



June 20, 2025

VIA EMAIL

Ms. Connie Chen  
California Environmental Quality Act Project Manager  
California Public Utilities Commission Energy Division  
505 Van Ness Avenue  
San Francisco, California 94201

**RE: LSPGC Response to CPUC Data Request #5 for LS Power Grid California, LLC's  
Collinsville 500/230 Kilovolt Substation Project (A.24-07-018)**

Dear Ms. Chen,

As requested by the California Public Utilities Commission (CPUC), LS Power Grid California, LLC (LSPGC) has collected and provided the additional information that is needed to continue the environmental review of the Collinsville 500/230 kilovolt (kV) Substation Project (Application 24-07-018). This letter includes the following enclosures:

- A Response to Data Request Table providing the additional information requested in the Data Request #5, received June 6, 2025.
  - Attachment A: Alternative Site a Potential Interference with Sacramento Municipal Utility District Microwave Tower
  - Attachment B: ADLS Radar Tower Location
  - Attachment C: Grading and Activity Level for Alternative Substation Sites

Please contact me at (925) 808-0291 or [djoseph@lspower.com](mailto:djoseph@lspower.com) with any questions regarding this information. If needed, we are also available to meet with you to discuss the information contained in this response.

Sincerely,

A handwritten signature in black ink that reads "Dustin Joseph". The signature is written in a cursive, flowing style.

Dustin Joseph  
Director of Environmental Permitting

Enclosures

cc: Jason Niven (LSPGC)  
Doug Mulvey (LSPGC)



Lauren Kehlenbrink (LSPGC)  
Clayton Eversen (LSPGC)  
David Wilson (LSPGC)  
Michelle Wilson (CPUC)  
Aaron Lui (Panorama)  
Peter Mye (Panorama)  
Susanne Heim (Panorama)

LSPGC DATA REQUEST No.5 RESPONSE

Project Description

Section/Page Reference	CPUC Comment	Request ID	CPUC Request	LSPGC/PG&E Response
Data Request #2, DR-8	<p><b>DR-1: Permanent Land Rights</b></p> <p>Need clarification on the size of Parcel ID: 0090-12-0300. The Solano County Parcel Viewer indicates:</p> <ul style="list-style-type: none"><li>• Measured GIS Acreage: 64.11</li><li>• Recorded Assessor Acreage: 61.05</li></ul> <p>Which is the correct number based on the negotiations to acquire permanent land rights to 28.3 acres.</p>	A	<p>Please confirm if this text is accurate.</p> <p>“The proposed substation site would require permanent land rights to be acquired by LSPGC, which include approximately 28.3 acres of a 61.05-acre parcel (Parcel ID: 0090-12-0300).</p>	<p>LSPGC confirms and agrees with the text.</p>
n/a	<p><b>DR-2: Basic Project Objectives</b></p> <p>The CPUC must define basic project objectives for evaluation in the ASR. The basic project objectives are the fundamental drivers for the project.</p>	A	<p>Please verify that the following are the basic project objectives:</p> <ul style="list-style-type: none"><li>• Meet the CAISO policy-driven need established for the project in its Transmission Plans by:<ul style="list-style-type: none"><li>– Relieving congestion on the 230 kV system and providing greater support for 230 kV lines in the Contra Costa region.</li><li>– Reliably and economically supporting increased energy demand in the Bay Area.</li><li>– Facilitating deliverability of load from existing and proposed renewable energy projects and progressing California’s renewable energy goals.</li><li>– Achieving commercial operation by May 2028 consistent with the 2024-2025 Transmission Plan timelines and policy goals.</li></ul></li></ul>	<p>LSPGC requests the following update to the basic project objectives:</p> <p>Meet the CAISO policy-driven need established for the project in its Transmission Plans by:</p> <ul style="list-style-type: none"><li>– Relieving stress on the 230 kV line in the Contra Costs region and providing grid support for the East Bay area.</li><li>– Reliably and economically supporting increased energy demand in the Greater Bay Area.</li><li>– Facilitating deliverability of generation and energy storage resources in the Solano area, progressing California’s renewable energy goals.</li><li>– Achieving commercial operation by June 2028 consistent with the timeline included in the 2021-2022 Transmission Plan and reinforced by the 2024-2025 Transmission Plan.</li></ul>
n/a	<p><b>DR-3: Substation Buildout</b></p> <p>There is discussion in the Project Description about future substation buildout. Additional information is needed to understand the future buildout and timing of the buildout to determine whether the buildout is reasonably foreseeable.</p>	A	<p>Please provide information on the source for the proposed substation buildout. What is the timing of the substation buildout? What would cause the substation buildout? Are there currently any proposals (e.g., interconnection of other transmission lines in the CAISO transmission plans) that would require buildout of the substation?</p>	<p>The full, ultimate substation buildout was included as part of CAISO’s technical specifications for the Collinsville Substation project. Timing of the ultimate substation buildout is unknown and dependent upon future interconnection requests.</p> <p>There are no current proposals or interconnection requests that would require the full, ultimate buildout of the substation. However, there may be a small, incremental buildout of the substation to support the Future 525 kV Line to HVDC Converter Station that is needed to support the recently awarded Humboldt to Collinsville project. The current timing for that interconnection is 2034, but with the current federal stance on supporting projects related to wind power, that interconnection date is subject to delay or possibly cancellation. In order to accommodate the Future 525 kV Line to HVDC Converter Station interconnection, the northwest corner of the Collinsville Substation existing eastern fenceline would be expanded by approximately 40 feet for the length of approximately 250 feet to south in order to provide enough space for the required interconnection equipment. This incremental buildout would represent approximately 10 to 15 percent of the full, ultimate substation buildout.</p>

Alternatives

Section/Page Reference	CPUC Comment	Request ID	CPUC Request	LSPGC/PG&E Response
n/a	<p><b>DR-4: Substation Alternative Site A (Adjacent to Existing Wind Energy Substations)</b></p> <p>SMUD identified two concerns related to this alternative site related to (1) potential for interference with an existing microwave communication tower and (2) potential for impact on an existing aircraft detection lighting system (ADLS) radar tower. The CPUC requests an engineering evaluation of these concerns and information to support the alternatives evaluation process. The following requests were submitted to LSPGC via email on May 20, 2025.</p>	A	<p>Potential interference with SMUD’s existing microwave communication tower:</p> <ul style="list-style-type: none"><li>• Provide information on the types of potential direct or indirect inference/impacts that could occur to existing microwave communication towers. Explain how LSPGC would evaluate and avoid such interference/impacts at an engineering and design level.</li><li>• Specifically address the potential for beam path obstruction leading to signal loss; electromagnetic interference that could degrade signal quality; or multipath interference resulting in phase cancellation or signal distortion.</li></ul>	<p>Please see <b>Attachment A</b> for details on the potential interference/impact to the existing microwave tower and mitigation for avoidance.</p>
		B	<p>Potential interference/impacts with SMUD’s existing aircraft detection lighting system (ADLS) radar tower:</p> <ul style="list-style-type: none"><li>• Provide information on the types of potential direct or indirect inference/impacts that could occur to the ADLS radar tower. Explain how LSPGC would evaluate and avoid such interference/impacts.</li><li>• Specifically address the potential for radar obstruction leading to a loss in radar coverage; electromagnetic interference that could degrade signal quality and processing; or multipath interference resulting in signal reflection or diffraction.</li></ul>	<p>LSPGC met with SMUD to discuss concerns about Substation Alternative Site A and its potential interference with the ADLS radar tower shown in <b>Attachment B</b>. SMUD stated that larger structures around the non-directional ADLS tower would block its radar. The primary solution for this would be to have the ADLS tower tuned for the new obstructions to confirm that it doesn’t degrade the resolution of the software. However, this could not be confirmed until the substation is designed in order for SMUD to evaluate and analyze the data.</p>
n/a	<p><b>DR-5: Grading and Activity Level for Alternative Substation Sites</b></p> <p>Panorama will need to evaluate the impacts of the alternatives considered in detail in the EIR. Additional information is needed to support the analysis for air quality, energy, greenhouse gas emissions, geology and soils, hydrology, and transportation.</p>	A	<p>Please provide the following information to support the EIR analysis of impacts for each alternative considered in detail (i.e., two substation sites, 230 kV overhead segment alternative alignment, 500-kV TSP alternative, and submarine segment alternative):</p> <ul style="list-style-type: none"><li>• Volume of grading and earthwork at each substation site. The volume can be provided as a range or comparable number to the proposed project.</li><li>• Would either substation alternative result in off haul of soil material due to increased grading or do you anticipate cut and fill would be balanced on site? If off haul is anticipated, provide a rough estimate of the volume of off haul and associated number of truck trips anticipated.</li><li>• Anticipated peak daily and annual maximum equipment activity level (and associated emissions) for off-road equipment, on-road equipment, and helicopters for each on land alternative. Estimated peak daily and annual maximum equipment activity level and associated emissions for the reroute of the submarine segment. The estimate can be provided in relation to the Proposed Project as an estimated percent increase or decrease. Explain the reasoning for any anticipated increase or decrease in activity level.</li><li>• Are there any streams or drainages that would need to be rerouted for the alternative?</li><li>• Are there any known buried utilities within the alternative work areas or adjacent the alternatives?</li></ul>	<p>Please see <b>Attachment C</b>, for a completed response.</p>

Biological Resources

Section/Page Reference	CPUC Comment	Request ID	CPUC Request	LSPGC/PG&E Response
n/a	<b>DR-6: Wetland and Vernal Pool Surveys at PG&amp;E Transposition Sites</b> Based on review of the BRTR Addendum and discussion with the biologists who conducted the survey, there is the potential for wetlands and/or vernal pools to occur along access roads and within work areas for the transposition sites.	A	Please provide a schedule and details for the vernal pool survey in advance of the surveys for review and comment by the CPUC team. A brachiopod specialist should conduct the vernal pool evaluation. Datasheets shall be prepared documenting conditions in accordance with the U.S. Army Corps of Engineers wetland delineation manual and Arid West Regional Supplement for the wetlands that cannot be avoided.	Please see PG&E's response to DR-6.
			If wetlands or vernal pools are present within the access roads, define measures to avoid the wetlands/vernal pools such as timing of access, plating, or other approaches that would avoid damage from driving on the road. If wetlands or vernal pools are present in the work areas, evaluate work area modifications that would avoid the wetland or vernal pool to the extent feasible.	Please see PG&E's response to DR-6.
n/a	<b>DR-7: Botanical Surveys at PG&amp;E Transposition Sites</b> The BRTR Addendum identified the potential for rare plants to occur within the transposition site areas; however, focused surveys were not included with the addendum. Focused surveys during the appropriate blooming period are needed.	A	Provide a schedule for completion of rare plant surveys at the transposition sites.	Please see PG&E's response to DR-7.
n/a	<b>DR-8: Characteristics of Rare Plant Populations Identified</b> The GIS data provided to Panorama includes polygons of rare plant populations but there are no estimates/numbers included in the metadata or points for the rare plants. During discussion with Insignia, Panorama learned that GIS point data exists and was not provided. This information is needed to estimate population impacts to the species.	A	Provide GIS point data for rare plant polygons within the 230 kV line route.	The GIS point data for rare plant polygons was provided to the CPUC via email on June 13, 2025.
n/a	<b>DR-9: Burrowing Owl and Crotch's Bumble Bee Surveys</b> PG&E discussed that focused surveys were being completed for burrowing owl and Crotch's bumble bee at the transposition sites and work areas to support applications for a California incidental take permit for construction.	A	Please provide the focused burrowing owl and Crotch's bumble bee survey reports to the CPUC when available.	Please see PG&E's response to DR-9.