hills, and southern Newport-Inglewood Fault zones and is believed to have a northward-propagating sequence of earthquakes. Provides dating of moderate to large earthquakes on the Agua Blanca, Rose Canyon, San Joaquin Hills, and southern Newport-Inglewood faults, but states the MRE for the northern Newport-Inglewood fault is unknown. Suggest the northern Newport-Inglewood fault is close to failure. Although this article focuses on faults south of DCPP, the authors present evidence of fault linkage that may be useful in the SSC	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Grant, L., B., Ballenger, L., J., Runnerstrom, E., E.,	2002	Coastal Uplift of the San Joaquin Hills, Southern Los Angeles Basin, California, by a Large Earthquake Since A.D. 1635	Bull. Seis. Soc. Am.	Geomorphic expression, distribution, and age of the elevated marsh deposits along the coast of the San Joaquin Hills are preferentially explained by tectonic uplift due to a M > 7 earthquake. Radiocarbon dating of the marsh deposits indicates emergence after A.D. 1635 and seismicity suggests the earthquake occurred between A.D. 1635 and 1855, possibly in 1769. While this article presents evidence of historic seismicity of the San Joaquin Hills, this information seems more relevant to the SSC at SONGS than at DCPP.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Grant, L., B., Shearer, P., M.,	2004	Activity of the Offshore Newport-Inglewood Rose Canyon Fault Zone, Coastal Southern California, from Relocated Microseismicity	Bull. Seis. Soc. Am.	Provides evidence (through analysis of clusters of microseismicity) supporting the steeply dipping, active strike-slip Newport-Inglewood Rose Canyon fault system is through going, extends to seismogenic depth of 13 km, and has a slip rate of 0.5-2.0 mm/yr. This article presents evidence of fault linking, although the data seem more relevant to the SSC at SONGS than at DCPP.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Gray, B., Lewandowski, N., AbramsonWard, H.,	2013	Regional stratigraphic framework along the central California shelf margin for assessment of Quaternary activity on the Hosgri fault zone	s. Am. Assoc. Petrol. Geol. Pacific Se	Poster presented a sequence stratigraphic model developed from 2D seismic data offshore of the central CA coast. Four prominent lowstand systems tracts were correlated with late Quaternary sea-level lows to provide a chronologic framework. Attributes of the Hosgri fault, including recency, style, and rate of slip on faults, were evaluated in the context of the sequence stratigraphic model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Graymer, R., W., Langenheim, V., E., Simpson, G., D.,	2007	Relatively simple through-going fault planes at large-earthquake depth may be concealed by the surface complexity of strike-slip faults	Geol. Soc. London Spec. Pub.	This paper suggests that the often complex nature of strike slip faults at the surface does not always reflect the relationship with to down-dip geometry, and supposed rupture boundaries may not represent a true rupture-arresting structure in large earthquakes. The study uses aftershock clouds of example areas including releasing and restraining stepovers such as the Hayward-Calaveras, San Andreas, and San Jacinto faults as well as a zone of fault complexity on central Calaveras fault. The authors suggest that stepovers should be further investigation in hazard assessments before they are characterized as rupture boundaries. Concepts from this paper may be useful for the DCPP SSC, although local study areas would have little bearing on the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Graymer, R., W., Langenheim, V., E., Roberts, M., A.,	2014	Geologic and Geophysical Maps of the Eastern Three-Fourths of the Cambria 30' by 60' Quadrangle, Central California Coast Ranges	U.S. Geol. Surv. Sci. Investig. Map	This map and pamphlet show updated traces of the onshore San Simeon fault (from San Simeon Point in the south to Ragged Point in the north), the Cambria fault, the Oceanic fault, and the Nacimiento fault. The pamphlet includes descriptions of stratigraphy of the California Coast Ranges, paleontology, radiometric ages, geophysical data, and a description of the structural history of and cross section through the Cambria region.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Greenhaus, M., R., Cox, A.,	1979	Paleomagnetism of the Morro Rock-Islay Hill complex as evidence for crustal block rotations in central coastal California	J. Geophys. Res.	Paper describes sampling, analysis, and interpretation of 63 paleomagnetic samples collected from the Morro Rock-Islay Hill intrusive complex outcropping along the north side of Los Osos Valley and Morro Bay. Samples show an average rotation of 52 degrees with significant variation in declination. Variation is suggested to be the result of localized rotation of the intrusive bodies through right-lateral shear.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Grossman, E., E., Eittreim, S., L., Field, M., E.,	2006	Shallow stratigraphy and sedimentation history during high-frequency sea-level changes on the central California shelf	Cont. Shelf Res.	Using high-resolution shallow seismic reflection and sedimentologic data, the authors present stratigraphy and morphology descriptions of the central California continental shelf and examine the depositional history of a mid-shelf sediment deposit. This sediment deposit likely formed during the postglacial transgression (~15 ka) and that an abrupt change in depositional environment occurred at ~12-11 ka after a shallow basal lag accumulated; later in the transgression, uplift rates greater than or equal to sea-level rise allowed the middle and inner shelf to be reworked by waves and currents (resulting in progradation of mid-shelf sediments). The authors also propose two models to explain how the extensive progradation and delta-like clinoforms formed.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Gutenberg, B., Richter, C., F.,	1944	Frequency of Earthquakes in California	Bull. Seis. Soc. Am.	Early work defining frequency of earthquakes in California. Used an exponential distribution to describe earthquake frequency. This was one of the models used to determine magnitude probability distribution functions for faults included in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Gutenberg, B., Richter, C., F.,	1956	Earthquake magnitude, intensity, energy, and acceleration	Bull. Seis. Soc. Am.	The authors present new earthquake data in California as an update to their 1942 paper and cite equation (20) as the best method for relating magnitude and energy. The authors speculate that magnitudes determined from body waves are more accurate than those determined from surface waves and suggest that magnitudes > 7 determined from surface waves have likely been overestimated while those < 7 have been underestimated.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Haeussler, P., J., Schwartz, D., P., Dawson, T., E.,	2004	Surface Rupture and Slip Distribution of the Denali and Totschunda Faults in the 3 November 2002 M 7.9 Earthquake, Alaska	Bull. Seis. Soc. Am.	Detailed report on the surface rupture associated with the 2002 Denali Fault earthquake. Used as an analog for characterizing rupture sources in the DCPP SSC model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Haeussler, P., J.,	2009	Surface Rupture Map of the 2002 M7.9 Denali Fault Earthquake, Alaska; Digital Data	U.S. Geol. Surv. Data Series	Surface rupture map of deformation associated with the 2002 Denali Fault earthquake generated from aerial photographs. Attributes of this fault are used as an analog in the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Hall, C., A., Corbato, C., E.,	1967	Stratigraphy and structure of Mesozoic and Cenozoic rocks, Nipomo quadrangle, southern Coast Ranges, California	Geol. Soc. Am. Bull.	This paper and map presents results from a mapping study that covered the 15-minute Nipomo quad, roughly 25 km to the east and southeast of DCPP. Stratigraphy within the quad is described in good detail with respect to provenance, environment, and age from fossils. Structure of the quad is also described in good detail, and some tectonic implications are made. For instance, the authors suggest that faulting in the quad ceased in Mio-Pliocene time, with folding apparently continuing farther into the Pliocene.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hall, C., A., Bowen, J., E.,	1968	Geology of the San Luis Obispo Area, San Luis Obispo County, California	Natl. Def. Ed. Act.	Guidebook of the SLO region. Describes a outcrop of the Indian Knob fault that dips 40 and 55 degrees and as steep as 60 (strike not noted). Notes there has been approximately 1000 feet of dip slip along the fault. This guidebook provides good locations to calibrate the local rock units, as well as key contacts that demonstrate the geologic relations of the units. Generally this is not helpful for the SSC model.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hall, C., A.,	1973	Geology of the Arroyo Grande 15' Quadrangle, San Luis Obispo County, California (Map Sheet 24)	Cal. Div. Mines Geol.	This map and explanation include descriptions of the stratigraphy, faults, and folds of the Irish Hills, Los Osos and San Luis Valleys, and the Santa Lucia Range. Structures include the Pismo syncline, West Huasna fault zone, and the Indian Knob fault, and the map includes several cross sections, subdivided Quaternary deposits, and pre-Quaternary bedrock units.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hall, C., A.,	1973	Geologic map of the Morro Bay South and Port San Luis quadrangles, San Luis Obispo County, California (scale 1:24,000)	J.S. Geol. Surv. Misc. Field Stud. Map	This 1:24,000 scale geologic map extends from Morro Bay and Los Osos Valley in the north to Point San Luis in the south and includes three cross sections, subdivided Quaternary deposits, and pre-Quaternary bedrock units. The map includes the Edna, Miguelito, and other faults and folds.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hall, C., A.,	1975	San Simeon-Hosgri Fault System, Coastal California: Economic and Environmental Implications	Science	Relatively early study on the San Simeon-Hosgri fault system that estimated 80 or more of total right lateral strike-slip on the fault. The author concludes this fault system comprised a portion of the plate boundary in the Miocene and explains the discrepancy in total plate motion and total slip on the San Andreas fault system. Results of this paper have been refined and superseded.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hall, C., A., Prior, S., W.,	1975	Geologic Map of the Cayucos-San Luis Obispo Region, San Luis Obispo County, California (scale 1:24,000)	J.S. Geol. Surv. Misc. Field Stud. Map	Geologic mapping at 1:24,000 scale that includes portions of the Atascadero, Cayucos, and Morro Bay North Quadrangles and 4 cross sections. Map includes several subdivided units and Quaternary deposits. Structures mapped include the Cambria fault, Oceanic fault, Los Osos fault, and other faults and folds. Locations of sections of the Los Osos and Edna faults presented on this map were included in the SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hall, C., A.,	1978	Origin and Development of the Lompoc-Santa Maria Pull-Apart Basin and its Relation to the San Simeon-Hosgri Strike-Slip Fault, Western California	Cal. Div. Mines Geol. Spec. Rpt.	Hall presents a "speculative" model for the stratigraphy of the Santa-Maria-Lompoc region in which a pull-apart basin developed following the deposition of the Vaqueros, Rincon, and Obispo-Tranquillon formations. The Santa Maria-Lompoc basin is wedge-shaped, bounded by faults, has a maximum ~50 km pull-apart, and may have undergone recurrent periods of rifting. Since the Pliocene, the western portion of the basin was likely displaced 80 to 95 km to the northwest due to right-lateral slip along the San Simeon-Hosgri fault zone. This paper provides constraints on displacement of the San Simeon-Hosgri fault zone since the Pliocene and the formation of the onshore Santa Maria basin.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hall, C., A., Ernst, W., G., Prior, S., W.,	1979	Geologic map of the San Luis Obispo-San Simeon region, California (scale 1:48,000)	S. Geol. Surv. Misc. Investig. Series M	This 1:48,000 scale geologic map of the San Luis Obispo-San Simeon extends several kilometers south of San Simeon Point and includes subdivided Quaternary deposits and pre-Quaternary bedrock units. The map includes the Oceanic, San Simeon, and other faults and folds.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hall, C., A.,	1981	San Luis Obispo transform fault and middle Miocene rotation of the western Transverse Ranges, California	J. Geophys. Res.	A synthesis paper using the distribution of latest Oligocene and Miocene volcanic and intrusive rocks to propose the pre existence of the "leaky" transform fault termed the San Luis Obispo Transform (SLOT). The fault defined or was in close proximity to the continental margin and was related to trans tension and rotation of the transverse and southern coast ranges.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hall, C., A.,	1982	Pre-Monterey subcrop and structure contour maps, western San Luis Obispo and Santa Barbara counties, south-central California	J.S. Geol. Surv. Misc. Field Stud. Map	Report includes six plates of subcrop and structure contour maps depicting the upper basement (pre-Tertiary) contact. Maps are based on surficial mapping and borehole data. Sheets 2 and 3 cover the Irish Hills. Structure contour maps indicate a thickening of Tertiary strata in core of the Pismo synclinorium and also near the coast southeast of Diablo Cove.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Hall, C., A.,	1991	Geology of the Point Sur-Lopez Point region, Coast Ranges, California: A part of the southern California allochthon	Geol. Soc. Am. Spec. Paper	This volume reviews geologic mapping in the Coast Ranges and the implications for the origin of the Salinian block in the Southern California allochthon, which includes a fairly lengthy discussion of geologic units in the area, Hall's interpretations for central California Coast Range geology, and Hall's interpretations of regional geology of central and southern California. This discussion includes descriptions of the Sur-Nacimiento/Oceanic-West Huasna fault zones.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hall, C., A.,	2002	Nearshore marine paleoclimatic regions, increasing zoogeographic provinciality, molluscan extinctions, and paleoshorelines, California: Late Oligocene (27 Ma) to late	Geol. Soc. Am. Spec. Paper	This study assigns index marine mollusk fossils to time slices and geographic provinces based palinspastically restored fault and crustal blocks. Results are used to develop paleoclimates along the California coast. Various climatic and tectonic events and their interplay are examined. The author also examines mollusk diversity as related to paleo-geography and -climate, effective temperature, and extinction events and appearance of new species. It is unlikely these data would contribute to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Hall, N., T.,	1984	Holocene history of the San Andreas Fault between Crystal Springs Reservoir and San Andreas Dam, San Mateo County, California	Bull. Seis. Soc. Am.	This study evaluated the 1906 San Andreas rupture to estimate the width of deformation south of San Francisco , and also performed paleoseismic trenching and mapping. Results include mapping of the fault rupture trace, slip per event estimates, and development of Holocene recurrence (<= 224 +/- 25) and strain (1.2 cm/yr) rates. This is a relatively early paleoseismic study of the San Andreas fault, and many of the results of this study have been refined or superseded.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hall, N., T., Hunt, T., D., Vaughan, P., R.,	1994	Holocene Behavior of the San Simeon Fault Zone, South-Central Coastal California	Geol. Soc. Am. Spec. Paper	Paper discusses geomorphic and paleoseismic evidence of fault location, offset, and Holocene slip rate of the San Simeon fault near San Simeon, CA. The onshore San Simeon fault is composed of 2 to perhaps 4 or more NW-striking, vertical to near vertical strands with an estimated combined right-lateral slip rate of 0.9-3.4 mm/yr with a best-constrained value of 1-1.4 mm/yr. Net slip is estimated at 1-2 m/event and recurrence is potentially highly-variable with an interval of 265-2000 yr. This paper presents constraints on the slip rate and faulting style of the San Simeon fault zone which would be useful in the SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hamilton, D., H., Willingham, C., R.,	1978	Evidence for a maximum of 20 km of Neogene right slip along the San Gregorio fault zone of central California [abs.]	Eos Trans. Am. Geophys. Un.	This abstract describes an estimate of 15-20 km of Neogene right-lateral displacement for the San Gregorio-San Simeon-Hosgri fault system north of Monterey Bay. The Neogene lateral slip rate for the San Gregorio, from this interpreted offset, is 1 mm/yr. Interpretations of gravity anomalies and mapping of this fault system has since been refined.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Hamilton, D., H.,	1987	Characterization of the San Gregorio-Hosgri fault system, coastal central California [abstract]	Geol. Soc. Am. Abst. Prog. Cord. Sec	This abstract describes the San Simeon fault and its splays and their sense of slip, and Hosgri fault as a tectonic boundary fault interpreted in high-resolution seismic data as a "linear zone of one of more near-surface strands". The estimate of late Quaternary slip rate of "no more than a few mm/yr" is in concordance with other studies; however, more recent seismic data and interpretations of the Hosgri (e.g., Langenheim et al., 2012; Johnson and Watt, 2012; Seismic Stratigraphy Project [PG&E, 2013]), should be considered for alternative interpretations.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hamilton, D., H., Hall, N., T.,	1987	Structure and tectonics of the San Luis-Pismo-Santa Maria region, coastal central California [abstract]	Geol. Soc. Am. Abst. Prog. Cord. Sec	The authors describe structural features in the "San Luis-Pismo-Santa Maria region" to have formed from NE-SW directed compression and suggest that this strain regime currently exists. This orientation of compression is consistent with results of the Stress/Strain Project presented at WS3.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hamilton, D., H.,	2010	Dual-system tectonics of the San Luis Range and vicinity, coastal central California [abstract]	Am. Geophys. Un. Fall Mtg.	This abstract describes a "seismogenic thrust wedge" underlying the San Luis Range and the interpreted importance of this wedge to ground motions (relative to the San Simeon and Hosgri faults). The author interprets a "side by side" system of active tectonics: strike-slip faulting offshore vs. thrust faulting onshore. To consider this abstract in the SSC, data supporting the author's interpretations would need to be reviewed.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hamilton, D., H.,	2012	Irish Hills/San Luis Range Tectonic and Fault Model	SSC Workshop	In this presentation, Hamilton presents a tectonic model for the Irish Hills/San Luis Range that involves compressional uplift of structural wedge-blocks along bordering reverse faults. Hamilton also describes the relation of the San Gregorio-Hosgri fault system to the Coast Ranges. Additionally, Hamilton describes his interpretation of the Diablo Cove fault. This presentation was considered in the development of the Southwest Vergent fault model.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Hamilton, D., H.,	2012	Direct testimony of Douglas H. Hamilton, February 10, 2012, Before the Public Utilities Commission of the State of California (submitted by the Alliance for	Cal. Pub. Util. Com.	This testimony addresses Hamilton's concerns about the DCPP seismic setting and previous and ongoing work to address potential seismic safety issues. The testimony includes: a description of the geology and seismic setting of DCPP (including geometry, location, and sense of slip on the Hosgri/San Simeon fault zone), descriptions of seismic sources, comparisons of estimated maximum earthquakes in the DCPP vicinity to earthquakes elsewhere, response spectra comparisons, potential earthquake hazards, and Hamilton's perceived deficiencies in previous and ongoing work as well as recommendations.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hamilton, D., H.,	2012	The Diablo Canyon Nuclear Power Plant in South Central Coastal California; Incremental Recognition of Seismic Hazard, 1965 - 2012	AEG Ann. Mtg.	This presentation is composed of images and maps showing the history of DCPP. Many images are pulled from references cited in this database (e.g., PG&E, 1988; Namson and Davis, 1990; McLaren et al., 2008). Hamilton cites the structural models of Crouch et al. (1984) and Namson and Davis (1990) and seismicity as evidence for thrust faulting as the dominant type of deformation in the DCPP vicinity. Slide 41 is a summary slide which shows Hamilton's San Luis Range model and its predicted spectral acceleration. As noted in the evaluations of the thrust-dominant structural models, evidence supporting these models is weak .	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hanks, T., C.,	1979	The 1927 Lompoc, California earthquake (November 4, 1927, M=7.3) and its aftershocks	Bull. Seis. Soc. Am.	Discusses the probable location of the Lompoc earthquake approximately 40 km to the southwest of the Gawthrop (1978) location and more or less argues against the Hosgri as the source.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hanks, T., C., Kanamori, H.,	1979	A Moment Magnitude Scale	J. Geophys. Res.	The authors derive the moment magnitude relation (logM0 = 1.5Mw + 16.1) by (1) relating the estimated radiated energy during an earthquake to the shear modulus and stress drop, and (2) using the G-R relation between radiated energy and surface wave magnitude. This relation is referenced in many articles when converting between seismic moment and magnitude.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Hanks, T., C., Bakun, W., H.,	2002	A Bilinear Source-Scaling Model for M-log A Observations of Continental Earthquakes	Bull. Seis. Soc. Am.	Hanks and Bakun develop M-log A relations that cover the transition from small earthquakes with circular geometry to large earthquakes with rectangular geometry by using the strike-slip subset of the full WC94 data set. These relations are intended to better estimate large earthquakes (where WC94 underestimates M for a given A at M > 7). The authors note that their use of L-model scaling for M > 7 earthquakes is controversial, but the model and the data appear to be in good agreement. The scaling relations presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hanks, T., C., Bakun, W., H.,	2008	M-log A observations for recent large earthquakes	Bull. Seis. Soc. Am.	The authors updated their dataset by adding 7 large strike-slip earthquakes and found insignificant changes to their bilinear model (0.01 change in the intercept value for the A > 537 km^2 equation, which is within the error of the original equation). Consequently, they deem their original model still valid. The scaling relations presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Hanks, T., C., Abrahamson, N., A., Boore, D., M.,	2009	Implementation of the SSHAC Guidelines for Level 3 and 4 PSHAs—Experience Gained from Actual Applications	U.S. Geol. Surv. Open File Rpt.	This paper provides a history of the SSHAC guidelines, and their adoption by the NRC. The paper begins with a brief synopsis of PSHA methodology and its uses, and how the SSHAC guidelines are designed to "capture, quantify, and communicate both the implicit and explicit uncertainties expressed by multiple experts" that will be incorporated into the model. The model should "represent the center body and range of the technical interpretations that the larger technical community would have if they were to conduct the study." Roles of SSHAC participants are discussed, noting that one person may play several roles. Each of the study levels is summarized followed by a series of lessons learned in each part of SSHAC process. This paper contains abundant information useful for the DCPP SSC, which follows the SSHAC process.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hanks, T., C., Bakun, W., H.,	2014	Magnitude – log Area Models and Other Curiosities	Bull. Seis. Soc. Am.	The authors compared the magnitude-log area models developed by Wells and Coppersmith (1994), Hanks and Bakun (2002, 2008), Ellsworth (2003), and Shaw (2009, 2013). The Shaw (2009) and Hanks and Bakun (2002) models are very similar up to magnitude 8, beyond which the authors state that there is little empirical basis in California for extrapolation. Differences in standard deviations between Shaw (2009) and Hanks and Bakun (2002, 2008) are hundredths of a M unit, and the authors state uncertainties in M-log A data are likely much large than this. Ellsworth (2003) is also similar for the 7 < M < 8 range but overestimates the data at smaller M values. Additionally, Hanks and Bakun (2002, 2008), Ellsworth (2003), and Shaw (2009, 2013) imply significant increases in surface rupture distances from M = 6.7 to M = 8.0. The authors also address the issue of deep slip vs. high stress drops, and propose rheological conditions at the brittle-ductile transition as a potentially important factor.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Hanson, K., L., Lettis, W., R., Mezger, L.,	1987	Late Pleistocene deformation along the San Simeon fault zone near San Simeon, California [abstract]	Geol. Soc. Am. Abst. Prog. Cord. Sec	This abstract describes an estimated 3.9 mm/yr slip rate (with uplift rates of 0.17 mm/yr SW/NE of the fault zone and 0.24 mm/yr within the fault zone) for the San Simeon fault zone based on a sequence of at least five displaced marine terraces, with Pleistocene deformation primarily occurring on two or three fault traces. A more detailed description of Quaternary marine terraces and Pleistocene slip rate for the San Simeon fault zone is presented in Hanson et al. (1994a, b) GSA Special Paper 292.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hanson, K., L., Lettis, W., R.,	1990	Use of rates of horizontal to vertical components of slip to assess style of faulting -- Hosgri fault zone, California [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes the ratio of horizontal to vertical components of slip along the length of the Hosgri fault zone and the authors determine that rake angles, as defined by these ratios, suggest the Hosgri fault zone is primarily a strike slip fault with a secondary dip slip component. The authors also state that horizontal slip likely decreases to the south, with potential oblique slip near Point Sal.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hanson, K., L., Lettis, W., R., Hall, N., T.,	1990	Quaternary behavior of the San Simeon and Hosgri fault zones: Field Trip Guide: Day 1	Pacific Cell FOP	This field trip guidebook provides a summary of the Hosgri and San Simeon faults followed by field locations where various characteristics of the fault can be viewed. Stops include areas where Quaternary activity and deformation can be recognized in the landscape and several paleoseismic sites where event chronologies, slip per event, and age of activity can be observed. The data included in this field trip guide would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hanson, K., L., Lettis, W., R.,	1994	Estimated Pleistocene Slip Rate for the San Simeon Fault Zone, South-Central Coastal California	Geol. Soc. Am. Spec. Paper	Utilizes emergent flights of marine terraces and deflected drainages to define the location of faults and their respective slip rates and senses of offset. Paleoreconstructions and age dating yield slip rates between 0.7 and 11 mm/yr, with preferred slip rates of 1-3 mm/yr with the vertical component ranging from 2 to 13%. Offset drainages yield slip rates between 1 and 6 mm/yr. Total displacement may be on the order of 3 km. Although there are uncertainties in the data and shoreline reconstructions, Hanson and Lettis, along with Hall et al. (1994), provide multiple pieces of evidence for 1-3 mm/yr slip rate.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hanson, K., L., Wesling, J., R., Lettis, W., R.,	1994	Correlation, ages, and uplift rates of Quaternary marine terraces: south-central coastal California	Geol. Soc. Am. Spec. Paper	Paper details mapping and correlation of marine terraces from two coastal reaches; the Simeon area and the Morro Bay to Santa Maria river to understand local and regional uplift rates north and south of DCPP. Provides discussions of Pleistocene sea level, marine terrace formation/preservation, detailed terrace mapping and distribution, age dating, and regional terrace correlation. Describes coastal uplift rates north and south of DCPP.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hanson, K., L., Kelson, K., I., Angell, M., A.,	1999	Techniques for identifying faults and determining their origins	USNRC	This NRC NUREG volume resemble a textbook on the subject of fault identification and origin characterization. The volume notes that faults are either tectonic (seismogenic or non-seismogenic) and non-tectonic (non-seismogenic). Specific examples and phenomenon are covered, including an appendix that compiles papers written by experts that discuss less frequently observed processes. Methods and criteria here globally applicable, including the DCPP SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hanson, K., L., Lettis, W., R., McLaren, M., K.,	2004	Style and Rate of Quaternary Deformation of the Hosgri Fault Zone, Offshore South-Central Coastal California	U.S. Geol. Surv. Bull.	Comprehensive paper detailing the contemporary style(s) of fault deformation, slip rate, regional kinematics, and geometry of the Hosgri fault zone. The Hosgri is a transpressional fault with an estimated right-lateral slip rate of 1-3 mm/yr and maximum vertical slip rate of 0.25 mm/yr. A limitation, as noted in the literature review of AB 1632 Appendix C, is that lateral displacements in and out of section are difficult to identify (if at all) in seismic reflection data along strike-slip fault zones.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Harbert, W., Cox, A.,	1989	Late Neogene motion of the Pacific plate	J. Geophys. Res.	In this paper, modeling of marine magnetic profiles indicates a change in motion of the Pacific plate at 3.9 to 3.4 Ma with respect to hot spots and North America. This change in motion, caused by a change in subduction geometry in the west Pacific, resulted in early Pliocene non-collisional orogeny on the western North American plate margin. This paper may benefit the DCPP SSC team in characterization of the early Quaternary plate boundary, although Herbert (1991) seems to provide an update to data and results presented here.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Harbert, W.,	1991	Late Neogene relative motions of the Pacific and North America plates	Tectonics	This paper presents rotations and relative movements of Pacific-North American plates since 10 Ma. The paper describes two motion changes, late Pliocene and early Pleistocene, which resulted in increased oblique convergence and decreasing rate of relative motion. The motion changes were caused primarily by detachment of subducted slab beneath the Fiji Basin. The author argues that this relatively small plate motion change coincided with a number of phenomena observed in the geologic and tectonic record along the western U.S. margin. This paper may benefit the DCPP SSC team in characterization of the early Quaternary plate boundary.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hardebeck, J., L., Shearer, P., M.,	2002	A new method for determining first-motion focal mechanisms	Bull. Seis. Soc. Am.	The authors present an algorithm for determining first-motion focal mechanisms from P-wave polarity data. They argue that this algorithm is superior to FPFIT because possible errors in the computed takeoff angles are accounted for (in addition to other errors). This algorithm determines the set of acceptable focal mechanisms for each event, with this set representing the mechanism uncertainty. The authors also state that mechanisms of dip-slip events are the most unstable and shallow events are less constrained than deeper events.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Hardebeck, J., L.,	2006	Homogeneity of small-scale earthquake faulting, stress, and fault strength	Bull. Seis. Soc. Am.	Paper describes analysis of small (M <3) focal mechanisms for events in southern CA, the east Bay, and aftershocks from Loma Prieta to understand homogeneity/heterogeneity of temporally-related earthquakes. In general, small temporally clustered events have similar focal mechanisms, with orientation/heterogeneity increasing with distance. Work attempts to understand stress heterogeneities from the results of the focal mechanism analysis. Work may be applicable to understanding DCPP area background seismicity incorporated into the model.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Hardebeck, J., L., Michael, A., J.,	2006	Damped regional-scale stress inversions: Methodology and examples for southern California and the Coalinga aftershock sequence	J. Geophys. Res.	The damped inversion method presented in this article, SATSI, was developed to obtain the least complex stress orientation model that fits observations. To use this method, the user divides the region of interest into small subareas and simultaneously inverts for stress in all subareas while minimizing the difference in stress between adjacent subareas. By using a damping parameter, the stress field generated contains only variations that are strongly required by the data. Using a synthetic dataset, the authors compare different inversion methods (independent inversion of each grid node, smoothed inversion, moving-window, and the damped inversion) and find the damped inversion best reproduces the synthetic data. The damped inversion method is also applied to a southern California dataset and to the 1983 Coalinga earthquake aftershocks.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hardebeck, J., L.,	2010	Seismotectonics and fault structure of the California central coast	Bull. Seis. Soc. Am.	Hardebeck's 2010 paper detailing relocated focal mechanisms in the DCPP study area. Most notably, a seismicity lineament associated with the Shoreline fault is observed, defining a NW-SE near-vertical structure with focal mechanisms that are predominantly dextral strike slip. Data confirm the vertical dips and predominantly dextral sense of displacements for the Hosgri and San Simeon. Composite mechanisms computed within Estero Bay show dominantly dextral slip on NW-SE oriented faults. A very important paper outlining potential location, orientation, and sense of slip for DCPP area faults.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hardebeck, J., L., Zhang, H., Thurber, C., H.,	2011	Objective determination of the geometry of the Shoreline and Hosgri faults, near Point Buchon, California, from seismicity relocations [abstract]	SSA Mtg.	The authors use hypoDD-relocated seismicity near Point Buchon and the OADC algorithm to determine fault plane(s) of the Shoreline and Hosgri faults. The Hosgri is found to dip ~70° NE and the Shoreline plane is near vertical, ~25 km long, with the planes intersecting at ~30° and no evidence for discontinuities/segmentation of the Shoreline observed at seismogenic depths.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hardebeck, J., L.,	2012	Seismicity of the Shoreline and Hosgri Faults, Estero Bay and Irish Hills	SSC Workshop	In this SSHAC SSC Workshop 2 presentation, Hardebeck presents relocated seismicity and single-event and composite focal mechanisms to help constrain the location, dip, and rake on the Hosgri and Shoreline faults as well as to describe seismicity lineaments in Estero Bay and the Irish Hills. Hardebeck's OADC results for the Shoreline and Hosgri faults, which suggest a joint rupture of the two faults cannot be ruled out. This presentation is applicable to the seismotectonic setting, fault geometry model, and magnitude distribution model in the SSC model.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Hardebeck, J., L.,	2012	Constraining ETAS Parameters from the UCERF3 Catalog and Validating the ETAS Model for M≥6.5 Earthquakes	Unpub. Manuscript	This paper describes the epidemic type aftershock sequence model, which follows the space and time intensity function. The author validates the model by comparing modeled earthquake rate vs. instrumental earthquake rate, which are very similar. Additionally, the model is found to successfully generate clustered large earthquakes, as observed. Finally, by incorporating small events into the model, clustering of larger earthquakes is more accurately forecasted. This paper contains useful information for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Hardebeck, J., L.,	2012	Evidence Against the Hypothesis of Fault Segmentation [abstract and slidecast]	SSA Mtg.	Presentation gives characteristics that are used to define segment boundaries and what defines a segmented fault model. Several arguments against various fault segmentation models are given, while leaving open the possibility that segmentation is more likely related to subsurface fault structure as opposed to mapped traces. Concepts from this presentation are likely useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Hardebeck, J., L.,	2012	Fluid-driven seismicity response of the Rinconada fault near Paso Robles, California, to the 2003 M 6.5 San Simeon Earthquake	Bull. Seis. Soc. Am.	Paper analyzes the aftershock sequence of the 2003 San Simeon earthquake on or near the Rinconada fault. The temporal pattern of decreased aftershocks is suggestive of an initial decrease in normal stress and fluid pressure following the San Simeon event, and then an increase in seismicity several months later when normal stress fluid/pore pressure equilibrated. Decreases in normal stress and fluid pressure resulted in a delayed aftershock response on the Rinconada. San Simeon appears to have doubled the probability of a damaging earthquake on the Rinconada.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Hardebeck, J., L.,	2012	Report on Task 2 of Seismic Analyses of the South Central Coast Region, CA	Unpub. Tech. Rpt.	This report presents an improved velocity model and earthquake relocations in the San Luis Obispo area using a new tomoDD model and new data. The new velocity model is found to be "nearly indistinguishable" from Hardebeck (2010), and the earthquake locations are also very similar to those in Hardebeck (2010). Hardebeck also determines that fixing the relocated earthquakes to a single vertical plane on the Hosgri is not referred to leaving the events unconstrained.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Hardebeck, J., L.,	2013	Geometry and earthquake potential of the Shoreline fault, central California	Bull. Seis. Soc. Am.	Using the OADC algorithm, seismicity relocations, and earthquake focal mechanisms, Hardebeck found the Shoreline fault is a single structure (not three as presented in the Shoreline Report) and connects to the Hosgri fault at ~30 degree angle. The OADC algorithm resulted in three fault planes: two strands that diverge with depth (one associated with the Hosgri, one with the Shoreline) and one subhorizontal likely spurious fault plane. The OADC interpreted Shoreline fault plane dips very steeply southwest and is near vertical while the OADC Hosgri fault plane dips east towards the Shoreline. The composite focal mechanisms, however, show the Hosgri dipping to the west, though Hardebeck prefers the OADC interpreted plane. The focal mechanisms also indicate pure right-lateral strike-slip on the fault planes and the presence of a structure or non-planar deep Hosgri fault underlying the northern Shoreline fault. From the OADC algorithm results, Hardebeck determines a hypothetical earthquake could nucleate on the Shoreline fault and continue rupturing onto the Hosgri. Although the slip rate on the Shoreline is unknown, Hardebeck states a hypothetical earthquake rupturing the entire length could have a moment magnitude of 6.4-6.8, and that a hypothetical earthquake rupturing the Shoreline fault and the section of the Hosgri north of the intersection could have a moment magnitude of 7.2-7.5.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Harris, R., A., Day, S., M.,	1993	Dynamics of Fault Interaction: Parallel Strike-Slip Faults	J. Geophys. Res.	This study models 2D dynamic rupture propagations, finding that ruptures could propagate across both dilational and compressional steps, in contrast to previous modeling studies. The size of step a rupture can propagate is related to rupture velocity, and dilational stepovers slow rupture velocity considerably. The results and methods from this paper have been superseded by more complex, later studies.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Harris, R., A., Day, S., M.,	1999	Dynamic 3D simulations of earthquakes on en echelon faults	Geophys. Res. Let.	This paper presents a 3D dynamic rupture model of stepover effects on rupture propagation. The authors find that, for compressional stepovers, longer faults allow for propagation across larger stepover distances. For dilational stepovers, deeper faults allow for propagation across larger stepover distances. Jumps across dilational stepovers are also dependent on amount of fault overlap. Important influences on both types include strength and stress distribution, and 5 km appears to be a limit for a rupture to jump a stepover.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Harris, R., A., Arrowsmith, J., R.,	2006	Introduction to the Special Issue on the 2004 Parkfield Earthquake and the Parkfield Earthquake Prediction Experiment	Bull. Seis. Soc. Am.	This special volume introduction summarizes a number of studies on the 2004 Parkfield earthquake. The primary thesis of the paper is that despite the abundance of data gathered from the Parkfield earthquake, but that assessment of future earthquakes and seismic hazards remains challenging. The authors state PSHA remains the best method for forecasting future earthquakes, their behavior, and effects. Little here is useful for the DCPP SSC, although other papers summarized in this introduction may contain useful data.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Harsh, P., W.,	1982	Distribution of afterslip along the Imperial fault	U.S. Geol. Surv. Prof. Paper	This reference compares pre-1979 slip measurements to 1979 afterslip and suggest the features may represent typical behavior of the Imperial fault. The authors suggest that afterslip may be controlled by fault geometry and seismic-rupture patters. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Hart, E., W.,	1976	Basic Geology of the Santa Margarita Area, San Luis Obispo County, California	Cal. Div. Mines. Geol. Bull.	Paper discusses 1:24k mapping in the La Panza Ranges northeast of SLO region. The paper discusses the Rinconada and Nacimiento faults, as well as geologic relations of important bedrock units. Generally, this paper does not pertain to much to the key faults important to this SSC.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [x] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Hartwell, S., R., Finlayson, D., P., Dartnell, P.,	2013	Bathymetry and Acoustic Backscatter—Estero Bay, California	U.S. Geol. Surv. Open File Rpt.	Bathymetric data for Estero Bay. Vital for interpretation of offshore geomorphology.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [x] Other [ ] None	[x] Hosgri fault [x] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Hartzell, S., Helmberger, D., V.,	1982	Strong-motion modeling of the Imperial Valley earthquake of 1979	Bull. Seis. Soc. Am.	The authors attempt to model the rupture of the 1979 Imperial Valley earthquake and find the preferred model has slip concentrated below 5 km and north of the epicenter. The preferred fault model is consistent with the pattern of seismicity and aseismic creep in the Imperial Valley and implies the southern end of the fault is locked. This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [x] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting

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☑	Hartzell, S., Heaton, T.,	1983	Inversion of strong ground motion and teleseismic waveform data for the fault rupture history of the 1979 Imperial Valley, California, earthquake	Bull. Seis. Soc. Am.	By inverting local strong motion and teleseismic body waves, the authors estimate the moment release of the 1979 Imperial Valley earthquake 5.0 x10^25 dyne-cm and a vertical fault. The dislocation increased significantly northern of the border from ~20 cm up to 2 m. This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Hauksson, E., Jones, L., M., Hutton, K.,	2002	The 1999 Mw 7.1 Hector Mine, California, Earthquake Sequence: Complex Conjugate Strike-Slip Faulting	Bull. Seis. Soc. Am.	This paper provides the details of ruptured segments of the Lavic Lake and Bullion faults. This earthquake is used as an analog for the types of ruptures expected near Diablo Canyon power plant.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☑ Tectonic setting
☐	Hauksson, E., Shearer, P., M.,	2005	Southern California Hypocenter Relocation with Waveform Cross-Correlation, Part 1: Results Using the Double-Difference Method	Bull. Seis. Soc. Am.	This study relocates earthquake hypocenters using the double difference method. The primary results of this method were better delineation of seismicity, clustering, and depth distribution. This new catalog covers a sizable portion of the DCPP site vicinity and is available on the SCEC website.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Hauksson, E.,	2010	Spatial Separation of Large Earthquakes, Aftershocks, and Background Seismicity: Analysis of Interseismic and Coseismic Seismicity Patterns in Southern California	Pure Appl. Geophys.	In this study, the 3-D spatial distribution of background earthquakes are compared with large earthquakes and their aftershocks. The author finds that large, major earthquakes and aftershocks originate on principal slip zones and decay with distance to about 2 km from the fault, while background earthquakes originate in seismic damage zones, or 10-km-wide zones that help accommodate strain where major faults bend or are oriented sub-optimally with respect to the stress field. The author also makes the spatial association that denser fault networks are associated with thin crust and high heat flow. This paper, therefore, has implications for the identification or geometric assessment of faults in the subsurface using background seismicity.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Hauksson, E., Shearer, P., M., Yang, W.,	2010	Geophysics of the Crustal Seismogenic Zone in Southern California	J. Geophys. Intl.	The author normalizes seismicity to a multitude of parameters and finds that seismicity tends to cluster in areas of low to moderate topography, average heat flow, average Vp/Vs, and more than any other parameter, areas dense with Quaternary faults. The author finds a peculiar relationship where seismogenic crust is thin in areas of cold, thick crust. A heat flow-thickness relationship is developed, and suggests that the 400 C isotherm forms the base of seismicity for crustal thickness 22 to 37 km. For thicker crust, 37 to 43 km, the 250 C isotherm forms this basis. The author concludes that faulting in these thick areas is confined to the upper crust, and does not accommodate plate motion.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hay, C., Mitrovica, J., X., Gomez, N.,	2014	The sea-level fingerprints of ice-sheet collapse during interglacial periods	Quat. Sci. Rev.	The authors develop fingerprints (distinct geometries of sea-level change for individual ice sheets) due to the collapse of the WAIS, GIS, and marine-based sections of the EAIS and evaluate sensitivities of the fingerprints to variation in geometry and duration of ice-sheet collapse. The fingerprints are used to (1) identify regions where local change in sea-level would have exceeded ESL (2) calculate the value of the three fingerprints at sites previously considered at peak ESL during MIS 5e or MIS 11, and (3) revise previous ESL estimates that assumed GIA-corrected sea-level records are equivalent to ESL. The authors conclude that the collapse of polar ice sheets results in distinct geographic-patterns of sea-level change and must be accounted for when including GIA-corrected local highstands into ESL estimates.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Hecker, S., Sickler, R., Feigelson, L.,	2013	Global Surface Displacement Data for Assessing Variability of Displacement at a Point on a Fault	U.S. Geol. Surv. Open File Rpt.	This report presents an updated dataset (through 2010) of 860 site-specific surface-displacement observations from 292 sites on faults in 34 counties. The average number of observations per site was about three, with 50% of sites with two observations, and 12% of sties with greater than four observations (roughly the same distribution as in Hecker et al. [2013]). Half of these data are from normal/normal-oblique faults, 33% from strike-slip faults, and ~17% from reverse faults. Inter-event variability in displacement at a point was determined from a composite form of this dataset, with a calculated coefficient of variation of 0.53 ± 0.02, essentially the same as was previously calculated.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Hecker, S., Abrahamson, N., A., Wooddell, K., E.,	2013	Variability of Displacement at a Point: Implications for Earthquake-Size Distribution and Rupture Hazard on Faults	Bull. Seis. Soc. Am.	This study explores the relationship between earthquake size of a given fault by examining the variability of slip at a point of a given fault. These relationships indicate that the coefficient of variation of slip at a point (0.5) is too small to correlate with exponential magnitude distribution on a given fault, thus supporting characteristic earthquake model. They found that CV is most sensitive to variability of a given magnitude, which includes variability in slip distribution and variability in average displacement. The authors strongly argue against the use of a large Mmax exponential model. This paper contains abundant useful data and concepts for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Helmberger, D., V., Somerville, P., G., Garnero, E.,	1992	The location and source parameters of the Lompoc, California earthquake of 4 November, 1927	Bull. Seis. Soc. Am.	Paper utilizes teleseismic body waves to better constrain the focal mechanism, depth, and location of the 1927 earthquake. The relocation is approximately 40 km west of point conception on fault striking N20W 66 NE with a Ms magnitude of 7.0. This location precludes the Hosgri as a potential source.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Helmstetter, A., Kagan, Y., Y., Jackson, D., D.,	2007	High-resolution Time-independent Grid-based Forecast for M ≥ 5 Earthquakes in California	Seis. Res. Let.	The authors develop time-independent, moderate and larger earthquake forecasts for California. The model uses observed small-magnitude seismicity to forecast moderate and large earthquakes. The authors note that the model should be used in concert with a fault model since many faults are associated with low seismicity, but could produce large events (e.g.., S. San Andreas fault).	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Helmstetter, A., Shaw, B., E.,	2009	Afterslip and aftershocks in the rate-and-state friction law	J. Geophys. Res.	In this research oriented paper, the authors use the rate-and-state friction law slide block model to examine post-seismic behavior of slip and aftershocks. The afterslip model seems to fit empirical observations well, and suggests post-seismic behavior is more complex than previous studies' results have shown. However, for simplicity, the authors note that other, less complicated models can provide similar results. Their slider block afterslip model produces similar aftershock decay rates to existing models, with a time delay between stress change and triggered earthquakes. The authors conclude that afterslip may well drive decrease of aftershocks through time by renewing stress on faults. Results of this paper are not directly applicable to seismic source characterization, which largely endeavor to reduce and eliminate aftershocks from recurrence.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Henrys, S., A., Levander, A., R., Meltzer, A., S.,	1993	Crustal Structure of the Offshore Southern Santa Maria Basin and Transverse Ranges, Southern California, From Deep Seismic Reflection Data	J. Geophys. Res.	Study reinterprets RU-10 with RU-2 data and constrained results with refraction and gravity models. The findings suggest that there was a regional episode of shortening that occurred in the Miocene and coincided with about 55 degrees of rotation of the western Transverse Ranges. Major anticlines and synclines are associated with a regional detachment surface at ~12 km depth. These findings strongly suggest extensive oceanic crust underneath the continental shelf.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Herbert, J., W., Cooke, M., L.,	2012	Sensitivity of the Southern San Andreas Fault System to Tectonic Boundary Conditions and Fault Configurations	Bull. Seis. Soc. Am.	This paper documents fault slip rate sensitivities to changes in the model boundary conditions. The authors find that by varying plate motion five degrees, slip rates trade off by up to about 1 mm/yr between the San Andreas fault system (increase when motion directed more westerly) and the Eastern California Shear Zone (increase when plate motion directed more easterly) (Figure 5). Effects on individual faults and fault zones are also covered.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hiemer, S., Jackson, D., D., Wang, Q.,	2012	A stochastic forecast of California earthquakes based on fault slip and smoothed seismicity	Bull. Seis. Soc. Am.	The authors present a new method for developing an earthquake source model. Their construction methods yield a smoothed seismicity model that incorporates the moment rate contribution on mapped faults and typically places large events near major faults, with consistent focal mechanisms. However, the stochastic nature of the model allows for large events away from faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Hilley, G., Arrowsmith, J., R.,	2005	Progressive deformation around a restraining bend in the San Andreas Fault, Carrizo Plain, CA	PGS SAF Field Trip	This guidebook describes the geomorphology and structural geology of the Northern and Southern Elkhorn Hills in the Carrizo Plain. The authors suggest a "causal link" between deformation within the Northern and Southern Elkhorn Hills and the development of the restraining bend in the SAF. Additionally, the authors describe the Dragon's Back pressure ridge and the resulting geomorphic/topographic response to uplift.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Hogarth, L., J., Driscoll, N., W., Babcock, J., M.,	2012	Transgressive deposits along the actively deforming Eel River Margin, Northern California	Marine Geol.	Using high-resolution CHIRP seismic data, this article presents a stratigraphic interpretation of the Eel margin of northern California generated during the LGM, including mapping of a transgressive systems tract and highstand systems tract. Between ~21 to 7 ka, sea-level rise appears to have controlled sediment distribution, while after 7 ka tectonic deformation was more important. On the inner shelf, sediment thickness is primarily controlled by tectonically induced relief, whereas on the outer shelf the rate of sediment supply is more important in generating along shore sediment thickness variations. Additionally, the geometry of reflectors was used to determine the relative timing of sediment accumulation and deformation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Holliday, J., R., Chen, C-c., Tiampo, K., F.,	2007	A RELM Earthquake Forecast Based on Pattern Informatics	Seis. Res. Let.	This study develops a unconventional earthquake forecast map for California using pattern informatics, a technique that the authors argue has been used to accurately forecast El Nino events. Figure 2 shows the earthquake forecast, symbolized by scale magnitude bins, for a five to ten year window.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Holzer, T., L., Noce, T., E., Bennett, M., J.,	2005	Liquefaction at Oceano, California, during the 2003 San Simeon earthquake	Bull. Seis. Soc. Am.	Paper discusses liquefaction generated by the 2003 San Simeon earthquake. Authors note that three types of deposits liquefied at Oceano including sandy artificial fill, young aeolian sand, and fluvial deposits, with fill representing the most liquefiable material. Nothing here is applicable the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Honjas, W., Louie, J., N., Pullammanappallil, S., K.,	1995	Cenozoic Tectonic History of the Hosgri Fault Zone, Offshore California from Seismic Imaging and Stratigraphic Analysis	Am. Assoc. Petrol. Geol. Bull.	The authors use post- and pre-stack migration imaging of a 13.7 km northeast section of seismic reflection profile RU-3 to characterize the geometry and evolution of the Hosgri fault zone. The authors state that the Hosgri rotated from SW dipping to steeply NE dipping between the late Miocene and early Pliocene and that Neotectonic motion is primarily strike-slip with a secondary vertical component of slip. The fault is described as near vertical at the surface but shallows with depth, and the authors speculate that the fault may root into a detachment at ~10-12 km depth.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Hornafius, J., S.,	1985	Neogene tectonic rotation of the Santa Ynez Range, western Transverse Ranges, California, suggested by Paleomagnetic investigation of the Monterey Formation	J. Geophys. Res.	Paper describes paleomagnetic study of Monterey dolomites in the coastal Santa Ynez range spanning roughly 16 to 8 Ma. The oldest rocks show magnetic declination of up to 92 degrees whereas 11-8 Ma rocks are characterized by declinations of 36 degrees implying rapid transverse range rotation between 15 and 11 Ma.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Hornafius, J., S., Luyendyk, B., P., Terres, R., R.,	1986	Timing and extent of Neogene tectonic rotation in the western Transverse Ranges, California	Geol. Soc. Am. Bull.	Quantifies block rotation of the western Transverse Ranges using paleomagnetic data from numerous locations throughout the western Transverse Ranges. Magnetic declination in lower Miocene rocks increases westward from 33.5 degrees in the San Gabriels to 91 degrees in the Santa Ynez range. A minimum of 230-260 km of dextral shear is proposed for the coast and offshore area since the middle Miocene.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Howe, T., M., Bird, P.,	2010	Exploratory models of long-term crustal flow and resulting seismicity across the Alpine-Aegean orogen	Tectonics	This paper applies the NeoKinema tectonic model to Alpine-Aegean orogeny to predict long-term velocities, fault slip rates, and strain rates between faults. The model uses geodetic velocity, stress direction and geologic slip rate information and considers locked and creeping subduction models, the latter of which closely approximates observed large event rates; however, neither model accurately predicts rates at all magnitudes. Other problems were noted with the model results, but the authors conclude the model shows promise for predicting tectonic elements. This paper may be useful for the DCPP SSC in gaining a better understanding of the NeoKinema model and its strengths and weaknesses.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Howie, J., M., Miller, K., C., Savage, W., U.,	1993	Integrated crustal structure across the south central California margin: Santa Lucia escarpment to the San Andreas Fault	J. Geophys. Res.	This study developed a crustal velocity structure model that crosses the entire continental margin near the DCPP site, following seismic line PG&E-3. Results of the study may be useful in seismic source characterization, primarily estimates of crustal thickness, which may approximate seismogenic thickness. The study found that the Sur-Obispo, Patton, and Salinian terranes are 15 to 20 km thick and underlain by remnants of the Farallon plate, which are in turn tectonically underplated. The lower two sections are 5 to 7 km thick. Results of the study confirm earlier interpretations that the Patton and Sur-Obispo terranes are separated by the Santa Lucia Bank fault. The authors find evidence of strike-slip and compression along the Santa Lucia Escarpment that includes a series of broken oceanic crust arranged in down-dropped blocks, which they term the Santa Lucia Monocline. They suggest the monocline represents the initial location of the transform plate margin.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Humphreys, E., D., Coblentz, D., D.,	2007	North American dynamics and western U.S. tectonics	Rev. Geophys.	This study discusses the regional tectonics of North America, generally in a scale that is zoomed out that it does not pertain to this SSC model. However, regional stress field kinematics on the continental region are discussed.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Ichinose, G., A., Thio, H., K., Somerville, P., G.,	2006	Moment Tensor and Rupture Model for the 1949 Olympia, Washington, Earthquake and Scaling Relations for Cascadia and Global Intraslab Earthquakes	Bull. Seis. Soc. Am.	Using the source parameters from global intraslab earthquakes, the authors derive a source-scaling relation between the combined area of asperities and seismic moment. For the same moment, the area of asperities for intraslab earthquakes is found to be significantly smaller than for shallower strike-slip earthquakes. As noted in Stirling et al. (2013) and in Tom Hanks' WS2 presentation, this scaling relation is most applicable to intraslab earthquake source modeling. Therefore, this scaling relation is not relevant to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Idriss, I., M.,	2008	An NGA empirical model for estimating the horizontal spectral values generated by shallow crustal earthquakes	Earthq. Spectra	This article presents an empirical relationship derived to calculate horizontal values of pseudo-absolute spectral accelerations generated by shallow crustal earthquakes. The model is applicable to sites with a narrow range of shear wave velocities which correspond qualitatively to soft rock and stiff soil conditions. The model presented in this article is more relevant to the GMC than the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Ishibe, T., Shimazaki, K.,	2012	Characteristic Earthquake Model and Seismicity around Late Quaternary Active Faults in Japan	Bull. Seis. Soc. Am.	Manuscript uses tests whether the Gutenberg-Richter relationship versus the characteristic earthquake model better fits observed seismicity data; conclusion is that characteristic earthquake model better fits observed data. This work is used to support the approach to magnitude distribution models for the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Jachens, R., C., Wentworth, C., M., Zoback, M., L.,	2002	Concealed strands of the San Andreas fault system in the central San Francisco Bay region, as inferred from aeromagnetic anomalies	U.S. Geol. Surv. Prof. Paper	Using an aeromagnetic map, the authors infer potential faults concealed by water or alluvium in the San Francisco Bay region. In addition to a description of a right step of the SAF proximal to the 1906 earthquake, the paper also addresses the geometry of the Pilarcitos fault and its potential truncation/linkage with the San Gregorio fault. Further description of the San Gregorio fault zone near the latitude of the San Francisco Bay region is consistent with an extensional junction between the San Gregorio fault and SAF. The fault strands inferred from the aeromagnetic map provide information on potential linkage of the SAF and San Gregorio-Hosgri faults, which has implications for fault length and maximum magnitude.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Jackson, D., D., Kagan, Y., Y.,	2006	The 2004 Parkfield earthquake, the 1985 prediction, and characteristic earthquakes: lessons for the future	Bull. Seis. Soc. Am.	Discusses the failure of the prediction of a characteristic magnitude 6 Parkfield earthquake and the dangers of using the characteristic hypothesis and seismic gap models without considering their drawbacks (and inability to predict future events). Provides potentially useful information in the development of earthquake rate models.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Jackson, D., D., Kagan, Y., Y.,	2011	CHARACTERISTIC EARTHQUAKES AND SEISMIC GAPS	Ency. Solid Earth Geophys.	Chapter discusses the seismic gap hypothesis in terms of characteristic earthquakes. It concludes that simple versions of the gap theory, in which characteristic earthquakes occur on independent segments, are no longer tenable. Modified versions of the gap theory have not yet been formulated in a rigorously testable way.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Jackson, J., Molnar, P.,	1990	Active folding and block rotations in the western transverse Ranges, California	J. Geophys. Res.	Comprehensive paper discussing location, style, and orientation faulting and clockwise block rotation of the western Transverse Ranges (WTR). The WTR are separated into elongate crustal blocks delineated by E-W trending oblique reverse faults. Slip vectors for major earthquakes on these faults are more or less orthogonal to the Mojave section of the SAF, indicating plate motion is accommodated by crustal shortening. Five years of VLBI measurements indicate a present-day block rotation rate of 6 deg/Ma.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Jahns, R., H.,	1967	Geology of the Diablo Canyon Power Plant Site, San Luis Obispo County, California, Supplementary Report (Appendix to PSAR for Diablo Canyon units 1 and 2)	USNRC	This file [PDF titled PSAR Vol II, Part 3 (Appendices)] includes the original PSAR and Supplemental Report I [also in PDF file titled: Unit 2 PSAR, Vol III, Part 3 (Chapter 13 and Appendices A and B)], and also includes a letter of recommendations from E.C. Marliave, a preliminary geologic investigation report by M. Micheli, and a seismic evaluation of the site by H. Benioff and S. Smith.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Jahns, R., H.,	1970	Guide to the geology of the Diablo Canyon nuclear power plant site	Geol. Soc. Am. Cord. Sec.	This document provides a background to a geologic investigation conducted at the plant site. The investigation included 12 large trenches with an aggregate length of ~1 mile. The trenches were 5 to 40 feet deep. The logs were logged on photographs at a average scale of 2.5':1", and then transferred to survey controlled section at a scale of 20':1". The report notes numerous faults exposed in the investigation, generally related to bedding parallel deformation. Three "distinctly larger" and more continuous faults were noted, ranging from 0.5 to several feet wide. None of the three major faults were noted to extend into the overlying Quaternary terrace deposits.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Jamison, W., R.,	1991	Kinematics of compressional fold development in convergent wrench terranes	Tectonophys.	Jamison analyzes the kinematics of compressional fold development in wrench and convergent wrench settings in order to estimate the strain and rotation of folds. Applies these models to several wrench settings (including the Rinconada Fault and the San Andreas Fault (southwestern San Joaquin Basin) and Durmid Hill) and finds evidence of strongly convergent wrenching and little (<3°) map-view rotation of the fold axes. In central California, cumulative displacements (due to deformation) in the borderlands are minor and in a different direction compared to the faults. Maximum shortening due to wrench-related folding is about 0.8 to 1.7 km and 12 km for the Rinconada and the SAF, respectively. The kinematic models and applications presented in this article may be useful in forming the tectonic models in the SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Janecke, S., U., Dorsey, R., J., Belgarde, B.,	2010	Age and structure of the San Jacinto and San Felipe fault zones, and their lifetime slip rates	acific Sec. SEPM Soc. Sed. Geol. 201	This field trip guide complements the Janecke et al. (2010) GSA Special Paper. This paper succinctly summarizes the Special Paper, with most results and concepts identical. However, the long-term slip rate across the San Jacinto fault is lower in this paper, at 17.8 +2.6/-2.3 mm/yr. Results of this paper have been apparently superseded by the GSA Special Paper.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Janecke, S., U., Dorsey, R., J., Forand, D.,	2010	High Geologic Slip Rates since Early Pleistocene Initiation of the San Jacinto and San Felipe Fault Zones in the San Andreas Fault System: Southern California,	Geol. Soc. Am. Spec. Paper	This study uses a variety of methods including detailed mapping, paleomagnetism, structural analyses, basin analyses, and interpretation of gravity data, to evaluate the age, total slip, and slip rate and its variability of the southern San Jacinto fault and the San Felipe fault. Earliest phases of slip are estimated to have begun about 1.1 Ma for the San Jacinto fault, and 1.1 to 1.3 Ma for the San Felipe fault. Estimates of total slip on various strands of the San Jacinto fault range from about 4 to 17 km. The authors estimate long-term slip rates of 20.1 +6.4/-9.8 mm/yr across the San Jacinto fault and 5.4 +5.9/-1.4 mm/yr on the San Felipe fault. The authors also describe a detailed history of the organization of the fault network of the southern San Jacinto fault zone. This paper contains much useful data for the San Jacinto fault including thorough summaries of previous work.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Jennings, C., W.,	1958	Geologic Map of California, San Luis Obispo Sheet and Explanatory Data	Cal. Dept. Nat. Res. Div. Mines	Relatively early geologic map (1:250,000 scale) of the site vicinity. Included with the map is a formation correlation chart for the previous mapping studies compiled. Nearly all the mapping here has been superseded by later maps completed with a better understanding of both rocks and faults, and at finer scales.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Jennings, C., W., Strand, R., G., Rogers, T., H.,	1977	Geologic Map of California	Cal. Div. Mines Geol.	This map presents the geology of California.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Jennings, C., W., Bryant, W., A.,	2010	Fault activity map of California: California Geological Survey Geologic Data Map No. 6, 1:750,000	Cal. Dept. Conserv.	Shows faults categorized by recency of activity. Mostly relevant as a summary of regional structures.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Ji, C., Wald, D., Helmberger, D., V.,	2002	Source description of the 1999 Hector Mine, California, Earthquake, Part II: Complexity of slip history	Bull. Seis. Soc. Am.	The authors model the Hector Mine earthquake rupture and compare with a forward simulation fo the InSar data. They've determined an average slip of 1.5 m for the earthquake and simultaneous rupture of the two northern branches.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Ji, C., Wald, D., Helmberger, D., V.,	2002	Source description of the 1999 Hector Mine, California, Earthquake, Part I: Wavelet domain inversion theory and resolution analysis	Bull. Seis. Soc. Am.	This work provides a new method for parameterizing faults and determining rupture complexity. The authors apply this method to the Hector Mine earthquake.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☑ Tectonic setting
☑	Ji, C., Larson, K., M., Tan, Y.,	2004	Slip history of the 2003 San Simeon earthquake constrained by combining 1-Hz GPS, strong motion, and teleseismic data	Geophys. Res. Let.	Strong motion, teleseismic, and GPS data were modeled on fault oriented 292, dipping 52 deg NE. Results suggest a hypocentral depth of 8.5 km with rupture propagating southeast at a rate of 3 km/s. Maximum slip was calculated at 2.8 m.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Johanson, I., A., Fielding, E., J., Rolandone, F.,	2006	Coseismic and postseismic slip of the 2004 Parkfield earthquake from space-geodetic data	Bull. Seis. Soc. Am.	In this study, the authors use InSAR and GPS data to assess co- and post-seismic surface displacement and fault plane displacement associated with the 2004 Parkfield earthquake. They identify two planes of slip, deeper coseismic slip and shallower postseismic slip, and determine that that majority (66 to 75%) of seismic moment occurred aseismically.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Johanson, I., A., Burgmann, R.,	2010	Coseismic and postseismic slip from the 2003 San Simeon earthquake and their effects on backthrust slip and the 2004 Parkfield earthquake	J. Geophys. Res.	This paper presents a slip inversion model of the San Simeon earthquake. The model suggests coseismic slip occurred on a main rupture plane with a conjugate backthrust. Aftershock data support this interpretation and decaying post-seismic slip, although interferograms and GPS data suggest very early postseismic slip. The San Simeon earthquake reduced normal stress at the southern end of the Parkfield segment of the San Andreas fault, thus encouraging an unexpected rupture on that portion of the segment. This paper may be useful for characterizing the causal Oceanic and related faults.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	John Wallace & Associates, Cleath, T., S.,	1988	Ground Water Study, Phase 3 Exploration Results	Unpub. Consult. Rpt.	This phase III report contains results of exploratory drilling and testing of potential groundwater resources in the upper San Luis Obispo Creek area, the Stenner Creek area, and the south central San Luis Obispo area, as well as water quality analysis. The report includes ten boring logs in the area, but otherwise does not provide information directly relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Johnson, C., E., Hutton, L., K.,	1982	Aftershocks and preearthquake seismicity	U.S. Geol. Surv. Prof. Paper	This reference discusses the aftershock distribution associated with the Imperial Valley earthquake, compare to seismicity in years prior, and speculate about potentially unique aspects of seismicity in the weeks prior to the 1979 event. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Johnson, C., E., Hill, D., P.,	1982	Seismicity of the Imperial Valley	U.S. Geol. Surv. Prof. Paper	This reference discusses historical seismicity in the Imperial Valley and potential processes that have dictated seismicity patterns. The authors observe swarms in seismicity in space and time and find the northern section of the fault capable of surface rupture and aseismic creep. They propose changes in fluid pressure due to magma injection at depth as a cause for earthquake swarming. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Johnson, S., Y., Stanley, R., G.,	1993	Sedimentology of the Conglomeratic Lower Member of the Lospe Formation (Lower Miocene), Santa Maria Basin, California	U.S. Geol. Surv. Bull.	This stratigraphic study of the lower Lospe formation focuses primarily on the depositional characteristics that relate to transgressions and regressions. The authors find that the formation records earliest opening of the Santa Maria basin, which is responsible for the overall fining upward sequence of the Lospe formation. Of particular interest, the authors posit a possible fault that between the Santa Maria basin and the San Gregorio-Hosgri fault at the latitude of Point Sal. The basis for the hypothetical fault is the presence of near-source fan material, suggestive of an uplifted block. Alternatives to this hypothetical fault are also considered.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Johnson, S., Y., Hart, P., E., Watt, J., T.,	2009	High resolution seismic reflection survey offshore central California will help refine regional seismic hazard assessment [abstract]	SSA Mtg.	This abstract describes the collection of marine magnetic data and high-resolution marine seismic-reflection data between Cayucos and Pismo Beach and the planned uses of the data to better characterize offshore fault geometry, location, structure, slip rate, earthquake recurrence, and tsunami hazard potential. This abstract introduces data that was later analyzed in more detail (e.g., Johnson and Watt, 2012; Seismic Stratigraphy Project [PG&E, 2013]), but does present such analyses here.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Johnson, S., Y., Watt, J., T.,	2012	Influence of fault trend, bends, and convergence on shallow structure and geomorphology of the Hosgri strike-slip fault, offshore central California	Geosphere	The authors interpret 2D high-resolution seismic-reflection data, marine magnetic data, and multibeam bathymetry to characterize the length, location, dip, and slip on the Hosgri fault zone between Point Sal and Piedras Blancas. The authors divide the Hosgri into eight sections based on changes in fault geometry and structure. The authors attribute localized uplift/subsidence to restraining/releasing bends and stepovers in the Hosgri fault zone. Two complexities in the fault zone receive particular focus, a left deflection in the fault zone southwest of the DCPP interpreted as a "sidewall ripout" due to convergence of the Shoreline fault with the Hosgri (several kilometers to the north) and a double bend in the fault zone interpreted as a "Lazy Z bend", which is interpreted to be the cause of an enclosed structural basin east of the fault.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Johnson, S., Y., Hartwell, S., R., Dartnell, P.,	2014	Offset of latest Pleistocene shoreface reveals slip rate on the Hosgri strike-slip fault, offshore central California	Bull. Seis. Soc. Am.	Using high-resolution bathymetry, the authors mapped the "cross-Hosgri slope", a linear, ~265 m wide SW-facing bathymetric slope that crosses the eastern strand of the Hosgri fault in Estero Bay. The lower and upper slope breaks are both considered potential piercing points to determine lateral slip rate, though the lower slope break is considered more reliable because of the inferred minimal reworking it has experienced relative to the upper slope. Using slope profiles and slope maps, the authors find a preferred mean lateral slip rate of 2.6 ± 0.9 mm/yr, though they interpret this slip rate to be a minimum. The results presented in this reference may provide a constraint on slip rate of the Hosgri fault; however, a closer analysis of the data used to determine slip rate should be considered before directly using this value in the SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Jones, C., H., Farmer, G., L., Unruh, J., R.,	2004	Tectonics of Pliocene removal of lithosphere of the Sierra Nevada, California	Geol. Soc. Am. Bull.	The authors analyze data from existing studies and make new observations to evaluate tectonics of the Sierra Nevada microplate and its role in western U.S. tectonics. The authors argue that loss of the eclogitic root of the Sierra Nevada increased buoyancy of the block, triggered range uplift, extension of the Basin and Range within 50 km, and compression in the Coast Ranges at about 3.5 Ma. However, they note that slowing compression rates and the lack of change in Pacific Plate vector are inconsistent with their arguments. This paper may be marginally useful for the DCPP SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Jones, L., E., Helmberger, D., V.,	1998	Earthquake source parameters and fault kinematics in the Eastern California Shear Zone	Bull. Seis. Soc. Am.	This paper presents an exploration of seismicity and stress drops for Mojave-area earthquakes. Faults discussed include the Pinto Mountain, Kickapoo, Garlock, Johnson Valley, Homestead valley, and the Calico faults.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Jonsson, S., Zebker, H., Segall, P.,	2002	Fault slip distribution of the 1999 Mw 7.1 Hector Mine, California, Earthquake, estimated from satellie radar and GPS measurements	Bull. Seis. Soc. Am.	This work provides details about the Hector Mine earthquake rupture. It indicates that calculated displacements are greater than those observed in the field.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Jouzel, J., Masson-Delmotte, V., Cattani, O.,	2007	Orbital and Millennial Antarctic Climate Variability over the Past 800,000 Years	Science	Using a high-resolution deuterium profile from a deep ice core in East Antarctica, the authors develop a climate record back to MIS 20.2 (~800 ky BP) that resolves long-term changes (controlled by local insolation changes induced by the obliquity cycle) and millennial changes (induced by changes in North Atlantic deep water formation). These results are in good overall agreement with the benthic oxygen-18 record of Lisiecki and Raymo (2005).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Julian, B., R., Zirbes, M., Needham, R.,	1982	The focal mechanism from the global digital seismograph network	U.S. Geol. Surv. Proj. Plan	This reference presents an analysis of the focal mechanism for the 1979 Imperial Valley earthquake using first motions of long-period body waves. The long-period first motions of shear waves are consistent with right-lateral motion on the SAF or parallel fault. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Kadinsky-Cade, K., Reilinger, R., Isacks, B.,	1985	Surface deformation associated with the November 23, 1977, Caucete, Argentina, earthquake sequence	J. Geophys. Res.	This work describes the Caucete earthquake, which serves as a possible analog for the NE-vergent fault geometry model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Kadinsky-Cade, K., Barka, A., A.,	1989	Effects of restraining bends on the rupture of strike-slip earthquakes	U.S. Geol. Surv. Open File Rpt.	The authors use a dataset that includes surface fault geometry from Turkey, California, and China and earthquakes of magnitude 5.1-7.9 to determine that restraining single and double bend angles have a maximum value of 30°-35°; this restraining segment orientation and length can be related to earthquake magnitude, with the majority of events in the study of magnitude > 7. They state that their results are likely applicable to smaller events, though they do not have data to support this claim. In addition to their conclusions, the authors also state that the complexities associated with single or double bend surface fault geometries remain poorly understood. This article is of little direct use to the DCPP SSC except that some segmentation concepts could be applied to faults in the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kagan, Y., Y., Jackson, D., D.,	1991	Long-term earthquake clustering	Geophys. Jour. Intl.	This statistical analysis of several instrumental earthquake catalogs suggests that after catalogs have been declustered (short term clustering), that long-term clustering equally characterizes the occurrence of shallow, intermediate and deep earthquakes. No evidence for decreased seismicity is observed following a strong earthquake. The authors conclude that, similar to short term clustering, long term clustering and mainshock occurrence is scale independent and closer to a stationary Poisson process. This paper contains concepts that may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Kagan, Y., Y.,	1993	Statistics of characteristic earthquakes	Bull. Seis. Soc. Am.	Statistically tests the characteristic earthquake hypothesis and determines that other, simpler distributions should be preferred unless data shows otherwise. The article also discusses the drawbacks of delta-functions, maximum moment, and Pareto distributions, and states the gamma distribution is preferable because of its simplicity and ability to accurately approximate data. This article provides statistical information that may be useful in developing earthquake rate models.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Kagan, Y., Y.,	1996	Comment on "The Gutenberg-Richter or characteristic earthquake distribution, which is it?" by Steven G. Wesnousky	Bull. Seis. Soc. Am.	Kagan states that Wesnousky's conclusion (the characteristic earthquake model is a better description of the statistical distribution of earthquake size than G-R) depends on two assumptions: (1) seismic activity for small and intermediate earthquakes can be correlated with geologic deformation rate and (2) that the models can accurately assess the rate of occurrence for large earthquakes. Kagan concludes that the characteristic hypothesis still needs validation and that strike-slip faults in southern California are adequately described by the G-R distribution. This article analyses distribution models that will likely be considered in the logic tree.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kagan, Y., Y., Jackson, D., D., Rong, Y.,	2007	A Testable Five-Year Forecast of Moderate and Large Earthquakes in Southern California Based on Smoothed Seismicity	Seis. Res. Let.	Assuming a tapered G-R magnitude distribution, the authors present a long-term (5 year) seismicity forecast for southern California. The forecast treats foreshocks, mainshocks, and aftershocks equally and includes estimations of focal mechanisms and their uncertainty. The authors state that this methodology could be applied to northern California if the rupture pattern of large earthquakes is documented. Among other limitations, the authors caution against applying this method in volcanic, geothermal, and creeping zones. Because of the limitations and consideration of solely earthquake data, this time-independent methodology should only be considered (if at all) along with models that incorporate tectonic, geologic, or geodetic information.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kagan, Y., Y.,	2012	Characteristic Earthquake Model, 1884–2011, R.I.P.	Seis. Res. Let.	This article primarily presents arguments against the seismic gap model and the characteristic earthquake model. They site several references that have shown these models have "failed" statistical testing, that random Poisson forecasts were more accurate, and several "uncharacteristic" events in the past decade. They also provide what they interpret as limitations of paleoseismic data that has been used to support the characteristic model. Finally, the authors present three practices that should be adopted regarding earthquake models: (1) to explicitly define terms such as "segmentation" and "characteristic behavior" in publications, (2) to use entire datasets rather than potentially biased subsets when completing statistical studies, and (3) the development of appropriate testing of the characteristic model. This reference, although clearly a biased, opinion based article, presents several arguments and ideas that should be considered in the SSC, primarily being explicit when defining terms used in the logic tree. The idea of "cherry picking" data and the potential pitfalls of doing so is also valuable to consider when defining the magnitude PDF applicable to the DCPP vicinity.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Kame, N., Rice, J., R., Dmowska, R.,	2003	Effects of prestress state and rupture velocity on dynamic fault branching	J. Geophys. Res.	Study discusses the findings of a simulated rupture of branched fault systems. The findings of the paper suggest the effects of prestress state, rupture velocity and branch angle on dynamic branching. One of the key parameters was evaluating the prestress levels, particularly at branching junctions of faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kanamori, H., Anderson, D., L.,	1975	Theoretical basis of some empirical relations in seismology	Bull. Seis. Soc. Am.	Kanamori and Anderson present several relations and their applicability including a G-R derived radiated seismic energy versus magnitude relation. The authors also explore the relationships between moment and source area, magnitude and moment, magnitude and fault area, and magnitude and frequency. Data and the relations derived in this article are referred to in Kanamori (1977, JGR) and should be considered with this article.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kanamori, H.,	1977	The energy release in great earthquakes	J. Geophys. Res.	Kanamori presents relations between strain energy radiated during an earthquake and seismic moment by considering earthquake stress drop and the shear modulus. Kanamori also relates fluctuations in strain energy to variations in the Chandler wobble. Concepts and relations presented in this article are incorporated into Hanks and Kanamori (1979) JGR.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Kanamori, H., Regan, J.,	1982	Long-period surface waves	U.S. Geol. Surv. Proj. Plan	This reference presents the long-period surface wave data and seismic moment calculation of 6x10^18 Nm for the 1979 Imperial Valley earthquake, and draw comparisons to the 1940 Imperial Valley earthquake. The difference in seismic moment between these events suggests the overall fault displacement of the 1979 event was minor compared to the 1940 event. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Kanamori, H.,	1983	Magnitude scale and quantification of earthquakes	Tectonophys.	Kanamori addresses problems associated with different types of magnitude relations and possible methods for improving earthquake catalogs. He concludes that 1) different magnitude scales need to be used for different regions in order to account for differences in data/parameters (e.g., quality and quantity of instruments, depth, etc.), 2) magnitude scales should be grouped according to seismic wave period, and 3) five different magnitude scales can be used (surface-wave magnitude, body-wave magnitude based on maximum amplitude of various body-wave phases, body-wave magnitude based on the first few seconds of short-period P waves, moment magnitude, and local and regional scaling). Kanamori's argument that a single magnitude scaling relation cannot represent all physical parameters of an earthquake is important to consider when choosing magnitude relations and the data available.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kanamori, H., Allen, C., R.,	1986	Earthquake repeat time and average stress drop	Source Mechanis, Geophys. Monogr.	Kanamori and Allen examine source parameters of large crustal earthquakes (no subduction events) in an effort to correlate repeat times and source parameters. For surface wave magnitude events between 7 and 8, shorter fault length, longer repeat time, and high average stress drops are correlated, and earthquakes with a longer repeat time generally have a larger surface wave magnitude. The authors also found that faults with short repeat times generally have large slip rates. Improved estimations of source parameters, recurrence intervals, and datasets likely exist and may change the conclusions of this article.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Kanamori, H., Hauksson, E.,	1992	A slow earthquake in the Santa Maria basin, California	Bull. Seis. Soc. Am.	An anomalous low frequency earthquake (Richter magnitude 3.5) was observed in the Santa Maria basin which appears to have been triggered by shallow (100-300 m) hydro-fracturing work related to well completion. The slow earthquake resulted in ~30 cm of dip-slip displacement on 40 degree-dipping fault plane, estimated from deformation of well casings with the five-well cluster where the hydro-fracturing was being performed. First motions indicate reverse faulting with a NNE-SSW oriented axis of compression. Rupture length is estimated to be 0.4 km.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Kaneda, H.,	2003	Threshold of geomorphic detectability estimated from geologic observations of active low slip-rate strike-slip faults	Geophys. Res. Let.	The author concludes that faults capable of generating large earthquakes are likely to be geomorphically undetectable at slip rates lower than 0.1 mm/yr in humid regions. This slip rate would be much lower in arid regions.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kaneda, H., Rockwell, T., K.,	2009	Triggered and primary surface ruptures along the Camp Rock fault, eastern California shear zone	Bull. Seis. Soc. Am.	Paper uses surface displacement of the Camp Rock fault during the 1992 Landers earthquake and paleoseismic evidence to outline a means of resolving primary slip from triggered slip observed in detailed paleoseismic investigations. Because triggered slip results from short-term stress changes and primary slip occurs at the end of a seismic cycle due to strain buildup, their rupture styles may be different and potentially resolvable through detailed geomorphic/paleoseismic investigations.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Karageorgi, E., Clymer, R., McEvilly, T., V.,	1992	Seismological studies at Parkfield. II. Search for temporal variations in wave propagation using vibroseis	Bull. Seis. Soc. Am.	This study investigated changes in shear wave propagation properties near the Parkfield seismic observatory, and develop a new method for displaying the data in time order. The authors identified decreasing velocities over a span of four years at several stations that were under additional investigation.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [x] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Kase, Y., Day, S., M.,	2006	Spontaneous rupture processes on a bending fault	Geophys. Res. Let.	This study used 3D modeling to investigate rupture properties in bending strike slip faults. Results indicate that bends decelerate rupture speeds, although in releasing bends, a short period of acceleration occurs just ahead of the bend. The authors find that strike change also has and effect on	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [x] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting
[x]	Kaverina, A., Dreger, D., Price, E.,	2002	The combined inversion of seismic and geodetic data for the source process of the 16 October 1999 Mw 7.1 Hector Mine, California, earthquake	Bull. Seis. Soc. Am.	This work uses seismic and geodetic data to determine the rupture properties of the Hector Mine earthquake. This earthquake is a common analog for many of the rupture sources for DCPP.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [x] All faults [x] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Keefer, D., L., Bodily, S., E.,	1983	Three-Point Approximations for Continuous Random Variables	Mgmt. Sci.	The authors compare several approximations used to represent continuous distributions and find large differences in accuracy, suggesting the use of a simple three-point approximation instead. They argue that the three-point approximation is advantageous and is more accurate because it uses the median rather than mode. This article presents an alternative three-point approximation for continuous probability distribution that could be applied to estimates of fault slip rate.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Keller, M., A., Barron, J., A.,	1993	Re-evaluation of the Miguelito Member of the Pismo Formation of Montana de Oro State Park, California, including new diatom age data [abstract]	Am. Assoc. Petrol. Geol. Ann. Conv.	This abstract describes the Miguelito Member of the Pismo Formation, drawing comparisons to the upper Monterey Formation. Additionally, from diatoms and silicoflagellate assemblages, the Miguelito section is interpreted to be the same age as the upper Monterey in nearby basins (rather than the Sisquoc Formation). Additionally, the youngest exposed strata is defined as the upper part of the Miguelito Member rather than the base.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Keller, M., A., Tennyson, M., Denison, R., E.,	1995	Strontium isotope evidence for the age of Vaqueros Formation and latest Oligocene marine transgression in the Northern Santa Maria Province, Central California	U.S. Geol. Surv. Bull.	This study compares strontium isotope data for the lower Vaqueros Formation with seawater ratios. Results suggest an age of about 25 Ma, which is consistent with previous interpretations and K-Ar/Ar ages from others studies. Little to no data are applicable to the DCPP SSC, unless the geochronologic interpretations are to be used in calculating long term slips rates from offset Vaqueros Formation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Kelson, K., I., Lettis, W., R., Wesling, J., R.,	1990	Quaternary deformation of the San Luis Range (Part II), the Santa Maria Valley, and the Casmalia Range: Field Trip Guide: Day 3	Pacific Cell FOP	This field trip guide explores the southwest margin of deformation in the San Luis Range. The guide focuses on the Wilmar Avenue, San Luis Bay and Olson faults. Each of these faults were recognized based on Quaternary marine terrace deformation, and slip rates, structural style and age of activity based on this observed deformation are summarized for each fault. The Orcutt fault is also visited, as well as other areas of Quaternary deformation in the southwest San Luis Range. Data in this guide would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Khan, S., O., Coe, R., S., Barron, J., A.,	2001	Paleomagnetism of the middle-upper Miocene Monterey Formation, Shell Beach, Pismo Basin; implications for the age and origin of the Monterey and tectonic block	Soc. Econ. Paleo. Min. Pacific Section	The authors completed a detailed study of the Monterey at Shell Beach (including precise ages of the entire section) as part of their attempt to develop a comprehensive chronostratigraphic framework for the Monterey using paleomagnetic data. They determined that the 290 m thick section of Monterey studied was deposited between ~15.15 Ma and 11.535 Ma and underwent a depositional hiatus between ~14.3 Ma to 13.4 Ma, resulting in a compaction sediment accumulation rate of 107m/my. The hiatus may have been due to eustatic sea level fall starting at ~14.3-13.4 Ma. Additionally, the authors speculate that the unconformity between the Monterey and Pismo may also represent a long hiatus and may be linked to a latest middle Miocene eustatic sea level fall around 11.5-11.2 Ma. The authors also measured significant clockwise deflection of the mean declination of the section (~42 ± 5°), consistent with dextral shear between the Hosgri fault and San Andreas fault.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Kijko, A.,	2004	Estimation of the Maximum Earthquake Magnitude, mmax	Pure Appl. Geophys.	This article is not applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Kijko, A.,	2009	Different Techniques for estimation of the Maximum Earthquake Magnitude mmax	Unpub. Consult. Rpt.	This article is not applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Kijko, A., Singh, M.,	2011	Statistical Tools for Maximum Possible Earthquake Estimation	Acta Geophysica	This article is not applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Killeen, K., M.,	1988	Timing of folding and uplift of the Pismo Syncline, San Luis Obispo County, California	Univ. Nev. Reno	Dates and measures marine terraces from Montaña de Oro to Arroyo Grande and suggests uniform uplift of 0.14 mm/yr along this reach, contradictory to more recent work. Mapping of longitudinal profiles for SLO, Pismo, and Arroyo Grande creeks suggest little to no internal deformation within the Pismo Syncline post 450 ka.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	King, G., Stein, R., S., Rundle, J., B.,	1988	The Growth of Geological Structures by Repeated Earthquakes 1. Conceptual Framework	J. Geophys. Res.	The authors present a kinematic model for the earthquake cycle that considers crustal flexure due to sediment loading and erosion. They determine the growth of dip-slip structures is controlled by the long-term effective elastic thickness of the crust (controls width) and sediment loading (controls the asymmetry of uplift to subsidence). Surface displacement is linearly dependent on load (sediment deposition and erosion), has some dependency on plate thickness and density contrast, and is insensitive to Young's Modulus. The effective elastic thickness is found generally to be less than 4 km even in areas where earthquakes occur much deeper. This reference may be considered in determining the maximum subsidence rate of the Morro hole in the context of the uplift rate of the Irish Hills in that the King et al. model predicts the amount of subsidence of the footwall is limited by the uplift of the hanging wall.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Klinger, Y., Xu, X., Tapponnier, P.,	2005	High-resolution satellite imagery mapping of the surface rupture and slip distribution of the Mw ~7.8, 14 November 2001 Kokoxili earthquake, Kunlun fault, Northern Tibet,	Bull. Seis. Soc. Am.	Paper details quantifies location, sense, and magnitude of surface displacement resulting from 450 km of rupture on the Kunlun fault. Provides the first documentation of simultaneous slip partitioning (strike slip and normal), which occurred on faults separated by ~2 km at the surface. Surface rupture terminated at a triple junction to the west and ruptured along a relatively linear traces for much of it's length. Rupture bypassed the Xidatan segment in the east and continued ESE for another 70 km.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Klinger, Y.,	2010	Relation between continental strike-slip earthquake segmentation and thickness of the crust	J. Geophys. Res.	Paper uses historical surface rupture events to understand segmentation length and what controls it. Segment rupture patches can range in length from the granular scale to a maximum of 21 +/- 4 km. Lengths of rupture segments do not infinitely scale with surface rupture length and are most likely related to crustal thickness.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Klugel, J-U.,	2010	Comment on "Is There a Basis for Preferring Characteristic Earthquakes over a Gutenberg–Richter Distribution in Probabilistic Earthquake Forecasting" by	'acific Sec. Am. Assoc. Petrol. Geol. S	Klügel states the conclusions of Parsons and Geist are incorrect due to (1) the nonuniqueness of their inversion method, (2) their assumption of an uncountable number of different earthquake magnitudes on a single fault which ultimately results in a truncated exponential distribution (a result of their model maximizing entropy), and (3) their use of long-term data increases the number of observations and associated uncertainties further increases entropy, making data-based probabilistic models less applicable.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Knuepfer, P., L.K.,	1989	Implications of the characteristics of end-points of historical surface fault ruptures for the nature of fault segmentation	U.S. Geol. Surv. Open File Rpt.	An earlier work analyzing 75 historic surface-rupture events (includes strike slip, normal and reverse events) to understand the characteristics of surface fault rupture termination at and propagation through fault stepovers and bends. In a very general sense, dip-slip events are less likely to be arrested at discontinuities than strike-slip events.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kohler, M., D., Davis, P., M.,	1997	Crustal thickness variations in southern California from Los Angeles Region Seismic Experiment passive phase teleseismic travel times	Bull. Seis. Soc. Am.	This study used data from the 93 and 94 LARSE experiments to distinguish upper and lower crustal and mantle features. Results indicate a crustal thickness of up to 40 km in the San Gabriel Mountains and as thin as 25 km in the Los Angeles Basin and San Gabriel Valley. The San Gabriel Valley is also underlain by thinned crust. They find a maximum basin thickness of about 7.6 km between the Newport-Inglewood and Whittier faults. Finally, the authors find a high-velocity anomaly in the upper mantle. Data from this study have mostly been superseded by later LARSE experiments; nevertheless, these data may be useful for estimations of crustal/ and/or seismogenic thickness.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Kreemer, C., Holt, W., E., Haines, A., J.,	2003	An integrated global model of present-day plate motions and plate boundary deformation	Geophys. Jour. Intl.	This study uses GPS data to present a new global plate motion velocity and strain rate model. For the Pacific-North American plate, results indicate a slightly faster angular velocity (2 to 3 mm/yr in southern California and Baja) than suggested by the long-term NUVEL-1A model. Relative motion between the plates is 48.8 ± 1.0 mm/yr to 59.3 ± 1.0 mm/yr depending on the latitude of the measurement. Compared with the NUVEL-1A model, angular velocities are up to 3° counterclockwise, consistent with several other recent geodetic plate motion studies. This paper contains information that the DCPP may find useful.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Kreemer, C., Blewitt, G., Hammond, W., C.,	2009	Geodetic constraints on contemporary deformation in the northern Walker Lane: 2. Velocity and strain rate tensor analysis	Geol. Soc. Am. Spec. Paper	Study evaluates geodetic data across the western US, particularly focused on the Walker Lane located in the northern Sierra Nevada Great Basin transition. This study does not directly relate to this SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Krijgsman, W., Hilgen, F., J., Raffi, I.,	1999	Chronology, causes and progression of the Messinian salinity crisis	Nature	Using a stratigraphic study of three continuous pre-evaporite sequences of the western, central, and eastern Mediterranean, the authors developed a high-resolution cyclostratigraphic framework for the Messinian. Astronomically tuned ages for paleomagnetic reversals of chron C3An indicate the largest rate change for Pacific plate motion occurred at ~5.9 Myr, which may be the result of a significant change in the absolute motion of the Pacific plate. This late Miocene change in Pacific plate motion may be coincident with and related to the transition from a transtensional to transpressional regime in the DCPP vicinity.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Krinitzsky, E., L.,	2002	Epistemic and aleatory uncertainty: a new shtick for probabilistic seismic hazard analysis	Eng. Geol.	In this opinion paper, Krinitzsky argues that the deterministic method better accounts for uncertainty than the probabilistic method and points to what he regards as flaws in the usage of the terms epistematic and aleatory uncertainty. While this paper does not provide inputs into the logic tree of the DCPP SSC, it does encourage treating and characterizing uncertainty with caution.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Kurushin, R., A., Bayasgalan, A., Olziybat, M.,	1997	The surface rupture of the 1957 Gobi-Altay, Mongolia earthquake	Geol. Soc. Am. Spec. Paper	This describes the rupture of the 1957 Gobi-Altay earthquake in Mongolia. This earthquake serves as a potential analog for the outward-vergent fault geometry model and is an example of a complex rupture source.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Lafond, C., F., Levander, A., R.,	1995	Migration of wide-aperture onshore-offshore seismic data, central California: Seismic images of late stage subduction	J. Geophys. Res.	This paper presents results from a seismic imaging study of deep crustal structure conducted across the Sur Obispo terrane and part of the Salinian block. The study used a unique wide-angle recording geometry, and data and image processing method to evaluate the deep structure. Results include tomography and velocity models, and imaging of underplated oceanic crust, interpreted as the Monterey Plate, which dips to the west at 18 to 28 km depth. The authors find that the wide-angle technique produces images comparable to traditionally acquired data and that their processing methods revealed greater deep crustal detail than conventional ray trace methods. This paper contains data and concepts that may be useful for DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Langbein, J., Johnston, M.J., S., McGarr, A.,	1982	Geodetic observations of postseismic deformation around the north end of surface rupture	U.S. Geol. Surv. Open File Rpt.	This report describes preliminary modeling results of a geodetic survey near the northern section of the Imperial Fault after the mainshock in 1979. Significant postseismic fault displacement was observed, and significant changes in strain were mainly characterized by NW-SE compression in the first two weeks after measurements were made. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Langenheim, V., E., Jachens, R., C., Graymer, R., W.,	2008	Implications for fault and basin geometry in the central California Coast Ranges from preliminary gravity and magnetic data [abstract]	Am. Geophys. Un. Fall Mtg.	This abstract describes aeromagnetic and gravity data collected across the central California Coast Ranges and the main block-bounding faults observed with this data. These data were also used to help constrain fault dip (e.g., the northern reach of the Hosgri fault is interpreted to dip eastward). These results are refined and presented in greater detail in Langenheim et al. (2012).	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Langenheim, V., E., Jachens, R., C., Moussaoui, K.,	2009	Aeromagnetic survey map of the central California Coast Ranges	U.S. Geol. Surv. Open File Rpt.	This aeromagnetic map of the central California Coast Ranges extends from the Santa Barbara Channel to the south to north of Ragged Point. Map includes faults from Jennings (1994); locations of potential abrupt lateral changes in magnetization that may represent lithologic or structural boundaries are observed near the Rinconada and San Andreas faults.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Langenheim, V., E., Watt, J., T., Denton, K., M.,	2012	Magnetic Map of the Irish Hills and Surrounding Areas, San Luis Obispo County, Central California	U.S. Geol. Surv. Open File Rpt.	This magnetic map across the Irish Hills and offshore (from slightly north of Pt. Buchon to south of Souza Rock) shows magnetic anomalies coincident with the Shoreline, Miguelito, and San Luis Bay fault zones. Along this stretch of the Hosgri, no steep magnetic gradients are observed.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Langenheim, V., E., Jachens, R., C., Graymer, R., W.,	2012	Fault geometry and cumulative offsets in the Central Coast Ranges, California: Evidence for northward increasing slip along the San-Gregorio-San Simeon-	Lithosphere	The authors use aeromagnetic data to estimate the cumulative displacement, depth extent, and dip of the San Gregorio-San Simeon-Hosgri and other regional faults. They correlate geophysical anomalies offset by the faults in order to measure cumulative displacement and find a northward increase in right-lateral displacement along the San Gregorio-San Simeon-Hosgri fault consistent with Quaternary slip rates. This increase is partially balanced by slip added to other regional faults. This manuscript treats the San Gregorio-San Simeon-Hosgri fault as a single system rather than individual faults. Interpretations of how slip is distributed throughout the domain (specifically, how regional faults contribute to slip on the Hosgri) are also provided.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Langridge, R., Stenner, H., D., Fumal, T., E.,	2002	Geometry, slip distribution, and kinematics of surface rupture on the Sakarya fault segment during the 17 August 1999 Izmit, Turkey, earthquake	Bull. Seis. Soc. Am.	Summarizes observations of surface faulting made after the 1999 Izmit, Turkey earthquake. Describes the style, orientation, and magnitude of surface rupture at 88 different locations and places them into context with regional fault geometry and kinematics.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Le Dantec, N., Hogarth, L., J., Driscoll, N., W.,	2010	Tectonic controls on nearshore sediment accumulation and submarine canyon morphology offshore La Jolla, Southern California	Marine Geol.	New seismic reflection and bathymetry data are used in this study to evaluate the submarine geology of La Jolla and Scripps canyons. The images capture folding and faulting related to the Rose Canyon fault, which has produced an anticline that partially controls canyon location and morphology. Stratigraphic sequences are also defined that characterize the depositional environment of the canyons. Many seismic lines are included in the paper, although little here is likely to be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Lee, W.H., K., Stewart, S., W.,	1981	Principles and Applications of Microearthquake Networks	Academic Press	This book describes the development of microearthquake networks and portable arrays, the different types of instrumentation systems, data processing procedures, seismic ray tracing, methods of analysis, a description of inversion methods, and applications of these networks and microearthquake data. This book provides background on the development of microseismicity networks and helps explain the data, how it is processed, and its applications, but is not directly relevant to a branch in the SSC logic tree. Other more recent publications on applications of microseismicity data may be of more use.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Legg, M., R., Goldfinger, C., Kamerling, M., J.,	2007	Morphology, structure and evolution of California Continental Borderland restraining bends	Geol. Soc. London Spec. Pub.	This paper describes a study of restraining bends in faults offshore of Los Angeles and San Diego. The authors use seismic reflection data and high resolution bathymetric data to develop uplift profiles, sedimentation rates, and a tectonic history for several faults and basins in the study area. Little to no data here are applicable to the DCPP SSC, although some concepts may help determine long-term tectonic histories.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Leonard, M.,	2010	Earthquake fault scaling: self-consistent relating of rupture length, width, average displacement, and moment release	Bull. Seis. Soc. Am.	Leonard proposes the displacement relation D = C2*sqrt(A) and the fault area scaling W=C1L^β (where β≈2/3) are applicable to all faults. When substituted into the definition of moment, Leonard develops 9 series of self-consistent scaling relations that relate seismic moment, fault rupture area, length, and displacement to each other. Leonard primarily uses dip slip data but assumes the data applies to strike-slip earthquakes (though he states the applicability of his relations to very large (M > 7.0-7.6) strike slip earthquakes is ambiguous). The scaling relations presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Leslie, R., B.,	1981	Continuity and tectonic implications of the San Simeon-Hosgri fault zone, central California	U.S. Geol. Surv. Open File Rpt.	Study uses ~1 km-spaced high-resolution seismic in conjunction with aeromagnetic data to understand the kinematic relationship between the Hosgri and San Simeon faults and strives to the answer the question of connectivity. En-echelon folds suggest a right-lateral shear couple between the Hosgri and San Simeon faults, allowing for, but not proving connectivity between the Hosgri and San Simeon faults.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Lettis, W., R., Hanson, K., L., Kelson, K., I.,	1990	Neotectonics of south-central coastal California: Field stop 2-4 -Pismo Syncline, Central Irish Hills	Pacific Cell FOP	This field trip guide contains discussion of balanced cross-sections by PG&E (1990) and Namson and Davis (1990) through the Irish Hills. These sections suggest the presence of one or more detachment faults beneath the Irish Hills, which accommodated upper crustal shortening (e.g.., the Pismo syncline). The authors note that uplift rates from the sections by Namson and Davis (1990) do not agree with rates derived from marine terraces, like the PG&E sections. The authors conclude that these detachments, and associated folding, are not a result of modern processes, citing undeformed marine terraces.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Lettis, W., R., Wesling, J., R., Angell, M., A.,	1990	Quaternary deformation of the San Luis Range (Part I): Field Trip Guide: Day 2	Pacific Cell FOP	This field trip guide details stops in the Irish Hills in the northwestern part of the San Luis Range. Structures visited include the Pismo syncline and the Los Osos fault zone. Uplift of the Irish Hills is summarized based on well constrained marine terrace ages, which are not deformed by the Pliocene age Pismo syncline. Structure, activity and slip rate of the Los Osos fault is covered based on mapping and paleoseismic studies. Data in this guide would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Lettis, W., R., DiSelvestro, L., A., Hanson, K., L.,	1990	The San Simeon/Hosgri Pull-Apart Basin, South-Central Coastal California	Pacific Cell FOP	In this study, geophysical and geological data acquired from where the San Simeon and Hosgri fault zones interact are assessed. In the offshore area near San Simeon Bay and Point Estero, the faults overlap for 5 km, forming a subsiding pull-apart basin that contains Pliocene and younger deposits. Based on basin geometry, dimensions and age, the authors estimate that 1 to 4 mm/yr of slip is transferred across the basin. Data in this study would be useful for the DCPP SSC team.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Lettis, W., R., Hanson, K., L.,	1991	Crustal Strain Partitioning: Implications for Seismic-Hazard Assessment in Western California	Geology	Assesses strain partitioning in western California to determine if close or adjacent faults and folds should be treated as independent sources of seismicity, dependent structures above a single seismic source at depth, or both. The upper lithosphere is divided into different seismogenic sections, where a region of low-seismic release exists above 5 km depth, a transition zone from 5-7 km depth, and a region of high-moment release below 7 km depth. Faults that occur or extend deeper than 5-7 km are considered independent seismic sources whereas faults originating above 5-7 km depth are dependent on movement on the main seismogenic fault. As noted in the literature review of AB 1632 Appendix C, this article is useful for determining seismic source parameters in assessing seismic hazards, particularly in California.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Lettis, W., R., Hanson, K., L.,	1992	Quaternary tectonic influences on coastal morphology, south-central California	Quat. Intl.	Describes the relationship of Quaternary coastal morphology to Quaternary deformation along the central California coast from Morro Bay to the Santa Maria basin. Coastal morphology is inextricably linked with rates of tectonic uplift and subsidence. Retreating sea cliffs, marine terraces, and hillslopes dominate regions of uplift (San Luis Range rising at 0.1-0.2 mm/yr) whereas broad coastal lowlands and advancing river deltas dominate regions of subsidence (Santa Maria Basin).	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Lettis, W., R., Hall, N., T.,	1994	Los Osos Fault Zone, San Luis Obispo County, California	Geol. Soc. Am. Spec. Paper	The most comprehensive paper to date discussing the location, orientation, sense of slip, and slip rate of the Los Osos fault on a segment by segment basis. Lettis and Hall separate the fault into four segments based on location and orientation. Details marine terrace and trench work on the Irish Hills and Lopez Reservoir segments. The Irish Hills segment is by far the most well studied and best constrained segment of the fault. Paper lays the foundation for additional work defining the location, style, and slip rates for different segments. As stated in the literature review of AB 1632 Appendix C, a limitation to the paper is the lack of deeper geophysical data to define fault geometry greater than several hundred meters deep.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Lettis, W., R., Kelson, K., I., Wesling, J., R.,	1994	Quaternary deformation of the San Luis Range, San Luis Obispo County, California	Geol. Soc. Am. Spec. Paper	Describes the regional structure and tectonics of the San Luis Range. Reviews previous geologic mapping of structures within the range (e.g. Pismo Syncline), mapping of range-bounding faults, and abundant marine terrace/paleoshoreline mapping to describe rates and style of uplift for the block as a whole and slip rates on some individual faults. Develops a tectonic model accommodating transpression occurring within and along the margins of the San Luis Range. This is a very useful paper for understanding the local and regional tectonics related to the San Luis Range and nearby faults. As stated in the literature review in AB 1632 Appendix C, while deeper crustal seismological data is not presented here, McLaren and Savage (2001) address this issue and provide evidence of the block deformation model for the San Luis Range.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Lettis, W., R., Bachhuber, J., Witter, R.,	2002	Influence of releasing step-overs on surface fault rupture and fault segmentation: examples from the 17 August 1999 Izmit earthquake on the North	Bull. Seis. Soc. Am.	An analysis of fault segments and stepovers involved in the 1999 Izmit Turkey earthquake; specifically looking at stepover dimensions and orientations. Also looks at 30 historical, well-documented surface ruptures to understand thresholds for stepover width and fault displacement at which rupture can or cannot propagate through. Similar to previous and subsequent analysis by Wesnousky, stepovers of 4-5 km seem to nearly always arrest fault rupture. Obviously critical in understanding rupture linkage between the Hosgri and San Simeon.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Lettis, W., R., Hanson, K., L., Unruh, J., R.,	2004	Quaternary Tectonic Setting of South-Central Coastal California	U.S. Geol. Surv. Bull.	Provides a framework Quaternary tectonic setting for the central California Coast, focusing primarily on the Los Osos domain. Discusses the primary fault and fold structures and related seismicity. Discusses geologic and geodetic rates of vertical and horizontal deformation across the region.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Lettis, W., R., Unruh, J., R., Hanson, K., L.,	2009	Quaternary Tectonic Setting of South-Central Coastal California	Seis. Res. Let.	Abstract describes the tectonic domains that make up the central California coast and the driving mechanisms behind deformation in the region. Reference is cited in Chapter 5 (5.2.5), specifically refers to the mechanisms regarding the tectonic setting.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Lewis, S., D., Reay, W., G.,	1990	Deformation style of shelf sedimentary basins seaward of the San Gregorio fault, central California [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes the geometry of faults and folds in the offshore Outer Santa Cruz basin, as determined from CDP seismic reflection lines. The observed structures are considered active though at rates lower than local sedimentation rates. These offshore thrust faults and their associated folds and deformation of shelf sediments may not be good analogs for the offshore strike slip Hosgri fault; however, the authors' point regarding vertical offset rates vs. local sedimentation rates and how such faults and folds appear in seismic data should be considered.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Li, Y., Jia, D., Shaw, J., H.,	2010	Structural interpretation of the coseismic faults of the Wenchuan earthquake: Three-dimensional modeling of the Longmen Shan fold-and-thrust belt	J. Geophys. Res.	In this study, a model is constructed of faults ruptured during the 2010 Wenchuan earthquake. Of primary interest to the DCPP SSC is that the earthquake ruptured two faults that merge into a detachment at 15-17 km depth, and faults ruptured across several major geometric segment boundaries. In general, no data here can be applied to the DCPP SSC, but some analogues may be drawn and used to assess style of faulting and segmentation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Lienkaemper, J., J., McFarland, F., S., Simpson, R., W.,	2012	Long-term creep rates on the Hayward Fault: evidence for controls on the size and frequency of large earthquakes	Bull. Seis. Soc. Am.	Identifies spatial and temporal changes in the Hayward Fault creep rate since the Loma Prieta earthquake and uses this information to further understanding of the process of strain release along the HF. An increased amount of data has indicated an area of retarded slip on the fault between two areas where creep exists at greater depth. The authors propose this locked area determines the size and recurrence interval of ruptures. This article may be useful in determining recurrence intervals for faults where data on creeping sections exists.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Lin, A., Ouchi, T., Chen, A.,	2001	Co-seismic displacements, folding and shortening structures along the Chelungpu surface rupture zone occurred during the 1999 Chi-Chi (Taiwan) earthquake	Tectonophys.	The authors describe the surface rupture zone of the Chelungpu fault that occurred during the 1999 Chi-Chi earthquake. They divide the surface rupture zone into four segments based on various characteristics (e.g., surface rupture geometry) and find the segments generally are right-stepping en echelon, strike NE-SW to N-S, and dip 50 to 85 degrees to the east. This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Lin, P-S., Chiou, N., Walling, M.,	2011	Repeatable source, site, and path effects on the standard deviation for empirical ground-motion prediction models	Bull. Seis. Soc. Am.	The authors quantify the reduction in standard deviation by removing the ergodic assumption (variability seen in ground motion amplitudes at a single site from multiple earthquakes is the same as variability seen in a mixture of a broad range of site conditions and from earthquakes that occurred at different locations) and present a model of ground-motion amplitude that includes residuals broken down into five components. They also estimate variance of each component, apply their methodology to a dataset from a large dataset from Taiwan, and compare these results with previous studies. The authors find that although removal of the ergodic assumption reduces standard deviation, this causes an increases in epistemic uncertainty. The procedures presented in this article are more relevant to the GMC than the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Lindh, A., G., Motooka, C., Bell, S.,	1981	Current seismicity of the central California coastal region from Point Buchon to Point Piedras Blancas: a preliminary report (3 Sheets)	U.S. Geol. Surv. Open File Rpt.	Paper describes seismicity recorded during a 3-month period in 1980 along the south-central CA coast, including 33 events. One third of the seismicity was suggested to have occurred on or near the Sur-Nacimiento fault zone (most likely the Rinconada) while most of the additional seismicity was located on the Hosgri or immediately west of San Simeon.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Lindvall, S., C., Rockwell, T., K., Huftile, G., J.,	1989	Evidence for prehistoric earthquakes on the Superstition Hills Fault from offset geomorphic features	Bull. Seis. Soc. Am.	Article documents offset geomorphic features to constrain slip distribution of the penultimate event of the Superstition Hills fault. The penultimate event appears to have a similar distribution to the 1987 event's distribution. Depending on if slip continues to accrue for the next 150 to 300 years or not, the characteristic earthquake model may be applicable to the fault. This article may be useful in determining how slip is distributed on a fault, particularly if the fault (or segments of the fault) are creeping.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Lindvall, S., C., Rockwell, T., K.,	1995	Holocene Activity of the Rose Canyon Fault Zone in San Diego, California	J. Geophys. Res.	Using trenching at Rose Creek in San Diego, the authors present new data on the Holocene slip rate, sense of slip, and potential seismic hazard associated with the Rose Canyon fault zone, as well as implications for the likely slip rate of the northern continuation of the Newport-Inglewood fault (the Rose Canyon fault) into the LA basin. The authors estimate slip rate using measurements of offset channels and find that the fault is likely more active than previously thought. Estimates of slip rate based on offset channels is similar to the LESS studies for the Hosgri and other offshore faults, though the onshore analysis of the Rose Canyon fault through trenching makes this article of little direct applicability to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Lindvall, S., C., Rockwell, T., K., Dawson, T., E.,	2002	Evidence for two surface ruptures in the past 500 years on the San Andreas Fault at Frazier Mountain, California	Bull. Seis. Soc. Am.	Identified two earthquake ruptures during paleoseismic studies of the SAF on the north flank of Frazier Mountain, CA. The earlier rupture took place between A.D. 1460 and 1600 as determined by radiocarbon dating and the more recent rupture is interpreted as the historical 1857 earthquake. The authors attempt to correlate these findings with other sites and conclude the San Andreas may have repeatedly failed in large ruptures similar to the 1857 event. Provides evidence of historical seismicity on the SAF, but may not be directly useful in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Lisiecki, L., E., Raymo, M., E.,	2005	A Pliocene-Pleistocene stack of 57 globally distributed benthic δ18O records	Paleocean.	The authors present a Pliocene-Pleistocene stack containing benthic δ18O data from 57 globally distributed sites. The stack is consistent with previously published stacks, though the higher quality data and techniques result in greater variance. ESL fluctuations appear to have increased in amplitude in the Quaternary, with the oldest and greatest δ18O ratio occurring at MIS 16.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Liu, J., P., Milliman, J., D., Gao, S.,	2004	Holocene development of the Yellow River's subaqueous delta, North Yellow Sea	Marine Geol.	Using high-resolution seismic reflection and other sedimentological and oceanographic data, the authors describe the development and structure of the subaqueous Shandong clinoform delta in the North Yellow Sea. The authors state the development of the Shandong clinoform involved stepwise postglacial sea level rise, reintensification of the Asian summer monsoon, and the transition of the river mouth between the Bohai Sea and the southern Yellow Sea, making growth of this clinoform unique (and potentially less applicable to the central California coast). Additionally, the comprehensive and statistically rigorous sea level curve presented Stanford et al., 2011 is likely more useful to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Liu, J., P., Milliman, J., D.,	2004	Reconsidering Melt-water Pulses 1A and 1B: Global Impacts of Rapid Sea-level Rise	J. Ocean Univ. China	The authors re-analyzed coral reef data from the Barbados and U/Th dates in order to refine depth ranges of MWP-1A and 1B and also draw correlations between sea level rise and paleoclimate. Their results are in agreement with previous estimates of the timing and vertical extent of MWP-1A and 1B though they find shorter duration and higher extent and rate of transgression. The comprehensive and statistically rigorous sea level curve presented Stanford et al., 2011 is likely more useful to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Lobo, F., J., Dias, J., M.A., Hernandez-Molina, F., J.,	2005	Late Quaternary shelf-margin wedges and upper slope progradation in the Gulf of Cadiz margin (SW Iberian Peninsula)	Geol. Soc. London Spec. Pub.	Focusing on the Guadiana River, Gulf of Cadiz, this authors (1) characterize the geometry and development and preservation of the most recent regressive shelf-margin wedges; (2) interpret the geometry of the shelf break/upper slope facies using seismic stratigraphy to distinguish falling sea-level and lowstands; and (3) define growth patterns and estimate potential growth of the upper slope. The authors found the most recent late Quaternary shelf-margin is characterized by convex arcuate profiles and prograding shelf breaks that likely formed during episodes of late Quaternary sea-level fall and/or lowstand. The bases of the deposits are defined by major sea-level rise and aggradational sheet drape. Additionally, the majority of identified shelf-margin wedges show an upbuilt-outbuilt slope growth pattern with two geometries: (1) margins composed of forced regressive deposits formed during sea-level rise; and (2) shelf-margin wedges with both regressive deposits and lowstand deposits, developed during sea-level lowstands.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Lobo, F., J., Maldonado, A., Hernandez-Molina, F., J.,	2008	Growth patterns of a proximal terrigenous margin offshore the Guadalfeo River, northern Alboran Sea (SW Mediterranean Sea): glacio-eustatic control and disturbing	Mar. Geophys. Res.	Sea level and shelf margin architecture processes discussed here help to understand ages of channels used a strain markers for the Hosgri fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Lobo, F., J., Ridente, D.,	2014	Stratigraphic architecture and spatio-temporal variability of high-frequency (Milankovitch) depositional cycles on modern continental margins: An overview	Marine Geol.	This paper describes continental margin stratigraphy and processes used to understand ages of strata offset by the Hosgri fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Lomnitz, C.,	1989	Comment on "Temporal and Magnitude Dependence in Earthquake Recurrence Models" by C. A. Cornell and S. R. Winterstein	Bull. Seis. Soc. Am.	Lomnitz states that Cornell and Winterstein's (1988) interpretation that the effect of temporal and magnitude dependence are unaccounted for by the Poisson model is incorrect: the Poisson process considers several discrete sources that each exhibit time and magnitude dependence. Lomnitz also states that it is unconservative to assume a Poisson model is accurate if the elapsed time since the last significant event exceeds the average time between events. This comment should be considered with the Cornell and Winterstein article when characterizing the most appropriate earthquake recurrence model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Lozos, J., C., Oglesby, D., D., Duan, B.,	2011	The Effects of Double Fault Bends on Rupture Propagation: A Geometrical Parameter Study	Bull. Seis. Soc. Am.	This paper uses a 2-D finite element model to evaluate geometries that control rupture behavior across stepovers. The authors find that longer overall fault lengths permit through-going ruptures more readily shorter faults. They find that when the faults are oriented parallel to maximum shear, extensional stepovers more readily permit through-going ruptures, while the opposite is true when the direction of maximum shear is rotated.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Ludwig, L., G., Akçiz, S., O., Noriega, G., R.,	2010	Climate-Modulated Channel Incision and Rupture History of the San Andreas Fault in the Carrizo Plain	Science	This study uses offset stream channels to evaluate displacements in previous San Andreas fault surface ruptures in the Carrizo Plain. The authors use existing paleoclimate data to assess ages of channels, fan deposits and incision events. In contrast to previous studies, the authors find that incision events occur less frequently than offset events, therefore, many channels may be offset by more than one event. Cumulative channel offset compared with earthquake dates suggests that the last three surface ruptures in the Carrizo Plain exhibited similar total offset of 5.6 to 5.9 m. The authors conclude that a similar or greater amount of strain has occurred (at time of publishing) since the last event. Use paper for characterizing the San Andreas fault.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Lutter, W., J., Fuis, G., S., Ryberg, T.,	2004	Upper crustal structure from the Santa Monica mountains to the Sierra Nevada, southern California: tomographic results from the Los Angeles Regional Seismic	Bull. Seis. Soc. Am.	Using refraction and low-fold reflection data, the SCEC created velocity models that, paired with oil-test well data and forward modeling of LARSE II refraction data, may indicate areas of low velocity and high velocity gradient correspond to Cenozoic sedimentary basin fill for several valleys in southern California. The article also states the role of the San Andreas Fault in separating velocity structures of the Transverse Ranges and Mojave Desert. This article focuses on upper crustal structure in southern California and would likely be of little use in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Luttrell, K., Sandwell, D.,	2010	Ocean loading effects on stress at near shore plate boundary fault systems	J. Geophys. Res.	The authors determine Coulomb stress on a fault plane from calculations of bending stress from global ocean loading and apply this model to the SAF, Alpine fault, Cascadia subduction zone, and North Anatolian fault. For the SAF, the model indicated that the regional effect of ocean loading on vertical faults is extension onshore and compression offshore. This result suggests sea level rise and the associated "bending" at coastlines (1) reduces the magnitude of normal stress and promotes failure of onshore faults, and (2) inhibits failure of offshore faults. Although the change in normal stress due to this effect is ~100 times smaller than the rate of tectonic loading on major plate boundaries, this change may alter the required accumulated stress for fault rupture. Additionally, during high sea level, onshore coastal transform faults will be weaker (more rapid seismic cycle) and offshore coastal transform faults will be stronger (less activity). These effects are more likely to be observed on secondary faults with a lower tectonic loading rate.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Luyendyk, B., P., Kamerling, M., J., Terres, R., R.,	1980	Geometric model for Neogene crustal rotations in southern California	Geol. Soc. Am. Bull.	Authors present a model of rotation of 70 to 80 degrees for crustal blocks bounded on the north and south by east-west-trending sinistral faults as applied to the Transverse Ranges, parts of the offshore Borderland, central Mojave Desert, and the Tehachapi Mountains. The authors also use the model to predict timing of the rotation, displacement, and creation of triangular basins.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Luyendyk, B., P., Kamerling, M., J., Terres, R., R.,	1985	Simple shear of southern California during Neogene time suggested by Paleomagnetic declinations	J. Geophys. Res.	This article presents a regional geometric model for Neogene tectonic rotations in the Transverse Ranges. This model predicts middle Miocene and younger clockwise rotations have occurred in the Northeast Mojave and Tehachapi Mountains Block. Luyendyk (1991) states this model does not entirely predict and explain rotations east of the San Andreas fault.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Luyendyk, B., P.,	1991	A model for Neogene crustal rotations, transtension, and transpression in southern California	Geol. Soc. Am. Bull.	Describes the two Miocene episodes of crustal rotation in southern California and the Mojave Desert. Extension is associated with both episodes, but primarily with the earlier episode. The earlier episode appears to be related to the subduction of the Farallon, while the later episode is related to shear between the Pacific and North American plates and is likely still rotating today. Article focuses on southern California but may be relevant because the Hosgri and Los Osos Faults and Morro block are included in the block rotation model (Figure 2, 5, 6).	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Machette, M., N., Personius, S., F., Nelson, A., R.,	1989	Segmentation models and Holocene movement history of the Wasatch fault zone, Utah	U.S. Geol. Surv. Open File Rpt.	They authors describe the purported five or six segments of the WFZ and define four types of segments boundaries the fault. They determine that segments along the central two thirds of the 383 km long Wasatch fault zone (WFZ) have each ruptured two or more time in the past 6,000 years, while the shorter, distal segments have relatively lower slip rates and longer recurrence intervals; however, activity on the WFZ appears to be clustered through time. This article is of little direct use to the DCPP SSC except that some segmentation concepts could be applied to analogous faults; however, segmentation concepts are more thoroughly described in other and more recent papers.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☑	Madden, E., H., Pollard, D., D.,	2012	Integration of surface slip and aftershocks to constrain the 3D structure of fault involved in the M 7.3 Landers earthquake, southern California	Bull. Seis. Soc. Am.	Article presents complexities associated with the Landers earthquake including multifault rupture, variations in fault structure at the surface and depth, and differences in fault geometry that affect the local stress field. Additionally, the orientation and slip direction of aftershocks is not always consistent with those of the mainshock faults or the cluster in which they occur.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Magistrale, H., Day, S., M., Clayton, R., W.,	2000	The SCEC southern California reference three-dimensional seismic velocity model Version 2	Bull. Seis. Soc. Am.	Article describes Version 2 of the 3D seismic velocity model of southern California developed by the SCEC; the model represents major basins in southern California as well as regional tomography-derived representations of the crust for areas outside of the basins. The updated model allows the user to create any specified 3D mesh of seismic velocity and density values. This model aids in understanding how basin depth affects ground motion.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Mai, M., Beroza, G., C.,	2000	Source Scaling Properties from Finite-Fault-Rupture Models	Bull. Seis. Soc. Am.	In this study, the authors evaluate slip distribution with respect to fault rupture type and size using finite-fault-rupture models. The authors find significant differences between scaling laws for strike- and dip-slip earthquakes. For example, their results indicate a nonlinear relationship between displacement and fault length for strike slip faults, with slip continuing to increase with rupture width/length. This relationship exists into very large earthquakes, but with a decreasing rate of increase. Dip slip earthquakes, on the other hand, remain self-similar in small to moderate events with that relationship breaking down with large earthquakes. In conclusion, they argue for the use of corresponding equations for slip estimations. Concepts and conclusions in this paper may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☑	Manighetti, I., Campillo, M., Bouley, S.,	2007	Earthquake scaling, fault segmentation, and structural maturity	EPSL	This paper explores the relationship between magnitude and displacement with respect to fault segmentation and complexity. The authors find a significant difference in displacement observed on ruptures of more mature faults (lower stress drop) compared with less mature faults (higher stress drop). Surface slip accounts for about 85% of subsurface slip in large earthquakes, but only 40% in moderate earthquakes (M = 6 to 6.5). The authors argue that, based on better statistical analyses of error, their scaling laws are more accurate than those of Wells and Coppersmith (1994).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Mann, P., Hempton, M., R., Bradley, D., C.,	1983	Development of Pull-Apart Basins	J. Geol.	This study characterizes pull apart basins, noting in what types of tectonic environments they have been mapped and are likely to develop, the possible tectonic mechanisms for their development (e.g.., change in motion, fault not oriented optimally with respect to stress field), and their developmental evolution with respect to various geometries. Little here is likely to be of direct use to the DCPP SSC, although concepts may help build a regional or fault-specific tectonic model.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Mann, P., DeMets, C., Wiggins-Grandison, M.,	2007	Toward a better understanding of the Late Neogene strike-slip restraining bend in Jamaica: geodetic, geological, and seismic constraints	Geol. Soc. London Spec. Pub.	Presents a tectonic model for the restraining bend formation and later stage of bend bypassing in Jamaica. The authors state that the island of Jamaica is the morphological expression of the restraining bend and that the GPS velocity field suggests left-lateral shear is currently transmitting across the restraining bend. Article comments on the SAF and how the San Bernardino restraining bend may eventually result in slip transferring to the San Gabriel fault zone and abandoning the restraining bend. The article also states that the evolution of a restraining bend may affect seismicity, which may be an important to consider for the SAF.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Mann, P.,	2007	Global catalogue, classification and tectonic origins of restraining- and releasing bends on active and ancient strike-slip fault systems	Geol. Soc. London Spec. Pub.	Mann uses published information on strike-slip tectonic setting, size, basin and bend type, age, and models for active and ancient releasing and restraining bends in an effort to create a naming and classification scheme for the bends. Mann also attempts to classify how their morphologies and range of structures are controlled by strike-slip tectonic settings in which they form.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Manson, M., W.,	1985	San Simeon fault zone and Cambria fault, San Luis Obispo County, California	Cal. Div. Mines Geol. Fault Eval. Rpt.	A summary of available data regarding the San Simeon fault zone (including descriptions of the Arroyo Laguna fault, the San Simeon fault, the Arroyo del Oso fault, and several unnamed fault strands), the Oceanic fault, and the Cambria fault. Manson also interpreted two sets of air photos and made field observations of these faults. Manson describes geomorphic observations of "recent" right-lateral displacement along the San Simeon and Arroyo Laguna faults southeast of Arroyo de la Cruz and cites Weber (1981) and Weber et al. (1981) as the best evidence for recent faulting along the Arroyo Laguna fault and the southern San Simeon fault; three lines of evidence against recent displacement along the northern segment of the San Simeon fault are also presented Manson observed no evidence of recent faulting on air photos or in the field on the northwest segment of the Oceanic fault; similarly, no evidence of Holocene faulting was observed on air photos or in the field, though Manson cannot preclude fault offset.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Marliave, E., C.,	1966	Letter to Mr. B.W. Shackelford from E.C. Marliave, subject: Nuclear Power Plant, Diablo Canyon Site (Appendix to PSAR for Diablo Canyon units 1 and 2)	USNRC	This letter documents E. C. Marliave's field reconnaissance and review of reports and maps of the (at the time) potential DCPP site location, which includes estimates of marine terrace ages, a lack of potential landslide threats or evidence of faulting in trenches at the site, an the interpretation of the area as "generally seismically inactive". Given the age of this letter and lack of data presented, interpretations presented are not relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[x]	Marshall, S., T., Funning, G., J., Owen, S., E.,	2013	Fault slip rates and interseismic deformation in the western Transverse Ranges, California	J. Geophys. Res.	This manuscript concludes that show that there are not any significant discrepancies between short-term slip rates captured by geodesy and longer-term slip rates measured by geology when using a model driven by geodetically determined strain rates in the western transverse ranges. This paper indicates continued contraction within the western transverse ranges, with rates of shortening decreasing from east to west to approximately 2.5 mm/yr of north-south-directed shortening in the offshore Santa Barbara Channel. This manuscript is used in the definition of the seismotectonic setting of the SSC.	[x] Seismotectonic Setting [ ] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Martel, S., J.,	1989	Formation of segmented strike-slip fault zones: Mount Abbot Quadrangle, California	U.S. Geol. Surv. Open File Rpt.	The authors describe how large strike-slip compound fault zones formed in pre-existing fractures in plutons of the Mount Abbot quadrangle in the Sierra Nevada. They observe that thicker fault zones generally accommodate larger displacements than narrower ones, suggesting that many fault zones have grown in thickness as they slipped. In the Mount Abbot quadrangle specifically, the compound zones are thought to have thickened as simpler fault zones and smaller faults were linked through fractures, with the most intense deformation concentrated at the edges of fault zones, thereby increasing the size of geometric irregularities. Although the model in this article may provide a mechanism for the development of compound fault zones, it is of little direct use to the DCPP SSC.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [x] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Martin, A., K., Flemming, B., W.,	1986	The Holocene shelf sediment wedge off the south and east coast of South Africa	Can. Soc. Petrol. Geol.	Seismic reflection survey describes the south and east coast shelves of South Africa and the sediment wedges that accumulate along each coast, reaching a volume up to 5 km^3. Large-scale and small-scale cross bedding is observable in these shelves. Although this paper describes coasts of South Africa, it may be a proxy for the accumulation of Holocene sediment bodies off the coast of California.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Maselli, V., Trincardi, F., Cattaneo, A.,	2010	Subsidence pattern in the central Adriatic and its influence on sediment architecture during the last 400 kyr	J. Geophys. Res.	Manuscript discusses subsidence and sequence stratigraphy on the western shelf of the Adriatic Sea. It is used as additional support for the Middle Pleistocene Transition observed in the Point Sal area.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Matsuda, T., Yamazaki, H., Nakata, T.,	1980	The surface faulting associated with the Rikuu earthquake of 1896 (in Japanese)	ull. Earthquake. Res. Inst. Tokyo Univ	This work provides field photos and data about the surface rupture from the 1896 Rikuu earthquake. This earthquake rupture is an example of a splay rupture source.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Matthews, M., V., Ellsworth, W., L., Reasenberg, P., A.,	2002	A Brownian model for recurrent earthquakes	Bull. Seis. Soc. Am.	The authors present the Brownian Relaxation Oscillator (BRO) and Brownian Passage-Time (BPT) distributions and their defining parameters. The BPT distributions are compared to four other families of distributions (exponential, gamma, Weibull, and lognormal). This article presents a critical model for earthquake recurrence that will be used in the logic tree.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Mattinson, J., M., Hopson, C., A.,	2008	New high-precision CA-TIMS U-Pb zircon plateau ages for the Point Sal and San Simeon ophiolite remnants, California Coast Ranges	Geol. Soc. Am. Spec. Paper	This study applied new zircon analyses to determine the Point Sal and San Simeon ophiolites are part of a single remnant. This result confirms early work that determined ~80 to 115 km of lateral offset by the San Gregorio-San Simeon-Hosgri fault system.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	McBride, J., H., Brown, D., F.,	1986	Reanalysis of the COCORP deep seismic reflection profile across the San Andreas fault, Parkfield, California	Bull. Seis. Soc. Am.	Article presents a reanalysis of the seismic reflection profile completed by COCORP in 1977 of the San Andreas fault through Parkfield, CA and describes the Salinian block and its juxtaposition against Franciscan terrane. The San Andreas fault zone is distinguishable as a near-vertical zone ~3 km wide, and a marked change in the upper vs. lower crust is speculated to represent the transition from brittle to ductile deformation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	McCaffrey, R.,	1997	Statistical significance of the seismic coupling coefficient	Bull. Seis. Soc. Am.	McCaffrey describes the coupling coefficient, or the ratio of slip that occurs in earthquakes to the total expected rate of slip, at subduction zones. Due to short length of the reliable earthquake record, the global variations in the coupling coefficient cannot be resolved using seismicity alone. The coupling coefficient is invoked for the rupture models of the Los Osos fault and San Luis Bay fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	McCaffrey, R.,	2005	Block kinematics of the Pacific-North America plate boundary in the southwestern United States from inversion of GPS, seismological, and geologic data	J. Geophys. Res.	Pacific-North America angular velocity is found through rigid block rotations, recoverable elastic strain rates resulting from friction on block-bounding faults, and nonrecoverable strain rates resulting from slip on faults within blocks. The Sierra Nevada-Great Valley and the eastern Basin and Range have approximately rigid behavior. The author states that most blocks rotate about vertical axes at approximately the same rate as the Pacific which may indicate spin rates of one block affect neighboring blocks' rates. The author concludes that the Pacific strongly influences the motions of these blocks via edge tractions, though the blocks must spin counter to the Pacific-North America shear. This article may provide useful information regarding the relationship of faults (such as the Hosgri and San Simon) with the rotation of elastic spherical blocks in the western U.S.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	McClay, K., Bonora, M.,	2001	Analog models of restraining stepovers in strike-slip fault systems	Am. Assoc. Petrol. Geol. Bull.	The authors use sand box models to simulate the evolution of restraining bend structures. Underlapping, adjacent, and overlapping fault tips were modeled. Various slices are made through the models to examine 3-dimensional structure. The authors find that the structures tend to flower at the surface, with numerous small displacement faults extending and merging into a deeper, high-displacement "basement fault." Syn-kinematic deposition does not effect this structure, but does effect near-surface structure. Rotations within the stepovers range from 7 to 16 degrees counterclockwise, increasing from underlap to overlap. Comparisons are made with real-world examples in the western U.S. (not California) and internationally. Little here would be of use to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	McCrory, P., A., Wilson, D., S., Ingle, Jr,, J., C.,	1995	Neogene Geohistory Analysis of Santa Maria Basin, California, and Its Relationship to Transfer of Central California to the Pacific Plate	U.S. Geol. Surv. Prof. Paper	Authors present detailed North American-Pacific Plate boundary history using basin analyses and backstrip plots to create plate reconstructions. Results of the study corroborate other studies, including geodesy studies, and indicate ongoing oblique transpression along the San Andreas fault. They observe strain partitioning with primarily strike slip on the San Andreas fault zone, and compression, at about 10 mm/yr, taken up in thrust faults and large scale folding. Compression is accommodated on either side of the San Andreas fault. The authors provide 3 Ma to present plate vector diagrams, which could be useful in seismic source characterization for slip rate budgeting across the plate boundary. These vectors would provide longer-term estimates that could compliment modern geodetically derived rates.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	McCulloch, D., S., Greene, H., G., Heston, K., S.,	1980	A Summary of the Geology and Geologic Hazards in Proposed Lease Sale 53, Central California Outer Continental Shelf	U.S. Geol. Surv. Open File Rpt.	Report focused on hazards offshore CA specific to the hydrocarbon industry. Is used to support geometries for offshore faults (described as 'non-UCERF3 faults') in the SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	McGuire, R., K.,	1993	Computations of seismic hazard	Ann. Geophys.	This reference describes seismic hazard methodology, inputs, and restrictions on inputs and results. Examples used in this reference include the logic tree, seismic hazard analysis, and uncertainty for the DCPP LTSP, maps of seismic sources in the Eastern U.S., probabilities of earthquake occurrence in the SF bay area, as well as others. While analyses presented here have since been refined, this reference provides descriptions of parts of the earthquake rate and probability model that should be reviewed.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	McHugh, C., M.G., Seeber, L., Cormier, M.-H.,	2006	Submarine earthquake geology along the North Anatolia Fault in the Marmara Sea, Turkey: a model for transform basin sedimentation	EPSL	Article finds evidence for coseismic deformation of the sea floor along the rupture of the North Anatolia Fault. The authors propose a qualitative sedimentation model relating the coseismic deformation to mass-wasting of the slope, scour of the basin floor, seiche motions and homogenite deposition. Additionally, sediment thickness increases due to earthquake activity and lessen the likelihood of sediment failures due to normal marine gravity-driven processes. Although this article focuses on the NAF, it provides paleoseismic methodologies applied to a submarine environment, specifically in regards to transform basin sedimentation. These techniques may be useful in characterizing hazard offshore of the DCPP.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	McHugh, C., M.G., Hartin, C., A., Mountain, G., S.,	2010	The role of glacio-eustasy in sequence formation: Mid-Atlantic Continental Margin, USA	Marine Geol.	Manuscript discusses relationship between stratigraphic sequences and glacio-eustatic cycles along the Atlantic Margin of the US. Used as support of 100 ka glacial cycles in stratigraphic sequences applied to slip-rate estimates of the Hosgri fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	McIntosh, K., D., Reed, D., L., Silver, E., A.,	1991	Deep Structure and Structural Inversion Along the Central California Continental Margin from Edge Seismic Profile RU-3	J. Geophys. Res.	This study discusses the findings of the RU-3 seismic profile line. The authors conclude there is subducted lithosphere beneath the central California continental margin, the subducted lithosphere likely being a fragment of the Monterey plate. Three main stages of Tertiary and Quaternary structural development are suggested: 1.) Paleogene convergent margin tectonics, followed by 2.) Miocene through lower Pliocene transtension, with 3.) renewed convergence accompanied by probably strike-slip from middle Pliocene to present.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	McKittrick, M., A.,	1988	Late Quaternary deformation of marine terraces, Monterey Peninsula, California [abstract]	Geol. Soc. Am. Abst. Prog.	This abstract describes five marine terraces along the Monterey Peninsula, including estimated uplift rates of ~0.16 to 0.2 m/ky and the observation/interpretation that uplift rates have been spatially uniform during the latest Quaternary. Uplift rates presented here are similar to those reported between San Simeon and the Santa Maria Valley (e.g., Lettis and Hanson (1992), Hanson et al. (1994)).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	McLaren, M., K., Savage, W., U.,	1987	Relocation of earthquakes offshore from Point Sal, California [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes relocated seismicity near Point Sal, with an ~2.5 km shift in relocations relative to previous USGS/Calnet locations. The May 29, 1980 composite and single-event focal mechanisms were described as pure reverse and are consistent with the strike of the Casmalia fault.	[x] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	McLaren, M., K., Savage, W., U.,	2001	Seismicity of South-Central Coastal California: October 1987 through January 1997.	Bull. Seis. Soc. Am.	Paper discusses 10 years of seismicity data from Point Arguello to Big Sur and plots 200+ focal mechanisms. Seismicity trends are generally consistent with known faults. Seismicity is generally sparse in subsiding basins. Both the distribution and orientation of focal mechanisms suggest seismicity reported in this paper is consistent with seismicity reported for the previous several decades.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	McLaren, M., K., Hardebeck, J., L., van der Elst, N.,	2008	Complex Faulting Associated with the 22 December 2003 Mw 6.5 San Simeon, California Earthquake, Aftershocks and Postseismic Surface Deformation	Bull. Seis. Soc. Am.	Seismic (mainshock and nearly 10,000 aftershocks) and InSAR data are used to constrain the geometry of faults and style of deformation, and amount of post-seismic slip. Slip during the mainshock occurred on a 30-km-long NW-striking NE-dipping fault plane in a purely reverse sense. The aftershock sequence defined a 10-km-long backthrust east of the mainshock. InSAR suggests 72 mm of maximum postseismic uplift of the pop-up block.	[x] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [x] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	McLean, H.,	1991	Distribution and Juxtaposition of Mesozoic Lithotectonic Elements in the Basement of the Santa Mara Basin, California	U.S. Geol. Surv. Bull.	This study performed petrographic analyses of Great Valley and Franciscan rocks. Results indicate that the Franciscan may represent altered Great Valley rocks. Some tectonic implications are made in the study including Neogene vertical movement identified on the Pezzoni-Casmalia fault and that separation of lithologically similar Great Valley rocks suggests deposition on an active zone of accretion.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	McLean, H.,	1993	Miocene Lavas Constrain Right Slip Movement on the West Huasna Fault in San Luis Obispo County to Less Than 8 Km [abstract]	Am. Assoc. Petrol. Geol. Pacific Sec.	This abstract describes stratigraphy near the West Huasna fault and the observation of an outcrop distribution of erosion-resistant andesitic lava within the Obispo Formation that appears to limit right-lateral strike-slip separation of the West Huasna fault to 5-8 km.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	McLean, H., Stanley, R., G.,	1994	Provenance of Sandstone Clasts in the Lower Miocene Lospe Formation Near Point Sal, California	U.S. Geol. Surv. Bull.	The paper details a petrographic study of the Lospe Formation. The authors find that much of the Lospe is sourced from nearby ophiolites, and to a lesser degree the Franciscan mélange and Great Valley sequence. Portions of the formation may also be sourced from yet younger sedimentary rocks. Little to no data here are applicable to the DCPP site.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Meade, B., J., Hager, B., H.,	2005	Block models of crustal motion in southern California constrained by GPS measurements	J. Geophys. Res.	The authors use a block model approach to combine geologic and geodetic data into a model that considers block rotation and interseismic strain accumulation. This model estimates slip rates on all faults simultaneously which results in a slip model without a priori assumptions. The authors apply this model to faults in southern California to determine fault slip rats and possible tectonic implications. They also make inferences regarding the viscosity of the lower crust/upper mantle with respect to the state of the earthquake cycles on faults.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Meigs, A., J., Oskin, M.,	2002	Convergence, block rotation, and structural interference across the Peninsular-Transverse Ranges boundary, eastern Santa Monica Mountains, California	Geol. Soc. Am. Spec. Paper	Manuscript suggests deformation in southern California occurs in two distinct tectonic provinces. Indicates the western Transverse Ranges rotate at a steady 6°/m.y. which continues to the present day. Rotation of the western Transverse Ranges is relevant to the regional tectonic setting.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Melchiorre, E., B., Criss, R., E., Davisson, M., L.,	1999	Relationship between seismicity and subsurface fluids, central Coast Ranges, California	J. Geophys. Res.	Aseismic areas in the central Coast Ranges of California correlate with areas of abnormally high pore fluid pressures > 130% of hydrostatic and have potentially had significant historical uplift. These areas are mostly found at the center of structural blocks under compression and are bounded by major faults and seismicity belts. The article states that pockets of overpressured formation fluid are created because of volumetric strain, and that these pockets may affect seismicity on major faults. The negative correlation between abnormally high pore fluid pressures and seismicity may be useful in understanding one potential reason for aseismicity on faults; however, the presence of these fluids does not appear to be to the sole or conclusive cause.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Meltzer, A., S., Levander, A., R.,	1987	Interpretation of deep crustal reflection profiles offshore southern central California [abstract]	Eos Trans. Am. Geophys. Un.	Using a deep crustal seismic reflection profile, the authors interpret subducted oceanic crust beneath the Santa Lucia High at a depth of ~11-14 km, with > 12 km of overlying accreted material, and interpret a deeper reflector at ~18-21 km depth to be the moho. They also describe the Santa Lucia Bank fault as a high angle strike slip fault that has undergone extensional then compressional deformation in the Neogene.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Meltzer, A., S.,	1989	Crustal structure and tectonic evolution: central California	Rice Univ.	PhD dissertation including analysis and interpretation of deep crustal reflection profiles through the offshore Santa Maria Basin. Images the underthrusted oceanic crust at depths between 11 and 16 km dipping 5-6.6 degrees east. Top of oceanic crust is probably at or below base of seismogenic zone where DCPP area faults are located.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Meltzer, A., S., Levander, A., R.,	1991	Deep crustal reflection profiling offshore southern Central California	J. Geophys. Res.	Article provides a description of the crustal structure offshore southern central California (Santa Maria Basin). In the lower to middle Miocene, the Santa Maria Basin underwent extension and strike-slip faulting. In the upper Miocene to lower Pliocene, compression and basin inversion took place. Article also proposes that Neogene oblique plate motion between North American and Pacific plates resulted in shortening that extends east of the Santa Maria Basin and is distributed across the entire transform margin.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Meng, L., Ampuero, J.-P., Stock, J.,	2012	Earthquake in a Maze: Compressional Rupture Branching During the 2012 Mw 8.6 Sumatra Earthquake	Science	The authors use backward source projection to evaluate rupture dynamics of the Sumatra earthquake. This large event included a number of unexpected and/or unprecedented processes such as very high stress drop, multisegment ruptures including segments not oriented optimally for rupture, and a 20 km jump between ruptures. Little here is of use to the DCPP SSC, except to highlight some unexpected rupture processes.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Michael, A., J.,	1984	Determination Of Stress From Slip Data: Faults And Folds	J. Geophys. Res.	This article presents a linear stress inversion method (SLICK) that uses slip data and, by assuming the magnitude of tangential traction is similar between faults, (1) minimizes the difference between the slip direction and the predicted tangential traction (shear stress vector); and (2) keeps magnitudes of tangential traction similar and keeps the magnitude of the tangential traction similar for various fault planes. The SLICK inversion method was the basis for SATSI, the inversion method implemented in the stress field analysis presented at Workshop 3.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Michael, A., J.,	1987	Stress Rotation During the Coalinga Aftershock Sequence	J. Geophys. Res.	Using the stress inversion technique of Michael (1984) with the modification of bootstrap resampling (Michael, 1987), slip data was used to infer the spatial and temporal variation of stress following the Coalinga earthquake. Spatially, σ1 was found to rotate from N51°E to N24°E in the southern area of the aftershock zone; temporally, σ1 was found to rotate from N62°E to N47°E. Michael concludes that rotation during the aftershock sequence consisted of two stages: (1) coseismic rotation of stresses from NE-SW to N62°E, then (2) stresses rotated more slowly back towards NE-SW, indicating the highest seismicity rate is concurrent with the greatest stress anomaly.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Michael, A., J.,	1987	Use of Focal Mechanisms to Determine Stress: A Control Study	J. Geophys. Res.	Michael proposes using a bootstrap resampling technique in order to determine the uncertainty in a stress inversion because, although determining the best-fit stress tensor for a set of focal mechanisms is relatively straight forward, determining the confidence interval for such solutions is difficult due to non-Gaussian uncertainties in the focal mechanism solution. Michael rejects the idea of using both nodal planes as fault planes as the concept lacks a physical basis. Hardebeck and Michael (2006) cite this reference in their description of using bootstrap resampling to determine uncertainty in the SATSI algorithm which was implemented in the stress analysis presented during Workshop 3.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Micheli, M.,	1966	Diablo Canyon Nuclear Plant Site, Preliminary Geologic Investigation (Appendix to PSAR for Diablo Canyon units 1 and 2)	USNRC	This report describes the geologic units (Point Sal and Obispo Formation) and overlying thin terrace deposits at the site, as well as a small intrusive igneous body with a relict granitic texture east of the site. Includes a geologic map; fault map and cross sections not included in PDF provided by PG&E.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Miller, D., M., Mountain, G., S.,	1994	Global sea-level change and the New Jersey margin	Proc. ODP Initial Reports	This work presents the objectives of the study of several boreholes planned off the coast of New Jersey. This boreholes are planned to supplement available sea level records. This work contributes to the understanding the age of marine deposits within the DCPP area.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Miller, D., M., Wright, J., D., Browning, J., V.,	2012	High tide of the warm Pliocene: Implications of global sea level for Antarctic deglaciation	Geology	The authors use benthic foram δ^18O values, and Mg/Ca-δ^18O estimates, and backstripping to estimate ESL during the Pliocene. Their statistical analysis of the results suggests that during the Pliocene (2.7-3.2 Ma) sea level was 22 ± 10 m or 22 ± 5 m higher than modern sea level at the 95% or 68% confidence interval, respectively.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Miller, G., H., Howie, J., M.,	1989	Laterally varying deep crustal structure in the central California offshore [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes two of the deep crustal seismic lines collected by PG&E that cross the continental shelf. These data and the authors' interpretations provide information on the dip and depth of the oceanic crust, which may help constrain seismogenic depth in the area.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Miller, III, A., C., Rice, T., R.,	1983	Discrete Approximations of Probability Distributions	Mgmt. Sci.	The authors present a method for determining discrete approximations of subjective continuous probabilitiy distributions using Gaussian quadrature. This procedure is superior to other methods (that generally calculate a discrete approximation based on means of intervals) which typically underestimate the moments of the original distribution. Additionally, this method also can be applied different kinds of distributions (e.g., Gaussian, exponential, etc.). This article presents an alternative method to finding discrete approximations of and assigning weights to different estimates of fault slip rate.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Miller, K., C.,	1993	Crustal structure along the strike of the offshore Santa Maria basin, California	Tectonophys.	The basin fill in the Santa Maria basin is Miocene to Pliocene in age and began to subside in Early Miocene times. The basin strata began to fault and fold due to Late Miocene to Early Pliocene shortening. This shortening also led to the uplift of basement blocks.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Miller, K., C., Meltzer, A., S.,	1999	Structure and Tectonics of the Central Offshore Santa Maria and Santa Lucia Basins, California: Results from the PG&E/EDGE Seismic Reflection Survey	U.S. Geol. Surv. Bull.	Santa Maria and Santa Lucia basins began subsiding in the early Miocene as the transform boundary of North America was established. The basins are younger and have increased shortening towards the south. Additionally, offshore folds and faults strike parallel to the Hosgri Fault Zone and Santa Lucia Bank such that oblique convergence is decoupled intro transform motion and shortening. Article characterizes the Hosgri as steeply dipping (> 60 deg) to subvertical. Provides information about basin formation in central California that may be useful in the tectonic model as well as observations on the PG&E/EDGE dataset on the dip of the Hosgri.	[x] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Miller, K., C., Meltzer, A., S.,	1999	Interpreted (Plates 1 and 3) and Uninterpreted (Plates 2 and 4) Migrated Seismic Reflection Data for Offshore Santa Maria Basin Transects, California	U.S. Geol. Surv. Bull.	These plates show interpreted and uninterpreted seismic reflection profiles RU-13, PG&E-1, RU-3, PG&E-3, RU-2, and PG&E-2. Interpreted structures include the Santa Lucia Bank and Hosgri fault zones, and the Queenie structure; interpreted units include the Miocene-Pliocene boundary unconformity, the top of basement, and four additional unnamed seismic units. On PG&E-1, the Hosgri fault zone is shown as offsetting the base of seismic units down to the west. Although these data have limited shallow resolution, they show interpretable reflectors to much greater depths than the Sliter et al. (2008, 2009) data.	[ ] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Miller, K., C.,	2002	Geophysical evidence for Miocene extension and mafic magmatic addition in the California Continental Borderland	Geol. Soc. Am. Bull.	Three gravity models that span the Pacific ocean floor to shore are presented and indicate the crust of the California Continental Borderland was extended and began to contain mafic melt since early Miocene time. Extension is supported by evidence suggesting the crust of the forearc basin and accretionary complex is ~22 km thick. The presence of mafic melt is supported by gravity models indicating the accretionary complex is 100-200 kg/m^3 more dense than areas to the north. Highlights structural differences between the borderland and northern California which may be useful in creating the tectonic model in the SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Miller, K., G., Browning, J., V., Pekar, S., F.,	1997	Cenozoic evolution of the New Jersey coastal plain: changes in sea level, tectonics, and sediment supply	Proc. ODP	This work summarizes the results from a drilling project on the new Jersey Coast. The stratigraphy of the boreholes indicates that late middle Eocene to middle Miocene onshore sequence boundaries can be correlated with the sea level curves derrived from d18O records. This work contributes to the understanding the age of marine deposits within the DCPP area.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Miller, K., G., Mountain, G., S., Browning, J., V.,	1998	Cenozoic global sea level, sequences, and the New Jersey transect: Results from coastal plain and continental slope drillings	Rev. Geophys.	This paper discusses regional correlations of sequence boundaries between New Jersey, Alabama and the Bahamas. This work also presents possible correlations with sea level curves and has implications for the timing of unconformities and sea level events in California.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

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☐	Miller, K., G., Kominz, M., A., Browning, J., V.,	2005	The Phanerozoic Record of Global Sea-Level Change	Science	The authors review the record of and uncertainties in eustatic changes over the past 543 Myr, looking at the long-term trend (10^7-10^8 yrs) affected by changes in sea-floor spreading, 10^6 year scale, and 10^4-10^5 year scale, dominated by changes in ice volume and controlled by astronomical variations in insolation. Using backstripping and benthic foraminiferal δ18O, they also present a new sea-level record for the past 100 million years and determine that (1) sea level in the Late Cretaceous was 100 +/- 50 m higher than it is today; (2) a modest decrease in the rate of ocean-crust production has occurred since the early Eocene; (3) long-term eustatic changes are much smaller than previously thought; (4) sea level changed by 20-80 m during the Late Cretaceous to Miocene; and (5) sea-level changes on the 10^6 yr scale occurred throughout the Phanerozoic. Other references that focus on more recent sea-level history (e.g., Stanford et al., 2011), are likely of more use to the DCPP SSC deformation model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Miller, K., G., Mountain, G., S., Wright, J., D.,	2011	A 180-million-year record of sea level and ice volume variations from continental margin and deep-sea isotopic records.	Oceanography	This article describes sea level and ice volume changes over the past 180 million years. The authors largely summarize previous and ongoing research with some discussion of the Pleistocene and Pliocene. References cited within are useful for estimates of paleosea level but otherwise presents limited new and relevant data and/or interpretations.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Mitra, S., Paul, D.,	2011	Structural geometry and evolution of releasing and restraining bends: Insights from laser-scanned experimental models	Am. Assoc. Petrol. Geol. Bull.	This paper presents results from analogue strike-slip fault modeling with clay. Structures are laser-scanned, which permits fine-scale analysis, mapping, 3D modeling, and enhanced relief visualization. Releasing and restraining bends are considered, with results of the analogue model compared against real word examples, the nearest to the DCPP site being the southern San Jacinto and San Andreas fault zones. While concepts can be applied to a variety of strike slip faults, little to no data are directly applicable to the DCPP site.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Mooney, W., D., McMechan, G., A.,	1982	Synthetic seismogram modeling for the laterally varying structure in the central Imperial Valley	U.S. Geol. Surv. Prof. Paper	The authors use synthetic seismograms to understand the structure and crustal velocity of the Imperial Valley, with the basement/subbasement structure as the least constrained part of the model. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Mountain, G., S., Burger, R., L., Delius, H.,	2007	The long-term stratigraphic record on continental margins	Cont. Marg. Sed.	This work describes the production fo the long-term stratigraphic record on continental margins. This work helps to refine ages of marine deposits found near DCPP.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Muhs, D., R., Simmons, K., R., Steinke, B.,	2002	Timing and warmth of the Last Interglacial period: new U-series evidence from Hawaii and Bermuda and a new fossil compilation for North America	Quat. Sci. Rev.	This study uses coral and fossil data to evaluate temperatures and duration of the last interglacial period. Data from Hawaii suggest that the Milankovitch theory cannot explain climate change because summer insolation was at low values. Instead, warmer water was likely transported to higher latitudes than in modern processes. Results of this study may be useful for constraining sea levels and, thus, terrace uplift and ages.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Muhs, D., R., Simmons, K., R., Kennedy, G., L.,	2002	The last interglacial period on the Pacific Coast of North America: Timing and paleoclimate	Geol. Soc. Am. Bull.	This study uses terrace corals and mollusk fossils from several locations along the California and Baja coast to construct sea levels, paleoclimates and sea water paleotemperatures during the last interglacial period (80 to 120 ka). The authors find that sea level was high at 116 ka, in contrast to previous ice volume, and warmer than present temperatures at 120 ka, and cooler than present at 80 ka. Location specific data, in particular at Cayucos may be useful for constraining terrace ages and formation for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Muhs, D., R., Wehmiller, J., F., Simmons, K., R.,	2004	Quaternary sea-level history of the United States	Dev. In Quat. Sci.	This article presents a literature review of Quaternary sea-level fluctuations as recorded on U.S. coastlines, primarily focusing on highstands of MIS-5. The review is arranged geographically, describing the coast of Florida, Hawaiian Islands, Pacific Coast, Alaska, Atlantic Coast, and the Gulf Coast. Regarding the Pacific Coast, the authors describe terrace sequences preserving sea-level highstands superimposed on long-term crustal uplift. They also describe the high terrace preserved on San Nicolas Island, though the Muhs et al. (2012) reference should be cited for a more thorough description.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Muhs, D., R., Simmons, K., R., Schumann, R., R.,	2012	Sea-level history during the Last Interglacial complex on San Nicolas Island, California: implications for glacial isostatic adjustment processes, paleozoogeography	Quat. Sci. Rev.	Using marine terrace mapping and uranium-series dating, the authors address two issues regarding Quaternary sea level history on the California coast: (1) the magnitude of sea level rise during relatively high sea stands that post-date the peak of the Last Interglacial complex at ~120 ka, and (2) "thermally anomalous" faunas in Pacific Coast marine terrace deposits. The authors find "terrace 2" is geomorphically the best expressed of the 14 terraces mapped by Vedder and Norris (1963) and is composed of two marine platforms (2a [shoreline angle elevation of 36-38 m] and 2b [shoreline angle elevation of 28-33 m]), with terrace 1 (shoreline angle elevation of 8-13 m) the lowest of all terraces and cuts into terrace 2b. Their uranium-series dating of corals indicates ages of ~120 ka on terrace 2a (MIS 5e), ~120 and ~100 ka on terrace 2b (MIS 5c), and ~80 ka on terrace 1 (MIS 5a). Using the Quaternary uplift rates calculated from terrace 2a and elevations of the shoreline angles of terraces 2b and 1, the authors estimate relative paleo-sea level elevations of +2 to +6 m for the ~100 ka sea stand and -11 to -12 m for the ~80 ka sea stand. Additionally, the authors address the issue of "thermally anomalous" faunas through reworking of corals and mollusks on terrace 2b from a formally more extensive terrace 2a.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Muir, S., G., Scott, R., F.,	1982	Earthquake-generated sandblows formed during the main shock	U.S. Geol. Surv. Prof. Paper	This report documents sandblows formed during the 1979 Imperial Valley earthquake that were later reactivated during aftershocks. The authors suggest these features may have initially formed during prehistoric earthquakes. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Murray, J., R., Thatcher, W., Onishi, C., T.,	2011	Crustal deformation in the central California coast region inferred from Global Positioning System data	Am. Geophys. Un. Fall Mtg.	Using geodetic data, the authors attempt to constrain rotation of fault-bounded blocks, fault slip rates, and internal strain within blocks, and find (1) high slip rates are not required on the Rinconada or Oceanic-West Huasna faults; and (2) significant internal contractional strain accumulation perpendicular to the plate boundary or parallel to major strike-slip faults is not required by the data.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Murray, J., R., Svarc, J., L., Hearn, E.,	2012	Regional Deformation and Kinematics from GPS Data	SSC Workshop	In this SSHAC SSC Workshop 2 presentation, Murray et al. present an analysis of the patterns and rates of deformation west of the San Andreas fault in central California using a GPS velocity field developed in 2011. Based on block modeling, the Hosgri fault slip rate is constrained to be in the range of 0.5 to 3 mm/yr. Additionally, greater NE-SW contraction was observed east of the Los Osos domain (the region west of the San Andreas fault), than within the domain itself, though most results are not significant due to the standard errors on the data.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Murray-Moraleda, J., R., Svarc, J., L., Onishi, C., T.,	2011	An interseismic velocity field for the central California coast region derived from Global Positioning System measurements	Unpub. Tech. Rpt.	The authors compiled a spatially-dense secular velocity field for the central California coast region from GPS measurements, includes continuous GPS, survey-mode GPS, and semi-permanent GPS stations. The velocities indicate postseismic deformation following the San Simeon earthquake was longer-lived that previous thought, though the reason for this longer duration is unknown. Block-modeling to refine models presented in the report is proposed.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Naeser, N., D., Isaacs, C., M., Keller, M., A.,	1995	Regional thermal maturity of surface rocks, onshore Santa Maria Basin and Santa Barbara-Ventura Basin Area, California	U.S. Geol. Surv. Bull.	The authors develop a map of thermal maturity and denote thermal maturity zones for a potion of central and southern California. The accompanying map covers the coast from about Santa Monica, north to Lopez Point and 10 to 50 miles inland. Thermal maturity is described with respect to formation and location and used to delineate areas and formations of higher potential to yield oil. Little to no information here is applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Naish, T., R.,	1997	Constraints on the amplitude of late Pliocene eustatic sea-level fluctuations: New evidence from the New Zealand shallow-marine sediment record	Geology	This paper presents a eustatic sea level curve for 2.6 to 2.0 Ma based on the shallow marine sediment record of the Wanganui Basin, New Zealand. The cyclothematic record of the basin was evaluated from faunal paleobathymetry, subsidence, and stratigraphic analyses. Results of the study indicate 20% larger fluctuations in sea level (compared with previous studies) during the studied period, with minimum amplitudes ranging from 110 ± 20 m to 25 ± 10 m. These results indicate greater than climatic variability at the onset of the ice ages than previously thought. These data and concepts may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Naish, T., R., Wilson, G., S.,	2009	Constraints on the amplitude of Mid-Pliocene (3.6-2.4?Ma) eustatic sea-level fluctuations from the New Zealand shallow-marine sediment record	Phil. Trans. R. Soc. A	This study builds on Naish (1997) and extends the sea level fluctuation curve back in time to cover 3.6 to 2.4 Ma. The authors correct for tectonic effects, load, and paleobathymetry in the Wanganui Basin, which combine to show fluctuations in depth that are about 50% greater than eustatic sea level changes. Several eustatic sea level curves are presented in figures. The results indicate eustatic sea level fluctuation amplitudes ranging from 10 to 30 m, generally less than 20 m. The authors conclude that orbital influence on ice volume primarily controlled eustatic sea level fluctuation in the mid-Pliocene. This paper included data and concepts that may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Namson, J., S., Davis, T., L.,	1988	Seismically active fold and thrust belt in the San Joaquin Valley, central California	Geol. Soc. Am. Bull.	Paper uses geologic, seismic reflection, and earthquake relocation to constrain the fold and thrust geometry of the Coalinga-Avenal area. Authors attribute the seismicity of the area to fault-bend-folding and flexural slip, ultimately driven by thrusting along a basal detachment. The authors warn that traditional characterization of seismic hazard based only on surface data are subject to numerous pitfalls when applied to fold and thrust belts because of the complexity of fold and thrust systems that often include rupture on blind faults, and surface rupture that does not extend to depth.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Namson, J., S., Davis, T., L.,	1988	Structural transect of the western Transverse Ranges, California: Implications for lithospheric kinematics and seismic risk evaluation	Geology	The authors develop a cross section to interpret the fault and fold geometry of the Transverse Ranges at depth from the Ventura basin north to the southern San Joaquin Valley. They refer to stratigraphic evidence that suggests the fold and thrust belt initiated 2-3 Ma. The cross section shows a basal detatchment at 12-15 km depth and implies 53 km of convergence above the detachment. Based on the age estimates, the overall convergence rate is 18-27 mm/yr. The authors note that thrust ramp locations coincide with regions of highest seismicity and that these regions have the highest potential for compressive earthquake activity.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting

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☐	Namson, J., S., Davis, T., L.,	1990	Detection of blind thrusts in the western Transverse Ranges and southern Coast Ranges [abstract]	Eos Trans. Am. Geophys. Un.	Description paraphrased from AGU abstract. Study uses balanced sections through the coast ranges to estimate shortening using onset timing (2-4 Ma) to estimate crustal shortening rates. A section near SLO from the coast to the SAF shows crustal shortening rates of 6.7-13.4 mm/yr. May be utilized to fit study area faults into the regional late Cenozoic strain budget. Shortening rates for SLO area seem high when compared to other areas and other studies.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Namson, J., S., Davis, T., L.,	1990	Late Cenozoic fold and thrust belt of the southern Coast Ranges and Santa Maria Basin, California	Am. Assoc. Petrol. Geol. Bull.	The authors interpret the Santa Maria basin and southern Coast Ranges of California as an active fold and thrust belt consisting of large anticlinal structures, most of which are blind. The structural analysis in this paper along with compressive focal mechanisms appear to indicate the ramps of the thrust belt as the likely sources for earthquakes, where fault dips are between 10 and 45 deg. The presence of blind thrusts is similar to other parts of the Coast Ranges and southern California that have undergone late Cenozoic convergence. The historic record indicates the thrust ramps are capable of generating earthquakes 5.0<Mw<7.5, with large earthquake recurrence every 75-299 years. Article provides seismicity and structural evidence supporting blind ramps in the southern Coast Ranges that may be important in the tectonic model and the SCC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Nason, R.,	1982	Seismic-intensity studies in the Imperial Valley	U.S. Geol. Surv. Prof. Paper	This report presents seismic intensity ratings of the 1979 Imperial Valley earthquake, which had an MMI of VII everywhere in the central Imperial Valley south of Brawley, based on the disturbance of items in local businesses. Comparisons are also drawn to seismic-intensity ratings for the 1940 earthquake. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	National Seismic Hazard Mapping Project,	2007	Preliminary Documentation for the 2007 Update of the United States National Seismic Hazard Maps	U.S. Geol. Surv. Open File Rpt.	This draft report provides documentation for the 2007 USGS National Seismic Hazard Maps. This documentation includes descriptions of the methodologies and treatment of historical seismicity used for the Central and Eastern U.S. and Western U.S. The historical seismicity documentation includes descriptions of the catalog, maximum magnitude for background seismicity, gridded seismicity, regional background models, special zones, and the computation of hazard from seismicity. Although the final documentation and map should be cited, this reference is relevant to the SSC of background seismicity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	New Sense Geophysics,	2010	Point Buchon: Helicopter Aeromagnetic Geophysical Survey for Pacific Gas and Electric Company, December 2nd–December 5th, 2009 (PG&E No.	Unpub. Tech. Rpt.	This report documents the magnetic survey location, personnel, parameters, aircraft and equipment, operations and procedures, and results. Data deliverables include maps (magnetic contour, flight line path, grid and survey parameters), grids, geosoft databases, summary reports, raw flight and base station data, and video flight records. This data could be used to help constrain fault location and possible displacement on faults in the survey area.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Nicholson, C., Crouch, J., K.,	1989	Neotectonic structures along the central and southern California margin: Predominantly a thrust regime? [abstract]	Seis. Res. Let.	This abstract describes several moderate-sized earthquakes with reverse or thrust faulting focal mechanisms in near offshore California (1988 event offshore of Huntington Beach, 1986 Oceanside earthquake, the 1927 Lompoc earthquake and later events in the Santa Maria Basin). The authors draw parallels among these events, citing that they each occurred on planes striking parallel to strike slip faults (Palos Verdes fault, Hosgri fault), and suggesting these faults may actually have a strong reverse component. Subsequent work has shown more evidence supporting the characterization of Hosgri fault as a strike slip fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Nicholson, C., Sorlien, C., C., Atwater, T.,	1994	Microplate capture, rotation of the Western Transverse Ranges, and initiation of the San Andreas transform as a low-angle fault system	Geology	Proposes a model to explain tectonic rotation of the transverse ranges and describes a possible low angle geometry of the incipient SAF system. The partially-subducted Monterey plate became part of the pacific plate and significant faulting along a basal decollement ensued.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Nicholson, C., Kamerling, M., J., Sorlien, C., C.,	2007	Subsidence, compaction, and gravity sliding: implications for 3D geometry, dynamic rupture, and seismic hazard of active basin-bounding faults in southern	Bull. Seis. Soc. Am.	Paper suggests basin-bounding thrust faults may rotate toward lower dips under basin compaction, resulting in very deep-seated landslide-type features. The authors use the San Cayetano and Oak Ridge faults as examples, but note that the behavior is possible at any basin-bounding thrust fault where ductile material is thrust over compactible basin deposits.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Nicholson, C., Plesch, A., Shaw, J.,	2013	Mapping the 3D Geometry of Active Faults in Southern California	NEHRP Tech. Rpt.	This NEHRP technical report summarizes work completed to update and refine the SCEC Community Fault Model for southern California. Methods for the update include analysis improved catalogs of about 500,000 relocated earthquakes and about 200,000 focal mechanisms since 1981. Spatial patterns of earthquakes and slip were used to refine 3D fault surfaces in the subsurface. Updated faults include the southern San Andreas, San Jacinto, Elsinore, Earthquake Valley, Garlock, Imperial, Landers, San Gabriel, Oakridge, and Sierra Madre fault zones. Additionally, cross-faults that may link to multi-fault ruptures in these zones were also updated or added. This background information on the SCEC CFM may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Niemi, T., M., Hall, N., T., Shiller, G., I.,	1987	Seafloor scarps along the central reach of the Hosgri fault zone, southern Coast Ranges, California	Geol. Soc. Am. Abst. Prog.	Bathymetric maps were created for the central Hosgri fault zone between Pt. Estero and San Luis Obispo Bay. Provides a summary of seafloor scarps in the area, including the intersection of the Hosgri fault and the NE boundary of the San Luis-Pismo structural block marked by a 30 m fault scarp. Two prominent scarp trends are congruent with or parallel to the east and west strands of the Hosgri. Scarp heights on the eastern strand of the Hosgri are consistent with uplift rates for San Luis-Pismo structural block, which may be useful information in the tectonic model. Additionally, Sheet 4 presents fault scarp data and its potential relation to the Hosgri.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Nitchman, S., P., Slemmons, D., B.,	1987	Late Pleistocene flexural slip faulting possibly triggered by crustal unloading, Pismo Beach, central coast California [abstract]	Geol. Soc. Am. Abst. Prog.	This abstract describes a bedding-parallel fault in the footwall of the Wilmar Avenue fault whose short-lived activity may have initiated by crustal unloading due to the development of the late Pleistocene wave cut platform. This abstract and concept is cited in Nitchman and Slemmons (1994) GSA Special Paper (Figure 5) and suggests this minor fault may be inactive.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Nitchman, S., P.,	1988	Tectonic geomorphology and neotectonics of the San Luis Range, San Luis Obispo County, California	Univ. Nev. Reno	This master's thesis contains abundant information on faults, folds and strata in the vicinity of the DCPP. The most prominent results of the work, made based on field data and data provided by PG&E, include the conclusion that the San Luis Range represents a block bound to the north and south by the Los Osos and Wilmar Avenue faults, respectively. Slip and activity rates of these faults and numerous other faults and folds within the region are presented, as well a Quaternary-scale tectonic model and history.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Nitchman, S., P., Slemmons, D., B.,	1994	The Wilmar Avenue Fault: A Late Quaternary Reverse Fault Near Pismo Beach California	Geol. Soc. Am. Spec. Paper	The study discusses the uplift and emergence of the San Luis Range largely postdating the deposition of the late Pliocene Squire Member. The Wilmar Ave. fault was one of the controlling range bounding revers faults. Two discrete structural sections of the Wilmar Ave fault are delineated: 1.) the eastern section is a monoclinal warp that forms the southeast flank of the San Luis Range; interpreted as a fault propagation fold that is forming above a blind reverse fault, and 2.) The western section of the fault which exhibits bock uplift with little tilting or folding of the hanging wall.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Noda, H., Lapusta, N.,	2013	Stable creeping fault segments can become destructive as a result of dynamic weakening	Nature	This paper presents results from dynamic rupture models that incorporate the rate-and-state friction model, as well laboratory results from fault rocks that indicate fault weakening at seismic slip rates. Their model uses two fault patches; one that fails in typical stick-slip-style earthquakes, and the other that approximates a creeping section. Also worth noting is that the model assumes higher pore pressure in the creeping patch. In some model runs, large earthquakes that originated on the stick-slip patch propagated to the creeping patch, producing very large events, uncharacteristically high frequency waves, and larger than expected slip. Results of this paper may have implications for ruptures on the San Andreas fault, wherein the creeping section may allow linkage of the Northern and Southern San Andreas fault zone.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Noriega, G., R., Arrowsmith, J., R., Grant, L., B.,	2006	Stream channel offset and Late Holocene slip rate of the San Andreas fault at the Van Matre Ranch site, Carrizo Plain, California	Bull. Seis. Soc. Am.	Stream channels offset across the San Andreas fault were excavated, measured, and the geomorphology and stratigraphy were studied. Slip rates were also derived assuming timing of channel incision and offset; these slip rates were in agreement with late-Holocene slip rate at Wallace Creek.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Nuttli, O., W.,	1983	Empirical magnitude and spectral scaling relations for mid-plate and plate-margin earthquakes	Tectonophys.	Nuttli presents empirically derived scaling relations for mid-plate and plate-margin earthquakes and finds the average stress drop increases with seismic moment for mid-plate earthquakes while plate-margin earthquakes have a nearly constant stress drop. Nuttli also cautions that this article addresses extremes in types of earthquakes but is not applicable to intermediate types (e.g., earthquakes near plate boundaries but not associated with plate-margin movement). Consequently, the empirical relations presented in this article are not very applicable to the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Oglesby, D., D., Day, S., M.,	2001	Fault Geometry and the Dynamics of the 1999 Chi-Chi (Taiwan) Earthquake	Bull. Seis. Soc. Am.	This used a dynamic rupture model to replicate observations of the 1999 Chi Chi earthquake. The primary conclusion of the paper is that the rupture characteristics (including slip and wave propagation) of the earthquake are primarily due to fault asymmetry, especially in the near surface. The authors argue that accounting for the effects of fault geometry may lead to better predictions of some future earthquake characteristics. Little to no data or concepts here are useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Oglesby, D., D., Day, S., M., Li, Y-G.,	2003	The 1999 Hector Mine Earthquake: The Dynamics of a Branched Fault System	Bull. Seis. Soc. Am.	This study uses rupture modeling to examine the rupture pattern of the Hector Mine earthquake. The authors show that by allowing only partial rupture in the subsurface of the north branch, the northwest branch ruptures. Conversely, by allowing the north branch to rupture to the surface, the northwest branch does not rupture. While the results are not directly applicable to the DCPP site, they can be used to more accurately model complex ruptures in zones of dense faulting.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Oglesby, D., D., Dreger, D., Harris, R., A.,	2004	Inverse Kinematic and Forward Dynamic Models of the 2002 Denali Fault Earthquake, Alaska	Bull. Seis. Soc. Am.	This paper uses kinematic and dynamic rupture models to explore fault geometry and stress heterogeneity in the 2002 Denali earthquake. The authors are able to resolve the rupture onto various faults and fault segments, and conclude that a combination of modeling methods can be more informative than any single method alone. Concepts from this paper may be applied to model multi-fault or other complex ruptures on faults near the DCPP site.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Oglesby, D., D.,	2005	The Dynamics of Strike-Slip Step-Overs with Linking Dip-Slip Faults	Bull. Seis. Soc. Am.	This study uses dynamic rupture modeling to investigate rupture linkage between two strike-slip faults separated by perpendicularly oriented normal or thrust faults. Results of the model indicate that ruptures originating on either of the strike-slip segments are most likely to transcend the normal fault (dilational) stepover as opposed to the thrust fault stepover (compressional). Likelihood of linked rupture on the compressional stepover is increased when the event originates on the thrust fault. The author suggests these results explain why some stepovers arrest ruptures while others do not. Results of this paper may have implications seismic source characterization with respect to linkage of faults and, thereby, magnitude.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Oglesby, D., D.,	2008	Short Note: Rupture Termination and Jump on Parallel Offset Faults	Bull. Seis. Soc. Am.	This paper presents results of a dynamic rupture model that investigates rupture linkage between two strike-slip faults separated by perpendicularly oriented normal or thrust faults. The author finds that the distance over which initial stress tapers to zero directly affects the probability of rupture transcending the stepover. The author argues that rupture velocity, slip gradient and stress gradient should be included in models seeking to determine the likelihood of combined rupture on faults or fault segments separated by a stepover.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Okubo, P., G.,	1989	Numerical model studies of dynamic rupture processes	U.S. Geol. Surv. Open File Rpt.	Okubo uses a frictional constitutive relation to develop a numerical dynamic rupture model, simulating a complete faulting cyclic of stable rupture nucleation and dynamic rupture propagation. This model uses a quasi-static method during slow deformation and a dynamic method once maximum slip rate is obtained. Concepts from this paper may be applied to complex rupture models of faults in the DCPP vicinity; however, the numerical modeling presented in this reference is likely superseded by more recent 3D modeling or otherwise that better handle the transition from slow deformation (quasistatic equilibrium) to instability (maximum slip rate).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Onderdonk, N., W.,	2005	Structures that accommodated differential vertical axis rotation of the western Transverse Ranges, California	Tectonics	The author uses paleomagnetic data and new geologic mapping to assess rotation accommodating structures in the western Transverse Ranges. The author finds that the Big Pine-Pine Mountain fault to the north and the Santa Ynez fault to the south represent bounding structures that accommodated rotation in the region. A local pole of rotation is defined at the intersection of these faults, with a westward increase in shortening between them (fan-like closure). The intervening area is characterized by folds and faults that accommodated rotation of the southern block (Transverse Ranges south of the Santa Ynez fault). The northern block (Coast Ranges) display little to no rotation. This paper may be useful for characterizing the tectonic history of the greater DCPP region, but contains little to no information on modern processes.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Onderdonk, N., W., Minor, S., A., Kellogg, K., S.,	2005	Taking apart the Big Pine fault: Redefining a major structural feature in southern California	Tectonics	This paper presents results of a mapping study of the Big Pine fault near the Big Bend section of the San Andreas fault. New mapping suggests that the Big Pine fault trend comprises the Big Pine-Pine Mountain fault, the eastern Big Pine fault, and the Lockwood Valley fault. The eastern Big Pine fault dips south while the others dip north. Each of the three faults exhibits a different tectonic and structural history, although all three are dip slip faults. The author notes that the Big Pine-Pine Mountain fault would represent one of the longest reverse fault systems in southern California, noting a lack of evidence of Holocene activity, and recommending a neotectonic study be completed to assess its age of activity. The characterization of this fault as a reverse fault is in contrast to the long-standing hypothesis that the Big Pine fault is a primarily left-lateral fault. The information in this paper is useful insomuch as it was used in the UCERF3 characterization of the fault and may be of note to the DCPP SSC team.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Onderdonk, N., W.,	2007	Vertical-axis rotation controlled by upper crustal stress based on force balance analysis: A case study of the western Transverse Ranges of California	Tectonophys.	Using geologic observations of vertical axis rotation from the western Transverse Ranges (WTR), Onderdonk determines that rotation in southern California must be driven by stresses transmitted through the upper brittle crust rather than basal traction forces, though these results are dependent on block dimensions and the viscosity of the ductile part of the crust. Although Onderdonk treats the WTR as a single rotating block, if the WTR is instead modeled as several rotating independent panels, upper crustal driving forces become even more pronounced. Onderdonk also postulates that when rotation of the WTR began, the upper crust was underlain either by a subduction surface with oceanic crust beneath or asthenosphere, and the presence of such a strong discontinuity makes the assumption that lower crustal variation effects may alter the displacement field in the lower crust highly unlikely.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Oppenheimer, D.,	1989	The geologic and seismic expression of the Calaveras fault, central California: a lack of coincidence	U.S. Geol. Surv. Open File Rpt.	Oppenheimer explores two sections of the Calaveras fault for which the seismic expression of the fault does not coincide with the surface expression: (1) the section that rupture during the 1984 Morgan Hill earthquake; and (2) the juncture of the Calaveras and Hayward faults. Oppenheimer proposes that the apparent lack of concordance between seismicity and surface expression on the Calaveras may be due to mechanical decoupling of the shallow crust above 2 km (minimum depth of earthquake occurrence). This article is of little direct use to the DCPP SSC except that the concept of possible discordance between the surface expression of a fault and activity at depth is useful in assessing possible fault segmentation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Orme, A., R.,	1992	Late Quaternary deposits near Point Sal, south-central California: a time frame for coastal-dune emplacement	Soc. Sed. Geol. Spec. Pub.	Describes the chronology of dune-forming events following marine-terrace deposits southward from the Santa Maria Valley to the Point Sal Ridge.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Ouillon, G., Ducorbier, C., Sornette, D.,	2008	Automatic reconstruction of fault networks from seismicity catalogs: Three-dimensional optimal anisotropic dynamic clustering	J. Geophys. Res.	The authors present a 3D algorithm, Optimal Anisotropic Dynamic Clustering (OADC), that delineates earthquake hypocenters into anisotropic clusters, essentially estimating the number and orientation of fault planes. This method was applied to synthetic data as well as the aftershocks of the 1992 Landers earthquake, and identified both known and blind faults. The authors state that although the same planes might have been chosen through visual inspection of the data, this algorithm removes the manual assessment of data and therefore produces more objective results. However, drawbacks of the method include (1) the potential for assigning spurious fault planes, particularly in cases of diffuse seismicity, and (2) earthquakes are assigned to a fault plane with certainty.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1966	Diablo Canyon Site, San Luis Obispo County: Report Prepared by the Meteorology Office Pacific Gas and Electric Company (Unit 2 PSAR v. 3, part 3)	USNRC Docket	Comprehensive report of the bedrock and surficial geology of the DCPP site, with focus toward Unit 2. This document includes three supplemental reports that discuss: 1) results of trenching and geologic investigation of the site; 2) bedrock faults and fractures, and; 3) report of the additional trenches specific for Unit 2.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1967	Nuclear Plant, Diablo Canyon Site, Pacific Gas and Electric Company: Third Supplement to Preliminary Safety Analysis Report Docket No. 50-275	USNRC Docket	Report is a series of PG&E responses to questions for the PSAR. Questions mostly pertain to the structure itself.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Pacific Gas & Electric Company,	1974	Appendix 2.5D: Geology of the southern Coast Ranges and the adjoining offshore continental margin of California, with special reference to the geology in the	USNRC	This appendix documents results of a geologic and geophysical investigation of the San Luis Range/Irish Hills and Estero Bay. Includes descriptions of major regional and local structural features in the area (Pismo syncline, San Miguelito fault zone, etc.), stratigraphy, and geologic history and structural evolution. Appendix A includes offshore seismic reflection data and interpretations from Cape San Martin to Point Arguello. Appendix B includes a gravity study of the regional structure from north of Point Estero south to Point San Luis and farther offshore to the Santa Lucia Bank fault. Much of the data and results presented in this appendix have been improved or refined.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	1975	Appendix 2.5E: Additional geologic and seismologic studies (FSAR, Rev. 1)	USNRC	This appendix describes (1) the geology of the offshore Santa Maria Basin, Santa Lucia Bank and Hosgri faults, and the western end of the Transverse Ranges; (2) the maximum potential earthquake on the SAF system; and (3) the maximum potential earthquake on the Hosgri fault. Much of the data, results, and interpretations presented in this appendix have been improved or refined.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1976	Appendix 2.5F: Additional geologic and seismologic studies (FSAR, Rev. 1)	USNRC	This appendix documents additional geologic and seismologic studies, including (1) documentation of the distance between the site and Hosgri fault; (2) a detailed focal mechanism analysis of the 1927 Lompoc earthquake; (3) ground motions associated with a maximum earthquake on the Hosgri. Much of the data, results, and interpretations presented in this appendix have been improved or refined.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Pacific Gas & Electric Company,	1988	Final report of the Diablo Canyon Long Term Seismic Program	USNRC Docket	This report documents PG&E's reevaluation of the seismic design basis for DCPP, which included evaluations of geologic and seismologic data and seismic source characterization, with an estimated maximum magnitude of 7.2 on the Hosgri. Although data, interpretations, and methods have been improved or refined since the LTSP, this report is critical to the SSC. Responses to questions posed by the NRC are evaluated separately in this database.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	1988	Final Report of the Diablo Canyon Long Term Seismic Program. Docket Nos. 50-275, and 50-323	USNRC Docket	The LTSP includes geologic and seismic data, seismic source characterization, evaluation of ground motion, PSHA, and deterministic analyses. With the exception of the Shoreline fault, source characterizations of all other relevant faults are provided, as well as analyses and documentation of the regional tectonic setting.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 40 of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide justification of weighting factors used in logic trees as they seem unrelated to evidence from various investigations. The response notes that the weights are intimately related to the GSG investigations and note that each parameter is justified in turn in the final report. Examples are given, including the Hosgri fault slip rate, of how parameters were assigned using consensus input from the project team's data gathering and interpretation effort. Logic tree concepts presented here may be useful for DCPP SSC team review.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43z (Part 2) of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide draft reports and seismic reflection data for the style, rates and timing of deformation of the section across the Queenie structure to the Pt. Sal area and the Lompoc structure. The response notes that a response the Queenie structure is included in a separate document (Q43n-1). For the Lompoc structure, no manuscript had been produced. The document goes on to describe the Lompoc structure through analyses of bathymetry, and several seismic reflection lines. The structure is described as a 25-km-long en echelon pair of anticlines in the southeastern Santa Maria basin. Its structure is easily observable on the seafloor, and delineates a change in gradient of the floor.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43n of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide high resolution and CDP reflection profile which show continuity and possible segmentation points for 8 faults. This response focuses on addressing fault segmentation of the Hosgri fault, describing the Estero Bay-Los Osos zone of deformation, characterizing the Hosgri fault west of Pt. Buchon and Diablo Canyon, describing the offshore boundary of the San Luis-Pismo block, addressing the potential intersection of the Hosgri fault with the Pecho, Lion's Head and Casmalia faults and the southern termination of the Hosgri fault. Many of the questions presented here are partly or entirely covered in other responses. This response may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43i of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	The data report presents the numerical age dates and correlations of marine terraces to the paleo-sea-level curve. Marine terraces investigated span from just Northwest of Diablo Canyon to near Pismo Beach. The appendix 1-A presents the findings of fossil analysis of marine terraces the San Luis Bay region. The findings suggest colder and warmer water relating to late stage 5 and stage 5e respectively. This data could be used to estimate the age of uplifted terraces along the coast and the associated slip rate based upon those ages.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 3 of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide summaries of interviews on geology, geophysics and tectonics held with J. Crouch, T.L. Davis, C.A. Hall, and B.P. Luyendyk. The response notes that these individuals are mentioned in the report, and that they were chose for the expertise in regional tectonics and related data. The response notes the methods used to question each individual, and includes attachments of each session. This document and its attachments contain abundant useful information and proponent views for the DCPP SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 1c of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide deterministic vertical ground motion estimates and evaluate the LTSP 84% free field response spectra with the free field response spectra modified for justified spatial incoherency. The response notes that incoherency effects were evaluated in both vertical and horizontal directions. Due to the lack of vertical soil-structure interaction analyses, the vertical incoherency effects were conservatively omitted. Therefore basemat and freefield vertical motions are unchanged. This brief response is concerned more closely with ground motion characterization, and therefore, likely contains little information for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 1a of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document describes how the deterministic vertical ground motions were estimated for the Hosgri fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 1d of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide deterministic comparisons of vertical ground motion estimates and evaluate differences in the Hosgri Tau reduced Newmark response spectra for different structures with the LTSP 84% free filed response spectra modified by the soil-structure interaction and justified incoherency effects. The response describes that the 1977 evaluation applied filters (Tau reduction factors) to the horizontal PGA free field motions. No such reductions were done for the vertical direction. Therefore the vertical input motion remained the same as free field motions. This brief response is concerned more closely with ground motion characterization, and therefore, likely contains little information for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43h of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request of seismic reflection and other geophysical data that support an apparent reversal of vertical slip on the Hosgri fault. The response notes that several seismic lines image changes in basement elevation on either side of the Hosgri fault. The document cites lines (GSI80-86 and 106) south of Estero Bay to Point Sal that show basement on the eastern block higher, then goes on to cite line GSI80-107A in the vicinity of Point Sal that show near zero offset. Line GSI80-114 is then cited to show basement on the west elevated above the eastern basement elevation, a relationship that persists southward to line GSI80-118. Farther south, GSI80-123 shows eastern basement once again position above the western basement. The document cites a strong correlation of this relationship in gravity data to supplement basement picks from seismic lines.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43e of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	document describes the sampling technique for underwater sampling of bedrock offshore of Diablo Canyon as well as other geophysical methods such as side scan sonar, gravity data, and aeromagnetic data. This data was interpreted and presented on Plate 19 of the Final Report. Offshore geology was interpreted from the samples attained through the dive program, the various geophysical data, as well as the geomorphic texture of the bedrock units (e.g. irregular sea floor being interpreted as KJf, etc.)	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1989	Responses to NRC Questions of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	Q3: This document presents the conclusions of a meeting with Kevin Coppersmith, William Lettis, William Savage, Bruce Luyendyk, Burt Slemmons, Thom Davis and a representative of the NRC. This document details the tectonic model accepted at the time and the opinions of various aforementioned that were interviewed. Considerable focus was placed on the Hosgri fault. Q40: Discusses the assigned weights to seismic sources in the model, that have relatively little geologic evidence for in the geology-seismology-geophysical investigations. Q43a: Discusses the importance of the Pecho fault and its relation to the Wilmar Ave and San Luis Bay fault. Q43n: Discusses the segment boundaries of the fault model particularly in how they may relate to the Cambria Stepover Area. Q43z: Discusses the offshore Lompoc structure located approximately 20 kilometers wnw of Purisima Point. Discusses the findings of various seismic lines that cross the structure. Q46: This verifies the location method of the 1927 Lompoc earthquake by using the same method on the 1969 Santa Lucia Banks earthquake.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 1e of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC	This document comprises a response to the NRC in request to provide deterministic comparisons of Hosgri reanalysis floor response spectra and other structural response parameters with corresponding parameters developed by the LTSP using 84% free field ground motions, soil-structure interaction analyses, justified spatial incoherency, and consistent structural parameters. The response notes that the only vertical direction that was considered significant was the vertical floor response for evaluation of equipment. The response summarizes the method used to scale the Hosgri reevaluation vertical spectra using the spectral ratio method. They note that no soil-structure interaction or spatial incoherency effect were used in the evaluations. This brief response is concerned more closely with ground motion characterization, and therefore, likely contains little information for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 46 of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to apply the methodology for relocation of the 1927 Lompoc earthquake to other independently located earthquakes. The response uses the Santa Lucia Banks and Coalinga earthquakes as examples. SSS-S and S-P time differences were used to estimate the location of the Lompoc earthquake with respect to the Santa Lucia and Coalinga events, resulting in a closure error of about 10 km for each providing a quantification of the level of uncertainty in this method.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 1b of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide deterministic comparisons of the LTSP 84% free field response spectra with the basemat motions resulting from soil-structure interaction analyses. The response notes that no soil-structure interaction analyses were performed, and a conservative alternative method using dynamic amplification factors was used. In conclusion, response notes identical vertical motions at various basemats and free field motions. This brief response is concerned more closely with ground motion characterization, and therefore, likely contains little information for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43d of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide data showing the southern termination of the Crowbar Canyon fault. The response points to bathymetric, geophysical, and geologic mapping data that help identify the Crowbar structures (a note on terminology is included in the intro). Bathymetric data are only slightly suggestive of fault, with minimal expression of the Crowbar structures observed. The structures range in length from 2.2 to 6.4 km long, with evidence of their presence best expressed in seismic reflection data. The response suggests that to the south, the expression of the structures is lost or significantly reduced in the seismic data to the south. Unremarkable minor faults and folds are observed to the south, projected onshore from the offshore features, and marine terrace mapping shows no deformation across the surfaces to where the offshore faults project. Information in this response are likely useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43g of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide seismic reflection and other geophysical data that support the termination of the Hosgri fault near Point Pedernales. The detailed response points to several seismic lines that image the structure of the southern Hosgri fault south of Purisima Point. The document notes that two strands persist to about line 306 at which point the east trace is no longer observable and the west trace shows little deformation. A kilometer south at line 164-310, only a weak western trace is observable with no offsets, and only opposing dips of strata. One kilometer further south, no fault is observable on line 164-314. The fault strands are described as dying out in structural fold and fault complexes, and terminating near a structural boundary formed by the Transverse Ranges, and no through-going structure is interpreted southward into the Santa Barbara channel.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	1989	Response to NRC Question 43a of December 13, 1988 on the Long Term Seismic Program Final Report	USNRC Docket	This document comprises a response to the NRC in request to provide additional evidence supporting the interpretation that the Pecho fault is an important part of the southwest boundary zone. The response notes that the Pecho fault is a single part of a larger system of structures that accommodate uplift across the boundary zone and is not interpreted to be the dominant element. It is unknown from available data whether the Pecho fault merges with or is truncated by the Hosgri fault, or dies out. The response then describes offshore geophysical data used to characterize the fault. This response may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	1990	Response to United States Regulatory Commission Question GSG-1A: Montage of geophysical data and interpretations, Hosgri fault zone, eastern offshore Santa	USNRC	This work represents some of the earliest information gathered about the offshore Hosgri fault and associated structures.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-16	USNRC Docket	This document comprises a response to the NRC in request to provide new information that was presented at NRC/PG&E workshops and public meetings on the southwestern boundary zone of the San Luis-Pismo Block. The response provides data on 32 boreholes (including logs and sections) drilled between DCPP and Rattlesnake Canyon, onshore, offshore, and fluvial system mapping, and analyses of bathymetric data. These data are used to better characterize the Olson and San Luis Bay faults, constrain their onshore locations, and assess their deformation of Q1 and Q2 surfaces. Additional data including seismic reflection lines (included) are used to assess the faults.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-7	USNRC	The response to Question GSG-7 presents an analysis of the predictive intensity model of Evernden et al. (1981) and finds the model is generally applicable when source and attenuation parameters are accurately defined and when site conditions are accurately known. In cases like the Lompoc earthquake, where these parameters and conditions are not well constrained, the model (and others using intensity data alone) may inaccurately predict earthquake location.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-2	USNRC	The response to Question GSG-2 summarizes the concept of strain partitioning, worldwide observations of strain partitioning, and the potential implications of the model for assessing seismic source characteristics of the Hosgri. Conclusions are that (1) regional and local strain partitioning may occur along sections of the Hosgri but does not occur everywhere; (2) faults assumed to have been produced by strain partitioning should be characterized as separate seismic sources; (3) the LTSP characterization of the Hosgri captured the distribution of local strain partitioning; and (4) the Hosgri is best characterized as a high-angle strike-slip fault.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-1	USNRC	The response to Question GSG-1 summarizes PG&E's basis for characterizing the Hosgri fault zone as a high-angle strike-slip fault as imaged on seismic reflection data, and compare this characterization with the interpretations of McCulloch and Crouch et al. (1984). Referring to Attachment GSG Q1-A, the Hosgri is described as consisting of two high angle strands that are well-constrained in the upper 1 to 3 kms to dip vertically to 60° NE. Several lower-dipping fault strands associated with folds are observed that either intersect the Hosgri at shallow depths or, if projected down dip, would intersect the Hosgri too deep to be observed on the seismic data. Structural modeling indicates that if the Hosgri were a listric thrust fault, the geometry, spatial distribution, or dimensions of these observed folds and faults could not be reproduced. Therefore, although certain aspects of PG&E's characterization of the Hosgri are in concordance with McCulloch and Crouch et al.'s (1984) interpretations, the response states that these alternative interpretations are oversimplifications that do not consider all datasets available at that time.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question SSC-6	USNRC	Considering field mapping, paleoseismic investigations, and seismic reflection data and structural analysis, this response presents the interpretation that the San Luis/Pismo bock is undergoing Quaternary uplift, moderate to steeply dipping late Quaternary dip-slip faults (rather than near-vertical) border the NE and SW margins of the block, and that the block is part of the Los Osos/Santa Maria domain. This domain has undergone late Quaternary compression between the western Transverse Ranges and the southern Coast Ranges. Additionally, the interpretation of the Honolulu-Tidewater well data is found to have limited application in interpreting the down dip geometry or activity of the block bounding faults.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question SSC-5	USNRC	The response addresses the earthquake potential of the boundary of the San Luis/Pismo structural block, the San Luis Bay fault, and the Olson faults and the possible contribution to ground motions. The southwestern boundary zone is characterized as a wide, diffuse deformation zone at the surface that is distinctly difference from the Los Osos fault zone and is unlikely to coalesce into a single fault within the seismogenic crust. Model A and B cross sections (end members for the characterization of the Franciscan basement that are shown in Question GSG-11) suggest that the southwestern boundary structures are not significant to probabilistic and deterministic ground motions at the site (relative to the significant contributions from the Hosgri fault zone). Similarly, probabilistic and deterministic evaluations of the San Luis Bay and Olson faults show minor contributions from these faults to ground motions.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question SSC-4	USNRC	This response includes criteria for identifying strike-slip faults on seismic data (Figures SSC Q4-1 and 2), presents examples of seismic data spanning other strike-slip fault systems (including the Washita Valley fault zone in the Ardmore Basin, the Newport-Inglewood fault zone in southern California, and the San Gregorio fault zone), and summarize characteristics of the Hosgri fault zone observed in seismic data that indicate a strike-slip sense of displacement. The Hosgri fault zone, as interpreted on seismic reflection data, is found to be typical of strike-slip fault zones, including the presence of varied styles of faulting within the larger fault zone. This variation is expected due to (1) the Hosgri's orientation oblique to plate motion; (2) localized extensional/contractional deformation due to local bends or en echelon steps; and (3) cumulative effects of multiple deformation episodes.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question SSC-3	USNRC	This response clarifies that average displacements for the San Simeon fault were not applied to the Hosgri fault zone as maximum displacements. One, two, and three meter average displacements (estimates ascertained as specific locations along the fault) were used as average displacements rather than maximum, stating that any random point along a rupture is more likely to represent average displacement rather than maximum. Therefore, no estimation of maximum displacement per event was made or used to estimate maximum magnitude along the fault zone.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question SSC-2	USNRC	The response to Question SSC-2 (1) states strike slip evidence on the San Simeon fault zone along trend with the Hosgri is important but not the primary source of characterization of the Hosgri; (2) makes the distinction of vertical separation from direct evidence of dip-slip displacement; and (3) summarizes the observations, datasets, and rationale for characterizing the Hosgri as a strike-slip fault and highlight the importance of considering all datasets rather than individual sources. The datasets and lines of reasoning considered in this analysis include CDP and high-resolution seismic data, retrodeformable modeling, seismicity data, bathymetry, side-scan sonar, comparison to other strike-slip faults, relation to the San Gregorio-San Simeon fault system, and tectonic, kinematic, and regional stress data.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question SSC-1	USNRC	This response provides documentation of the development of logic trees for the PSHA analysis in the LTSP, with geology/seismology/geophysics (GSG) conclusions directly assigned to branches or the logic trees and determine relative weights. The procedures for determining these values and individuals involved are explained, as well as examples of sensitivities tested and dips and weights for the Hosgri fault source. The explanations presented in this response may be useful to the TI Team in documenting their processes of developing logic tree values and weights.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-14	USNRC	The response to Question GSG-14 presents linear regressions between maximum displacement and surface rupture lengths for reverse faults and for all slip types. The regressions published here were later updated with additional data points in Wells and Coppersmith (1994), though the regressions for reverse faults were statistically insignificant even with additional data points in this later publication.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-15	USNRC	This response to NRC GSG question 15 summarizes the method applied in developing segmentation models for the Hosgri fault and includes a quantitative analysis of the segmentation model of the Hosgri (Attachment Q15-A). The methodology included analyses of historical surface fault ruptures and physical models of rupture processes and using geologic and geophysical data to help define possible rupture segments of the Hosgri. Since the time of this response, other theories on fault segmentation have been developed or proposed, seismicity has been relocated, and the mapping of Hosgri fault traces and vertical slip rates has been updated (e.g., Seismic Stratigraphy project [PG&E, 2013]), though the methodology and results presented in this response should still be reviewed by TI Team members.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-13	USNRC	By evaluating the orientations and rates of crustal shortening in the Piedras Blancas antiform, the response to Question GSG-13 suggests potential strain partitioning north of the Hosgri fault zone, with the San Simeon fault zone accommodating a strike-slip component of motion and the Piedras Blancas antiform accommodating a dip slip or convergent component of motion. Deformation of post-mid-Pliocene strata is observed within the antiform, suggesting late Cenozoic compression in the area. The total rate of shortening is found to be 0.2-0.4 mm/yr based on restored deformation of the 5.3 Ma top of Miocene unconformity, with the assumption that all shortening has occurred since 2.8 Ma.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-12	USNRC	The response to Question GSG-12 addresses the structural interaction between the San Simeon and Hosgri fault zones using geophysical and geological data. Three main observations are made: (1) the Hosgri and San Simeon fault zones terminate offshore between San Simeon Point and Point Estero and extend into the basement; (2) these faults overlap for ~10-12 km and form an ~5 km wide en echelon releasing stepover; and (3) an actively subsiding (tectonic pull-apart) basin filled with late Pliocene and younger deposits within the stepover region is bordered by normal faults and structurally related to the two fault zones. No evidence for compressional deformation in Estero Bay is found, as well as no structures that would support the interpretation of the Hosgri fault zone as a thrust fault. Additionally, lateral dextral slip rates for the southern San Simeon and northern Hosgri faults is estimated to be ~1-4 mm/yr.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-9	USNRC	This response addresses the NRC question of the structural association of the 1927 Lompoc earthquake, stating that the earthquake's offshore location makes association with a particular structure difficult. The authors conclude that the event probably occurred on the southern Santa Lucia Bank fault zone, with alternative interpretations of the event occurring on a currently unrecognized fault either in the southern Santa Lucia Bank high or the southernmost offshore section of the Santa Maria Basin. This response also includes an analysis of the Santa Lucia Bank fault as a seismic source, which may be relevant in the characterization of "other faults" in the DCPP SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-11	USNRC	The response to NRC Question GSG-11 includes two retrodeformable cross sections across the San Luis/Pismo block and an evaluation of the earthquake potential and site ground motion implications from structures observed in these cross sections. The response refers to the analysis presented in the Question GSG-10 response, including issues with Namson and Davis' assumptions and their non-unique structural solutions. The cross sections are described as end members of the range of possible solutions that could be developed using the available geologic and geophysical datasets available at that time, following the rules of fault-bend fold theory, reflect alternative interpretations of deformation mechanisms at depth within the Franciscan basement, and the implications of these mechanisms in the vicinity of the Tertiary-basement contact. Model A, which does not assume that Franciscan basement deforms similarly to the brittle crust and includes reverse ramps splaying up from a shallow detachment at ~5 km depth, predicts comparable uplift rates to those observed in elevated marine terraces. Model B, which includes modeling the Franciscan basement as an originally subhorizontal layered medium, assumes no distributed deformation and that displacement on discrete faults within the Franciscan has caused folding of the overlying Tertiary strata. Uplift rates predicted by this model are found to be comparable with observed uplift rates. The two models vary in their interpretations of the Olson, San Luis Bay, and Los Osos fault zones, though they agree in their interpretation of the geometry and activity of the Hosgri fault zone, the possibility of a reactivated Mesozoic shear zone in the Franciscan basement, and the interaction of the detachments with the Hosgri. Additionally, a seismic source characterization of these two models is presented, with neither having a significant impact on probabilistic or deterministic ground motions at the DCPP site.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-8	USNRC	The response to Question GSG-8 presents an analysis of the location of the 1927 Lompoc earthquake using regional body waves. The location is found to be in an identical location as presented in Question 46 and inconsistent with the latitude of Gawthrop's (1978) location near Point Sal. Although validating previous estimates of the location of the Lompoc earthquake, this response does not address possible fault sources for the event.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-4	USNRC	Using geophysical and geologic data, the response to Question GSG-4 includes a quantitative analysis of the horizontal and vertical components of slip along the Hosgri fault in order to assess the style of faulting. Horizontal slip rate is estimated at 1-3 mm/yr based on paleoseismic and Quaternary mapping in the San Simeon fault zone, evaluation of the necessary slip to produce the San Simeon/Hosgri pull-apart basin, regional tectonics, and geodetic rates of crustal shortening. Vertical slip rate estimates range from 0.1-0.44 mm/yr based on offset of the mid-Pliocene unconformity and elevated Pleistocene marine terraces. Additionally, the ratio of horizontal to vertical slip and implied rake angles suggest the Hosgri is a strike-slip fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-3	USNRC	Using geophysical and stratigraphic information, the response to Question GSG-3 addresses the timing, amount, location, and sense of vertical slip that has occurred along the Hosgri fault zone.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-6	USNRC	The response to Question GSG-6 assesses the implications of the intensity data for the location of the 1927 Lompoc earthquake and analyze the consistency of the data with several alternative locations of the event. This analysis found a location consistent with PG&E's (1988) revised location southwest of Point Arguello and that the limited felt area at higher intensities is not consistent with proposed epicentral locations along the Hosgri fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-5	USNRC	The response to Question GSG-5 consists of an analysis of the location, moment, and magnitude of the Lompoc earthquake as well as a letter from K. Abe to K. Satake. In this letter, K. Abe states that records at Hilo and Honolulu suggested a magnitude of 7.6 for the event, whereas California tide gage data suggest a smaller magnitude of 6.9. Estimates of seismic moment from tsunami records are ~3x10^16 dyne cm, and waveforms suggest an offshore rather near-shore location, incompatible with Gawthrop's (1978) estimation of location.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	1990	Response to United States Nuclear Regulatory Commission Question GSG-10	USNRC	The response to NRC Question GSG-10, and Attachment GSG-10A, critiques the structural modeling of Namson and Davis (1990) and includes two main categories of issues with the modeling: (1) the assumptions of the model do not apply to Quaternary style and rates of deformation in the Los Osos/Santa Maria domain, and (2) data/interpretations presented by Namson and Davis are inconsistent with other observed geologic/kinematic relationships in the area. Although the construction of the cross section is found to be sound, Namson and Davis' interpretations of surface deformation to model underlying crustal structure are found to be flawed, several of which include: assuming basement deforms similarly to the brittle upper crust, assuming plane strain within their cross sections, assuming constant style and rate of deformation, interpretations of structures not present or incorrectly defined, and the interpretation of the Hosgri fault zone as an inactive basin-margin normal fault.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Pacific Gas & Electric Company,	1991	Addendum to the 1988 Final Report of the Diablo Canyon Long Term Seismic Program	USNRC	This addendum includes lists of NRC questions following the 1988 LTSP and a table of each section of the LTSP and relevant NRC questions. The addendum describes updates/clarifications to the characterization of faults in the DCPP vicinity, seismic source characterization, ground motions, soil and structure analysis, PSHA and deterministic evaluations, and the assessment of seismic margins. Individual questions/response should be reviewed for more detail, though this addendum provides a relatively thorough summary of information potentially relevant to the SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	1991	Benefits and insights of the Long Term Seismic Program, letter from J.D. Shiffer to the U.S. Nuclear Regulatory Commission, Enclosure 1, PG&E Letter DCL-91-091	USNRC	This enclosure to PG&E Letter DCL-91-091 describes background and management of the LTSP as well as PG&E's plan for future investigations (in 1991). This enclosure provides some background but otherwise does not provide information relevant to the SSC that is not included elsewhere in the LTSP.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2002	Diablo Canyon Spent Fuel Storage Installation (ISFSI) Safety Analysis Report (SAR). (2.6. Geology and Seismology; ISFSI SAR Amendment 1)	USNRC	Provides a description and evaluation of seismologic and geologic conditions in the surrounding DCPP area. While the foundation conditions and ground motion response characteristics are the same for the ISFSI and DCPP, response spectra having a longer-period component that incorporate near-fault effects were developed for the ISFSI. While this report does provide relevant geologic and seismologic information about the DCPP area, a large portion of the information is by reference only and not directly included.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2003	Los Osos Fault Investigations, Newsom Ridge Segment (Biddle Ranch Development) (Project SLO1987-1)	Unpub. Letter Rpt.	This document includes a response from PG&E for questions about a fault investigation performed by Geosolutions at Biddle Ranch wherein the Newsome Ridge segment of the Los Osos fault was identified. The author (W.D. Page) concurs with the findings of the fault investigation. Attached by W.D. Page is a letter that presents review notes from W.R. Lettis of the Biddle Ranch investigation. Similarly, Lettis agrees with the findings of the study. Important results include the identification and location of the Newsome Ridge segment of the Los Osos fault. Geosolutions differs from the opinion of Page and Lettis, characterizing this segment of the fault as potentially active; however, Page and Lettis agree that this is acceptable and conservative conclusion for that project in the absence of evidence supporting otherwise.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	2004	Evaluation of the December 22, 2003 Mw6.5 San Simeon earthquake	USNRC Docket	This investigation developed a tectonic model for the almost purely reverse San Simeon earthquake. Using a multitude of data, earthquake parameters are developed including depth (11.3 km), strike (297), dip (61NE) and rake (96). A rupture process model found that the San Simeon earthquake involved rupture on two fault segments with different strikes, and the rupture travelled unilaterally to the southeast leading to strong directivity effects. Higher than expected ground motions associated with the event in some areas cannot be explained.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2004	Regional Earthquake Reports: San Simeon Earthquake of December 22, 2003 (Appendix L-2 of Shoreline Report)	USNRC Docket	This appendix describes the San Simeon earthquake that occurred on December 22, 2003, 11 km northeast of San Simeon, as a reverse fault event along a NW-SE trending fault plane dipping either to the SW or NE, consistent with previous earthquakes in the area. At the time this Appendix, it was unclear if the Oceanic fault, the Nacimiento fault, or neither, was the cause of the event.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2008	E-mail to Alan Wang and Vincent Gaddy (NRC) from Bill Guldemond (PG&E), Subject: preliminary data for seismic discussion, with attachment, DCPP_Nov 20-	USNRC	This email exchange and PowerPoint, which was cited in the Shoreline Fault Report, document preliminary seismicity data associated with the Shoreline fault. Subsequent datasets that are not considered preliminary should be considered over these data.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	2009	Diablo Canyon Power Plant, Units Nos. 1 and 2 - NRC Preliminary Review of Potential Shoreline Fault (TAC Nos. ME0174 and ME0175) [Research	USNRC	This letter includes preliminary interpretations of the Shoreline fault as a 15 km long strike-slip fault located ~1 km offshore of DCPP whose ground motion levels are bounded by previous previously determined estimates for the Hosgri. Although this letter describes the geometry, slip sense, and ground motions predicted for the Shoreline fault, the final Shoreline Fault Report should be referenced for updated/more detailed results.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2010	Progress report on the analysis of the Shoreline fault zone, central coast California, Enclosure 1, PG&E Letter DCL-10-003, January 2010	USNRC Docket	This report describes the data collection, evaluation of the Shoreline seismicity lineament, initial results of attempts at improving the characterization of the Shoreline fault zone geometry and segmentation, potential impacts (ground motion and secondary fault deformation) at DCPP, and studies planned for 2010. The full 2011 Shoreline Report and appendices provides a more comprehensive analysis of the Shoreline fault zone.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2010	Section 2.5: Geology and Seismology (FSAR, Rev. 19, May 2010)	USNRC	This geology and seismology section of the 2010 update to the FSAR includes the following regional-scale and site-scale descriptions: physiography, geology, tectonic setting, faulting (including the SAF, Sur-Nacimiento, Rinconada, San Simeon, Santa Lucia Bank, West Huasna, Edna, and San Miguelito faults, and the "East Boundary Zone"), geologic history (late Mesozoic through the Pleistocene), stratigraphy, and structure. Historical seismicity, correlation of epicenters with geologic structures, and maximum earthquake estimates are also presented.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pacific Gas & Electric Company,	2010	Methodology for probabilistic tsunami hazard analysis: trial application for the Diablo Canyon Power Plant Site	Unpub. Tech. Rpt.	This report presents an initial attempt at conducting a probabilistic tsunami hazard analysis (PTHA) for nuclear facilities, with a trial application of the method at DCPP. The Hosgri, Casmalia, and northern Santa Lucia Bank faults, the Purisima and Queenie structures, and the 1927 Lompoc event were considered for the tsunami modeling in this study. In addition to fault displacement, submarine landslides were also characterized. The PTHA is considered a "methodology study" and is not intended to be used for engineering purposes, though local faulting is found to not contribute significantly to hazard.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2011	Coastal LiDAR Survey (Appendix G of Shoreline Report)	USNRC Docket	This appendix describes the LiDAR data and air photos collected in 2010 along the coast from Islay Creek to Avila Bay. In the Shoreline Report, this dataset was used to better locate paleoshorelines and for onshore geologic mapping.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2011	Identification, mapping, and analysis of offshore wave-cut platforms and strandlines (Paleoshorelines) in the Shoreline fault zone study area, San Luis Obispo County,	USNRC Docket	This appendix presents wave-cut platforms, strandlines, and paleosea cliffs mapped between Morro Bay and Pismo Beach using MBES data and seismic reflection profiles. Because ~one third of the mapped strandlines crosscut bedding, differential erosion is ruled out as the origin of the features. Sequences of paleoshorelines on Islay shelf and Santa Rosa Reef shelf are described and interpreted to have resulted from Quaternary paleosea-level lowstands, highstands, or stillstands; comparisons of these sequences of paleoshorelines, geomorphology, and onshore uplifted blocks suggests the Santa Rosa Reef shelf and Islay shelf are two distinct blocks uplifting at different rates, with either the Shoreline fault or the SLBFZ as the boundary between them.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Pacific Gas & Electric Company,	2011	Regional Earthquake Reports: Mw 6.0 Parkfield Earthquake of September 28, 2004, Preliminary Report (Appendix L-3 of Shoreline Report)	USNRC Docket	This appendix describes the Parkfield earthquake that occurred on September 28, 2004 as having occurred on a northwest trending right-lateral strike-slip fault, consistent with motion along the SAF. This appendix also briefly describes aftershocks and includes a sections describing strong ground motion in the Parkfield area as well as in the DCPP vicinity.	[ ] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Pacific Gas & Electric Company,	2011	Regional Earthquake Reports: Deer Canyon Earthquakes of October 18, 2003 (Appendix L-1 of Shoreline Report)	USNRC Docket	This appendix describes the two earthquakes that occurred on October 18, 2003, northwest of Deer Canyon within the San Luis/Pismo block. The events occurred at similar depths (6.5 and 6.7 km) and focal mechanisms for both showed normal oblique slip. These events were part of the Deer Canyon sequence, which consisted of 14 earthquakes of magnitudes ranging from 0.4 to 3.4. Because there are so few earthquakes/focal mechanisms in the Irish Hills (~32 in the NCEDC catalog at the time of this evaluation), these events are crucial to the characterization of stress/strain in the Irish Hills.	[ ] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [x] San Luis Bay fault zone [ ] Shoreline fault [x] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Pacific Gas & Electric Company,	2011	Multibeam Echo Sounding Surveys (Appendix F of Shoreline Report)	USNRC Docket	This appendix describes the MBES and side scan data collected in 2007, 2009, and 2010 from nearshore Estero Bay to San Luis Obispo Bay. The MBES bathymetry data was used in the Shoreline Report to identify faults, folds, and texture and structures to differentiate offshore rock units.	[x] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [x] Other [ ] None	[x] Hosgri fault [x] Los Osos fault [ ] Wilmar Ave fault [x] San Luis Bay fault zone [x] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pacific Gas & Electric Company,	2011	Potential Field Data - Gravity Surveys (Appendix E of Shoreline Report)	USNRC Docket	This appendix presents an isostatic residual gravity map from ~Monterey Bay to the Santa Barbara channel and describes a large NNW trending gravity high offshore of DCPP that is coincident with Franciscan rocks truncated by the Hosgri fault to the SW.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2011	Potential Field Data - Magnetic Surveys (Appendix D of Shoreline Report)	USNRC Docket	This appendix describes the collection and processing of aeromagnetic data (along the central California coast from north of Cape San Martin to Point Conception) and marine magnetic data (collected simultaneously with the mini sparker seismic-reflection data discussed in Sliter et al. [2009]). In the Shoreline Report, the magnetic field data was used to help differentiate rock units with high magnetic signatures.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Pacific Gas & Electric Company,	2011	High Resolution Marine Seismic Reflection Surveys (Appendix H of Shoreline Report)	USNRC Docket	This appendix describes the single-channel offshore seismic-reflection data acquired by the USGS in 2008 and 2009 between Piedras Blancas and Pismo Beach, as well as the process of collecting and reprocessing the data. No information in this appendix is relevant to the SSC; the analysis of this data (Seismic Stratigraphy report [PG&E, 2013]; Johnson and Watt, 2012) is relevant to the Fault Model and Deformation Model for the Hosgri, San Simeon, and Los Osos faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Pacific Gas & Electric Company,	2011	Onshore-Offshore Geologic Map of the Shoreline Fault Zone Study Area, San Luis Obispo County (Appendix B of Shoreline Report)	USNRC Docket	This appendix includes an onshore-offshore geologic map in the Shoreline fault zone study area and descriptions of (1) geomorphology of the San Luis Range and the continental shelf; (2) descriptions of Mesozoic Formations, and Tertiary and Quaternary stratigraphy; (3) descriptions of the tectonic history and basement, Tertiary [including deformation of the Tertiary/basement contact, within the Obispo Formation, and within the Pismo Formation], and Quaternary structures (including the Hosgri, Pt. Buchon [N40W], Shoreline, and San Luis Bay fault zones). Portions of the mapping presented in this appendix have since been updated through the GMP, LESS, and offshore Seismic Stratigraphy Project.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2011	Report on the analysis of the Shoreline Fault Zone, central coastal California	USNRC	This report presents analyses and documents the seismic source characterization of the Shoreline fault, including the following: length, segmentation (which has been updated since the time of this report), dip, downdip width, faulting style, slip rate, relationship to other structures (including the Hosgri fault zone and San Luis Bay fault zone), and the lack of secondary fault deformation at DCPP due to or potentially associated with a maximum earthquake on the fault. Additionally, this report includes summaries of the regional tectonic and seismic setting. The appendices of the report (A-L) are entered in the database as separate entries.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2013	Stratigraphic Framework for Assessment of Fault Activity Offshore of the Central California Coast Between Point San Simeon and Point Sal	Unpub. Tech. Rpt.	This report presents the results of offshore mapping of a set of 2D seismic-reflection profiles and a 3D/2D volume along the Shoreline fault. Work included developing a sesimic stratigraphy, determining fault geometries, and mapping paleochannels and paleoshorelines that interact with offshore faults. This data allowed for confident estimates of separation rates along the Hosgri fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Pacific Gas & Electric Company,	2013	Quaternary Geomorphic Analysis of Fluvial and Marine Terraces in the Los Osos and Edna Valleys, San Luis Obispo County, California	Unpub. Tech. Rpt.	This report provides data and interpretations of the Los Osos fault zone. Interpretations were based on LiDAR and other data analyses (including maps and profiles of terraces) and field investigations. Four or five marine terrace surfaces were identified in Edna valley, three or four terraces in Los Osos Valley, and no terraces in the vicinity of the Madonna fault. Terraces in Los Osos Valley are described as less convincing and of an uncertain origin. Correlations of the Q1 through Q4 terraces in Edna Valley based on elevation and assumptions about the ages of terraces suggest a minimum long-term uplift rate of the Edna subblock of ~0.053 mm/yr and 0.006 mm/yr of the Los Osos Valley block. However, these terraces lack age control and correlations are speculative, which indicate large uncertainties in the long term uplift rate. Age dating of the Memorial Park Terrace is suggested to potentially correlate this terrace with other in the Irish Hills.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2014	ONSIP 2011 Data Report (Chapter 7 of CCCSIP Report)	Unpub. Tech. Rpt.	This report presents an interpretation of 2D and 3D seismic-reflection data collected in the Irish Hills, Los Osos Valley and in the offshore areas to the west of the Irish Hills. The primary objectives of this report were to better define the subsurface geometry of faults beneath the Irish Hills and to determine if any previously unobserved structures were apparent. The fault geometries determined from this study were as inputs to Chapter 7 os the SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2014	DCPP 3D/2D Seismic-Reflection Investigation of Structures Associated with the Northern Shoreline Seismicity Sublineament of the Point Buchon Region	Unpub. Tech. Rpt.	This report documents geologic and geophysical interpretations of low-energy, high-resolution 3D and 2D seismic-reflection data offshore of Point Buchon. The primary structures mapped in the study were the Hosgri fault zone, the Point Buchon fault zone, folded Tertiary strata that suggest NE-SW directed horizontal shortening, and potential traces of the Shoreline fault. En echelon Hosgri/Point Buchon fault parallel folds in the central and southern portions of the study area were inferred to have resulted from a transpressional regime with the caveat that these data only image the shallow subsurface.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Pacific Gas & Electric Company,	2014	2012 3D Onshore Seismic Survey Report (Chapter 8 of CCCSIP Report)	Unpub. Tech. Rpt.	This report presents high-resolution 3D seismic-reflection and seismic velocity tomography data in the vicinity of the DCPP that specifically target the shallow subsurface. Data were recorded within an ~1km radius of the DCPP site and on the wide marine terrace(s) ~6 km SE of the site. No major structures were apparent in the data in the immediate vicinity of the DCPP site, and identified several lineaments beneath the marine terrace as part of the second phase of this investigation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2014	Interpretation of Seismic-Reflection Data, Point Buchon to San Simeon Point (Chapter 4 of CCCSIP Report)	Unpub. Tech. Rpt.	This chapter details the offshore seismic reflection investigation northwest of the DCPP site in response to CA AB 1632.This study was undertaken to better understand the pattern of faulting along the continental shelf between San Simeon Point and southern Estero Bay. The report indicates that there was no obvious fault linking the San Simeon and Hosgri fault zones. The report also interpreted a series of northwest-trending faults that appear to continue southeast into the Irish Hills.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2014	Geologic Mapping and Data Compilation for the Interpretation of Onshore Seismic-Reflection Data (Chapter 9 of CCCSIP Report)	Unpub. Tech. Rpt.	This Chapter provides details regarding the most recent compiled geologic map of the Irish Hills. The geologic maps and data emphasize bedrock stratigraphic and structural relations. The geodatabase and this data report explain how the map was constructed, what the map contains, what additional geologic information is available (e.g., deep well data), and what uncertainties in the data the interpreters of seismic-reflection data should consider.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Pacific Gas & Electric Company,	2014	Offshore Low-Energy Seismic-Reflection Studies in Estero Bay, San Luis Obispo Bay, and Point Sal Areas (Chapter 3 of CCCSIP Report)	Unpub. Tech. Rpt.	Chapter details offshore 3D seismic reflection data collected in response to CA AB 1632 with subsequent interpretations of stratigraphy, fault geometry, and fault slip rates that are based on offset piercing points and crosscutting relationships with key stratigraphic markers. Slip rates estimated for the Hosgri fault zone range from 0.2-3.6 mm/yr at Estero Bay and 1.75-1.90 mm/yr at Point Sal. Slip rates estimated for the Shoreline fault range from 0.01-0.51 mm/yr based on paleoshorelines(?) to 0.07-0.12 mm/yr based on a paleochannel offset in San Luis Obispo Bay.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Pacific Gas & Electric Company,	2014	Response to Administrative Law Judge's Decision Number 12-09-008 Regarding Dr. Douglas Hamilton's Concerns (Chapter 12 of CCCSIP Report)	Unpub. Tech. Rpt.	This report evaluates the validity of the testimony of Dr. Douglas Hamilton regarding faulting and seismic hazard to the DCPP site. The report concludes that proposed Diablo Cove fault is a Miocene-Pliocene structure associated with transpressional shortening of the Pismo basin. In terms of the San Luis Range/IOF thrust fault, the report concludes that 1) geophysical data show no positive evidence for this structure, and 2) the pattern of marine terrace uplift near the intersection of the San Luis Range/IOF with the Shoreline fault is inconsistent with any significant thrust displacement. The geometry of the San Luis Range/IOF is incorporated into the SW-vergent fault geometry model.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Page, B., M.,	1970	Time of completion of underthrusting of Franciscan beneath Great Valley rocks west of Salinian block, California	Geol. Soc. Am. Bull.	Describes the timing of underthrusting of the Franciscan assemblage beneath Great Valley rocks. Speculates that the timing of the completion of underthrusting could be similar to the timing of North America encountering the Pacific plate; San Andreas fault activity was subsequent to this.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Page, B., M.,	1970	Sur-Nacimiento fault zone of California: Continental margin tectonics	Geol. Soc. Am.	Describes the location, genesis, and tectonic history of the Sur-Nacimiento fault zone (SNF). The SNF roughly defines the Salinian/Franciscan boundary. The SNF may have been initiated during the late Cretaceous or early Tertiary and defines part of the former continental margin. Ocean-floor spreading resulted in underthrusting of KJf crust beneath the Great Valley and perhaps brought these two units into contact with the Salinian continental crust with the suture roughly defined along the Sur-Nacimiento fault zone. Later stages of faulting included. Normal faulting ensued following termination of subduction and accretion. Subsequent strike slip and reverse faulting may also have occurred.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Page, B., M.,	1972	Oceanic crust and mantle fragment in subduction complex near San Luis Obispo, California	Geol. Soc. Am.	Paper describes the petrology, distribution, and structural emplacement of a fragment of oceanic crust outcropping in areas north of San Luis Obispo. The proposed fragment is a synclinal remnant composed of a basal serpentinite, an overlying intrusive/volcanic complex, a radiolarian chert, and the uppermost Jurassic-Cretaceous Toro Formation. The author suggests the fragment was tectonically rafted into its present structural position below the Cretaceous sandstones and above the Franciscan. Given this article's focus on Mesozoic processes and speculation based on field observations, it likely has little relevance to the logic tree and the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Page, B., M., Wagner, H., C., McCulloch, D., S.,	1979	Tectonic interpretation of a geologic cross section of the continental margin off San Luis Obispo, the Southern Coast Ranges, and the San Joaquin Valley, California:	Geol. Soc. Am. Bull.	Utilizes a geologic cross-section extending from offshore, through DCPP, to the San Joaquin valley to narrate a geologic history of the Coast Ranges. Outlines the different depositional and tectonic events leading to the present-day geologic setting of the southern coast ranges.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Page, B., M., Brocher, T., M.,	1993	Thrusting of the central California margin over the edge of the Pacific plate during the transform regime	Geology	Presence of oceanic slab may be due to thrusting of North America over the Pacific plate during Pliocene to Quaternary time (after subduction subsided). This was most likely due to change in plate motion around 3.5 Ma and the extension in the Basin and Range province. Additionally, evidence exists that the SAF continued to accommodate the relative motion between the North America and Pacific plates even after plate motion changed. This article may be relevant to forming the tectonic model in regards to the timing and change of plate motion and the impact this change had on the SAF.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Page, B., M., Thompson, G., A., Coleman, R., G.,	1998	Overview: Late Cenozoic tectonics of the central and southern Coast Ranges of California	Geol. Soc. Am.	Extensive review of the tectonics of the coast ranges from Point Concepcion to Napa. Although marginal to the Pacific-NA transform boundary, uplift is not directly related strike-slip faulting. Nearly synchronous uplift initiated roughly 3.5 Ma related to a change in plate motions with uplift rates increasing around 0.4 Ma. Coast range deformation is likely directly related to thrusting on detachments at depths of 10-22 km.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [x] Tectonic setting
[ ]	Page, B., M., Thompson, G., A., Coleman, R., G.,	1998	Late Cenozoic tectonics of the central and southern Coast Ranges of California	Geol. Soc. Am. Bull.	Describes the formation of the central and southern Coast Ranges of California. These ranges are characterized by high heat flow, weak rocks of the Franciscan subduction complex, high fluid pressure, bounding high-angle reverse, strike-slip, or thrust faults, and uplift at a rate of 1 mm/yr beginning about 0.40 Ma. Provides a broad overview of the formation of the Coast Ranges including shortening and uplift rates which may be relevant to the tectonic model.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Page, M., T., Dunham, E., M., Carlson, J., M.,	2005	Distinguishing barriers and asperities in near-source ground motion	J. Geophys. Res.	Using increasingly complex rupture models, waves from rupture barriers and asperities are investigated. The authors find that fault heterogeneity is most clearly manifested in fault parallel wave components, but fault perpendicular pulses can be used to locate barriers or asperities. They also find that kinematic inversions that incorporate rupture velocity may overestimate stress heterogeneity. Little to no data here are applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Page, M., T., Carlson, J., M.,	2006	Methodologies for earthquake hazard assessment: model uncertainty and the WGCEP-2002 forecast	Bull. Seis. Soc. Am.	Analyzes methods used to incorporate model uncertainties into WGCEP-2002 and finds those methods introduced large unnecessary uncertainty. A proper and rigorous formulation of model dependence is needed to reduce uncertainty. Proposes one method of reducing said uncertainty.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Page, M., T.,	2010	The Case for Gutenberg-Richter Scaling on Faults	SSA Mtg.	This presentation discusses the use of the Gutenberg-Richter earthquake rate model on faults. The author shows that for large sections of a fault (500 km), G-R rates can take on a characteristic-type distribution, a relationship that breaks down in smaller fault sections (100 km) or points on a fault. The author also shows that the Hecker and Abrahamson COV is matched by a G-R slip simulation. Presentation #2 contains a Q&A session in which the presenter explains away some common arguments against the use of G-R for faults. This paper contains useful concepts for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Page, M., T., Alderson, D., Doyle, J.,	2011	The magnitude distribution of earthquakes near Southern California faults	J. Geophys. Res.	Study finds that seismicity distribution near southern California fault, within 20 km, fits the G-R relationship well. Increases in the magnitude distribution are observed as distance to major fault traces decreases. Earthquakes initiating near major faults are more likely to be of larger magnitude, but no "characteristic" behavior is observed for large earthquakes.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Page, M., T., Field, E., H., Milner, K.,	2013	Appendix N—Grand Inversion Implementation and Testing (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix presents results of the grand inversion, a simulated annealing algorithm that solves for the long-term rate of all possible ruptures on major faults in California. The appendix includes descriptions of data, logic tree branches, constraints, minimum rupture rates, and the evolution of the model and its constraints. Participation rates are shown for different magnitude ranges and compared to UCERF2 results, which did not consider multi-fault ruptures. These results should be reviewed and compared to other estimates for faults in the DCPP vicinity, though they may be more relevant to regional-scale analyses or the SAF.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Page, M., T., Field, E., H., Milner, K.,	2014	The UCERF3 Grand Inversion: Solving for the Long-Term Rate of Ruptures in a Fault System	Bull. Seis. Soc. Am.	This manuscript presents implementation details, testing, and results from a new inversion-based methodology, known colloquially as the “grand inversion,” developed for UCERF3.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Pantosti, D., Pucci, S., Palyvos, N.,	2008	Paleoearthquakes of the Duzce fault (North Anatolian Fault Zone): insights for large surface faulting earthquake recurrence	J. Geophys. Res.	Details a paleoseismic study on the Duzce fault in northern Turkey. Four events were recognized, including 1999, with an average recurrence of 320-390 years, generally consistent with other observations. The three most recent events are more closely spaced than the overall recurrence interval. Based on this, rupture does not appear to occur be periodic.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Parsons, T., Bruns, T., R., Sliter, R., W.,	2005	Structure and mechanics of the San Andreas–San Gregorio fault junction, San Francisco, California	Geochem. Geophys. Geosyst.	This study uses seismic reflection and refraction lines that cross the SAFZ and San Gregorio fault near their junction to interpret past basin development. Based on those results, they use a finite element code to model future basin and fault development. Little to no data are applicable to the DCPP site.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Parsons, T.,	2006	M >= 7.0 earthquake recurrence on the San Andreas fault from a stress renewal model	J. Geophys. Res.	Describes modeling used to estimate stress drop and stress recovery times for Mw 7.0-8.0 earthquakes on the San Andreas fault. Stresses were derived from geodetic rates. Recovery times were used to convert to expected magnitude, and those magnitudes follow a G-R relationship. Parsons also states that if evidence for large characteristic earthquakes on a fault segment is lacking then a G-R relationship is reasonable. This article provides a model that may be useful in quantifying recurrence intervals. Here it is applied to three sections of the SAF, but could conceivably be applied to other faults in the DCPP area.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Parsons, T.,	2006	Tectonic stressing in California modeled from GPS observations	J. Geophys. Res.	This study applies GPS-derived crustal strain rates to a finite element model of California. Results indicate greatest stressing rates along a 200 km-wide swath about the Pacific-North American plate boundary, coincident with greatest seismic release. Conversely, the Hayward and Rogers Creek faults exhibit a gap in seismic energy, yet stressing rate remains high. The Garlock fault is only loaded by slip on the San Andreas fault. Results of the this paper may be useful for the DCPP SSC.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Parsons, T.,	2008	Monte Carlo method for determining earthquake recurrence parameters from short paleoseismic catalogs: example calculations for California	J. Geophys. Res.	Developing probability density functions for earthquake recurrence from limited recurrence data is problematic. Parsons develops a Monte Carlo approach to assess recurrence where paleoearthquake data are sparse. Could be useful for DCPP area faults with limited earthquake data to support recurrence models.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [x] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting
[ ]	Parsons, T.,	2008	Earthquake probability calculated from paleoseismic observations on the south Hayward fault	:. Conf. Earthq. Haz. Eastern SF Bay /	Parsons uses the paleoseismic record of Lienkaemper and Williams (2007) to develop probabilities for fault rupture. Recurrence distribution appears to be time-dependent, with a mean recurrence of 210 years. Probabilities developed from recurrence match very closely to those developed by WGCEP 2008 using geologic slip rates. Paper may not have much application to DCPP because no faults in the study area have exceptional paleoseismic records like the Hayward fault.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Parsons, T.,	2008	Appendix C: Monte Carlo Method for Determining Earthquake Recurrence Parameters from Short Paleoseismic Catalogs: Example Calculations for	U.S. Geol. Surv. Open File Rpt.	Parsons presents a Monte Carlo method for estimating most-likely values and resolution on earthquake recurrence interval as well as coefficient of variation from paleoseismic and historic earthquake records and applied the method to 19 paleoseismic sites in California using time-independent and time-dependent PDF's. For short, synthetic paleoearthquake catalogs, Monte Carlo methods may give results more reflective of the underlying distribution mean by drawing form every reasonable recurrence PDF and compared to observed paleoearthquake series. Application of this method seems most appropriate on a fault for which paleoseismic and historic earthquake records are robust.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Parsons, T., Geist, E., L.,	2009	Short Note: Is There a Basis for Preferring Characteristic Earthquakes over a Gutenberg–Richter Distribution in Probabilistic Earthquake Forecasting?	Bull. Seis. Soc. Am.	The authors compare the characteristic and G-R distribution models and find that giving more weight to the characteristic model as the source for the largest earthquakes (as done in WGCEP 2008) on individual faults is not justified because the G-R model appears to fit available data (including long-term geologically and geodetically determined fault-slip rates, paleoseismic event rates, individual event-slip observations, and subregional magnitude-frequency distributions) equally as well. The authors state that using the G-R model requires defining the fault zone and which smaller earthquakes are included, and important and potentially subjective aspect of their argument.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Parsons, T., Geist, E., L.,	2010	Reply to “Comment on ‘Is There a Basis for Preferring Characteristic Earthquakes over a Gutenberg–Richter Distribution in Probabilistic Earthquake Forecasting?’ by	Bull. Seis. Soc. Am.	This reply is in response to and addresses Klügel's (2010, BSSA) three comments or "flaws" found in Parsons and Geist (2009, BSSA): (1) the authors do not prefer a particular distribution model, rather they believe the data/observations do not preclude the use of any models, (2) the earthquakes in their model are countable in that they are randomly drawn from a continuous magnitude-frequency distribution and that uncertainty associated with seismogenic area of a fault is far greater than associated with magnitude discretization, and (3) a G-R or characteristic distribution and whether or not they represent maximum entropy cannot be distinguished due to uncertainty in data. The authors' final point of allowing all models meeting observations in a logic tree (and weighted by their relative uncertainties) until the data supports otherwise, supports exploring both a G-R and characteristic model in the SSC logic tree.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Parsons, T., Velasco, A., A.,	2011	Absence of remotely triggered large earthquakes beyond the mainshock region	Nature Geo.	This article presents empirical results of comparisons of the timing and location of earthquakes 5 < M < 7 that might have been triggered by every M >= 7 during the past 30 years. The results show triggering of 5 < M < 7 earthquakes is delayed minutes to hours after the large mainshock and no increased M > 5 earthquake hazard at distances beyond about ~2-3 M >7 mainshock rupture lengths. 95% of triggered 5 < M <7 earthquakes occurred within 600 km of the largest mainshock. This distance limit and trigger delay indicate stress-change amplitude, duration, and slow nucleation process dictate the magnitude of a triggered earthquake. The results presented in this article indicate that only faults within 600 km of the DCPP vicinity should be considered in terms of mainshocks that could result in triggered earthquakes. These results are applicable for a M > 7 mainshock (potentially on the SAF?), and extrapolating the empirical results to predicting and determining probabilities of triggered earthquakes of 5 < M < 7 in the DCPP vicinity may be difficult.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Parsons, T., Thatcher, W.,	2011	Diffuse Pacific−North American plate boundary: 1000 km of dextral shear inferred from modeling geodetic data	Geology	This paper used geodetic data to determine the influence of Pacific Plate motion on deformation in the North American Plate. Figure 4 illustrates the primary conclusion of the paper that the west velocity (extensional) component extends 600 km inboard of -116W (roughly the middle of Nevada), while the north velocity component nearly ceases at this longitude. Through modeling, the authors find that the west margin of the Sierra Nevada block must exhibit some right-lateral shear to accommodate north motion in the west Basin and Range, and extension in the east Basin and Range. Data here are not likely to be useful for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Parsons, T.,	2012	Paleoseismic interevent times interpreted for an unsegmented earthquake rupture forecast	Geophys. Res. Let.	Parsons presents a method to estimate long-term mean and confidence on earthquake rate from point process observations of paleoearthquakes when a segmented/characteristic earthquake model is not assumed. This method is time dependent (no Poissonian behavior) and the primarily limitation is that it approximates an unknown interevent time distribution (or combination of distributions) as lognormal. The method is tested with combinations of 1 to 5 BPT distributions and then applied to two California sites (South Hayward and Central Garlock faults). For these two sites, the method returned reasonable earthquake rate estimates compared to prior methods. Parsons states that this method is applicable to sites where Monte Carlo methods have failed and points to the Hayward fault example to show that the method returned almost the same mean as computationally intensive Monte Carlo sampling. Because of the simplicity of this method, it may be good alternative to other time dependent recurrence models (BPT). However, the limited paleoseismic data of faults such as the Hosgri may limit the application of this method to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Parsons, T., Console, R., Falcone, G.,	2012	Comparison of characteristic and Gutenberg–Richter models for time-dependent M ≥ 7.9 earthquake probability in the Nankai-Tokai subduction zone, Japan	Geophys. Jour. Intl.	The authors apply the G-R and characteristic earthquake models to the Nankai-Tokai subduction zone in Japan and compare the two models. Reliable information on large magnitude historical earthquakes on interacting faults is available in this region, making the region an ideal location for application and testing of the two models. The authors find that the uncertainties affecting the statistical model used are more significant than earthquake interaction effects, and that the probabilities presented in this article are significantly higher than those in previously released forecasts. Additionally, an earthquake simulator that only required fault-slip rates and a magnitude-frequency distribution slope (b in the G-R distribution) was applied. Although no physical barriers were imposed, the simulator replicated fault segment ruptures spatially. The earthquake simulator presented in this article may be useful in the DCPP SSC because it requires only two inputs; however, the b value (and slip rates) are not necessarily well constrained on faults in the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Parsons, T., Geist, E., L.,	2012	Were Global M ≥8:3 Earthquake Time Intervals Random between 1900 and 2011?	Bull. Seis. Soc. Am.	This paper presents a statistical study of the pattern of great earthquake (M ≥ 8.3) occurrences over the past 111 years. By comparing a synthetically derived catalog with a real catalog, the authors find that the global distribution of events can be fit as time-dependent or clustered, but not a random Poisson process. This paper may be useful for assessment of the rate of infrequent/great earthquake occurrences in the DCPP source model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Parsons, T., Field, E., H., Page, M., T.,	2012	Earthquake connections on mapped California faults ranked by calculated static linking stresses	Unpub. Manuscript	The authors use static stress transmission as a proxy for dynamic rupture propagation and rank proposed earthquake ruptures by considering the physical likelihood of a given junction. Continuous ruptures consistently are ranked above stepping junctions, though changes in strike or rupturing with nearby subsections does not necessarily lower rank. The authors conclude that this method is best applied at fault junctions (or other "decision points") and branches within the same fault system. Although the authors state this methodology is not yet ready for statewide application, this approach may be an alternative to assessing the relative likelihood of different rupture scenarios.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Parsons, T., Ogata, Y., Zhuang, J.,	2012	Evaluation of static stress change forecasting with prospective and blind tests	Geophys. Jour. Intl.	This study explores the physics of earthquake triggering using static stress forecasts and documents two case studies. The authors find that forecasting static stress may be an effective tool for identifying future locations and timing of future M>6 earthquakes. These events preferentially occur in positive static stress changes, while 30% occur in stress shadows. Although forecasting static stress requires centroid moment tensor data, fault geometry can be used a proxy. This paper may contain useful concepts for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Parsons, T., Johnson, K., M., Bird, P.,	2013	Appendix C—Deformation Models for UCERF3 (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This appendix presents three types of deformation models (the finite element model NeoKinema, an average of five elastic block modeling methods, and the buried dislocation approach developed by Zeng and Shen) that use geologic and geodetic data, and compare these models to the geologic model presented in Appendix B of the same report. A logic tree was used to weight the different models, with NeoKinema and Zeng-Shen each weighted at 30% and the average block models and geologic models each weighted at 20%. Results of these models in the DCPP vicinity should be reviewed, though their site-specific applicability is questionable.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Payne, C., M., Swanson, O., E., Schell, B., A.,	1979	Investigation of the Hosgri Fault, offshore Southern California, Point Sal to Point Conception (Part I)	U.S. Geol. Surv. Open File Rpt.	An early 2d reflection study that maps the Hosgri and nearby faults between Point Sal and Point Conception. Their mapping shows post Stage II faulting of the latest marine transgressive sequence along the Hosgri, but no disruption of the latest transgressive sequence on other nearby faults. Begs the question as to how laterally extensive are the transgressive sediments and can anything be made of differences in sense and rate of slip regionally along strike using them.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Pegler, G., Das, S.,	1996	Analysis of the relationship between seismic moment and fault length for large crustal strike-slip earthquakes between 1977-92	Geophys. Res. Let.	In order to uniformly determine fault length L and the relationship between Mo and L, the authors used a dataset of earthquakes that had reliable seismic moment estimates and relocated aftershocks for each event, focusing on the largest strike slip earthquakes between 1977 and 1992. Their plot of Mo vs. length shows a slope of 0.5 provides a better visual fit to the data than a slope of 1, which suggest a Mo $\propto L^2$ relationship. The authors note the scatter of the data and suggest that more or improved data may not condense the data. This empirical relationship may be useful in the earthquake rate model. However, no statistics on the goodness of fit for the chosen slope of 0.5 are provided and therefore this relationship may not be as robust as others.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Petersen, M., D., Mueller, C., S., Frankel, A., D.,	2008	Appendix J: Spatial Seismicity Rates and Maximum Magnitudes for Background Earthquakes	U.S. Geol. Surv. Open File Rpt.	This appendix to the UCERF 2 documentation provides a description of development of the UCERF 2 background seismicity model. The authors describe selection of Mmax, lowering of Mmax near faults, gridded seismicity vs. background, recurrence models, shear zones that use geodetic/strain rate to derive moment rate, and special fault zones (Brawly, SAF Creeping section, Mendocino). This relatively brief paper contains abundant information modeling off-fault seismicity for California and could be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Petersen, M., D., Frankel, A., D., Harmsen, S., C.,	2008	Documentation for the 2008 Update of the United States National Seismic Hazard Maps	U.S. Geol. Surv. Open File Rpt.	This report documents the methodology and input parameters used to construct the 2008 U.S. National Seismic Hazard maps. These maps include 4 classes of earthquake source models: 1. smoothed-gridded seismicity; 2. uniform background source zones; 3. geodetically derived source zones; and 4. faults. Each class is applicable to different earthquake magnitude ranges. The background seismicity documented in this report may be considered for the DCPP site vicinity.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Petersen, M., D., Moschetti, M., P., Powers, P., M.,	2014	Documentation for the 2014 Update of the United States National Seismic Hazard Maps	U.S. Geol. Surv. Open File Rpt.	Like DCPP SSHAC3, this work also utilizes UCERF3 characterization of faults in California. However, the gridded seismicity from this study was not available in time for consideration in the DCPP SSHAC3.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Piper, D., Z., Isaacs, C., M., Medrano, M., D.,	1993	Cooccurrence of Fe-, Fe-Ca-, and Ca-Phosphate Minerals in Concretions Within the Monterey Formation: A Record of Uplift of the Santa Maria Basin, California	U.S. Geol. Surv. Bull.	Paper describes stratigraphic significance and geochemistry of phosphatic concretions in the Monterey Formation. The authors relate the geochemistry of the concretions to transition from fresh-groundwater conditions into phreatic or vadose zones during uplift of the Santa Maria Basin.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Platt, J., P., Becker, T., W.,	2010	Where is the real transform boundary in California?	Geochem. Geophys. Geosyst.	Highest geodetically defined strain rate in California does not always coincide with the surface trace of the San Andreas fault. Present-day velocity field is representative of long-term motions. Slip is transferred from one part of the system to another in a way that suggests the San Andreas fault should not be the unique locator of the plate boundary.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Plattner, C., Malservisi, R., Dixon, T., H.,	2007	New constraints on relative motion between the Pacific Plate and Baja California microplate (Mexico) from GPS measurements	Geophys. Jour. Intl.	The authors use GPS data to constrain North America-Pacific Plate motion in a stable Pacific Plate reference. They find the direction of North America-Pacific and North America-Baja motion is similar, though Baja moves much slower, consistent with right-lateral offset on Quaternary faults, seismicity along the southwestern coast of California, and suggests a partial coupling of Baja to the Pacific Plate and the existence of a western Baja shear zone. Their results are also consistent with the Pacific Plate acting as the driving force for rigid block motion of Baja.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Pollitz, F., F., Sacks, I., S.,	2002	Stress Triggering of the 1999 Hector Mine Earthquake by Transient Deformation Following the 1992 Landers Earthquake	Bull. Seis. Soc. Am.	Manuscript suggests the 1992 Landers earthquake triggered the 1999 Hector Mine earthquake. This is relevant to the recurrence model used in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Pollitz, F., F.,	2012	ViscoSim Earthquake Simulator	Seis. Res. Let.	This article describes ViscoSim, an earthquake simulator used by SCEC that accounts for layered elasticity and viscoelasticity. The layered aspect of this simulator aids in determining stress interaction effects at great distances, which are strongly affect by postearthquake transients for weeks to years. The simulator presented in this article provides an alternative to long-term earthquake forecasting.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Porcella, R., L., Matthiesen, R., B., Maley, R., P.,	1982	Strong-motion data recorded in the United States	U.S. Geol. Surv. Prof. Paper	The authors summarize mainshock and aftershock strong motion data in the Imperial Valley region from a total of 43 stations. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Porter, L., D.,	1982	Data-processing procedures for main-shock motions recorded by the California Division of Mines and Geology strong-motion network	U.S. Geol. Surv. Prof. Paper	This report summarizes the collection and processing of strong-motion data from the 1979 Imperial Valley earthquake. This includes 19 corrected time histories, velocity-response-envelope spectra, and duration spectra. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Powers, P., M., Jordan, T., H.,	2010	Distribution of seismicity across strike-slip faults in California	J. Geophys. Res.	This paper explores the relationship between the distribution of seismicity with respect to strike slip faults. Results indicate that seismicity tends to concentrate along faults in damage zones. The rate of decay is predictable and correlative with fault maturity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Powers, P., M., Field, E., H.,	2013	Appendix O—Gridded Seismicity Sources (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix presents gridded or background seismicity sources (earthquakes that are not considered to be associated with identified faults) included in the UCERF3 model. Fault-section polygons are defined as subdivisions of polygons defined for an entire fault zone. Although results should be reviewed, the large scale of each region (as delineated in the 2008 NSHMP gridded seismicity-source model) suggests the site-specific level of detail needed for the SSC may not be represented in this model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Prawirodirdjo, L., Bock, Y.,	2004	Instantaneous global plate motion model from 12 years of continuous GPS observations	J. Geophys. Res.	This study uses GPS velocities from 106 sites to estimate global plate motions for 17 major and minor plates. Six sites are located on the Pacific Plate, with one site located on the Farallon Islands, and the other nearest sites to the California coast are located in Hawaii and Alaska. Three sites are located on the Sierra Nevada microplate, and one site located just east of the plate (Quincy, CA). They note that the Farallon site is 2.7 mm/yr different than the Pacific Plate, suggesting it is affected by the relatively broad plate boundary. Little to no other discussion is given to plate motion with respect to western U.S. tectonics. Little here would be of significant use to SSC team.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Prescott, W., Manaker, D., Simpson, R., W.,	2000	Appendix C: R-factors Inferred from Geodetic Modeling (USGS OFR 03-214)	U.S. Geol. Surv. Open File Rpt.	This appendix summarizes R-factors assigned to fault in the San Francisco Bay area by combining geologic and geodetic estimates. This includes tables of (1) geodetically inferred R-factor estimates; (2) slip rate estimates and R-factors when deep slip is constrained to geologic rates; (3) slip rate estimates and R-factors when deep slip is estimated from geodetic data; and (4) median R-factor and standard deviations estimated from variation with model geometry and rat. The method presented in this appendix is not applicable to offshore faults in the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Putzig, N., E.,	1988	Modeling wide-angle seismic data from the central California margin	Rice Univ.	This master's thesis presents a seismic reflection study conducted along a profile extending perpendicular to the plate margin, on- and offshore through Morro Bay. The author produced velocity and structure profiles, including alternative lower crustal models; one with a low velocity zone, and another with a deeper lower crust, which the author prefers. Data from this study may aid the SSC team with developing estimates of crustal and seismogenic depth.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Quigley, M., Van Dissen, R., Litchfield, N.,	2012	Surface rupture during the 2010 Mw 7.1 Darfield (Canterbury) earthquake: Implications for fault rupture dynamics and seismic-hazard analysis	Geology	This article describes coseismic displacement that occurred during the 2010 Mw 7.1 Darfield earthquake and compare the rupture data with other historical surface ruptures from earthquakes of similar Mw. The authors find that (1) coseismic displacement was very high given the fault length, (2) maximum fault slip distribution was concentrated at shallow depths (supported by Davg and Dmax values greater than those predicted from regressions for global strike-slip earthquakes) and (3) the Darfield earthquake could be measured with more precision than typical earthquakes. The authors also describe limitations associated with using SRL and D data from paleoseismic studies to derive Mw for active faults and conclude that earthquake clustering and high stress drop ruptures can occur in regions of relatively low strain rates. In addition to scaling relations, the analyses of surface rupture length compared to fault length and average/maximum net displacement presented in this article may help characterize potential ruptures on faults in the DCPP vicinity.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Rabineau, M., Berne, S., Aslanian, D.,	2005	Sedimentary sequences in the Gulf of Lion: A record of 100,000 years climatic cycles	Marine Petr. Geol.	Manuscript discusses the sequence stratigraphy in the Gulf of Lion. It is used as additional support for the Middle Pleistocene Transition observed in the Point Sal area.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Rabineau, M., Berne, S., Olivet, J., L.,	2006	Paleo sea levels reconsidered from direct observation of paleoshoreline position during Glacial Maxima (for the last 500,000 yr)	EPSL	Sea levels described here help understand the timing of strata offset by the Hosgri fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Ramirez, P., C., Garrison, R., E.,	1998	Stratigraphy of the fine-grained facies of the Sisquoc formation, Santa Maria Basin, California-paleoceanographic and tectonic implications	U.S. Geol. Surv. Bull.	This study comprised stratigraphic analyses of the Sisquoc Formation in several locations within the Santa Maria basin. The Sisquoc Formation is slightly older near the basin margin, 6.3 Ma, which is marked by a conglomerate at the Monterey-Sisquoc Formation contact and is related sea-level-driven erosion deposition. Deposition in deeper areas of the basin was uninterrupted. Despite a sea leave rise from 5.3 to 5.0 Ma, the authors find considerable conglomeratic and detrital strata in the upper Sisquoc Formation, which they relate to a tectonic uplift event. Little information for seismic source characterization is presented here, except that constraints on age of the Sisquoc Formation could possibly be used to constrain long-term slip rates on regional faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Raymo, M., E., Mitrovica, J., X.,	2012	Collapse of polar ice sheets during the stage 11 interglacial	Nature	The authors investigate the potential contribution from GIA to MIS 11 highstand elevations by computing global sea-level variations over the past 500 kyr. They find the ESL reached ~6-13 m above present-day value the late stages of MIS 11, with contributions from ocean thermal expansion of no more than ~1 m. Their corrected estimates for MIS 11 sea-level elevations at sites in Bermuda and the Bahamas are 9.4 ± 1 m and 11.1 ± 3.6 m, respectively.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Reagor, B., G., Stover, C., W., Algermissen, S., T.,	1982	Preliminary evaluation of the distribution of seismic intensities	U.S. Geol. Surv. Prof. Paper	This report documents the observed or reported earthquake effects and the assigned felt intensities for the 1979 Imperial Valley earthquake and makes comparisons to the 1940 earthquake which had a greater duration of shaking. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Real, C., R.,	1982	Effects of shaking on residences near the Imperial fault rupture	U.S. Geol. Surv. Prof. Paper	Real interviewed occupants of four single-story houses and four mobile homes within a few hundred meters of the Imperial fault rupture. Although MMI values were VII for much of the Imperial Valley area, damage proximal to the fault surface rupture was minimal, with MMI values less than VII. Real states this contrasts highlights the complexity of the relationship between structural damage, ground shaking, and felt intensity. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Reasenberg, P., A., Oppenheimer, D.,	1985	FPFIT, FPPLOT, and FPPAGE: Fortran computer programs for calculating and displaying earthquake fault-plane solutions	U.S. Geol. Surv. Open File Rpt.	This manual provides an overview and describes the computational procedures, parameter uncertainty, solution quality, search modes, and input and output files of FPFIT. FPPLOT and FPPAGE installation and overviews are also provided, as well as sample input/output files and graphics. This reference is useful if reviewing earthquake fault-plane solutions calculated with FPFIT but is otherwise not directly relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Reasenberg, P., A.,	2003	Appendix E: Moment Released by Aftershocks (USGS OFR 03-214)	U.S. Geol. Surv. Open File Rpt.	In this appendix, Reasenberg presents the WG99 methodology for building moment-balanced fault rupture models for the San Francisco Bay area and derives a model using northern California aftershock sequences that estimates the fraction of moment released in the WG99 model through M < 6.7 aftershocks. The moment released by M < 6.7 aftershocks is ~2-3% of the total moment released in the San Francisco Bay area; however, aftershocks compose ~10% of the total moment released in a generic northern California sequence. The empirically derived model parameters presented in this appendix are applicable to northern California and the treatment of aftershocks was changed in UCERF3.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Regnier, M., Chatelain, J., L., Smalley, Jr., R.,	1992	Seismotectonics of Sierra Pie de Palo, a basement block uplift in the Andean foreland of Argentina	Bull. Seis. Soc. Am.	Manuscript provides a geometric model for the Argentine Precordillera and Sierras Pampeanas tectonic provinces based on crustal seismicity. Used as an analog regarding the Northeast-Vergent model in the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Reis, A., T., Maia, R., M.C., Silva, C., G.,	2013	Origin of step-like and lobate seafloor features along the continental shelf off Rio de Janeiro state, Santos basin-Brazil	Geomorph.	Continental shelf stratigraphy related to sea-level cycles is relevant to estimating ages of strata offset by the Hosgri fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Rhoades, D., Stirling, M.,	2012	An Earthquake Likelihood Model Based on Proximity to Mapped Faults and Cataloged Earthquakes	Bull. Seis. Soc. Am.	This article compares two components of a long-term earthquake likelihood model: the proximity-to-mapped-faults model (PMF) component, the proximity-to-past-earthquakes model (PPE) component, and the proximity-to-known-sources model (PKS), which combines the PMF and the PPE components. The PMF model is dependent on fault locations and slip rates and is almost as informative as the PPE smoothed seismicity model. The PKS model, though, is significantly more informative than the PPE model. The results presented in this article of considering both fault locations and slip rates along with earthquake catalog data may provide a better informed earthquake likelihood model. Other than considering the above data, this model may have limited applicability to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Richards-Dinger, K., Dieterich, J., H.,	2012	RSQSim Earthquake Simulator	Seis. Res. Let.	Description of the RSQS earthquake simulator. The model employs three stages for earthquake generation: nucleation, seismic rupture, and healing. Additionally, the model is equipped to handle creeping faults and segments. Currently, the model only includes earthquakes on faults, but off-fault nucleation is being developed. This model represents an alternative method for generating earthquakes on faults.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Richmond, W., C., Burdick, D., J., Phillips, D.,	1981	Regional Geology, Seismicity, and Potential Geologic Hazards and Constraints, OCS Oil and Gas Lease Sale 53, Northern and Central California	U.S. Geol. Surv. Open File Rpt.	This report assesses the existing and potential geologic hazards and constraints which could adversely affect oil and gas resource development in offshore areas of northern and central California. Used to determine the geometry for the Santa Lucia Bank fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Richter, C., F.,	1969	Possible seismicity of the Nacimiento fault, California	Geol. Soc. Am. Bull.	States that the Nacimiento fault is likely active at depth based on earthquake history and evidence from instrumentally located epicenters. Although Richter presents historical records of seismicity, he speculates that these events occurred on the Nacimiento fault zone and states that more evidence is needed, making this article of marginal use in the SSC.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [x] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Ridente, D., Trincardi, F., Piva, A.,	2008	Sedimentary response to climate and sea level change during the past ~400 ka from borehole PRAD1-2 (Adriatic margin),	Geochem. Geophys. Geosyst.	The authors use multi-proxy stratigraphy from a borehole in the Adriatic continental margin in order to correlate slope deposits to the continental shelf, show that the four uppermost depositional sequences in the area record the last four 100-kyr Quaternary eustatic cycles, and show that clinoform geometry is related to short-term climate and sea level cycles. This reference is applicable to the development of age constraints on channels buried beneath the continental shelf in Estero Bay and near Point Sal.	[ ] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Ridente, D., Petrungaro, R., Falese, F.,	2012	Middle–Upper Pleistocene record of 100-ka depositional cycles on the Southern Tuscany continental margin (Tyrrhenian Sea, Italy): Sequence architecture and	Marine Geol.	Offshore of Southern Tuscany, Italy, the authors describe five Late Middle-Upper Pleistocene depositional sequences that document the 100-ka eustatic cycle. They observe variability in the progradational architecture of these sequences, which they interpret to result from environmental changes. This reference is applicable to the development of age constraints on channels buried beneath the continental shelf in Estero Bay and near Point Sal.	[ ] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Rigsby, C., A.,	1998	Paleogeography of the Western Transverse Range Province, California: new evidence from the late Oligocene and early Miocene Vaqueros Formation	U.S. Geol. Surv. Bull.	This study explores the depositional environments, paleocurrents, sediment sources and shoreline paleogeography associated with deposition of the Vaqueros Formation. There is little to no data applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Ritz, J-F., Brown, E., T., Bourles, D., L.,	1995	Slip rates along active faults estimated with cosmic-ray–exposure dates: Application to the Bogd fault, Gobi-Altaï, Mongolia	Geology	The authors use 10Be to estimate the minimum ages for alluvial surfaces that have been offset along the Bogd fault in the Gobi-Altai of western Mongolia. These ages suggest a slip rate of 1.2 mm/yr, which is significantly less than the 20 mm/yr slip rate predicted by correlation of alluvial deposition with warm periods following the LGM. This low slip rate also suggest that larger magnitude earthquakes can occur along faults with low slip rates. This reference is relevant to the fault geometry model in the SSC in the discussion of analog fault systems.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Ritz, J-F., Vassallo, R., Braucher, R.,	2006	Using in situ–produced 10Be to quantify active tectonics in the Gurvan Bogd mountain range (Gobi-Altay, Mongolia)	Geol. Soc. Am. Spec. Paper	The authors reevaluate 10Be data using chi-square inversion analysis of depth profiles and an updated scaling model for spatial production rate variations to confirm low horizontal and vertical slip rates (1.5 mm/yr and 0.1-0.2 mm/yr, respectively) in the Gurvan Bogd mountain range for the Late Pleistocene-Holocene. This reference is relevant to the fault geometry model in the SSC in the discussion of analog fault systems.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Rivero, C., Shaw, J., H., Mueller, K., J.,	2000	Oceanside and Thirty-mile Bank Blind Thrusts: Implications for Earthquake Hazards in Coastal Southern California	Geology	This study uses seismic reflection data, 3D modeling, and historical seismicity to identify a blind thrust system between Los Angeles and the Mexican border. These faults are interpreted as reverse reactivated Miocene detachment faults that now have a reverse slip rate of about 1 to 2 mm/yr. The authors relate the faults to geomorphic processes including seafloor scarps and terrace uplift, the 1986 Oceanside earthquake and suggest the faults could potentially link posing a seismic hazard to southern California with infrequent, large earthquakes. This paper provides useful information for characterization of this fault system.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Roberts, D., L., Karkanas, P., Jacobs, Z.,	2012	Melting ice sheets 400,000 yr ago raised sea level by 13 m: Past analogue for future trends	EPSL	This work presents the results of a study of a sea level indicator in South Africa. There, an age of ~390 ka, corresponding to MIS 11, of a subtidal/intertidal deposit boundary indicates that eustatic sea level was +13 m. This work is applied to marine deposits near DCPP to understand the timing of potential Los Osos fault slip.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Rockwell, T., K.,	1988	Neotectonics of the San Cayetano fault, Transverse Ranges, California	Geol. Soc. Am. Bull.	This study focuses on characterization of the San Cayetano fault which trends into the Lion fault. The Lion fault is in close proximity to the southern Hosgri fault. This study does not provide much information critical to the SSC model.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Rockwell, T., K.,	1989	Behavior of individual fault segments along the Elsinore-Laguna Salada fault zone, southern California and northern Baja California: implications for the characteristic	U.S. Geol. Surv. Open File Rpt.	Rockwell describes the individual fault segments of the Elsinore-Laguna Salada fault zone, which include the predominantly strike-slip segments of Glen Ivy and Coyote Mountain and the predominantly dip-slip Laguna Salada segment. While the Glen Ivy and Coyote Mountain segments show variability in slip at a point along the fault, the Laguna Salada segment shows more repeatability of similar sized earthquakes. Rockwell concludes that although all three segments suggest characteristic earthquake behavior, events on dip-slip faults may be more consistent than strike-slip faults. This article is of little direct use to the DCPP SSC except that some segmentation concepts could be applied to analogous faults; however, segmentation concepts are more thoroughly described in other papers.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Rockwell, T., K., Nolan, J., Johnson, D.,	1992	Ages and Deformation of Marine Terraces between Point Conception and Gaviota, Western Transverse Ranges, California	Spec. Pub. SEPM	This study dated a number of marine terraces near the Santa Ynez mountains, and calculated uplift rates associated with movement along the Transverse Ranges. Most of the dating was conducted using U/Th and U/Pa. The data presented applies to deformation rates in the transverse range near the southern end of the Hosgri fault.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Rockwell, T., K., Vaughan, P., R., Bickner, F.,	1994	Correlation and age estimates of soils developed in marine terraces across the San Simeon fault zone, central California	Geol. Soc. Am. Spec. Paper	In this study the analysis of 17 soil profiles, recognizes a marine terrace chronosequence has been offset laterally and vertically across the San Simeon fault zone. The study correlates terraces across the fault zone based on soil development. The suggested terrace ages correlate to oxygen isotope stages 3, 5 and 7.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[x]	Rockwell, T., K., Lindvall, S., C., Herzberg, M.,	2000	Paleoseismology of the Johnson Valley, Kickapoo, and Homestead Valley Faults: Clustering of Earthquakes in the Eastern California Shear Zone	Bull. Seis. Soc. Am.	The authors collected paleoseismic data from 11 trenches at 7 sites across the 1992 Landers earthquake rupture (Johnson Valley, Kickapoo, and Homestead Valley faults) and found that previous events along the southern Johnson Valley and Kickapoo faults differed from the 1992 rupture and may have involved other segments. This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [x] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting
[ ]	Rockwell, T., K., Barka, A., A., Dawson, T., E.,	2001	Paleoseismology of the Gazikoy-Saros segment of the North Anatolia fault, northwestern Turkey: Comparison of the historical and paleoseismic records,	J. of Seis.	This study uses traditional paleoseismic methods to constrain the recurrence rate and slip per event, and estimate magnitudes of future earthquakes on the North Anatolian fault, Turkey. None of the data here are applicable to the DCPP SSC, and the paper does not introduce new methods that would benefit existing studies near DCPP.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [x] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Rockwell, T., K.,	2010	The non-regularity of earthquake recurrence in California: lessons from long paleoseismic records from the San Andreas and San Jacinto faults in southern	nt Advances in Geotechnical Earthqu	This extended conference abstract compares paleoseismic records of the San Andreas fault at Wrightwood, San Jacinto fault at Hog Lake, and North Anatolian fault. The author notes that California faults fluctuate between periods of regular recurrence and of non-regular occurrence, as opposed to the North Anatolian fault, which has maintained a regular recurrence interval for a considerable time. The author argues that relationships are the result of tectonic complexity, where the San Jacinto and San Andreas faults are flanked by numerous sub-parallel faults, all of which probably trade off stress transfer. This paper provides no new methods, and is a more a calls to arms to investigate these posited relationships. As such, little to no data here are of use to the DCPP SSC.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Rockwell, T., K., Klinger, Y.,	2013	Surface Rupture and Slip Distribution of the 1940 Imperial Valley Earthquake, Imperial Fault, Southern California: Implications for Rupture Segmentation and Dynamics	Bull. Seis. Soc. Am.	Using high-resolution aerial photography, the authors make 648 displacement measurements along 15 km (where imagery exists) of the 1940 Imperial Valley rupture. Average slip and maximum displacement were estimated as 5.5 m and 7 m, respectively, for this measured section, though significant variation along strike was observed (up to 30% along a rupture section). This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Rojahn, C., Ragsdale, J., T., Raggett, J., D.,	1982	Main-shock strong-motion records from the Meloland Road-Interstate Highway 8 overcrossing	U.S. Geol. Surv. Prof. Paper	This reference documents the strong-motion records from the Meloland Road-Interstate Highway 8 overcrossing 0.5 km SW of the Imperial fault and 18 km NW of the mainshock epicenter. The bridge was not significantly damaged, though evidence of relative motion between the abutments and surrounding fill material was observed. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Rojahn, C., Mork, P., N.,	1982	An analysis of strong-motion data from a severely damaged structure-the Imperial County Services Building, El Centro, California	U.S. Geol. Surv. Prof. Paper	This report documents the accelerograms from the damaged Imperial County Services Building and adjacent site and describes relative-displacement data. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Rolandone, F., Burgmann, R., Nadeau, R., M.,	2004	The evolution of the seismic-aseismic transition during the earthquake cycle: Constraints from the time-dependent depth distribution of aftershocks	Geophys. Res. Let.	In this fairly brief paper, the authors explore fault zone rheology near the base of seismicity by examining aftershocks following the Landers earthquake. The authors clearly demonstrate a time-dependence of the depth distribution of aftershocks. Following Landers, aftershocks exhibit a 3-km shallowing over a time span of 4 years.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Rolandone, F., Dreger, D., Murray, M.,	2006	Coseismic slip distribution of the 2003 Mw 6.6 San Simeon earthquake, California, determined from GPS measurements and seismic waveform data	Geol. Soc. Am. Bull.	Uses GPS and waveform inversions to model slip distribution for the 2003 San Simeon earthquake. Average peak slip is calculated to be between 0.61 and 2.37 m. In contrast to other notable CA reverse fault events, the San Simeon earthquake ruptured laterally and had a significantly larger than expected length to width aspect ratio. This rupture style may have reduced ground motions related to directivity and hanging wall effects. Unique rupture style may be applicable to other regional faults.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Rosenberg, L., I., Clark, J., C.,	1999	Southern San Gregorio fault: stepover segmentation vs. through-going tectonics [abstract]	Am. Assoc. Petrol. Geol.	Description from AAPG abstract. Study attempts to understand the relationship between the San Gregorio and the San Simeon (Hosgri in the abstract). Authors identify a 2-km-wide fault zone just north of point Sur with faults that offset Holocene colluvium and Pleistocene marine terraces. Authors note that at least some of the San Gregorio strain is transferred to intra-Salinian faults.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Rosenberg, L., I., Clark, J., C.,	2009	Map of the Rinconada and Reliz Fault Zones, Salinas River Valley, California (scale 1:250,000)	U.S. Geol. Surv. Sci. Investig. Map	The map and associated pamphlet include a compilation and synthesis of published and unpublished data on the Rinconada and Reliz faults, including their Neogene history. Evidence of late Pleistocene or Holocene movement along the section of the Rinconada fault closest to DCPP, the Rinconada Section, is described, along with summaries of trenching studies completed in this section. Although not presenting new data, this compilation provides information about the location, dip, and slip sense of the Rinconada fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Ross, D., C.,	1984	Possible Correlations of Basement Rocks Across the San Andreas, San Gregorio-Hosgri, and Rinconada-Reliz-King City Faults, California	U.S. Geol. Surv. Prof. Paper	The author attempts to reconcile offset issues related to the Salinian Block on the San Gregorio-Hosgri, San Andreas, and Rinconada-Reliz-King City fault zones through basement rock correlations. The author concludes that the origin of the Salinian block is not well resolved, citing two endmember models [1) 300 km of slip on the SAF supplemented by San Gregorio-Hosgri fault slip or 2) pre-SAF movement of a large composite terrane] as being deficient. Given the author's conclusions and the equivocal nature of his analysis, this reference is not relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Rubinstein, J., L., Ellsworth, W., L., Beeler, N., M.,	2012	Fixed recurrence and slip models better predict earthquake behavior than the time- and slip-predictable models: 2. Laboratory earthquakes	J. Geophys. Res.	Provides continued discussion of using fixed time and slip models versus time and slip-predictable models. Laboratory models suggest that over short time frames, elastic rebound does not explain earthquake behavior. However elastic rebound generally holds true for longer periods of observation. Again, suggests that fixed time and slip models (i.e. characteristic earthquakes) more accurately predict earthquake behavior.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Rubinstein, J., L., Ellsworth, W., L., Chen, K., H.,	2012	Fixed recurrence and slip models better predict earthquake behavior than the time- and slip-predictable models: 1. Repeating earthquakes	J. Geophys. Res.	Discusses the effectiveness of using time and slip-predictable models, rooted in Reid's elastic rebound theory, in accurately modeling the occurrence of earthquakes. Authors use repeating earthquakes from Parkfield, CA, Japan, and Taiwan to test whether earthquake sequences are better modeled by using simple fixed time and fixed slip models. The fixed time and slip models (i.e. characteristic earthquake) proved more accurate.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Ryan, H., F., Sliter, R., W.,	2008	Vertical tectonic deformation associated with the San Andreas fault zone offshore of San Francisco, California	Tectonophys.	This study interpreted faults in the Gulf of the Farallones from seismic reflection data to develop a finite element rupture model. The model is used to demonstrate little off-fault vertical tectonics, while the block between the San Andreas and San Gregorio faults is subsiding.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Rymer, M., J., Lisowski, M., Burford, R., O.,	1984	Structural explanation for low creep rates on the San Andreas fault near Monarch Peak, central California	Bull. Seis. Soc. Am.	With the exception of Monach Peak near the center of the creeping section, the creeping section of the San Andreas fault zone shows good agreement between near-fault and intermediate-scale geodetic measurements of right-lateral slip. The anomalously low near-fault creep at Monarch Peak may be due to active subsidiary faults that account for the difference in horizontal offset. The data presented in this article helps define how slip is accommodated on a portion of the creeping section of the SAF but likely is of little direct use in the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Rymer, M., J.,	1989	Surface rupture in a fault stepover on the Superstition Hills fault, California	U.S. Geol. Surv. Open File Rpt.	In order to address the potential importance of fault complexities associated with the stepover between the north and Imler strands of the Superstition Hills fault, Rymer (1) compares surface displacements of five events; (2) presents details of 1987 faulting; and (3) discusses the distribution of aftershocks along the fault and possible subsurface extent of the stepover. In the 1987 event, slip was transferred across strands in the subsurface through a minor splay, subsidiary crossover, and bedding-plane thrust faults, though net slip on the minor faults was much less than the amount on the two major strands. Additionally, the historic events did not consistently indicate the presence of a stepover and the subsurface extent of the stepover is poorly constrained. Rymer therefore concludes that observations of the central stepover on the Superstition Hills fault do not necessarily support fault segmentation. This article is of little direct use to the DCPP SSC except that some segmentation concepts could be applied to analogous faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Rymer, M., J., Tinsley, J., C., Treiman, J., A.,	2006	Surface fault slip associated with the 2004 Parkfield, California earthquake	Bull. Seis. Soc. Am.	Describes the surface fracturing, sense of slip, slip magnitude, and timing of slip associated with the 2004 Parkfield earthquake. Compares this data to that of a 1966 event along the San Andreas fault and Southwest Fracture Zone. The information presented in this article, although relevant to the SAF, has little to no data directly relevant to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Sachs, M., K., Heien, E., M., Turcotte, D., L.,	2012	Virtual California Earthquake Simulator	Seis. Res. Let.	This paper describes the Virtual California earthquake simulator. The authors note that the fault system in this model does not evolve, and is intended to simulate multiple runs of earthquakes on fault geometries as they currently exist. They use backslip to model fault interactions and a static-dynamic friction law following a Coulomb failure function to model failures. This model represents an alternative to typical SSCs.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Salisbury, J., B., Rockwell, T., K., Middleton, T., J.,	2012	LiDAR and Field Observations of Slip Distribution for the Most Recent Surface Ruptures along the Central San Jacinto Fault	Bull. Seis. Soc. Am.	The authors measure geomorphic offsets along the San Jacinto fault using LiDAR data, compare and combine results with field measurement, and develop a slip distribution curve dating back to 4 or 5 events. They apply these data to paleoseismology and to posit combined fault rupture possibility.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Sanders, C., O.,	1989	Fault segmentation and earthquake occurrence in the strike-slip San Jacinto fault zone, California	U.S. Geol. Surv. Open File Rpt.	This study of segmentation of the San Jacinto fault identifies twenty segments, 7 to 35 km long, based on seismogenic depth, change in strike, steps, and branches. The author argues that the short segments suggest future earthquake will be characteristic in length and magnitude and that past earthquakes terminated at these persistent segment boundaries.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Satake, K., Somerville, P., G.,	1992	Location and size of the 1927 Lompoc, California earthquake from tsunami data	Bull. Seis. Soc. Am.	Analyzes the tsunami records associated with the Lompoc earthquakes of November 4, 1927 and found the earthquake occurred offshore at about 34.2degN, 12075degW. Article states that the offshore location derived form tsunamis is consistent with that derived from seismic waveforms by Helmberger et al (1992).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Savage, J., C., Prescott, W.,	1978	Geodetic control and the 1927 Lompoc, California earthquake	Bull. Seis. Soc. Am.	Distortion between 1924 and 1957 of a geodetic quadrilateral near epicenter of 1927 Lompoc, California earthquake suggest thrust faulting on a northerly striking fault, indicating dextral slip on the Hosgri fault could not be a source. However, the article states that evidence is only marginally significant.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Savage, J., C.,	1993	The Parkfield prediction fallacy	Bull. Seis. Soc. Am.	Discusses the formulation of the "Parkfield prediction" and how it failed to account for less-contrived explanations of seismicity.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Schaff, D., P., Bokelmann, G., H.R., Ellsworth, W., L.,	2004	Optimizing Correlation Techniques for Improved Earthquake Location	Bull. Seis. Soc. Am.	This is a reference cited in the earthquake catalog appendix.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Scharer, K., M., Biasi, G., P., Weldon, R., J.,	2010	Quasi-periodic recurrence of large earthquakes on the southern San Andreas fault	Geology	This work describes the recurrence of large earthquakeson the southern San Andreas fault. This work has implications for the applicability of a time-independent Poisson process to earthquake recurrence.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Schneider, J-L., Fisher, R., V.,	1996	Obispo Formation, California: Remobilized Pyroclastic Material	U.S. Geol. Surv. Bull.	This is primarily a stratigraphic study of the Obispo Formation, focusing on water depths at the time of eruption and deposition, provenance of lithics, and paleogeography. There are no original data that constrain age and, as such, there are little to no data here applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Scholz, C., H.,	1989	Comments on models of earthquake recurrence	U.S. Geol. Surv. Open File Rpt.	The author argues that intrinsic uncertainty in earthquake recurrence precludes accurate long range prediction. A simple coupling model is used to show that this uncertainty can be reduced, especially if more is learned about earthquake dependence on initial conditions.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Scholz, C., H.,	1998	Earthquakes and friction laws	Nature	Scholz argues that the "traditional" view of tectonics (brittle layer overlying a ductile layer) is imprecise and less predictive than a constitutive law of rock friction and frictional stability regimes. This reference is relevant to understanding and estimating seismogenic thickness.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Scholz, C., H.,	2010	Large Earthquake Triggering, Clustering, and the Synchronization of Faults	Bull. Seis. Soc. Am.	Paper describes several examples of spatially and temporally clustered earthquake sequences on low slip rate faults (0.1-1.0 mm/yr) where historic and paleoseismic evidence suggest rupture sequences of multiple adjacent fault zones may occur partially in phase. Implies that faults with similar slip rates, orientations, and geologic settings can repeatedly rupture in clusters.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Scholz, C., H., Ando, R., Shaw, B., E.,	2010	The mechanics of first order splay faulting: The strike-slip case	J. Struct. Geol.	This paper contains little data specific to the DCPP site, but concepts from the paper can be applied to many strike-slip fault systems. The authors build on Ando et al. (2009) and show that major splay faults develop in the direction of the greatest stress vector when the primary fault becomes misaligned with principal stresses. Multiple splay faults may develop at nearly even distances from the primary fault to avoid the stress shadow of other faults. The authors find that, as opposed to small faults, crustal-scale splay faults generally are not linked kinematically to the primary faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Schulz, S., S.,	1988	Catalog of creepmeter measurements in California from 1966 through 1988	U.S. Geol. Surv. Open File Rpt.	This study summarizes about 20 years of creepmeter data from 38 USGS installations. The author notes the effects of the 1983 Coalinga earthquake in which steps in right-lateral creep were produced followed by below-average right lateral creep for a few years. Left-lateral creep was noted for a short period of time following the event at Parkfield. Creep was noted along a secondary surface rupture of the 1966 Parkfield earthquake, suggesting possible strain transfer to unmapped strands. Finally, a correlation between groundwater levels, seismic activity, and creep velocity was noted at some Parkfield stations. Most of these data have been superseded by later studies, and little here would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Schumann, R., R., Minor, S., A., Muhs, D., R.,	2012	Tectonic influences on the preservation of marine terraces: Old and new evidence from Santa Catalina Island, California	Geomorph.	This study uses new topographic, bathymetric, and stream-profile data to investigate the lack of prominent marine terraces on Santa Catalina Island that are present on all other Channel Islands. The authors note the presence of submerged terraces that lie far below glacial lowstand sea levels on all islands suggesting they have subsided tectonically. Recent and rapid uplift and northeast tilting of Santa Catalina Island is suggested by stream profile irregularities (i.e., convexities, knickpoints), steep canyons, deep dissection, and landslides. The authors suggest that this recent uplift may have removed marine terraces that were once present on the island. Uplift is attributed to a restraining bend on the Catalina fault. Data and concepts here may be anecdotally relevant for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Schwalbach, J., R., Bohacs, K., M.,	1996	Stratigraphic sections and gamma-ray spectrometry from five outcrops of the Monterey formation in southwestern California: Naples Beach, Point	U.S. Geol. Surv. Bull.	This paper presents a stratigraphic study of the Monterey Formation using outcrop examination in combination with gamma ray spectroscopy. The authors develop a stratigraphic framework for the study area, identify prominent stratigraphic surfaces, and develop a time transgressive stratigraphic sequence.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Schwartz, D., P., Coppersmith, K., J.,	1984	Fault Behavior and Characteristic Earthquakes: Examples From the Wasatch and San Andreas Fault Zones	J. Geophys. Res.	This is a classic paper that describes the discrepancy between Gutenberg-Richter magnitude frequency model and observed paleoearthquake magnitudes on the Wasatch and San Andreas faults. The authors argue the Gutenberg-Richter model underestimates the frequency of large earthquakes and that the characteristic earthquake is more likely to characterize earthquakes on these, and perhaps other faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Schwartz, D., P., Coppersmith, K., J.,	1986	Seismic Hazards: New Trends in Analysis Using Geologic Data	National Academy Press	The authors describe new (at the time) trends in seismic hazard analysis using geologic data, focusing on fault-zone segmentation and recurrence models and how they may contribute to the understanding of long-term earthquake potential. This reference is considered in the SSC model in the context of defining the term fault segment.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Schwartz, D., P.,	1988	Paleoseismicity and Neotectonics of the Cordillera Blanca Fault Zone, Northern Peruvian Andes	J. Geophys. Res.	This paper presents a paleoseismic study of an Andean normal fault zone. Slip per event, magnitude estimations, and recurrence are developed. The author suggests that the behavior of these Andean fault are similar to other prominent normal faults globally. Little to no date here appear useful to the DCPP SSC, although normal fault behavior described may be useful for characterization of normal faults an analogue.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Schwartz, D., P.,	1989	Paleoseismicity, persistence of segments, and temporal clustering of large earthquakes--examples from the San Andreas, Wasatch, and Lost River fault	U.S. Geol. Surv. Open File Rpt.	The study uses paleoseismic data to evaluate the interplay of recurrence and segmentation. Based on these data, the author observes persistent segment boundaries and slip at a point on the Lost River and Wasatch fault zones. This author argues that characteristic earthquakes will tend to rupture persistent segments.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Schwartz, D., P.,	2010	Do Large Earthquakes on Faults Follow a Gutenberg-Richter or Characteristic Distribution?: A Characteristic View	SSA Mtg.	This conference presentation explores the recurrence behavior of earthquakes generated by faults, specifically whether they exponentially distributed by size or similar in size. The author presents background information and definitions of the problem, then provides examples of faults exhibiting each type of behavior, noting that most seem to exhibit a characteristic behavior. The definition of a fault plane is considered with respect to the cloud of smaller events that tend to occur in the damage zone around the more discrete plane. The author concludes that globally, faults generally follow a characteristic earthquake distribution, while regions and a small number of faults exhibit an exponential distribution.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Schwartz, D., P.,	2012	Fault Segmentation and its Application to Predicting Fault Rupture	SSC Workshop	In this SSHAC SSC Workshop 2 presentation, Schwartz provides background and examples of previously characterized fault segments, and dynamic and static/kinematic factors to consider in fault segmentation. This presentation is considered within the range of technically defensible models for estimating rupture dimensions, particularly on faults that have paleoseismic data.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Schwartz, D., P., Haeussler, P., J., Seitz, G., G.,	2012	Why the 2002 Denali Fault Rupture Propagated Onto the Totschunda Fault: Implications For Fault Branching and Seismic Hazards	J. Geophys. Res.	The authors used LiDAR data to reinterpret the Denali-Totschunda fault intersection and information on the timing of paleoearthquakes on these faults to analyze why the rupture propagated from the Denali to the Totschunda fault. They discuss rupture propagation at branches and step-overs and state that differences in accumulated strain on separate fault segments help control the branching direction. However, the authors state this observation is applicable to high-slip-rate strike-slip (~15 mm/yr) faults, which is an order or magnitude greater than the Hosgri slip-rate. The authors also discuss fault connectivity at depth vs the surface and the role connectivity plays in the potential for rupture propagation through fault intersections (see Hardebeck, 2013, for an analysis of the Shoreline fault connectivity to the Hosgri fault at depth). Although high slip rates seem to play an important role in determining the rupture path at branching intersections, other structural elements and geometry of fault intersections should be considered when determining the likelihood of rupture to propagate from one fault to another in the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Sedlock, R., L., Hamilton, D., H.,	1991	Late Cenozoic tectonic evolution of southwestern California	J. Geophys. Res.	Presents a reconstruction of the tectonic evolution of the southern Coast Ranges, western Transverse Ranges, and borderland regions of California since 30 Ma. Provides limited information relevant to the San Gregorio-San Simeon-Hosgri fault system.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Seeber, L., Sorlien, C., C.,	2000	Listric thrusts in the western Transverse Ranges, California	Geol. Soc. Am. Bull.	States that main faults accommodating current shortening in western Transverse Ranges are likely listric. Proposes a listric thrust model where slip is proportional to backlimb dip. This article is specific to the area in southern California of west-trending folds and faults in the Transverse Ranges but may be useful in the tectonic model.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Selander, J., Oskin, M., Ormukov, C.,	2012	Inherited strike-slip faults as an origin for basement-cored uplifts: Example of the Kungey and Zailiskey ranges, northern Tian Shan	Tectonics	This study of the Tian Shan mountains uses a variety of methods to explore basement cored uplift of the range by high angle reverse faults, which the authors argue are not conducive to accommodation of uplift. The authors argue that an inherited strike slip fault began accommodating oblique strain, which causes upward propagation of reverse and oblique faults from depth. The system is similar to a flower structure. Structural concepts of this paper may be useful for the DCPP SSC.	[ ] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [x] All faults [ ] Tectonic setting
[ ]	Sella, G., F., Dixon, T., H., Mao, A.,	2002	REVEL: A model for Recent plate velocities from space geodesy	J. Geophys. Res.	This paper presents the REVEL global plate velocity model based on space geodesy. Data were collected from 1993-2000. The authors find some discrepancies with the NUVEL-1A model, which they attribute to tectonic complexities overlooked by that model. Other velocity differences are interpreted to represent actual plate rate changes related to the time scale each model covers. The authors believe their model applies the last 10,000 years. The velocities and motions presented here may be useful for the DCPP SSC in terms of North American-Pacific Plate boundary motion.	[x] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Sharp, R., V.,	1982	Comparison of 1979 surface faulting with earlier displacements in the Imperial Valley	U.S. Geol. Surv. Prof. Paper	This reference compares the surface ruptures of the 1940 and other historic and prehistoric fault displacements with the 1979 Imperial Valley earthquakes. The comparison suggests preexisting fault strands were reactivated during the 1979 event. Surface displacements were generally smaller for the 1979 event than the 1940 event.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [ ] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [x] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Sharp, R., V., Lienkaemper, J., J.,	1982	Preearthquake and postearthquake near-field leveling across the Imperial fault and the Brawley fault zone	U.S. Geol. Surv. Prof. Paper	This report documents observations of coseismic displacement and pre- and post-earthquake creep. Although creep was observed for 2-5 months prior to the 1979 event, during the 10 days preceding the earthquake no creep was observed. Total surface slip on the Imperial fault including projected afterslip was estimated at 50-80 cm. Afterslip was found to vary linearly with time and was approximated by log(t). This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Sharp, R., V., Lienkaemper, J., J., Bonilla, M., G.,	1982	Surface faulting in the central Imperial Valley	U.S. Geol. Surv. Prof. Paper	This reference describes the surface rupture of five fault zones (Imperial, Brawley, Superstition Hills, San Andreas, Rico) during or after the 1979 Imperial Valley earthquake. The Superstition Hills fault and ruptured section of the San Andreas were both a substantial distance from the epicenter.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Sharp, R., V.,	1982	Tectonic setting of the Imperial Valley region	U.S. Geol. Surv. Prof. Paper	This reference describes the regional tectonics, formation, stratigraphy, Quaternary volcanism, and Cenozoic deformation of the Salton Trough. The San Andreas, Imperial, Brawley, San Jacinto, Superstition Hills, and Elsinoire fault zone are also described in the context of the Imperial Valley and Salton Trough. The descriptions of the tectonic setting of the Imperial Valley are likely too far south to be applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Shaw, B., E.,	2004	Variation of large elastodynamic earthquakes on complex fault systems	Geophys. Res. Let.	This study modeled rupture on a large number of faults with various lengths and slip rates. The author found that time and slip variability are greater near segment boundaries, slip variability should not be used as proxy for time variability, and that the largest fault segments and events are the most regular in terms of slip and time variability.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Shaw, B., E.,	2006	Initiation propagation and termination of elastodynamic ruptures associated with segmentation of faults and shaking hazard	J. Geophys. Res.	This study modeled a complex fault zone and found that earthquake are persistent in directivity on individual faults, and often nucleate near stepovers and fault terminations. Additionally, the author notes that large events tend to originate farther from segment ends and, therefore, magnitude may have a location dependence.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Shaw, B., E., Dieterich, J., H.,	2007	Probabilities for jumping fault segment stepovers	Geophys. Res. Let.	Numerical simulations of segmented fault systems to determine the probability of elastodynamic ruptures jumping segment stepovers. Article determines that probability decreases exponentially with distance. May be useful in determining the likelihood of fault segmentation and weighting associated with segmentation in the logic tree.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Shaw, B., E., Wesnousky, S., G.,	2008	Slip-Length Scaling in Large Earthquakes: The Role of Deep-Penetrating Slip below the Seismogenic Layer	Bull. Seis. Soc. Am.	This study uses an elastodynamic rupture model to demonstrate that slip in large earthquakes can penetrate below the seismogenic layer. A large portion of total moment (one third) occurs within the sub-seismogenic layer.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Shaw, B., E.,	2009	Short Note: Constant Stress Drop from Small to Great Earthquakes in Magnitude-Area Scaling	Bull. Seis. Soc. Am.	Shaw presents a magnitude-area scaling relationship that treats stress drop as constant for small and large earthquakes, finding this assumption fits the data better than when stress drop increases with area. This model is fit to strike-slip earthquake data from Hanks and Bakun (2008), Wells and Coppersmith (1994), Hanks and Bakun (2002), and WGCEP (2003) using a least-squares regression. The scaling relation presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Shaw, B., E.,	2011	Surface-Slip Gradients of Large Earthquakes	Bull. Seis. Soc. Am.	In this modeling study, the author is able to fit the differences in slip from several large earthquakes to normal distributions. The study finds that, when accounting for separation between slip measurements on each rupture, variability is less than 1 m. Even when measurements are separated by greater distances, slip is quite similar (e.g. at 20 km separation, slip measurements vary only about 1.5 m). The author relates this observation to constant stress drop a length scales smaller than the rupture.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Shaw, B., E.,	2013	Appendix E: Evaluation of Magnitude-Scaling Relationships and Depth of Rupture (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	Shaw analyzes four magnitude-area relations for their applicability to UCERF3: Ellsworth-B, Hanks and Bakun (2002), Shaw (2009), and a Wells and Coppersmith-type linear relation. Shaw uses standard deviations and Akaike information criterion (awarding minimization of errors and penalizing extra parameters) to assess the fit of these relations to the WGCEP03 dataset and the Hanks and Bakun dataset. Shaw finds (1) the Hanks and Bakun (2002) and Shaw (2009) relations work best for the entire magnitude range, (2) Ellsworth-B and Shaw (2009) work best for large earthquakes (with Ellsworth-B only fitting M>6.5), and (3) the original Wells and Coppersmith-type relations do not fit the data well enough at large magnitudes and therefore argues against using this type of relation. Shaw also addresses issues with moment balancing and rupture depth extent. The comparison of the four magnitude-area relations (particularly Figure E1 and its associated discussion) may be relevant to the SSC earthquake rate model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Shaw, B., E.,	2013	Earthquake Surface Slip-Length Data is Fit by Constant Stress Drop and is Useful for Seismic Hazard Analysis	Bull. Seis. Soc. Am.	Shaw presents a method of using observed surface slip to balance slip rates rather than moment rates and derives a new constant stress-drop slip-length scaling relation. Shaw also analyzes four magnitude-area scaling relations (Ellsworth-B, Hanks and Bakun [2002], Shaw [2009], and Wells and Coppersmith [1994]) and their fit to two different datasets (WGCEP03 and Hanks and Bakun [2008]), noting the largest differences between relations in the M 6 range. Slip-length scaling implied by magnitude-area estimates with surface slip-length measurements leads to ~30% more slip estimated from magnitude area than slip length. Additionally, when fitting slip-length scaling with different functional forms, Shaw observed sublinear slip scaling for the largest events and a breakdown of L scaling for implied slip from magnitude-area and surface-slip data. The comparison of the four magnitude-area relations (particularly Figure 4 and its associated discussion) may be relevant to the SSC earthquake rate model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Shen, Z.-K., Jackson, D., D., Kagan, Y., Y.,	2007	Implications of Geodetic Strain Rate for Future Earthquakes, with a Five-Year Forecast of M5 Earthquakes in Southern California	Seis. Res. Let.	In this article, the authors present the hypothesis that earthquake rate is proportional to strain rate and test this hypothesis against future earthquake occurrence. The authors make two key assumptions: (1) seismicity rate is steady and proportional to the average horizontal maximum shear strain rate during interseismic time periods and (2) the shape of the earthquake magnitude distribution is spatially invariant and follows a tapered G-R relationship but the amplitude distribution varies spatially and is proportional to the maximum horizontal shear strain rate. The authors determine that the spatial concentration of earthquakes matches strain rate concentration well with ~75% of events occurring within ~25% of the highest strain rate area with several caveats addressed in the text. The authors state that if the earthquake occurrence rate is proportional to the strain rate, then strain rate may be a better intermediate-term predictor of earthquakes than predictors based on historical seismicity or geologic information which reflect more long-term rather than intermediate-term behavior of earthquake occurrence. They also define limitations of using geodetic data to constrain strains. This article presents an application of geodetic data that may be useful in assessing seismicity in the DCPP vicinity as well as limitations of geodetic data that should be considered when completing the Stress/Strain Inversion project.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Sibson, R., H.,	1982	Fault zone models, heat flow, and the depth distribution of earthquakes in the continental crust of the United States	Bull. Seis. Soc. Am.	Based on analyses of continental crust in the United States, Sibson found the maximum depth of seismogenic faulting is correlated with the transition from brittle faulting to plastic flow and that larger earthquake (ML > 5.5) often nuclear near the base of the seismogenic zone. This reference is relevant to understanding and estimating seismogenic thickness.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Sibson, R., H.,	1986	Earthquakes and rock deformation in crustal fault zone	Ann. Rev. Earth Planet. Sci.	Sibson compiles and describes field data that can be used to help construct conceptual fault zone models. This reference is relevant to understanding and estimating seismogenic thickness.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Siddall, M., Rohling, E., J., Almogi-Labin, A.,	2003	Sea-level fluctuations during the last glacial cycle	Nature	This paper presents a global sea level curve based on oxygen isotope-constructed water residence times in the Red Sea. An exchange flow hydraulic model is developed and sea level reconstructions normalized to climate fluctuations. The resulting centennial-scale sea level reconstruction has ±12 m uncertainty. The reconstruction in this paper may be useful for assessment of marine terraces in the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Sieh, K., E.,	1978	Central California foreshocks of the great 1857 earthquake	Bull. Seis. Soc. Am.	Documents magnitude and location of two foreshocks of the great 1857 earthquake. Uses the location of these foreshocks to conclude the 1857 rupture originated on a fault segment that historically had moderate activity and propagated into a historically quiet segment. This article presents historical foreshock information about the SAF but may have little direct application to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Sieh, K., E.,	1978	Slip along the San Andreas fault associated with the great 1857 earthquake	Bull. Seis. Soc. Am.	360 to greater than 400 km of the San Andreas fault ruptured during the great 1857 earthquake, including several tens of kilometers of the currently creeping reach. This article quantifies offsets associated with this earthquake, as well as the seismic moment and depth of rupture, but may have little direct application to the SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Sieh, K., E.,	1982	Slip along the San Andreas fault associated with the earthquake	U.S. Geol. Surv. Prof. Paper	This report describes the surface rupture that formed along the SAF following the 1979 Imperial Valley earthquake and draws comparisons to fracturing associated with a 1968 event. The comparisons of these two events are used to describe features and properties of the fault zone, and Sieh concludes that the section of the Imperial fault that failed seismically in 1979 is mechanically different from other fault sections. This reference likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Sieh, K., E., Jahns, R., H.,	1984	Holocene activity of the San Andreas fault at Wallace Creek, California	Geol. Soc. Am. Bull.	Investigations of offset of Wallace Creek indicate the average slip rate along the SAF has been 33.9 ± 2.9 mm/yr for the past 3,700 yr and 35.8 + 5.4/-4.1 mm/yr for the past 13,250 yr. The long-term slip rates at Wallace Creek are virtually the same as geodetically derived maximum fault-slip rates. The authors use these rates and measured dextral slip to calculate the period of dormancy before past 3 great earthquakes. They also speculate the timing of the next great earthquake on the SAF. The authors also consider the relative velocity between the Pacific and NA plates and the SAF and discuss the potential role of the B&R and San Gregorio-Hosgri fault in accounting for the discrepancy. This article provides an estimate for the slip rate on the SAF and also touches on the significance of this slip rate relative to the Pacific and NA plates. This discussion may be useful, however other articles provide a more thorough analysis of this discrepancy.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Sieh, K., E., Jones, L., M., Hauksson, E.,	1993	Near-field investigations of the Landers earthquake sequence, April to July 1992	Science	This study assesses surface deformation associated with the 1992 Landers earthquake, as well as provides a summary of pre-, fore- and mainshock data, earthquake source parameters, and rupture characteristics. The authors conclude that the relatively short rupture, with large surficial offsets indicate a high-stress drop event. A wide variety of data here may be useful for characterizing seismic sources in the Mojave.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Silver, E., A.,	1978	The San Gregorio-Hosgri Fault Zone: An Overview	Cal. Div. Mines Geol. Spec. Rpt.	Provides an overview of papers in the volume and defines the problems of fault location, seismicity, and offset history of the San Gregorio-Hosgri fault zone. Additionally, this overview highlights Point Sur, Cape San Martin, San Simeon, and south of Point Sur as "problem areas" for the concept of continuity of the San Gregorio-Hosgri fault zone. Silver concludes there is continuity between the Sur and Hosgri faults but cannot definitively state the southern extent of the Hosgri. This overview also comments on Holocene displacement and offset details for the San Gregorio fault. However, these details are from papers within the volume.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Silvester, R., Ho, S., K.,	1972	Chapter 74: Use of crenulate shaped bays to stabilize coasts	Coastal Eng.	This paper discusses the morphology of coastline. These concepts were used to establish the paleogeographic reconstruction of a paleo-coastline offset by the Hosgri fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Silvester, R.,	1976	Chapter 82 Headland Defense of Coasts	Coastal Eng.	This work considers the morphology of coastlines and is used in establishing the paleogeographic reconstruction of the shoreline that is offset by the Hosgri fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Simila, G., Stakes, D., S., Begnaud, M., L.,	2006	Analysis of the seismicity of the San Gregorio and Monterey Bay fault zones, Monterey Bay region, California [abstract]	Seis. Res. Let.	Using seismicity data from 1926-1999 in the Monterey Bay Region, the authors describe the San Gregorio and Monterey Bay fault zones: the San Gregorio fault is found to be dipping ~50°-70° downward to the east with deeper thrust faulting and shallower oblique right slip; the Monterey Bay fault is found to be vertical with right-lateral slip.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Simons, M., Fialko, Y., Rivera, L.,	2002	Coseismic deformation from the 1999 Mw 7.1 Hector Mine, California, Earthquake as inferred from InSAR and GPS observations	Bull. Seis. Soc. Am.	This work presents InSAR and GPS-derrived deformation measurements. This work is relevant to DCPP because the Hector Mine earthquake is an analog for some of the rupture sources.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Simpson, G., D., Thompson, S., C., Noller, J., S.,	1997	The northern San Gregorio fault zone: evidence for the timing of Late Holocene earthquakes near Seal Cove, California	Bull. Seis. Soc. Am.	Uses paleoseismic and archaeologic investigations to determine the location, style, and timing of slip events on the northern San Gregorio fault near Seal Cove in Moss Beach, California. The MRE occurred between A.D. 1270 and 1775 and the penultimate event occurred between A.D. 620 and 1400. These events resulted in 3-5 m of displacement. Presents data to support San Gregorio is an active fault and that it accommodates strain along the Pacific/North American plate margin. This information may be useful in characterizing the recurrence interval and seismicity on faults south of the northern San Gregorio.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Simpson, R., W.,	2003	Appendix F: Estimated Changes in State on San Francisco Bay Region Faults Resulting from the 1906 and 1989 Earthquakes (USGS OFR 03-214)	U.S. Geol. Surv. Open File Rpt.	In this appendix, Simpson uses an elastic dislocation model to calculate average Coulomb stress change which can be divided by the estimated loading rate to calculate the "clock change" or time required to bring the fault back to the original state. Clock changes were calculated for the 1906 and 1989 earthquakes and then converted to a BPT-state step using the event recurrence time. Some stated issues with this model include the assumption of long-term (decades to centuries) elastic halfspace behavior, exploits an unlikely long-term tectonic loading mechanism, and smooths stress concentrations over broad areas. This model may be relevant to the SCC recurrence model, though the limitations highlighted in the appendix suggest this may be an oversimplification of the system.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[ ]	Simpson, R., W., Barall, M., Langbein, J.,	2006	San Andreas fault geometry in the Parkfield, California, region	Bull. Seis. Soc. Am.	Aftershocks of 2004 Parkfield earthquake form straighter connection between San Andreas segments than mapped trace of the fault itself. San Andreas fault surface near Parkfield may have been deflected in its upper ~6 km by nonelastic behavior of upper crustal rock units. This article speculates about the evolution of the SAF geometry, where a warped section may become too deformed for strike-slip motion and slip may therefore be transferred to a straighter surface. This interpretation may give insight to slip and deformation on strike-slip faults where locked sections exist, but has little direct application to the SSC.	[ ] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [x] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[x]	Skene, K., Piper, D., J., Aksu, A.,	1998	Evaluation of the global oxygen isotope curve as a proxy for Quaternary sea-level by modeling of delta progradation	J. Sed. Res.	The authors use a sediment transport model to assess the influence of rapid Quaternary sea-level change on delta progradation in the eastern Mediterranean. They found the delta architecture observed in seismic profiles could not be reproduced directly based on sea level estimates from a scaled global oxygen isotopic curve and required corrections from independent sea level estimates based on geological data from other locations. This difference between isotopic and geological estimates follows a linear trend. This reference is applicable to the development of age constraints on channels buried beneath the continental shelf in Estero Bay and near Point Sal.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [x] Other [ ] None	[x] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Slawson, W., F., Savage, J., C.,	1983	Deformation near the junction of the creeping and locked segments of the San Andreas fault, Cholame Valley, California (1970-1980)	Bull. Seis. Soc. Am.	Presents a dislocation model of the San Andreas fault near Cholame, California that reproduces the transition from fault creep to locked condition on the surface trace and the observed deformation of nearby geodetic networks. The kinematic model presented in this article may be useful in understanding how slip is distributed both at depth and at distance along a fault, but may have little direct application to the SSC.	[ ] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting

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☐	Slemmons, D., B., Clark, D., G.,	1991	Independent Assessment of the Earthquake Potential at the Diablo Canyon Power Plant, San Luis Obispo County, CA. (Safety Evaluation Report Related to the	USNRC	This report provides an independent assessment of the geological, geophysical, and seismological data used to characterize potential seismic sources affecting DCPP in the LTSP. This report largely summarizes previously published work on local and regional faults, regional seismicity, the determination of Mmax, and SSCs of "capable faults" and Mmax in the DCPP vicinity. The authors generally characterize the Hosgri and Los Osos fault zones similarly as in the LTSP; however, an alternative model for the SWBZ is presented.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Sliter, R., W., Triezenberg, P., J., Hart, P., E.,	2009	High-resolution seismic reflection and marine magnetic data along the Hosgri Fault Zone, central California	U.S. Geol. Surv. Open File Rpt.	This report documents the acquisition and processing of high-resolution seismic-reflection and marine magnetic data collected on the continental shelf between Piedras Blancas and Point Sal. This data was the primary set used in Johnson and Watt (2012) and the Seismic Stratigraphy Project (PG&E, 2013).	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Smith, D., L., Angell, M., A.,	1990	Neogene thrust kinematics in the San Luis Range, south central California Coast Range -- Balanced cross sections of basement involved thrust faults [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes Namson and Davis' balanced cross sections, potential issues, and present two alternative cross sections that better fit data and surface geology. Although their two cross sections differ in the model used to characterize structures in the Franciscan, both predict late Neogene slip rates of 0.2-0.6 mm/yr on thrust faults and suggest a similar deposition of Oligocene and Miocene sediments of the Pismo Syncline in a tilted half-graben bounded by the Miguelito fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	So. Cal. Water Co.,	1994	Hydrogeologic Investigation: Edna Valley Well Location Study	Unpub. Consult. Rpt.	This consulting report presents an analysis of potential well locations in Edna Valley, including a description of the primary geologic units (Franciscan Fm., Obispo Fm., Monterey Fm., Squire Member of the Pismo Fm., and the Paso Robles Fm.) and the Los Osos and Edna faults. Several geologic cross sections are presented. In the area of the Lewis Lane wells, the Squire is found to be ~200 ft thick and in the vicinity of Highway 227 and Biddle Ranch Road, Paso Robles is through to be at least 200 ft thick. In the vicinity of the Greystone well, unconsolidated sediments are found to be thin and overlying volcanics and Franciscan basement.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Somerville, P., G., Smith, N., F., Graves, R.,	1997	Modification of empirical strong ground motion attenuation relations to include the amplitude and duration effects of rupture directivity	Seis. Res. Let.	This study uses empirical analysis of near fault data to refine strong ground motion attenuation relations (of Abrahamson and Silva, 1997) to incorporate rupture directivity effects. Effects depend on the fraction of the fault that lies between the site and the hypocenter and the angle between the fault plane and the hypocenter-site path. Ruptures toward a site increase spectral acceleration and decrease duration. For strike slip faults, directivity effects along a fault increase with distance from the epicenter. Directivity effects on dip-slip faults are relatively uniform, and greater updip from the hypocenter, indicating a smaller degree of spatial variation. Results of this study may be useful for the DCPP SSC, although the paper is better suited to the ground motion characterization.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Somerville, P., G., Irikura, K., Graves, R.,	1999	Characterizing Crustal Earthquake Slip Models for the Prediction of Strong Ground Motion	Seis. Res. Let.	This paper compiles source parameters and analyses slip models. The authors find that for strike-slip faults, slip increases with depth, while slip distribution is less regular for dip-slip faults. Average asperity area occupies 22% of the rupture area, while the large asperity accounts for 17.5% of rupture area. Slip on asperities is up to twice the average for the rupture, and the hypocenter usually lies outside of asperities. Several characteristics scale self-similarly with seismic moment including slip duration, asperity area, rupture dimensions. Slip velocity remains constant. The authors develop an alternative to represent average characteristics of slip models by computing Fourier transforms of slip function and analyzing spatial wavenumber spectra. Little here is of use to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Somerville, P., G.,	2009	Analysis of inhibition of faulting at fault branches (Appendix J of Shoreline Report)	Unpub. Consult. Rpt.	To test the possibility of a Hosgri-Shoreline fault rupture, this appendix presents results of dynamic rupture modeling using the methods of Kame et al. (2003). An analysis of six earthquakes involving rupture on branched faults that represent three possible kinds of fault branching behavior are presented. Of the six events, the Kokoxili earthquake is the most relevant to the potential Hosgri-Shoreline branching; however, analysis of this event was inconclusive due to uncertainty in the stress field orientation, though the observations are potentially consistent with the Kame et al. (2003) model. This would suggest ruptures on the Hosgri are inhibited from rupturing onto the Shoreline fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Sommerfield, C., K., Wheatcroft, R., A.,	2007	Late Holocene sediment accumulation on the northern California shelf: Oceanic, fluvial, and anthropogenic influences	Geol. Soc. Am. Bull.	The authors describe the continental shelf sedimentary record (lithology, sediment accumulation rates, variation in shelf deposition environment from late Holocene to historical time) off of northern coastal California, focusing on shelf sediments fed by the Eel and Klamath Rivers. The mean sediment accumulation rate in the shelf is 3-6 mm/yr and sediment cores show an upward-fining trend interpreted to represent the transition from transgressive to highstand sedimentation conditions in the late Holocene. Although Hogarth et al. (2012) cited the sediment accumulation rates presented in this article, the rates and other information in this article are not directly applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Sorlien, C., C., Kamerling, M., J., Mayerson, D.,	1999	Block Rotation and Termination of the Hosgri Strike-Slip Fault, California, from Three-Dimensional Map Restoration	Geology	New structure-contour maps quantify post-Miocene right-lateral slip across the southern Hosgri fault to 3.5 km which is absorbed by folding, thrust overlap, and block rotation. Restored part of a block located to the east rotated 8 degrees clockwise, resulting in an estimated 7 km of dextral shear for a total of 10.5 km of post-Miocene displacement. This article is useful in characterizing the slip sense/rate and post-Miocene magnitude of displacement along the Hosgri and how slip may be accommodated by clockwise block rotation.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Sorlien, C., C., Nicholson, C., Luyendyk, B., P.,	1999	Miocene extension and post-Miocene transpression offshore of south-central California (including Plate 1 [Seismic Reflection Profiles])	U.S. Geol. Surv. Bull.	Used seismic reflection data to document geometry of structures that accommodated the deformation associated with the transition of the Santa Maria basin and northwest margin of the western Transverse Ranges from subduction to transtensional to a transpressional plate boundary, which included ~90 degree clockwise rotation of the western Transverse Ranges. Offshore well data was used to correlate sediments affected by these transitions. Information presented in this article may be applicable to developing the tectonic model.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Sorlien, C., C.,	2012	Late Cenozoic kinematic model for transfer of strain along the California margin	SSC Workshop	In this SSHAC SSC Workshop 2 presentation, Sorliens interpretations of offshore seismic data include: oblique and left-lateral faults terminating into the Hosgri; that the Santa Lucia Bank fault is buried by hundreds of meters of potentially plio-Quaternary material; 2 km of sharp right offset at NNW-SSE striking faults in Arguello Canyon; and potentially wavecut or subaerially exposed planar basement/"old" unconformities at >1 km in offshore Santa Maria Basin. In the SSC model, this presentation was used to help characterize the Santa Lucia Bank fault and the West Basin-Southwest Channel fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Sorlien, C., C., Seeber, L., Broderick, K., G.,	2013	The Palos Verdes anticlinorium along the Los Angeles, California coast: Implications for underlying thrust faulting	Geochem. Geophys. Geosyst.	The authors use several 5000 km of seismic lines (many in paper) and 19 logs and paleontology from 19 wells to identify two levels of thrust faults in the Palos Verdes anticlinorium that dip northeast from the San Pedro basin (offshore of the Los Angeles basin) beneath the Los Angeles basin. They intersect previously known southwest-verging blind thrusts. The authors present three fault evolution models of the Palos Verdes anticlinorium and note that fault geometries and kinematics in some models may generate large earthquakes with potential for ground motion and tsunami hazard. The authors also estimate a slip rate between 1.1 and 1.6 mm/yr based on structural relief, consistent with 3 km of shortening in Pliocene-Quaternary time. Results here may be useful if characterizing faults in this system for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Sowers, J., M., Unruh, J., R., Lettis, W., R.,	1994	Relationship of the Kickapoo fault to the Johnson Valley and Homestead Valley faults, San Bernardino County, California	Bull. Seis. Soc. Am.	The authors describe the rupture associated with the 1992 Mw 7.3 Landers earthquake as initiating on the Johnson Valley fault and propagating to the Homestead Valley fault. The rupture was concentrated on the previously unrecognized Kickapoo (Landers) fault, which accommodates slip between the Johnson Valley fault and the Homestead Valley fault. These three faults are considered to form an "interlinked system". This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Sowers, J., M.,	2012	Stratigraphic and Geophysical Data from Historical Oil and Gas Wells near the Diablo Canyon Nuclear Power Plant	Unpub. Tech. Rpt.	This study summarized and evaluated data from 26 oil and gas wells in the vicinity of the DCPP. Data include scans of original well logs, digitized sonic logs, and a tabulation of well data. The author provides brief descriptions and interpretations of stratigraphy for each of the logs. Several faults (Hosgri, Los Osos, Edna, Indian Knob and unnamed/speculated) are discussed in Wells 1, 4, 10, 11, 13, 22, 24 of the report.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Spinelli, G., A., Field, M., E.,	2003	Controls of tectonics and sediment source locations on along-strike variations in transgressive deposits on the northern California margin	Marine Geol.	The authors determine that thick deposits of coastal/estuarine and marine transgressive sediment accumulated on the Eel River margin during sea level rise post-LGM. While long-term structural trends have a minor affect on the distribution of early transgressive coastal and estuarine deposits and short-term sediment accumulation, tectonic deformation strongly influenced the long-term pattern of transgressive marine sediment accumulation. Additionally, fine-grained sediment dispersed from the Eel River likely accumulated on the slope before, during, and after the last lowstand.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Spotila, J., A., Niemi, N., A., Brady, R.,	2007	Long-term continental deformation associated with transpressive plate motion: The San Andreas fault	Geology	This study used basic geomorphic observations and analyses along strike of the San Andreas fault, coupled with previous data from rock uplift studies, to evaluate crustal response in the transpressive tectonic regime. The authors find that rock uplift is concentrated in the near-field along the fault, but not in areas where fault orientation is oblique with plate motion. The authors suggest that this unintuitive result is likely related to local structural complexity, crustal anisotropy, surface processes, climate, and preferential uplift in areas of greater rock weakness. This paper contains little no information useful for the DCPP SSC.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Spudich, P., Chiou, N.,	2008	Directivity in NGA ground motions: analysis using isochrone theory	Earthq. Spectra	This reference documents a directivity correction to NGA ground motion prediction models that was developed with empirically determined coefficients and physically-based directivity predictors. These predictors simplify the computation of synthetic seismograms to help identify the main factors affecting directivity. This reference is more relevant to the GMC than the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Stanford, J., D., Hemingway, R., Rohling, E., J.,	2011	Sea-level probability for the last deglaciation: A statistical analysis of far-field records	Global and Planetary Change	The authors attempt to reconcile diverse records of sea level rise from six key far-field deglacial sea-level records by performing a Monte Carlo statistical analysis to determine the highest-probability sea-level history which fully accounts for realistic methodological and chronological uncertainties in all these records. The authors find a robust signal from meltwater pulse 1A, which began at about 14.6 ka BP, and a much broader signal from meltwater pulse 1B, which began at about 11.3 ka BP. The timing and rate of sea-level rise during meltwater pulses is an important consideration for evaluating the potential ages of unconformities and submerged shorelines that are used as strain gauges for the offshore parts of the Hosgri, San Simeon, Los Osos, San Luis Bay, Shoreline, Wilmar Avenue, and Casmalia faults.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Stanley, K., O., Surdam, R., C.,	1984	The role of wrench fault tectonics and relative changes of sea level on deposition of upper Miocene-Pliocene Pismo Formation, Pismo Syncline, California	Spec. Pub. SEPM	This paper describes stratigraphy of the Pismo Formation in a sequence stratigraphic context, and relates episodes of deposition/erosion to tectonic events. The authors indicate that the formation records basin subsidence from the late Miocene through early Pliocene. Gradual shoaling and progressively limited geographic extent of basins record tectonic uplift thereafter into the Quaternary.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☐	Stanley, R., G., Johnson, T., A., Swisher, C., C.,	1995	Age of Lospe Formation (early Miocene) and origin of the Santa Maria Basin, California	U.S. Geol. Surv. Bull.	The Lospe Formation (base of the Neogene Santa Maria basin) was deposited about 18-17 Ma. Data supports that the eruptive source of Lospe tuffs is near Tranquillon Mountain, 30 km south of Lospe outcrops. The Lospe Formation is restricted to the central Santa Maria basin and records bathymetric deepening, volcanism, active faulting, and rapid tectonic subsidence that initiated with regional transtension and clockwise rotation of western Transverse Ranges (~18 Ma). This article presents some information relevant to the tectonic model (initiation of rotation of the Transverse Ranges) but otherwise provides little information useful in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Stanley, R., G., Wilson, D., S., McCrory, P., A.,	2000	Locations and ages of middle Tertiary volcanic centers in coastal California	U.S. Geol. Surv. Open File Rpt.	Summarizes (via map and three tables) available information on the locations and ages of late Oligocene to middle Miocene volcanic centers in coastal California. Coastal California refers to the area west of the San Andreas fault from Point Arena to the northwestern tip of Mexico, but also include several locations east of the San Andreas. Constrains age of volcanic centers in region near DCPP from generally about 20-10 Ma, but otherwise provides little information useful in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Stein, M., Wasserburg, G., J., Lajoie, K., R.,	1991	U-series ages of solitary corals from the California coast by mass spectrometry	Geoch. Cosmo. Acta	This work bears on the age of marine terraces near DCPP and hence the regional uplift rate and rates of faults offsetting these terraces.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Stein, R., S., King, G., Rundle, J., B.,	1988	The growth of geological structures by repeated earthquakes 2. Field examples of continental dip-slip faults	J. Geophys. Res.	In this companion paper, the authors apply the kinematic model presented in King et al. (1988) and attempt to reproduce three dip-slip faults using coseismic deformation, postseismic relaxation, and observed sediment load. They determine that cumulative deformation is largely controlled by elastic plate thickness, with some dependency on sediment-substrated density contrast and no dependency on fluid viscosity. As stated in the companion paper, the elastic plate thickness is found from the long-term flexural rigidity to be < 4 km, even in areas where a coseismic fault extends up to 4 times this depth. The authors explain this apparent discrepancy by postulating that the seismogenic crust weakens during the life of active faults. As stated in the evaluation of King et al. (1988), this reference may be considered in determining the maximum subsidence rate of the Morro hole in the context of the uplift rate of the Irish Hills.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Stein, R., S., Hanks, T., C.,	1998	M >= earthquakes in southern California during the twentieth century: no evidence for a seismicity or moment deficit	Bull. Seis. Soc. Am.	Present a catalog of 1903 to 1997 earthquakes and find no evidence of increasing rate of seismicity, moment deficit, significant aseismic moment release, or for rare M > 8 earthquakes off the San Andreas fault system. This article may be useful in characterizing regional rates of seismicity, although it focuses on seismicity south of the DCPP.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Stein, R., S.,	2008	Appendix D: Earthquake Rate Model 2 of the 2007 Working Group for California Earthquake Probabilities, Magnitude-Area Relationships	U.S. Geol. Surv. Open File Rpt.	This appendix to UCERF2 documentation summarizes selection and implementation of magnitude-area scaling relationships. The authors note that W is inferred following Nazareth and Hauksson (2004) and the limitations, such as areas of sparse seismicity, of that method. Rationale is provided for the selection of Ellsworth 2003 and Hanks and Bakun 2007 relations. The uncertainty of the relationships is also addressed. This appendix contains information that could be useful for the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Stein, S., Geller, R., Liu, M.,	2011	Bad Assumptions or Bad Luck: Why Earthquake Hazard Maps Need Objective Testing	Seis. Res. Let.	The authors present examples of large earthquakes that were not represented by their respective area's hazard map. They state that hazard maps need to be objectively tested. Criteria would included ensuring the longest record possible is used and avoiding biases such as new maps incorporating a large earthquake after it happens. They also discuss assumptions used in making hazard maps and how maps of the same area with different assumptions should be compared to each other. The analysis of assumptions made when constructing hazard maps may be useful in determining the appropriate magnitude distribution, or the range of distributions that should be tested.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Steritz, J., W., Luyendyk, B., P.,	1986	Southern termination of the Hosgri fault zone offshore California [abstract]	Eos Trans. Am. Geophys. Un.	This abstract describes previous interpretations of the southern termination of the Hosgri fault zone, and suggests the Hosgri terminates near Pt. Conception and is a structural boundary separating NW-SE trending structures on the west from the Transverse Range structure to the east.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Steritz, J., W., Luyendyk, B., P.,	1994	Hosgri Fault Zone, Offshore Santa Maria Basin, California	Geol. Soc. Am. Spec. Paper	This study focuses on the kinematics of the Hosgri fault zone and its interaction with the transverse ranges near its southern terminus. Considerable focus of this paper was to present detailed mapping of the southern end of the HFZ. This study recognized the HFZ as a structural boundary separating offshore Santa Maria Basin structure to the west from onshore Santa Maria Basin and western Transverse Ranges structure to the east.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Stirling, M., Wesnousky, S., G., Shimazaki, K.,	1996	Fault trace complexity, cumulative slip, and the shape of the magnitude-frequency distribution for strike-slip faults: a global survey	Geophys. Jour. Intl.	The authors present magnitude-frequency distributions for a global dataset of 22 strike-slip faults and find them consistent with the characteristic earthquake model. This interpretation would imply the ratio of small to large earthquakes along a fault decreases with increasing cumulative slip. The authors also observe that as cumulative slip increases, fault-trace complexity decreases which would allow for longer rupture lengths. Increased rupture length would lead to increased size of the largest earthquakes and reduce the number of smaller earthquakes. This article may be useful in determining how the magnitude-frequency models should be weighted in the logic tree for strike-slip faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Stirling, M., Rhoades, D., Berryman, K.,	2002	Comparison of Earthquake Scaling Relations Derived from Data of the Instrumental and Preinstrumental Era	Bull. Seis. Soc. Am.	Using an updated WC94 dataset, the authors fit separate regression relations of moment magnitude on SRL and area and average displacement on SRL to preinstrumental and instrumental data. They find WC94's regressions underestimate Mw and coseismic surface displacement (relative to their preinstrumental regressions). By adding newly published earthquake data and data that was excluded from WC94, the differences between these regressions are reduced. Short surface rupture lengths and small displacements may not have been included in the preinstrumental record, accounting for the remaining differences. When the authors consider this censoring, they find the regressions derived from instrumental and preinstrumental data are, in general, consistent with each other. The scaling relation presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Stirling, M., Gerstenberger, M., Litchfield, N.,	2008	Seismic Hazard of the Canterbury Region, New Zealand: New Earthquake Source Model and Methodology	Bull. NZ Earthq. Eng.	The authors provide an updated PSHA of the Canterbury region, stating that estimated hazard has been slightly reduced over a significant proportion of the western Canterbury Plains and eastern Southern Alps. The scaling relation based on New Zealand reverse and oblique-slip earthquakes presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Stirling, M.,	2012	Has PSHA done its time? The hazard mapper's perspective [abstract and slidecast]	SSA Mtg.	This presentation considers whether PSHA remains appropriate despite several recent earthquakes (e.g., Tohoku, Christchurch) that went significantly under-predicted or not included in recent hazard maps. The presenter argues that PSHA remains the best source of end user information, is highly customizable based on knowledge, and that knowledge limitations are the only real deficiencies in the method. A several other elements of PSHA are reviewed that the presenter argues could use improvement. The concepts in this presentation may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Stirling, M., McVerry, G., Gerstenberger, M.,	2012	National Seismic Hazard Model for New Zealand: 2010 Update	Bull. Seis. Soc. Am.	This paper summarizes a national PSHA model assembled for New Zealand. This paper includes a summary of methods used for fault source parameterization (including recurrence model, magnitude selection, magnitude scaling relations, domain), distributed earthquake sources (including Mmax and a- and b-value selection), ground motion prediction equations, and hazard analysis. The authors conclude that, because iterative differences between past models the most recent model systematically have deceased, the model is reaching consistency.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Stirling, M., Goded, T., Berryman, K.,	2013	Selection of Earthquake Scaling Relationships for Seismic Hazard Analysis	Bull. Seis. Soc. Am.	The authors group magnitude scaling regressions based on tectonic regime (plate boundary crustal, stable continental, subduction, or volcanic) and assign quality scores for each regression. Magnitude/seismic moment regressions presented are those based on fault rupture area or length. Table 2 provides the "shortlist" of preferred regressions and their quality score (Table 1 explains the tectonic regime ID), while Appendix A provides more details about each shortlisted regression. These regressions and their associated publications are evaluated individually in the SSC database, therefore those individual evaluations should take precedent over this one.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Stock, C., Smith, E., G. C.,	2000	Evidence for different scaling of earthquake source parameters for large earthquakes depending on faulting mechanism	Geophys. Jour. Intl.	In this paper, the relationships between seismic moment and source length and width are examined. Based on catalog of 550 events, the authors find that small earthquake rupture lengths and widths scale in the same manner, regardless of mechanism. However, large strike-slip earthquakes do not scale similarly due to seismogenic thickness control on rupture width. The authors note that this breakdown in similarity does not occur in dip slip events, with the possible exception of the largest events. Normal and reverse faults do not exhibit any scaling differences, nor are there global/regional differences with these mechanisms.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Stone, E., M., Grant, L., B., Arrowsmith, J., R.,	2002	Recent Rupture History of the San Andreas Fault Southeast of Cholame in the Northern Carrizo Plain, California	Bull. Seis. Soc. Am.	This paper details a paleoseismic trenching study conducted on the Cholame segment of the San Andreas fault. The trench exposed evidence for 3 events, possibly 4, with age control coming from a paleosol below all three ruptures dated at A.D. 1058-1291. A possibly offset overlying unit contained pollen suggesting an MRE within a few decades of 1873 to 1874. These results suggest an average recurrence interval of 236 years. The recurrence interval presented here may be useful for characterization of the southern San Andreas fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Strasser, F., O., Arango, M., C., Bommer, J., J.,	2010	Scaling of the Source Dimensions of Interface and Intraslab Subduction-zone Earthquakes with Moment Magnitude	Seis. Res. Let.	This article presents scaling relations between rupture area, rupture length, rupture width, and moment magnitude for subduction zone environments. The authors (and Somerville et al. (2002)) state the primary difference between subduction zone and shallow crustal events is the rupture area, which results in very different scaling relations. The difference in rupture area is primarily due to differences in rupture width, not rupture length. The focus of this article on presenting scaling relations for subduction zone events is not applicable to magnitude-area relations appropriate for the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Surdam, R., C., Stanley, K., O.,	1981	Stratigraphic and Sedimentologic Framework of the Monterey Formation, Pismo Syncline, California	Spec. Pub. SEPM	This study is focused on describing the Miocene Monterey Formation in the Pismo Syncline. Relatively little emphasis is put upon the tectonic or geometric framework of the Pismo Syncline, but rather the focus is on the various facies of the Monterey Formation.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Suter, M., Contreras, J.,	2002	Active Tectonics of Northeastern Sonora, Mexico (Southern Basin and Range Province) and the 3 May 1887 Mw 7.4 Earthquake	Bull. Seis. Soc. Am.	This study discusses a zone of north south striking faults apparently related to the Basin and Range at the edge of Sierra Madre Occidental plateau.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Swanson, M., T.,	1989	Structural duplexing in the strike-slip environment	U.S. Geol. Surv. Open File Rpt.	This paper focuses on the transitional structure of stepovers from the surface, through the crust, into the brittle-ductile transition zone. The author finds that complicated stepovers, composed of folds and dip slip faults, give way to strike slip faults at depth due to depth effects and pressure. Even at depth, however, these strike slip faults may be duplexed.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Talebian, M., Fielding, E., J., Funning, G., J.,	2004	The 2003 Bam (Iran) earthquake: rupture of a blind strike-slip fault	Geophys. Res. Let.	This study uses interferometry to measure subsurface slip associated with the Bam earthquake in Iran. Despite over 2 m of slip, no surface rupture, or visually detectable surface deformation was associated with the fault, nor do the authors find any long-term geomorphic features related to the fault. Little to no data are applicable to the DCPP site.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Talwani, M., Mooney, W., D., Savage, W., U.,	1987	EDGE and related seismic projects onshore, offshore California	Eos Trans. Am. Geophys. Un.	This specific reference is the AGU abstract from 1987. Reports and papers regarding the EDGE and other seismic projects (e.g., Henrys and Levander, 1993; Meltzer and Levander, 1991) should be referred to for more detail	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Tanaka, A., Ito, H.,	2002	Temperature at the base of the seismogenic zone and its relationship to the focal depth of the western Nagano Prefecture area (in Japanese with English	J. Seis. Soc. Japan	The authors use 9 temperature profiles from boreholes in/near the inferred fault of the Naganoken-Seibu earthquake to determine heat flow values. They find evidence supporting previous studies that temperatures at the base of the seismogenic zone in are distributed from ~250 degrees C to 400 degrees C over a depth interval of 5 to 30 km. This suggests that temperature is the dominant control of focal depth. This reference is relevant to understanding and estimating seismogenic thickness.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Tanaka, A.,	2004	Geothermal gradient and heat flow data in and around Japan (II): Crustal thermal structure and its relationship to seismogenic layer	Earth Planets Space	Tanaka uses thermal measurements and a high-quality seismicity database of Japan to quantify seismogenic thickness and finds the lower limit of seismicity is inversely related to heat flow and geothermal gradient. For the Japanese Islands, temperature is determined to be the dominant factor in focal depth. This reference is relevant to understanding and estimating seismogenic thickness.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Tennyson, M.,	1989	Pre-transform early Miocene extension in western California	Geology	Lack of evidence for strike slip faulting during the earliest Miocene (20-24 Ma). Magnetic anomalies may indicate that a spreading ridge provided a still-active subduction zone with oceanic crust until after 20 Ma, which would indicate extension occurred in an arc-related setting. Transform regime and rotation of the western Transverse Range block likely initiated around 18 Ma. Information regarding the initiation of block rotation and transform regime may be relevant to the tectonic model but does not have direct application to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Tennyson, M., Keller, M., A., Filewicz, M., V.,	1991	Contrasts in early Miocene subsidence history across Oceanic-West Huasna fault system, northern Santa Maria province, California [abstract]	Am. Assoc. Petrol. Geol.	The authors describe the timing of subsidence west of and between strands of the Oceanic-West Huasna fault northeast of Morro Bay, northeast of Santa Maria, near Cambria, and in the Pismo syncline. As suggested by paleobathymetry, the authors found at least ~6,000 ft of subsidence along the Oceanic-West Huasna fault system that began ~20-21 Ma, whereas the block to the west had a potentially more complex history. Additionally, they observed no evidence for major lateral offset along the fault.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Thatcher, W., Matsuda, T., Kato, T.,	1980	Lithospheric loading by the 1896 Riku-u earthquake, northern Japan: implications for plate flexure and asthenospheric rheology	J. Geophys. Res.	This work describes leveling surveys done in northern Japan. There, a 35 cm depression was found to be centered near the surface fault trace from the Rikuu earthquake rupture. This 35 cm depression was then modeled to be the result of asthenospheric adjustments after the earthquake. With that assumption, a plate thickness of 30 km was calculated along with an asthenopheric viscosity. The Rikuu earthquake is a potential analog for several rupture source models used in the DCPP study.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Thatcher, W., Bonilla, M., G.,	1989	Earthquake fault slip estimation from geologic, geodetic and seismologic observations: implications for earthquake mechanics and fault segmentation	U.S. Geol. Surv. Open File Rpt.	This paper evaluates slip distributions (surface, subsurface, geodetic) in past earthquakes in attempt to reconcile the usual mismatch of the data. The authors find that ruptures tend to initiate toward the end of the seismic faulting, and nearly coincident with the area of highest slip.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Thurber, C., H.,	2009	Central California offshore earthquake assessment, Phases 1-3 (PG&E Contract #2500174779; Appendix C-1 of Shoreline Report)	Unpub. Tech. Rpt.	This report (and Appendix C-1 of the Shoreline Report) presents three phases: (1) Thurber's analysis of Hardebeck's location/tomography results; (2) an assessment of offshore earthquake location uncertainties; and (3) waveform cross-correlation analysis and replication and reprocessing Hardebeck's tomoDD analysis. In phases 1 and 2, although Thurber found events with unstable locations, the vast majority of events, particularly those associated with the Shoreline fault, were consistent with Hardebeck's results. In phase 3, Thurber found similar results of seismicity consistent with the Shoreline fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Titus, S., J., DeMets, C., Tikoff, B.,	2005	New slip rate estimates for the creeping segment of the San Andreas fault, California	Geology	This study presents analysis of new GPS data that suggests the creeping segment of the San Andreas fault is moving 20% slower than previously recognized for this segment of the fault. This study suggests the possibility of distributed deformation in western California citing examples such as the San Gregorio-Hosgri. Estimates of distributed deformation could be accommodating as much as 13 mm/yr.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Titus, S., J., DeMets, C., Tikoff, B.,	2006	Thirty-Five-Year Creep Rates for the Creeping Segment of the San Andreas Fault and the Effects of the 2004 Parkfield Earthquake: Constraints from Alignment	Bull. Seis. Soc. Am.	From GPS surveys of 7 alignment arrays along the creeping segment of the SAF, the authors find slip rate decreases from 26 mm/yr in the northwest to 21 mm/yr in the southeast. They also present coseismic and postseismic displacement measurements related to the 2004 Parkfield earthquake and find motion was concentrated near the epicenter. Finally, the authors observe increased fault-parallel creep rates with increased distance perpendicular to the SAF. They speculate that the observed gradient may be due to distributed deformation adjacent to the SAF (fault-parallel wrench deformation) and/or elastic strain accumulation along the creeping segment due to frictional coupling at depth. The creep rates provided in this article may help characterize deformation west of the SAF and also the role the Hosgri and Rinconada faults play in accommodating plate boundary motion.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Titus, S., J., Housen, B., Tikoff, B.,	2007	A kinematic model for the Rinconada fault system in central California based on structural analysis of en echelon folds and paleomagnetism	J. Struct. Geol.	This study used outcrop to map scale structural analysis of folds and paleomagnetism to develop a kinematic model for the Rinconada fault. The authors identify en echelon folds trending oblique to the fault and conclude that the fault accommodates oblique convergence, is 80% strike-slip partitioned and has imparted about 15° of vertical axis rotation. The authors calculate 0.6 to 1.4 mm/yr of fault parallel deformation and 0.3 to 1.1 mm/yr of fault perpendicular deformation.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Titus, S., J., Dyson, M., DeMets, C.,	2011	Geologic versus geodetic deformation adjacent to the San Andreas fault, central California	Geol. Soc. Am. Bull.	Uses geologic and GPS data to analyze the magnitude and style of off-fault deformation across the SAF system. Between the Pacific plate and Sierra Nevada-Great Valley block, fault-perpendicular and fault-parallel motion is accommodated away from the strike faults. States that elastic models of modern velocity gradient across the SAF that ignore off-fault deformation overestimate the long-term fault slip rate on the major faults that are modeled. This article may be useful in characterizing the slip rate on the Hosgri	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Titus, S., J., Crump, S., McGuire, Z.,	2011	Using vertical axis rotations to characterize off-fault deformation across the San Andreas fault system, central California	Geology	This study looks at paleomagnetic data in the coast range fold belt, in the borderlands west of the creeping section of the San Andreas Fault. The study finds small but significant rotations recorded in sedimentary rocks in the Rinconada fault. This suggests that fault parallel motion to the SAFZ is being accommodated in the coast ranges.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Toké, N., A., Arrowsmith, J., R.,	2006	Reassessment of a Slip Budget along the Parkfield Segment of the San Andreas Fault	Bull. Seis. Soc. Am.	The paper compares the post-1857 slip budget of the Parkfield segment of the San Andreas fault compared with the rest of the fault, particularly the Cholame segment. The authors suggest that, assuming a 33 mm/yr slip rate, the Cholame segment has accumulated a stored 5 m of slip, while the Parkfield segment has release stored slip in several moderate earthquakes such that little deficit is noted. The authors argue that the stored slip on the Cholame segment is capable of producing a Mw7.0 earthquake, rapid aseismic slip, or a multiple moderate-magnitude events.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Toké, N., A., Arrowsmith, J., R., Young, J., J.,	2006	Paleoseismic and Postseismic Observations of Surface Slip along the Parkfield Segment of the San Andreas Fault	Bull. Seis. Soc. Am.	This paleoseismic trenching study of the Parkfield segment of the San Andreas fault provides a roughly 2,000 year record of slip at Parkfield. No evidence of large earthquakes was observed in the exposures and an irregular recurrence interval of surface ruptures is observed ranging from 8 to 188 years.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Toké, N., A., Arrowsmith, J., R., Rymer, M., J.,	2011	Late Holocene slip rate of the San Andreas fault and its accommodation by creep and moderate-magnitude earthquakes at Parkfield, California	Geology	This study conducted 6 paleoseismic trench investigations to estimate slip rate along the creeping section of the San Andreas fault zone. The findings are consistent with the geodetic data from Titus et al. (2006) that estimates a slip rate of ~25 mm/yr. This estimate suggests that 10% or more of the surface slip of the SAFZ is distributed off the main trace.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Toppozada, T., R.,	1987	Earthquake history of Parkfield and surroundings	Eos Trans. Am. Geophys. Un.	This abstract documents 10 events within 70 km of Parkfield that occurred between 1877 and 1915 and were previously were not considered of magnitude 5 or greater.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Toppozada, T., R., Branum, D., Petersen, M., D.,	2000	Epicenters of and Areas Damaged by M ≥ 5 California Earthquakes, 1800-1999	Cal. Div. Mines Geol.	This map includes epicenters of M ≥ 5 earthquakes from 1800-1999 in California, as well as Holocene and historically active faults in the state.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Toppozada, T., R., Branum, D., Reichle, M.,	2002	San Andreas Fault Zone, California: M ≥5.5 Earthquake History	Bull. Seis. Soc. Am.	Paper discusses recurrence along the San Andreas fault.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Townend, J., Zoback, M., D.,	2001	Implications of earthquake focal mechanisms for the frictional strength of the San Andreas fault system	Geol. Soc. London Spec. Pub.	This study compiled stress orientation data in the San Francisco Bay area and reanalyzed stress orientations in southern California using focal mechanism data. The findings suggest that the San Andreas fault zone has a low frictional strength. These findings contradict that of Hardebeck and Hauksson (1999), which the authors attribute to a flaw in the gridding scheme. These findings would require that any postulated stress rotation must occur within a zone of a few kilometers wide rather than 20-30 km as suggested by Hardebeck and Hauksson (1999).	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Trehu, A., M., Wheeler, W., H.,	1987	Possible evidence for subducted sedimentary materials beneath central California	Geology	This study assessed onshore seismic reflection and refraction data collected along a profile oriented perpendicular to plate boundary from Morro Bay to just east of the San Andreas fault zone. Their primary results include the identification of two low velocity zones: one that they propose is almost certainly gouge rock along the San Andreas fault zone and extends to mid-crustal depths, and another beneath the coast into the Diablo Range, which the authors suggest may be subducted sedimentary rock. This second zone is sub-horizontal, and extends from 12 to 22 km depths tapering out to the east. They propose an age of about 23 Ma for the rocks based on back calculation of subduction rates and termination of subduction activity.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Trehu, A., M., Wheeler, W., H.,	1987	Seismic reflection profile across the Coast Ranges of central California, Morro Bay to the San Andreas fault	U.S. Geol. Surv. Misc. Field Stud. Map	This reference shows reprocessed seismic-reflection data that extends from the Coast Ranges of central California near Morro Bay to the San Andreas fault near Cholame. This seismic reflection profile and the interpretation of the east-dipping oceanic slab was used to help develop the contemporary seismotectonic setting in the SSC model.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Trehu, A., M.,	1991	Tracing the Subducted Oceanic Crust Beneath the Central California Continental Margin: Results From Ocean Bottom Seismometers Deployed During the 1986	J. Geophys. Res.	This study presents the results obtained from the large aperture data recorded using ocean bottom seismometers. The results constrain the crustal structure beneath the Santa Lucia Escarpment and Santa Lucia Bank. The author discusses that the previous work by Trehu and Wheeler (1987) over simplifies the geometry, of a low-velocity zone beneath the coast Ranges, representing subducted sediments. This study finds that although a low-velocity zone suggests the presence of subducted crust beneath the continental margin, it has been broken and imbricated several times.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Treiman, J., A., Kendrick, K., J., Bryant, W., A.,	2002	Primary Surface Rupture Associated with the Mw 7.1 16 October 1999 Hector Mine Earthquake, San Bernardino County, California	Bull. Seis. Soc. Am.	The authors present observations of the 1999 Hector Mine earthquake rupture, including sense and magnitude of surface offsets, the variability of the fault expression, and indicators of prior fault activity. The authors emphasize that, like the 1992 Landers earthquake, rupture in the ECSZ can propagate across several faults that are oblique to the strike of the ECSZ. This article is relevant to developing the rupture source model and provides an example a large magnitude earthquake that that involved secondary faults.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Trifunac, M., D., Brune, J., N.,	1970	Complexity of energy release during the Imperial Valley, California, earthquake of 1940	Bull. Seis. Soc. Am.	The authors use strong motion seismograph data to describe the pattern of energy released during the 1940 Imperial Valley, California, earthquake. This data indicated a series of at least 13 distinct events occurred during the period of about 6 minutes, though most of the energy was produced in the first 4 events which likely propagated SE from the initial epicenter along a 25 km section of the fault. This reference is relevant to the rupture source model in the SSC in the discussion of rupture event analogs.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Tullis, T., E., Richards-Dinger, K., Barall, M.,	2012	A Comparison among Observations and Earthquake Simulator Results for the allcal2 California Fault Model	Seis. Res. Let.	This paper compares results of several earthquake simulators over models runs of 10 to 30 kyr. The paper focuses on the allcal2 earthquake simulator. Comparisons are made between magnitude-frequency, recurrence, moment and event rates, slip-rupture length relations, magnitude-rupture area, and magnitude-rupture length. The authors find relatively good fits between observed and model data, but note that discrepancies are present across all simulators. They suggest the allcal and RSQSim models fit observed data best across the multiple comparisons. Models in this paper are alternatives to typical earthquake seismic source models for PSHA.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Tullis, T., E.,	2012	Preface to the Focused Issue on Earthquake Simulators	Seis. Res. Let.	This paper serves as a brief, non-technical introduction to a SRL special volume on the SCEC earthquake simulator project. Nothing here is useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Tullis, T., E., Richards-Dinger, K., Barall, M.,	2012	Generic Earthquake Simulator	Seis. Res. Let.	This is a short introduction to a special volume on multi-fault earthquake simulators. The authors describe what each of the models in the volume has in common, and what the models treat differently (e.g.., fault geometry, rheology, stresses, friction, etc.). Table 1 provides a brief summary of what variables the models include. Little here is applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☑	Twiss, R., J., Unruh, J., R.,	1998	Analysis of fault slip inversions: Do they constrain stress or strain rate?	J. Geophys. Res.	The authors state that fault slip data most directly constrain global strain rate and that information about constitutive equations and material properties is insufficient to determine global stress from global strain rate. Additionally, the level of anisotropy and nonlinearity of the cataclastic flow behavior of the crust determines whether principal stress and strain orientations and relative magnitudes are comparable. The assumptions and criteria to interpret fault slip data as constraining global principles stresses were considered in the stress/strain analysis presented at Workshop 3.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	U.S. Geological Survey staff,	1991	Review of Geological and Geophysical Interpretations (Safety Evaluation Report Related to the Operation of Diablo Canyon Nuclear Power Plant, Units 1 and 2, Docket	USNRC	This report documents the USGS staff review of the characterization of seismic sources in the LTSP and includes logic tree branch weights for the Hosgri, Los Osos, and San Luis Bay fault zones. Although the results of the LTSP and the USGS review are generally in agreement, the USGS staff suggest the interpretation of the Hosgri as a strike slip fault with little to no vertical component of slip may be inaccurate and state a preferred dip of 50 to 70 degrees. This report largely summarizes results from the LTSP and other studies; the alternative interpretations presented for the Hosgri have since been refined with additional data/studies.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	U.S. NRC,	1991	Diablo Canyon SSER 34 (Safety Evaluation Report Related to the Operation of Diablo Canyon Nuclear Power Plant, Units 1 and 2, Docket Nos. 50-275 and 50-323,	USNRC	Largely summarizing information in the LTSP as well as input from the USGS and UNR., Supplement 34 to the Safety Evaluation Report includes the NRC staff's review of the LTSP and includes the following sections potentially relevant to the SSC: geology (including descriptions of the San Luis-Pismo block and geometry and sense of slip on the Hosgri fault zone, Los Osos fault, and Southwest Boundary zone), regional geology and tectonics, site region and site area geology (including descriptions of the San Simeon fault zone, Cambria stepover basin, Piedras Blancas anticlinorium, and the Hosgri fault zone, divided into five reaches). Additionally, maximum earthquake estimates are provided for the Hosgri, San Simeon, Los Osos, Nacimiento, and Southwest Boundary Zone faults.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☑ Tectonic setting

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☑	U.S. NRC,	2007	Regulatory Guide 1.208: A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion	USNRC	This NRC regulatory guide provides guidance on the development of site-specific ground motion response spectrum, which is the first part of the development of the safe shutdown earthquake ground motion for a site as a characterization of the regional and local seismic hazard. Appendices include: definitions (Appendix A); abbreviations (Appendix B); investigations to characterize site geology, seismology, and geophysics (Appendix C); development of seismic hazard information base and determination of controlling earthquakes (Appendix D); seismic wave transmission analysis (Appendix E); criteria for developing time histories (Appendix F)	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	U.S. NRC,	2012	Research Information Letter 12-01, Confirmatory Analysis of Seismic Hazard at the Diablo Canyon Power Plant from the Shoreline Fault Zone (ADAMS Accession	USNRC	This report presents results from a deterministic hazard assessment of the Shoreline fault and is meant to aid NRC staff in determining if a safety concern exists (though the PSHA had begun development at the time of this report). The report also describes the history of the DCPP licensing as it relates to seismic hazard.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	U.S. NRC,	2012	Practical Implementation Guidelines for SSHAC Level 3 and 4 Hazard Studies (NUREG-2117, Rev 1)	USNRC Docket	This report provides (1) additional levels of detail on topics related to implementation of SSHAC processes beyond those provided in NUREG/CR-6372, and (2) additional guidance on implementation of Level 3 and 4 studies. These details include a history of multiple-expert hazard assessments, descriptions of key SSHAC concepts, essential steps in SSHAC Level 3 and 4 processes, and practical implementation of processes. Additionally, this report contains updates on replacing and refining PSHA. The information and guidance within this report is essential to developing all parts of the SSC Model.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☑	U.S. NRC,	2012	Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3 of the Near-Term Task Force	USNRC	In this letter, the USNRC states the need for support in determining if the nuclear plant licenses issued in the U.S. (in this case, the DCPP), should be modified, suspended, or revoked. The letter provides background on the accident at the Fukushima Dai-ichi nuclear power plant following the Tohoku Earthquake and subsequent tsunami, and the NRC's establishment of the Near-Term Task Force (NTTF). The letter also describes necessary actions to verify compliance with the plant's design basis and to determine if additional actions are needed. Six enclosures are included with this letter, the first five of which provide recommendations (seismic, flooding, emergency preparedness), and the sixth is a list of licensees and holders of construction permits.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Underwood, M., B., Laughland, M., M.,	2001	Paleothermal structure of the Point San Luis slab of central California: Effects of Late Cretaceous underplating, out-of-sequence thrusting, and late Cenozoic	Tectonics	Documented the paleothermal structure of the Point San Luis slab. Thermal maturation of the slab occurred in an accretionary prism (10-15 km) and the paleothermal structure was offset and tilted after peak heating by two out-of-sequence faults. Estimated the maximum post-Miocene dextral displacement on the southern Hosgri fault to be 10-15 km.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Unruh, J., R., Humphrey, J., Barron, A.,	2003	Transtensional model for the Sierra Nevada frontal fault system, eastern California	Geology	Strike-slip and normal faulting in the Walker Lane belt contribute to distributed dextral shear parallel to Sierra Nevada-North American plate motion. Normal faults along the eastern Sierran range front accommodate northwest translation of the Sierra Nevada and graben have resulted from releasing steps along the margin of the microplate; these faults, however, have not contributed to uplift of the Sierra of regional Basin and Range extension.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Up de Graff, J., E., Luyendyk, B., P.,	1989	Gravity study of the boundary between the western Transverse Ranges and Santa Maria basin, California	J. Geophys. Res.	In order to determine the geometry and density contrasts across the Santa Ynez River fault at depth, three gravity profiles were completed. The gravity anomaly at the north edge of the western Transverse Ranges may be due to three sources: northward dipping crust-mantle boundary beneath the Santa Ynez Mountains (~25 km depth), a dense midcrust source beneath the Santa Ynez Mountains (3-11 km depth), and a light upper crustal source in the Santa Maria basin (< 3 km). Midcrust contribution may be due to layer of oceanic crust beneath the western Transverse Ranges south of the fault. Description of the north edge of the western Transverse Ranges may be useful in the characterizing the tectonic model, but is likely of little use to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Ustaszewski, K., Schumacher, M., E., Schmid, S., M.,	2005	Fault reactivation in brittle–viscous wrench systems–dynamically scaledanalogue models andapplication to the Rhine–Bresse transfer zone	Quat. Sci. Rev.	This study relates analogue models of oblique rifting, followed by transpression with the Rhine-Bresse transfer zone. The authors use slabs of sand and silicone to approximate brittle and ductile behavior and find that higher rates for deformation improve coupling with opposite results at low rates. This behavior has implications for the types of resulting faults (P or R). Thrust formation is also dependent on rate, with higher rates producing more prominent faults. At low rates, only more recent thrust faults produce uplift, whereas at high rates, this relationship breaks down. The results of this study may be useful for developing the tectonic history of the plate margin near DCPP	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Vakov, A., V.,	1996	Relationships between earthquake magnitude, source geometry and slip mechanism	Tectonophys.	This paper explores the relationships of fault area, length, width, and slip style with magnitude based on global empirical data. The author finds that, when all else is held constant, slip style has a significant impact on magnitude, increasing from strike slip, through oblique, to reverse and normal. In contrast to other studies, the author advocates using regression equations that are restricted to slip type, which display higher correlation coefficients than all slip type regression.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Van Dissen, R., Barrell, D., Litchfield, N.,	2011	Surface rupture displacement on the Greendale Fault during the Mw 7.1 Darfield (Canterbury) earthquake, New Zealand, and its impact on man-made structures	Earthquake	Characterizes the surface rupture of the Greendale Fault (Christchurch, New Zealand) during the Mw 7.1 Darfield earthquake and the impact on man-made structures. Surface rupture displacement was determined to be dextral strike-slip with an average ~2.5 m. The largest step-over of surface rupture is ~1 km wide in addition to many smaller step-overs. This article provides an example of rupture on a large segmented strike-slip fault system which is relevant to understanding rupture on the Hosgri, San Simeon, and Shoreline faults.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Vassallo, R., Ritz, J-F., Braucher, R.,	2005	Dating faulted alluvial fans with cosmogenic 10Be in the Gurvan Bogd mountain range (Gobi-Altay, Mongolia): climatic and tectonic implications	Terranova	The authors date offset alluvial fans using 10Be to constrain the slip rate of the Bogd left-lateral strike slip fault to be 0.95 ± 0.29 mm/yr over the past ~250 ka. Thrust faults in the Gurvan Bogd system have Upper Pleistocene vertical slip rates between 0.12 ± 0.02 mm/yr and 0.13 ± 0.02 mm/yr and activity along the Gurvan Bulag thrust fault is thought to have increased in the past ~20 ka. This analysis was completed along the segments of the Gurvan Bogd fault system that rupture during the 1957 M 8.3 earthquake. This reference is relevant to the fault geometry model in the SSC in the discussion of analog fault systems.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Vedder, J., G., Stanley, R., G., McLean, H.,	1998	Age and Tectonic Inferences from a Condensed (?) Succession of Upper Cretaceous, Paleocene, and Eocene Strata, Big Pine Mountain Area, Santa	U.S. Geol. Surv. Bull.	This paper presents a stratigraphic study of an unnamed mudstone unit near Big Pine Mountain. The 350-m-thick mudstone was deposited over a 22-myr-long interval about the K-T boundary and lacks any evidence of hiatuses. The authors suggest a fault-bounded ridge likely limited transport of sediment and is responsible for the slow sedimentation rate. The conclude the paleogeography was that a of a strike-slip continental borderland, with deep-water environments, limited short-lived shallow water areas, and slow rates of deposition. This paper contains little to no information relevant to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Vittori, E., Nitchman, S., P., Slemmons, D., B.,	1994	Stress pattern from Late Pliocene and Quaternary brittle deformation in coastal central California	Geol. Soc. Am. Spec. Paper	This study collected structural data including Fault slip data and tectonic joints from 75 sites between Ragged Point and Point Sal to assess the change in stress regime through time. Most of the locations were located in the San Luis Range. The data found that the current onland deformation within the San Luis Obispo-Santa Maria area is characterized by north-northeast shallow crustal shortening, accommodated by 130-110 degree trending active folds and reverse thrust faults (e.g. Wilmar Ave, Los Osos, faults). No major Neogene shifts in stress tensor orientations were recognized. The authors speculate that the variation in Miocene-early Pliocene during the transition from wrench regime to an oblique convergent regime did not have a clear record or has been since overprinted.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wachtor, S., T.,	2010	Geologic Survey of Lands South of Cabrillo Estates, Los Osos, California	Unpub. Consult. Rpt.	This report includes descriptions of rock types and geologic structures south of the Cabrillo Estates subdivision at the southern end of Los Osos valley. The Miguelito is observed south of the Los Osos fault and the Paso Robles formation, overlying the Pismo formation, is observed north of the fault. The geometry of the Los Osos fault is described as a reverse, E-W trending fault dipping ~60° S. This report also includes a description of the Spooner #1 Well, a geologic map with strikes and dips in the area, and several geologic cross sections.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Waelbroeck, C., Labeyrie, L., Michel, E.,	2002	Sea-level and deep water temperature changes derived from benthic foraminifera isotopic records	Quat. Sci. Rev.	The authors derive sea-level transfer functions between high resolution δ18O records and sea-level data and then reconstruct sea-level changes over four climatic cycles to determine deep water temperature changes. They state that this reconstruction needs further validation with new relative sea-level data derived from coral reef terraces or other data independent of benthic foraminifera isotopic ratios.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Wagner, H., C.,	1974	Marine geology between Cape San Martin and Point Sal, south central California offshore	U.S. Geol. Surv. Open File Rpt.	This paper documents a seismic reflection survey along the CA coast from Point Sal to Cape San Martin. Primary findings include recognition of the Hosgri fault, and data that suggest pre-, and possibly post-Wisconsinian movement of the fault. Multiple seismic reflection profiles are presented that could be valuable to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wahl, A., D.,	1998	Cenozoic deformation of the Franciscan Complex, eastern Santa Maria Basin, California	U.S. Geol. Surv. Bull.	This paper presents results of field mapping near the junction of the Transverse and Coast Ranges. The author develops the structural and tectonic history of the study region focusing primarily on the pre-late Cenozoic. Little to no data are applicable to the DCPP site.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wakabayashi, J.,	2007	Stepovers that migrate with respect to affected deposits: field characteristics and speculation on some details of their evolution	Geol. Soc. London Spec. Pub.	This article describes various types of stepovers, including the endmembers of migrating (features associated minimal structural relief) and "traditional" (features associated with progressively increasing structural relief with increasing slip on faults). Wakabayashi describes migrating stepovers or restraining and releasing bends on the SAF and finds examples of these two end members, stating that many stepovers likely exhibit varying degrees of both endmembers. The models for stepover development presented in this article, are, as Wakabayashi states, simplistic, but may be field tested.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Waldhauser, F., Ellsworth, W., L.,	2000	A double-difference earthquake location algorithm: method and application to the northern Hayward Fault, California	Bull. Seis. Soc. Am.	Presents a double-difference method to determine hypocenter locations over large distances. Tests the method on two clusters of earthquakes on the northern Hayward fault and results in a sharp image of seismicity. This method is relevant to "existing earthquake catalogs and/or digital waveform data as provided by almost any seismic network".	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Waldhauser, F., Ellsworth, W., L.,	2002	Fault structure and mechanics of the Hayward Fault, California, from double-difference earthquake locations	J. Geophys. Res.	Using hypoDD, the authors relocate seismicity recorded between 1967 and 1998 along the Hayward and Mission faults. Paired with high-resolution focal mechanisms, the authors describe the geometry and connectivity of the Hayward, Mission, and Calaveras faults. Additionally, the authors analyze seismicity data for repeating earthquakes and find slow repeat rates suggestive of a low slip rate or high stress drop. The geometry of the Hayward and Mission faults and their relationship to the Calaveras fault may be a good analog for the geometry of the Hosgri fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Waldhauser, F.,	2009	Central California offshore earthquake location assessment (PG&E Project #2500179119; Appendix C-2 of Shoreline Report)	Unpub. Tech. Rpt.	This report (and Appendix C-2 of the Shoreline Report) presents Waldhauser's assessment of the robustness of the seismicity locations estimated with tomoDD composing the Shoreline fault zone. Waldhauser re-analyzed phase picks and cross-correlation based on differential and travel times in order to estimate hypocenter locations and uncertainties using hypoDD and 1D and 3D velocity models. This analysis showed events associated with the Shoreline fault zone could be constrained within < 200 m on average, confirming Hardebeck's interpretation.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Walker, R., Jackson, J.,	2002	Offset and evolution of the Gowk fault, S.E. Iran: a major intra-continental strike-slip system	J. Struct. Geol.	Provides geologic and geomorphic context for the Gowk fault, which may be used to understand fault linkage and rupture scenarios for faults near DCPP. The Gowk fault occupies a restraining bend in the larger fault system. Uses drainages and other geomorphic features to reconstruct the last 3 and, more crudely, 12 km of slip along the fault. Slip rate of the fault system (including the Nayband fault to the north) is estimated to be 1.5-2.4 mm/yr, in the range of estimated slip rate for the Hosgri. Proposes a ramp-flat geometry at depth in which strain is partitioned between the Gowk (strike slip) and Shahdad (reverse faults).	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wallace, R., E.,	1989	Fault-plane segmentation in brittle crust and anisotropy in loading systems	U.S. Geol. Surv. Open File Rpt.	Based on faults in the Basin and Range, the author argues that fault segment lengths approximately equal the down-dip dimension of the fault plane. Furthermore, a decoupling is suggested between the broken, brittle crust above and the brittle-ductile loading system below. This lower loading system, however, likely controls which fault segments will rupture.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Walter, A., W., Mooney, W., D.,	1982	Crustal structure of the Diablo and Gabilan Ranges, Central California: a reinterpretation of existing data	Bull. Seis. Soc. Am.	Presents two velocity models derived by iterative two-dimensional ray tracing for both the Diablo and Gabilan Ranges in order to model their crustal composition. The velocity models presented in this article are likely of little use in the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Walter, A., W., Mooney, W., D.,	1987	Interpretations of the SJ-6 seismic reflection/refraction profile, south-central California, USA	U.S. Geol. Surv. Open File Rpt.	A collection of papers presented during a workshop held to analyze a single seismic line extending from Morro Bay to the Sierra Nevada foothills. Provides analysis of velocity and crustal structure utilizing both reflection and refraction data.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Ward, S., N.,	2007	Methods for Evaluating Earthquake Potential and Likelihood in and around California	Seis. Res. Let.	Ward presents several earthquake potential models including geodetic, geological, seismic, and synthetic earthquake hazard models. For each of these methods he presents the motivation, a technical description, advantages, drawbacks, and the required information to use the model. Ward speculates that a combination of the geodetic, geological, and seismic hazard models may provide the "best" or strongest estimate of earthquake rates. Ward also addresses time independent shaking hazard and discusses future possibilities of time-dependent hazard estimation. The earthquake rate models presented here may be useful to apply to the DCPP vicinity, particularly because (1) the models provide output with the same formatting (allowing easy comparison of the models), and (2) the various models require different input which is beneficial if a particular parameter (e.g., geologic fault slip rate) is poorly constrained.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Ward, S., N.,	2012	ALLCAL Earthquake Simulator	Seis. Res. Let.	This paper presents the ALLCAL earthquake simulator, including how stress and displacement are calculated. The operating principle of the model is to track total slip and Coulomb stress change on faults that are represented by rectangular fault elements with fixed orientations and rakes. The ALLCAL model uses a velocity-weakening friction law and dynamic ruptures. Several ruptures are presented with a concluding remark that earthquake simulators can tell us as much as geologic estimates of rupture and recurrence. This paper represents an alternative model for forecasting earthquake occurrence.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Watson-Lamprey, J.,	2007	The search for directivity [abstract]	Seismol. Soc. Am. Ann. Mtg.	This abstract describes previous treatment of directivity in ground motion prediction equations and attempts to address differences in directivity effects between Somerville et al. (1997) and Spudich and Chiou (2006). This abstract is more relevant to the GMC than the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Watt, J., T., Johnson, S., Y., Hartwell, S., R.,	0	Draft version of “Offshore geology and geomorphology maps from Piedras Blancas to Pismo Beach, San Luis Obispo and Santa Barbara counties, California:	U.S. Geol. Surv. Open File Rpt.	Used extensively in geologic maps of the region.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Watt, J., T., Johnson, S., Y., Hardebeck, J., L.,	2009	Geophysical characterization of the Hosgri fault zone, central California [abstract]	SSA Mtg.	This abstract describes the geometry and geologic structure of the Hosgri and "other nearshore faults", including the Cambria fault, north of Point Buchon using high-resolution marine magnetic and seismic-reflection data, and geologic, regional magnetic, multichannel seismic, and seismicity data. The Hosgri is described as complex, steeply dipping, and active. Uncertainty regarding magnetic boundaries and their potential relationship to the Hosgri are also described.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Watt, J., T., Morin, R., L., Langenheim, V., E.,	2011	Isostatic Gravity Map of the Point Sur 30' x 60' Quadrangle and Adjacent Areas, California	U.S. Geol. Surv. Open File Rpt.	This isostatic gravity anomaly map extends from north of Carmel Valley to south of the Sur Basin offshore, and east to San Lucas onshore. Gravity highs are observed along the Santa Lucia and Gabilan Ranges (indicative of Mesozoic granitic and Franciscan Complex basement rocks) and lows Salinas Valley and in the Sur Basin (indicative of alluvial and marine sediment and Monterey Formation).	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Watt, J., T., Johnson, S., Y., Langenheim, V., E.,	2011	Fault intersections along the Hosgri Fault Zone, Central California [abstract]	Am. Geophys. Un. Fall Mtg.	Using multibeam bathymetry, high-resolution seismic data, and potential-field data, the authors describe the geometry and the asymptotic interaction of the offshore Los Osos fault and the Hosgri fault in Estero Bay, as well as the relationship between the Hosgri fault and the Shoreline fault northwest of Point Buchon. Although providing information relevant to the fault and deformation models, this abstract should be considered with Johnson and Watt (2012) and Langenheim et al. (2012).	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Webb, T., Somerville, P., G., Doser, D., I.,	1999	Moment–Area Scaling of Crustal Earthquakes in New Zealand	Inst. Geol. & Nuc. Sci. Ltd.	This consulting report presents source durations for 49 moderate to large crustal earthquakes in New Zealand and compares the New Zealand earthquakes to global datasets. The authors develop a self-similar scaling relation between seismic moment and fault area, similar to those of a small and similar dataset of Western North America earthquakes. Their relations are substantially different from those based on global data as well as those based on historical and paleoearthquake data.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Weber, G., E.,	1983	Geologic investigation of the marine terraces of the San Simeon region and Pleistocene activity on the San Simeon fault zone, San Luis Obispo County	NEHRP Tech. Rpt.	This article presents a study of the Pleistocene geology of the San Simeon coastal area with analysis and interpretation of the different emergent marine terraces on opposite sides of the fault. The authors state the limitations of this study, specifically in better constraining slip rate on the San Simeon fault, but do confirm late Pleistocene-Holocene activity on the fault.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Weber, G., E., Lettis, W., R., Hanson, K., L.,	1987	Late Pleistocene uplift rates along the central California coast, Cape San Martin to Santa Maria Valley [abstract]	Geol. Soc. Am. Abst. Prog.	This abstract describes four structural blocks (the Santa Lucia block, the San Simeon-Morro Bay block, the Pismo-San Luis block, and the Santa Maria block) from Cape San Martin to Santa Maria Valley, their bounding faults, uplift rates, and structural interpretations of these uplift rates. Refined descriptions and delineations of the structural blocks and uplift rates in central coastal California were subsequently published (e.g., Lettis et al., 2004; Hanson et al., 2004).	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Weber, G., E.,	1990	Late Pleistocene slip rates on the San Gregorio fault zone at Point Ano Nuevo, San Mateo County, California	Am. Assoc. Petrol. Geol.	This paper develops slip rates for the San Gregorio fault near Monterey Bay. By mapping marine terraces and constructing cross-sections, the author finds a late Pleistocene slip rate of 6 to 10 mm/yr. Further, offset drainages reveal a 4 to 8 mm/yr slip rate for the past 105 ka. Results of this paper have been superseded. Improvements to these rates have been made and incorporated into more recent models.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Weichert, D., H.,	1980	Estimation of the earthquake recurrence parameters for unequal observation periods for difference magnitudes	Bull. Seis. Soc. Am.	This study examined the effects on maximum likelihood estimation parameters when events grouped by magnitude are observed over various time periods. The authors find that the least-squares method is appropriate for well-constrained data, but not for less well-defined datasets. They develop a method to estimate recurrence parameters for periods of unequal observation.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Weldon, R., J., Humphreys, E., D.,	1986	A Kinematic Model of Southern California	Tectonics	This study presents a kinematic model for southern California based on previous geologic information, slip rates, and rotations. The kinematic block model is largely controlled by three fault systems (San Andreas, Garlock, and the coastal system) and is integrated with four vector paths. Results identify areas of convergence in the Transverse Ranges due to opening of the Basin and Range, and the Big Bend and structural complexity. Compression is also suggested in the Banning area. Significant offshore deformation is also highlighted. While models with more refined geologic data have been developed, results of this study may be useful for the DCPP SSC.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Weldon, R., J., Biasi, G., P., Wills, C., J.,	2008	Appendix E: Overview of the Southern San Andreas Fault Model	U.S. Geol. Surv. Open File Rpt.	This appendix to the UCERF2 documentation summarizes a wealth of geologic data for the southern SAF, focusing primarily on slip rate, slip per event, and paleoseismic data along each section of the fault. The authors further discuss possible rupture combinations, likelihood of various multi-segment ruptures, and conditional probabilities. This paper compiles abundant information for characterization of the southern SAF, and could be useful to the DCPP SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Weldon, R., J.,	2010	A Discussion of Elastic Rebound,Earthquake Recurrence and Characteristic Earthquakes: Part Two: Reply to Seismological and Geodetic	SSA Mtg.	Part 2 of this presentation is intended to provide a geologists viewpoint, in addition to Ellsworth's seismologist viewpoint, and notes that while various degrees of periodicity are noted on some faults, it remains unknown why some faults exhibit this behavior and others do not. A greater understanding of the physical processes behind earthquakes is required before periodicity can be accepted. The author argues that, therefore, the characteristic model should be used with caution and not applied in all cases in which some or many may be inappropriate. This concept may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Weldon, R., J., Biasi, G., P.,	2013	Appendix I—Probability of Detection of Ground Rupture at Paleoseismic Sites (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix presents a probability of paleoseismic detection estimate of ground rupture using data from the Wrightwood, California site. Site-specific probability of detection values were not developed, though proposed as a future extension of this work. Given the preliminary nature of this work and lack of paleoseismological data in the DCPP vicinity, this appendix is not applicable to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Weldon, R., J., Dawson, T., E., Biasi, G., P.,	2013	Appendix G—Paleoseismic Sites Recurrence Database (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix contains an updated recurrence database and describes a methodology for estimating the probability of overlap between sites using rupture offset. This database contains recurrence estimates for sections of the SAF and the San Gregorio at Seal Cove, but is not relevant to faults in the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Weldon, R., J., Schmidt, D., A., Austin, L., J.,	2013	Appendix D—Compilation of Creep Rate Data for California Faults and Calculation of Moment Reduction Due to Creep (USGS OFR2013-1165)	U.S. Geol. Surv. Open File Rpt.	This UCERF3 appendix documents a method of determining seismic moment reduction due to interseismic creep. This includes descriptions of creep observations as well the variation of creep with depth (decreasing with depth, with increased depth for increased creep rate). This method and the UCERF3 results may be applicable in the characterization of the SAF for the SSC.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Wells, D., L., Coppersmith, K., J.,	1994	New Empirical Relationships among Magnitude, Rupture Length, Rupture Width, Rupture Area, and Surface Displacement	Bull. Seis. Soc. Am.	Defines relationships among source parameters for historical earthquakes. Length of rupture at surface is equal to 75% of subsurface rupture length. Average surface displacement per event is about 1/2 maximum surface displacement per event. Average subsurface displacement on fault plane is more than average surface displacement but less than maximum surface displacement. The scaling relations presented here are critical for the Magnitude-Area Model branch of the logic tree.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wentworth, C., M., Zoback, M., D.,	1989	The Style of Late Cenozoic Deformation at the Eastern Front of the California Coast Ranges	Tectonics	This study discusses modern compression directions, located primarily at the eastern edge of the Coast Range in response to northeast directed thrusting. These findings require northeast-southwest compression, approximately perpendicular to the transform. This is contrary to conventional wrench tectonics.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Werner, M., J.,	2012	Probabilistic Seismic Hazard Assessment and the Hazards of Overconfidence [abstract and slidecast]	SSA Mtg.	This presentation highlights assumptions in PSHA that may be simplifying, untested, and potentially hazardous. The presenter uses several examples of several large recent earthquakes (e.g., Tohoku, Christchurch, Chile) that were missed by hazard models. The author argues that the underestimation of hazard led to greater loss. The presenter offers some alternatives that rely on fewer assumptions but will require further refinement (e.g., physics based simulators, RELM). These concepts may be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wesnousky, S., G., Scholz, C., H., Shimazaki, K.,	1983	Earthquake frequency distribution and the mechanics of faulting	J. Geophys. Res.	Paper discusses the validity of the G-R relationship of earthquake magnitude/frequency distribution using onshore faults in Japan. As many others have said, G-R generally holds true for regions. Wesnousky et al. show that G-R is not reflective of seismicity observed for discrete faults. Rather, the frequency and magnitude distribution of earthquakes on discrete faults is primarily a function of fault distribution and slip rate.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G.,	1986	Earthquakes, quaternary faults, and seismic hazard in California	J. Geophys. Res.	Uses the idea that geologic rates of faulting can be used to reasonably estimate future seismic moment release and intensity of ground shaking for a given region. Provides a cursory look at estimated ground motion exceedance for a given time period for the state of California. Many assumptions are made and cautionary text explicitly states the major uncertainties and assumptions.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Wesnousky, S., G.,	1987	Geological data and seismic-hazard analysis: past and future	U.S. Geol. Surv. Bull.	Provides a discussion on the importance and limitation of geologic data used in seismic hazard analysis studies. At the time, significant advances were being made in understanding fault slip rates and the timing of paleoearthquakes. However, detailed multi-site paleoseismic records able to resolve rupture histories for fault systems were, and in many cases still are, lacking. Questions remain regarding what sections of faults rupture and when, what geometries arrest rupture, why do fault rupture lengths vary and how do the vary, etc. Efforts must be undertaken to better understand complex rupture histories and the processes that control them.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G.,	1989	Seismicity and the structural evolution of strike-slip faults	U.S. Geol. Surv. Open File Rpt.	This study compiles data for active faults in CA and Turkey to compare total length, total slip, segment length, stepover dimensions, and magnitude of strike slip faults. Results indicate that stepover dimensions decrease with increasing total fault length, and even more so with increasing total slip. The author suggests that, since fault complexity decreases with total slip, recurrence and size of earthquakes may also evolve in parallel. Later work by the author supersedes what is presented here.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G., Jones, C., H.,	1994	Oblique slip, slip partitioning, spatial and temporal changes in the regional stress field, and the relative strength of active faults in the Basin and Ranges, western	Geology	This paper focuses on strain partitioning in the Basin and Range. Most conclusions are specific to the Basin and Range however, the authors find that in regions of well-partitioned slip, principal stress directions are not necessarily the same as principal directions of crustal strain.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Wesnousky, S., G.,	1994	The Gutenberg-Richter or characteristic earthquake distribution, which is it?	Bull. Seis. Soc. Am.	Examines G-R and characteristic earthquake magnitude-frequency distributions. Uses seismicity from the Newport-Inglewood, Elsinore, San Andrea, Garlock, and San Jacinto faults/fault zones to address magnitude-frequency distributions. Results show that distributions are characteristic for the all but the San Jacinto. Overall the San Jacinto is G-R, but when taken as separate discrete segments, distribution is closer to characteristic.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G.,	1996	Reply to Yan Kagan's comment on "The Gutenberg-Richter or characteristic earthquake distribution, which is it?"	Bull. Seis. Soc. Am.	Response argues that the W94 selection of the 40 km width of seismicity is conservative in that it most certainly includes earthquakes not on primary fault traces. Wesnousky also notes that it would difficult if not geologically implausible to lengthen the faults used, nor would it make much difference with respect to magnitude in most cases. An analysis of Kagan's method points out several flaws, namely the requirement that faults be capable of producing earthquakes in excess of Mw 9.0 (up to Mw 11.3 for the Newport-Rose Canyon).	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G.,	1999	Crustal deformation processes and the stability of the Gutenberg-Richter relationship	Bull. Seis. Soc. Am.	Describes a method of deriving b-values for a given region based on slip rate/fault length and number of faults/fault length relationships. The log of the slip rate and log of the number of faults shows an inverse relationship while the slip rate and fault length show a direct relationship.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Wesnousky, S., G.,	2004	Earthquake slip distributions, mechanics of earthquake rupture, and seismic hazard	NEHRP Tech. Rpt.	Presents the surface rupture trace for the ~3 dozen historical earthquakes and conclude that 75% of endpoints of earthquake ruptures are correlated with geometrical steps in fault trace or endpoints of mapped faults. A fault step of < 5 km is found to stop strike-slip ruptures for ~40% of relevant earthquakes while fault steps >= 5 km consistently stops strike-slip earthquake ruptures. Additionally, dip-slip faults cannot be constrained with such percentages due to a lack of data. This report is relevant to our understanding of segmentation of a fault. See Wesnousky (2006) for updated results.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G.,	2005	The San Andreas and Walker Lane fault systems, western North America: transpression, transtension, cumulative slip and the structural evolution of a major	J. Struct. Geol.	Provides an overview of the Pacific-North America plate boundary and the two main systems that accommodate most all of the relative plate motion. The Walker Lane and ECSZ accommodate roughly 1/4 to 1/5 of the total Pacific-NA plate motion in addition to E-W basin and range extension. The difference in strain accommodation is reflected in the diffuse and relatively discontinuous style of faulting observed east of the Sierra Nevada microplate. In contrast the large amount of strain accommodated along the SAF fault has resulted in well-defined linear fault zone, especially in central CA. Differences in transpressional vs transtensional nature of the SAF and Walker Lane, respectively, are also accounted for in fault style and orientation.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Wesnousky, S., G.,	2006	Predicting the endpoints of earthquake ruptures	Nature	Two-thirds of endpoints of strike-slip earthquake ruptures are due to fault steps or the termini of active fault traces and a fault step of 3-4 km or greater prevents the propagation of an earthquake rupture. A fault step less than 3-4 km ceases propagation about 40% of the time. This article is critical in addressing how to characterize fault segmentation in the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☑	Wesnousky, S., G.,	2008	Displacement and geometrical characteristics of earthquake surface ruptures: issues and implications for seismic-hazard analysis and the process of	Bull. Seis. Soc. Am.	Presented a compilation of ~3 dozen historical earthquakes that have had their rupture traces mapped in order to improve understanding of seismic hazard analysis and fault mechanics. Observations of rupture width, aspect ratio, maximum and average coseismic slip, rupture length, earthquake moment and magnitude, shape of surface slip distribution, and location of epicenter are also presented. Wesnousky states that these observations can serve as the basis for a statistical approach to predicting end points and surface-slip distribution of earthquakes. He also presented evidence for/discussed implications of a process zone where changes in stress may be large enough to cause slip on adjacent faults. Like previous Wesnousky papers, this article may be important in understanding segmentation and the implications of a fault's geometry. The relations between instrumental measures of Mw and rupture length may also be useful in the Magnitude-Area Model branch in the logic tree.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G.,	2010	Short Note: Possibility of Biases in the Estimation of Earthquake Recurrence and Seismic Hazard from Geologic Data	Bull. Seis. Soc. Am.	Wesnousky states that current seismic hazard assessments may be biased due to aseismic deformation in that (1) seismic moment per unit area estimates of earthquakes on mapped faults based on empirical regressions of seismic moment and aftershock area may be systematically overestimated, and (2) as an inverse function of fault length, seismic moment rate on mapped faults determined from fault slip rates may be overestimated. Wesnousky also speculates that large earthquakes may rupture coseismically below the seismogenic layer and that aseismic deformation may be of sufficient magnitude to affect seismicity over regional fault models, though these concepts cannot currently be proven.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wesnousky, S., G., Biasi, G., P.,	2011	Short Note: The Length to Which an Earthquake Will Go to Rupture	Bull. Seis. Soc. Am.	This study discusses fault rupture behavior of historic surface faulting events. Particularly, the paper discusses the likelihood that segmentation will occur along a series of fault segment. The rough assessment is that for each rupture segment there is a 50/50 chance. For example, rupturing through one step would be 50% the second step 25% the third 12.5% etc.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Wesnousky, S., G., Bormann, J., M., Kreemer, C.,	2012	Neotectonics, geodesy, and seismic hazard in the Northern Walker Lane of Western North America: Thirty kilometers of crustal shear and no strike-slip?	EPSL	Using the Northern Walker Lane as an example, the authors develop a model by which relatively large amounts of strike slip can accommodated by structures besides major strike-slip faults. The authors conclude that all geodetic slip will not necessarily be recorded by earthquake displacements. As such, assuming that all geodetic slip must be taken up seismically will lead to overestimates of seismic hazard. Results of this study are not directly applicable the DCPP site, however, the concepts could help constrain discrepancies between GPS strain rates and geologic slip rates on faults in the site vicinity.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wessel, P., Kroenke, L., W.,	2007	Reconciling late Neogene Pacific absolute and relative plate motion changes	Geochem. Geophys. Geosyst.	Describes the significant change in Pacific absolute plate motion that occurred in the late Neogene. New models depict a more northerly absolute motion than previously determined. This article presents little to no information applicable to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wessel, P., Kroenke, L., W.,	2008	Pacific absolute plate motion since 145 Ma: An assessment of the fixed hot spot hypothesis	J. Geophys. Res.	Two new absolute plate motion models that extend estimates back to 145 Ma. Given the scale of this article, it is unlikely that it will be directly relevant to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Wheeler, R., L.,	1989	Persistent segment boundaries on Basin-Range normal faults	U.S. Geol. Surv. Open File Rpt.	Wheeler presents a method to identify persistent segment boundaries on normal faults and applies this method to normal faults in the Basin and Range. Wheeler makes the assumptions that (1) segments can be identified by locating ends of rupture zones produced by individual large earthquakes; and (2) segments usually rupture independently, such that large ruptures generally will not cross segment boundaries and thereby defining a segment boundary as a part of a fault where at least 2 rupture zones have ends. In order to identify these boundaries, less structural relief across the fault at the boundary should be observed (due to accumulated slip deficit). Additionally, a persistent segment boundary on a normal fault is found to control the spatial extent of strong ground motion. The method presented in this article is of little direct use to the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wicks, C.,	2006	Anomalous Surface Deformation Associated With the December 22, 2003, San Simeon Earthquake – From RADARSAT-1 Interferometry, Alaska	Alaska Sat. Facility News Notes	Short article describing InSAR analysis completed after the 2003 San Simeon earthquake. Article notes two primary zones of subsidence, one 8 km south of Paso Robles and one in downtown Paso Robles. The area of most significant damage from ground motion coincides with a zone of subsidence and development of new hot springs. Author attributes the subsidence to a breach in a shallow (~100 m) hydrothermal reservoir, evidenced by the newly-formed hot springs and increased stream flow in the Salina river. This article likely has little significance for ground site ground motions.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Wiegers, M., O.,	2009	Geologic Map of the Morro Bay South 7.5' Quadrangle: San Luis Obispo County, California: A Digital Database	Cal. Dept. Conserv.	Geologic mapping at 1:24,000 scale with a southern extent about 4 km north of the DCPP. Map includes several subdivided Quaternary deposits that are mapped in high detail. Similar, bedrock mapping includes several sub-divided units mapped in apparently high detail. Structures mapped include the Los Osos fault, Pismo syncline, and other faults and folds. Numerous bedding attitudes are presented, as well as air photos lineament mapping.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Wiegers, M., O.,	2010	Geologic Map of the San Luis Obispo 7.5' Quadrangle: San Luis Obispo County, California: A Digital Database	Cal. Dept. Conserv.	Geologic mapping at 1:24,000 scale with a southern extent about 4 km north of the DCPP. Map includes several subdivided Quaternary deposits that are mapped in high detail. Similar, bedrock mapping includes several sub-divided units mapped in apparently high detail. Structures mapped include the Los Osos fault, Pismo syncline, and other faults and folds. Numerous bedding attitudes are presented, as well as air photos lineament mapping.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Wiegers, M., O.,	2011	Preliminary Geologic Map of the Pismo Beach 7.5′ Quadrangle, San Luis Obispo County, California: A Digital Database	Cal. Dept. Conserv.	Geologic mapping at 1:24,000 scale whose western extent is < 1 km east of Point San Luis. Map includes several subdivided units and Quaternary deposits that are mapped in high detail.. Structures mapped include the Pismo syncline, San Luis Bay fault, San Miguelito fault, Edna fault, Los Osos fault, Wilmar Avenue fault, and other faults and folds.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☑ Wilmar Ave fault ☑ San Luis Bay fault zone ☐ Shoreline fault ☑ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Wiegers, M., O.,	2013	Preliminary Geologic Map of the Arroyo Grande NE 7.5′ Quadrangle, San Luis Obispo County, California: A Digital Database	Cal. Dept. Conserv.	Geologic mapping at 1:24,000 scale of the Arroyo Grande Quadrangle whose extent is 35°7'30" to 35°15' latitude and -120°30' to -120°37'30" longitude. Map includes several subdivided units and Quaternary deposits that are mapped in high detail. Structures mapped include the Wilmar Avenue fault, Edna fault, West Huasna fault, and other faults and folds.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☑ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Wiemer, S., Schorlemmer, D.,	2007	ALM: An Asperity-based Likelihood Model for California	Seis. Res. Let.	The authors present an asperity likelihood model that is intended to account for spatial variations in b-values. An annual rate of M5 to M9 events is calculated for California. Rates of M8 and M9 events are higher that observed due to lack of information and the chosen Mmax, respectively.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Willdan Associates,	1986	Ground Water Study, San Luis Obispo Airport Area (consulting report for the County of San Luis Obispo)	Unpub. Consult. Rpt.	This report documents a ground water study in the San Luis Obispo County Airport area, including descriptions of surface water, hydrogeology, ground water, and cultural development. Provides some description of the Franciscan Formation and the Squire, but does not discuss faults in the area and is otherwise not relevant to the SSC,	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Williams, C., F.,	2003	Appendix A: Implications of the Depth of Seismicity for the Rupture Extent of Future Earthquakes in the San Francisco Bay Area (USGS OFR 03-214)	U.S. Geol. Surv. Open File Rpt.	This appendix describes the depth of seismicity and potential rupture extent for faults in the San Francisco Bay Area based on observations of seismicity and heat flow. Uncertainties in this analysis include the absolute accuracy of hypocentral depths, the number of events necessary to accurately constrain seismogenic depth, variation in results by type of event (whether background seismicity, aftershocks, or mainshocks), and how to determine the uncertainty value. Although not directly applicable to the SSC, the concepts presented in this appendix (particularly the possible uncertainties) are generally applicable to the assessment of seismogenic depth in the DCPP vicinity.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
[x]	Willingham, C., R., Rietman, J., D., Heck, R., G.,	2013	Characterization of the Hosgri Fault Zone and adjacent structures in the offshore Santa Maria Basin, south-central California	U.S. Geol. Surv. Bull.	The authors use seismic reflection data, gravity and magnetic data, offshore well data, offshore cores, seafloor samples and diver observations, and onshore geologic studies to describe both the geometry and sense of slip of the Hosgri Fault Zone (HFZ) as well as the offshore geologic units and marker horizons or unconformities. The authors interpret the HFZ as an ~110 km long active, transpressional, convergent right-oblique slip-fault zone extending SE from ~6 km offshore of Cambria to ~5 km NW of Point Pedernales and separates two tectonic domains (offshore Santa Maria Basin and onshore Los Osos-Santa Maria domain). Additionally, the HFZ is found to (1) have a large component of lateral slip; (2) be vertical to steeply-dipping to at least depths of 2-3 km; and (3) late Quaternary offset is suggested at several location along the fault.	[ ] Seismotectonic Setting [x] Fault Geometry Model [ ] Fault Slip Rate Model [x] Rupture Model [ ] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [x] Los Osos fault [x] Wilmar Ave fault [x] San Luis Bay fault zone [x] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Wills, C., J., Weldon, R., J., Bryant, W., A.,	2008	Appendix A: California Fault Parameters for the National Seismic Hazard Maps and Working Group on California Earthquake Probabilities 2007	U.S. Geol. Surv. Open File Rpt.	Defines earthquake parameters for active faults used in the 2007 UCERF model. Document outlines contents and limitations, changes to fault parameters including slip rates, locations, zone of distributed shear (e.g. ECSZ) and fault sections. Outlines potential changes to earthquake recurrence models resulting from fault parameter updates. Contains tables with fault parameters. Does not define parameters for all faults included in the source model.	[ ] Seismotectonic Setting [x] Fault Geometry Model [x] Fault Slip Rate Model [ ] Rupture Model [x] Magnitude Distribution Model [x] Time Dependency Model [ ] Other [ ] None	[x] Hosgri fault [x] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [x] Other regional faults [ ] All faults [ ] Tectonic setting
[ ]	Wills, C., J., , Field, E., H.,	2008	Appendix K: A-Priori Rupture Models for Northern California Type-A Faults	U.S. Geol. Surv. Open File Rpt.	In this appendix to the UCERF2 documentation, the development of a-priori models for northern California fault is described. The authors present three a priori models for each fault: geologic insight; minimum rate, which minimizes the number events yet honors all available paleoseismic data and; maximum rate, which does just the opposite and yields many more single segment ruptures. The authors describe the implementation of segmented and unsegmented models, the range of magnitudes possible on floating ruptures, and the key differences from the 2002 model.	[ ] Seismotectonic Setting [ ] Fault Geometry Model [x] Fault Slip Rate Model [x] Rupture Model [x] Magnitude Distribution Model [ ] Time Dependency Model [ ] Other [ ] None	[ ] Hosgri fault [ ] Los Osos fault [ ] Wilmar Ave fault [ ] San Luis Bay fault zone [ ] Shoreline fault [ ] San Miguelito fault [ ] Other regional faults [ ] All faults [ ] Tectonic setting

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☑	Wilson, D., S., McCrory, P., A., Stanley, R., G.,	2005	Implications of volcanism in coastal California for the Neogene deformation history of western North America	Tectonics	The authors test the viability of correlating volcanic units with specific slab windows and find no serious issues with relating these correlations to previously published tectonic reconstructions. Their interpretation of a moderate increase in motion of the Sierra Nevada relative to the Colorado plateau or North America does not significantly change previous interpretations of the plate circuit, rather a refinement of these estimates. They find that, based on as estimate of 500 km of motion of Baja California, the current geometry of the Pacific-North American plate boundary in California and western Mexico developed by ~10-12 Ma. This article has little direct application to the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wisely, B., A., Schmidt, D., A., ,	2008	Appendix P: Compilation of Surface Creep on California Faults and Comparison of WGCEP 2007 Deformation Model to Pacific-North American Plate Motion	U.S. Geol. Surv. Open File Rpt.	This appendix to UCERF2 documentation summarizes surface creep data on several faults comprising the SAFS, and tests observed creep rates vs. modeled creep rates in the UCERF2 model. The author finds a good fit, but several minor discrepancies between plate rate and deformation are observed. Using a strain tensor analysis, the author finds that the model accounts for ~95% of the plate motion, which is within calculation uncertainty. The paper concludes with a discussion of model vs. plate motion for each strain tensor region. This paper may contain useful concepts for the DCPP SSC, such strain budgeting or general tectonic model development.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Wooddell, K., E., Abrahamson, N., A.,	2013	Constraints on magnitude-frequency distributions for evaluating the hazard of multi-segment ruptures	Seismol. Soc. Am. Ann. Mtg.	In this SSS presentation, the WAACY magnitude PDF model is presented as a method of evaluating the upper-bound rates of multi-fault and multi-segment ruptures without violating observations of surface rupture variability. The key components of the approach are: computing the probabilistic rupture hazard for each MFD; generating multiple slips at a point using a Monte Carlo approach; and computing the CV using the same sampling of earthquakes per site as the Hecker et al. (2013) dataset. The key model inputs are the shape of the MFD and the magnitude-displacement relation selected (Wells and Coppersmith, Wesnousky, and Shaw are shown in the presentation). This model was considered as an alternative to the exponential, simplified maximum magnitude, and characteristic magnitude PDF models.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Working Group on California Earthquake Probabiliti,	1995	Seismic Hazards in Southern California: Probable Earthquakes, 1994 to 2024	Bull. Seis. Soc. Am.	Uses geodetic, seismic, and geologic data to estimate frequencies of damaging earthquakes in S. California (Parkfield and south). Estimates frequencies for three types of fault zones (those with significant data, well-defined faults with limited data, and diverse or hidden faults). Presents probability of ≥ M 7 earthquake and probability of ground motion exceeding 0.2 g for the S. CA region. Predicted seismicity exceeds historical seismicity. Includes probabilities for the Hosgri.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Working Group on California Earthquake Probabiliti,	2003	Earthquake Probabilities in the San Francisco Bay Region: 2002-2031	U.S. Geol. Surv. Open File Rpt.	This open file report documents earthquake probabilities in the SF Bay Region, which includes three elements: SF Bay Region earthquake model (average magnitudes and long-term recurrence), time-dependent earthquake probability models, and background seismicity. Although these results are not directly relevant to the DCPP vicinity, the methodologies presented may be useful in developing the earthquake rate and probability model.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Wosser, T., D., Campi, D., E., Fovinci, M., A.,	1982	Damage to engineered structures in California	U.S. Geol. Surv. Prof. Paper	This study assesses damage to engineered structures following the 1979 Imperial earthquake. All structures assessed were within about 40 km of the epicenter, and damage ranged from shelving failures to complete structural compromise. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☐	Wu, S-C., Cornell, C., A., Winterstein, S., R.,	1995	A Hybrid Recurrence Model and Its Implication on Seismic Hazard Results	Bull. Seis. Soc. Am.	This paper discusses the development of a hybrid recurrence model that uses a characteristic model for large earthquakes, and exponential model for small earthquakes on an individual fault. The authors find that unless site to source distance is very small, the characteristic, large magnitude earthquakes control hazard.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Wyss, M.,	1979	Estimating maximum expectable magnitude of earthquakes from fault dimensions	Geology	Wyss presents a magnitude-area relation for all fault types that is valid for M > 5.6. He presents arguments of why Mmax estimates derived from rupture area are more accurate than those based on rupture length alone and also argues that Lmax should be defined as source length, not surface rupture. The scaling relation presented here may be useful in the Magnitude-Area Model branch of the logic tree. However, the age of the article may suggest that the dataset used to derive the scaling relation is not as robust as those used in more recent articles.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Xu, X., Chen, W., Ma, W.,	2002	Surface rupture of the Kunlunshan earthquake (Ms 8.1), Northern Tibetan Plateau, China	Seis. Res. Let.	Article presents the long-term slip rate and cumulative displacement of the seven segments of the Kunlun Fault. The article also includes a description of the surface rupture, type of surface breaks, and coseismic displacement associated with the Kunlunshan earthquake. The main surface rupture of the earthquake was determined to be left-lateral strike-slip. This article is an example of rupture on a large segmented strike-slip fault system which is very relevant to the SSC and understanding how segmented earthquakes rupture.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☑ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☑ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☑ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Yates, E., B., Wiese, J., W.,	1988	Hydrogeology and Water Resources of the Los Osos Valley Ground-Water Basin, San Luis Obispo County, California	S. Geol. Surv. Water-Res. Investig. R	This report presents a groundwater investigation (including lithologic logs and cross sections) and 3D model of the Los Osos Valley groundwater basin. The basin is described as occupying the central and westerns part of the valley, extending offshore and to depths of 1,000 ft, and is primarily filled with unconsolidated Careaga sandstone and Paso Robles Fm, with a thin covering of windblown sand or Holocene alluvial deposits; Pismo Fm and Franciscan Complex underlie the basin. The report describes a tectonic origin for the basin, with development initiating in the Tertiary. Additionally, the LOF is described as offsetting Paso Robles sediments by ~100 ft near the southern edge of the Valley. Two unnamed NS trending parallel faults near the western end of the Edna fault zone that extend into the basin are described, with the eastern fault offsetting Careaga and possibly Paso Robles, and the western fault possibly (though equivocal) offsetting Careaga.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☑ Other ☐ None	☐ Hosgri fault ☑ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Yen, Y., T., Ma, K., F.,	2011	Source-scaling relationship for M 4.6-8.9 earthquakes, specifically for earthquakes in the collision zone of Taiwan	Bull. Seis. Soc. Am.	The authors present scaling relations between source parameters and seismic moment that indicate seismogenic depth affects the development of the fault dimension during rupture. Their dataset included 12 dip-slip and 7 strike-slip earthquakes in Taiwan, plus 7 large magnitude events outside of Taiwan. They found Shaw's (2009) derived magnitude-area equation (adjusting seismogenic depth to better represent Taiwan) for fit well for events with stress drops of 10-100 bars and found the bilinear feature of the scaling appears at a ruptured area of about 1000 km^2. The scaling relations presented here may be useful in the Magnitude-Area Model branch of the logic tree.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Youd, T., L., Wieczorek, G., F.,	1982	Liquefaction and secondary ground failure	U.S. Geol. Surv. Prof. Paper	This article describes ground failures at 31 associated with the 1979 Imperial Valley earthquake (e.g., slumps, lateral spreads) and compares these failures with those of the 1940 Imperial Valley earthquake. This report likely contains little to no data that would be useful for the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

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☐	Young, J., J., Arrowsmith, J., R., Colini, L.,	2002	Three-dimensional excavation and recent rupture history along the Cholame segment of the San Andreas Fault	Bull. Seis. Soc. Am.	Excavations indicate the most recent ground-rupturing event occurred between cal. A.D. 1390-1460 and ~1865 and the penultimate event occurred between cal. A.D. 1030-1300 and 1390-1460. During the most recent event, 3.0+/-0.70 m of near-fault brittle slip occurred. Article provides information regarding recurrence and slip on the Cholame segment of the SAF but may be of little direct use in the DCPP SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☑	Youngs, R., R., Coppersmith, K., J.,	1985	Implications of fault slip rates and earthquake recurrence models to probabilistic seismic hazard estimates	Bull. Seis. Soc. Am.	Article presents a magnitude-frequency distribution for characteristic earthquake recurrence on faults, to account for observations (by Schwartz and Coppersmith, 1984) that recurrence estimates from paleoseismic data for large magnitude events may not match recurrence rates inferred from historic seismicity on that fault. The article compares a characteristic earthquake and an exponential magnitude distribution model and how variations in model parameters [slip rate, Mmax, site-source distance] affect seismic hazard assessments. Provides several critical equations for calculating magnitude PDFs.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☑ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☐	Zachos, J., Pagani, M., Sloan, L.,	2001	Trends, Rhythms, and Aberrations in Global Climate 65 Ma to Present	Science	Focusing broadly on the Cenozoic, this article assesses different mechanisms (including anomalies in Earth's orbit, catastrophic methane release, orbital pacing, etc.) that may cause significant changes in global climate. Given the lack of detailed focus on the Quaternary or sea level in the past several hundreds of thousands of years, this article provides little information useful in the SSC.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☑ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☐ Tectonic setting

Used in SSC?	Authors (first three)	Year	Title	Source/Publication	Description and Relevance	Relevant Seismic Source Model Component	Relevant Fault(s)
☑	Zechar, J., D., Frankel, K., L.,	2009	Incorporating and reporting uncertainties in fault slip rates	J. Geophys. Res.	Describes the reliability of reporting slip rates as probability distributions and accurately representing uncertainties in slip rates calculated from displacement and age values.	☐ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting
☑	Zeng, Y., Shen, Z.-K.,	2014	Fault network modeling of crustal deformation in California constrained using GPS and geologic observations	Tectonophys.	The authors use GPS velocity data and geologic constraints to determine slip rates on major faults in California. Block-like strain is less supported by the modeling than off-fault strain and transient deformation, and they conclude that geodetic and geologic observations are highly compatible.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☑ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☐ All faults ☑ Tectonic setting
☑	Zhang, H., Thurber, C., H.,	2003	Double-difference tomography: the method and its application to the Hayward fault, California	Bull. Seis. Soc. Am.	Presents a double-difference seismic tomography method for improved accuracy of earthquake hypocenters and imaging of velocity structures. Tests the method on the Hayward fault where a sharper velocity contrast was found relative to standard tomography methods. This article provides a useful method for locating earthquake hypocenters that could be applied to significant faults near the DCPP.	☑ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☐ Other regional faults ☑ All faults ☐ Tectonic setting

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☐	Zielke, O., Arrowsmith, J., R., Ludwig, L., G.,	2010	Slip in the 1857 and Earlier Large Earthquakes Along the Carrizo Plain, San Andreas Fault	Science	This study used LiDAR topographic data to evaluate geomorphic markers offset by the 1857 rupture of the San Andreas fault in the Carrizo Plane. The authors calculate average displacement from the 1857 of about 5.3 m, with similar offsets of about 5 m for the four previous events. These results are in contrast to earlier studies that suggested up to 9 m of slip is characteristic of the San Andreas fault in the Carrizo Plane. These results, do not however, change the estimated magnitude of the MW 7.9 1857 by an appreciable amount (0.03 units). Results of this paper may be useful for characterization of the San Andreas fault.	☐ Seismotectonic Setting ☑ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☑ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting
☐	Zoback, M., D., Zoback, M., L., Mount, V., S.,	1987	New Evidence on the State of Stress of the San Andreas Fault System	Science	This study discusses the origins of fault parallel fold /compression structures to the San Andreas fault zone. The study suggest a model in which the shear stresses in the crust are high far from the fault and constrained by the frictional strength of the rock, where the shear strength of the planes on either side of the main SAF are very low. This allows stress to build up on nearby regional structures while most of the slip is released through creep along the creeping section of the SAFZ.	☑ Seismotectonic Setting ☐ Fault Geometry Model ☐ Fault Slip Rate Model ☐ Rupture Model ☐ Magnitude Distribution Model ☐ Time Dependency Model ☐ Other ☐ None	☐ Hosgri fault ☐ Los Osos fault ☐ Wilmar Ave fault ☐ San Luis Bay fault zone ☐ Shoreline fault ☐ San Miguelito fault ☑ Other regional faults ☐ All faults ☐ Tectonic setting