

MR: Master Responses

This section presents a master response on a topic where commenters made similar comments on the same topic. This document contains only one Master Response, which is on geologic and seismic investigations.

Master Response 1: Geologic and Seismic Investigations

Several comments were received from multiple commenters pertaining to seismic hazards, seismic analysis, subsidence, and the content of the geology and soils impact analysis in Chapter 4.5 of the Draft EIR. For example, commenters made the following claims:

- Moment magnitude for certain faults are different in other documents than in the Draft EIR.
- Pulse, directivity, basin depth, Community Velocity Model data, and near field effects must be calculated by a professional working in the field of seismology.
- A site-specific investigation for subsidence and V_{S30} must be conducted.
- Certain impact discussions are not supported by an investigation and a report.
- Use the SCEC Cybershake program, SCEC Community Velocity Model; consultation with USGS staff is necessary.
- Use of the Caltrans ARS tool is necessary.
- The Draft EIR must analyze structures for their structural period relationships.
- The Draft EIR must establish seismic design coefficients for collapse.
- Ground motion maps must be created from simulations.
- Directivity, pulse, fling, and heave must be considered at the site.

The comments received relate to the seismic and geologic stability analyses in the Draft EIR, which are discussed under Impacts GEO-1 (fault rupture), GEO-2 (seismic ground shaking), GEO-3 (seismic-related ground failure, including liquefaction), GEO-6 (soil instability resulting in subsidence or liquefaction), and GEO-7 (expansive soil). This Master Response provides an explanation of the methodology and analyses discussed for each of the above-listed impacts in the Draft EIR as further support that the conclusions in the Draft EIR are based on substantial evidence.

Some comments contained incomplete sentences or citations to sources of information, making it difficult to ascertain the meaning of the comment. This response represents the CPUC's best effort to understand all comments submitted on the issue of the geologic impact analysis. This response discusses the level of detail required under CEQA for impact analyses, including the type and breadth of information needed to support an impact conclusion in an EIR. Please note, however, that "CEQA does not require a lead agency to conduct every test or perform all research, study and experimentation recommended or demanded by commenters" (CEQA Guidelines section 15204). Additionally, lead agencies are not required to respond to general reference materials or comments that are not directly relevant to the project (*Environmental Protection Information Center v. Dept. of Forestry & Fire Protection* (2008) 44 Ca.4th 459, 483, 487).

CEQA Guidelines section 15064(f) requires that “[t]he decision as to whether a project may have one or more significant effects shall be based on substantial evidence in the record of the lead agency.” CEQA Guidelines section 15151 states that the “evaluation of the environmental effects of a proposed project need not be exhaustive. . . .” CEQA does not require any particular type of investigation of geological resources or seismic impacts or site-specific geological investigations. However, per MM-GEO 1, a geotechnical investigation and report will be prepared prior to construction. Additionally, CEQA requires examination of the project’s impact on the environment (CEQA Guidelines § 15126.2(a)). CEQA does not require an analysis of the potentially significant impacts of locating a development in an area susceptible to hazards unless the project somehow exacerbates those existing hazards (*California Building Industry Assoc. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 388). In fact, the Supreme Court has invalidated the provisions of the CEQA Guidelines directing agencies to evaluate how existing conditions, including existing seismic hazards, could affect a project’s future users (*Id.* at 389–390). Here, the Geology and Soils Chapter sufficiently discusses the environmental hazards related to geology and soils and whether the project exacerbates existing seismic and geological conditions on the project site. Thus, no further discussion is needed.

As explained below, all of the conclusions for Impacts GEO-1, GEO-2, GEO-3, GEO-6, and GEO-7 are based on substantial evidence. The comments do not contain evidence that the analysis in the Draft EIR is incorrect or unsupported. Additional investigation is unnecessary.

Impact GEO-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault.

Faults with potential to rupture at the surface were determined by identifying Alquist-Priolo Fault Zones. Alquist-Priolo Zone indicates where fault rupture is most likely to occur, per the Alquist-Priolo Earthquake Fault Zoning Act, as explained in Draft EIR Section 4.5.2.2. The analysis under Impact GEO-1 explains that there several active faults in the vicinity of the proposed project, but only Staging Yard 6 lies within an Alquist-Priolo Fault Zone. There would be no permanent structures, trenching, or grading at depth at Staging Yard 6. Therefore, the risks associated with fault rupture would be less than significant. The proposed project would also not exacerbate existing fault rupture conditions at Staging Yard 6. As explained, these conclusions are based on substantial evidence, and no additional investigation is required.

Impact GEO-2: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

The potential for strong seismic ground shaking in the project area was characterized using the most comprehensive set of publicly available data, including data for the project area from the California Geological Survey’s Seismic Hazard Zone Reports and the United States Geological Service’s Quaternary Fault and Fold Database. These data disclose the known active and potentially active faults in the area and their predicted maximum earthquake size.

The analysis for Impact GEO-2 concluded that the proposed project could experience moderate to high levels of earthquake-induced ground shaking due to the proposed project’s location in a seismically active area and proximity to active and potentially active faults. Transmission and subtransmission structures would be designed in accordance with CPUC General Order (G.O.) 95. Underground infrastructure would be designed in accordance with G.O. 128. Buildings and equipment rooms would be designed in accordance with all applicable regulations, including the

California Building Code. The Draft EIR concluded that impacts at the substation may be significant due to the presence of structures other than the electrical equipment rooms that could be damaged during seismic ground shaking. To reduce impacts under this criterion, MM GEO-1 would require implementing the recommendations of a California-licensed Geotechnical Engineer or Certified Engineering Geologist based on site-specific conditions. MM GEO-1 would reduce seismic ground shaking impacts to less than significant. The Draft EIR also concludes the proposed project would not exacerbate existing seismic conditions in the area. As explained, these conclusions are based on substantial evidence, and no additional investigation is required.

Impact GEO-3: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

The potential for seismic-related ground failure in the project area was characterized using the most comprehensive set of publicly available data, including data for the project area from the California Geological Survey's Seismic Hazard Zone Reports and the United States Geological Service's Quaternary Fault and Fold Database. These data disclose the known active and potentially active faults in the area, the faults' predicted maximum earthquake size, and locations susceptible to landslides or liquefaction. Local general plans were consulted to assess subsidence risk.

As explained in the Draft EIR, a portion of Telecommunications Route 3 and the Pardee and Walnut Substations would be within a State of California Liquefaction Seismic Hazard Zone. The only ground disturbing activity that would occur in such a Zone would be installation of underground conduit and fiber optic cable. The proposed project would not exacerbate existing soil conditions, but liquefaction could damage the underground conduit, which would be a significant impact. MM GEO-1 would require the project be designed based on recommendations of a geotechnical report, which would reduce impacts to less than significant. As explained, the conclusions are supported by substantial evidence and no further investigation is required.

Impact GEO-6: Be located on a geologic unit or soil that is unstable, or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral, spreading, subsidence, liquefaction, or collapse.

As explained in the Draft EIR, according to California Geological Survey and USGS data, there are no active landslides in the project area, and the susceptibility of the project area to landslides is low. However, there would be localized increased susceptibility to instability where the project would result in over-steepening of natural slopes. Liquefaction and lateral spreading may also occur at the Walnut Substation as identified by the City of Industry's General Plan and Pardee Substation as identified in the City of Santa Clarita's General Plan. MM GEO-1 would require the project be designed based on recommendations of a geotechnical report, which would reduce impacts to less than significant. No areas are at risk of collapsing; therefore, there is no impact related to collapse. No General Plans identified subsidence as a significant hazard for the project area; therefore, there is no impact related to subsidence. As explained, the conclusions are supported by substantial evidence and no further investigation is required.

Impact GEO-7: Be located on expansive soil, creating substantial risks to life or property.

The shrink-swell potential of soil in the project area was determined using National Resource Conservation Service soil survey data, as shown in Table 4.5-2 of the Draft EIR. These data are

widely used to characterize soil parameters. Part of the Main Project Area is underlain by soil with a high shrink-swell potential, with other project areas underlain by soil with a moderate shrink-swell potential. Though the proposed project would not exacerbate existing conditions, this moderate and high shrink-swell potential could damage property. MM GEO-1 would require the project be designed based on recommendations of a geotechnical report, which would reduce impacts to less than significant. The conclusions are supported by substantial evidence outlined in the discussion of each impact and no further investigation is required.