May 2, 2025

VIA EMAIL

Ms. Tharon Wright
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Response to LS Power-PG&E Joint Data Request No. 1 for LS Power Grid California, LLC's Power Santa Clara Valley Project (Application 24-04-017)

Dear Ms. Wright:

As requested by the California Public Utilities Commission (CPUC), LS Power Grid California, LLC (LSPGC) has collected and provided the additional information requested relating to LS Power-PG&E Joint Data Request No. 1 (Joint DR-1) for the Power Santa Clara Valley Project (PSCV or Project). This letter includes the following enclosures:

- Joint DR-1 Response Table providing the additional Project information requested.
  - Attachment A – Alternative Grove 3 General Arrangement
  - Attachment B – PSCV Alternative Grove3_Data.gdb
  - Attachment C – Alternative Grove 3 Work Area Disturbance Summary Table
  - Attachment D – Alternative Grove 3 Route Map

Please contact me at (925) 808-0291 or djoseph@lspower.com with any questions regarding this information.

Sincerely,

Dustin Joseph
Director of Environmental Permitting

Enclosures

cc: Jacob Diermann (LS Power)
Casey Carroll (LS Power)
Lucy Marton (LS Power)
David Wilson (LS Power)
Michelle Wilson (CPUC)
Valisa Nez (ESA)
Michael Manka (ESA)
Vincent Molina (ESA)
Jo Lynn Lambert (PG&E)
Jason Castellanos (PG&E)

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) Energy Division, California Environmental Quality Act (CEQA) and Energy Permitting Unit, is currently considering a range of reasonable alternatives that would achieve most of the basic objectives of the Power Santa Clara Valley Project (Project) and may also avoid or substantially lessen any of the significant effects of the Project. In its Certificate of Public Convenience and Necessity (CPCN) application, LS Power Grid California, LLC (LSPGC) identified Grove Terminal Site Alternatives in its Proponent's Environmental Assessment (PEA), including an alternative which was described as "Alternative Grove 3." As the CPUC proceeds with the environmental review for the Project, the CPUC has identified additional information required from LSPGC and Pacific Gas and Electric Company (PG&E) to assess Alternative Grove 3 as a reasonable alternative pursuant to CEQA.

The following responses provide additional information regarding aspects of Alternative Grove 3 in support of the CPUC's environmental analysis. It is important to note, however, that the feasibility of Alternative Grove 3 remains contingent on confirmation that certain Project objectives are indeed satisfied, including the site being available within a timeframe that aligns with the Project's overall construction schedule and total Project costs being consistent with cost limits in the CPCN, if granted. Current uncertainty surrounding the site is driving additional engineering and planning efforts to maintain the Project schedule, thereby contributing to increased pre-construction costs. Similarly, delays in securing access to the site or uncertainties regarding its readiness for development could result in scheduling conflicts or extended construction durations that would impact the broader Project timeline. Finally, the total Project cost if Alternative Grove 3 is implemented, including costs related to securing the property and preparing it for construction, may be greater than the cost presented in the Project's CPCN application.

PG&E intends to provide additional information to supplement LSPGC's responses.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Joint DR-1 Response #1		
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Alternative Grove 3		
1	Provide site plans, or general arrangements, of the components of the Grove terminal alternative at the PG&E Metcalf Substation (Alternative Grove 3). a. Include all components as presented in PEA Figure 3-7, *HVDC Terminal General Arrangements*. b. Provide a figure and accompanying GIS data or .kmz.	A general arrangement figure for Alternative Grove 3, including all components as presented in PEA Figure 3-7, *HVDC Terminal General Arrangements,* has been included as **Attachment A** to this response. Accompanying updated GIS data (**Attachment B**) for the Alternative Grove 3 general arrangement has been provided as a supplement to LSPGC's response. As shown in **Attachment A**, Alternative Grove 3 would require the same HVDC terminal equipment as the proposed Grove terminal, albeit in a modified site arrangement. Additionally, PG&E would relocate an overhead distribution line to be underground along the northern boundary of the site to accommodate the new terminal layout under Alternative Grove 3.

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2	Provide site plans for the Metcalf to Grove 500 kV AC transmission line under an Alternative Grove 3. a. Confirm if this transmission line would be overhead or underground. b. Please provide a figure for the Metcalf to Grove transmission line under Alternative Grove 3 (e.g., PEA Figure 3-4, Project Route Map). c. Provide transmission line design details for a potential overhead line, including how many above-ground structures would be needed, what types of above-ground infrastructure would be needed, maximum height of structures, foundation information, etc. d. Provide transmission line design details for a potential underground line, including information on underground installation techniques (e.g., horizontal boring, trenching), duct bank/splice vaults, number of internal ducts, depths and dimensions of excavation, etc.	Under Alternative Grove 3, the Metcalf to Grove 500 kV AC station tie line would be a short (approximately 200 feet in length) overhead connection from the new Grove terminal to the existing PG&E Metcalf substation. a. Overhead b. The Metcalf to Grove 500 kV AC station tie line is included on the general arrangement drawing for Alternative Grove 3, which has been included as **Attachment A** to this response. c. The new Grove terminal would be interconnected with the modified PG&E Metcalf substation via a new short (approximately 200 feet in length), over-the-fence Metcalf to Grove 500 kV AC station tie line connection that would connect an LSPGC-owned H-frame (dead-end) or similar termination structure to a PG&E-owned H-frame (dead-end) or similar termination structure (see **Attachment A** to this response). The LSPGC-owned substation dead-end structure would be approximately 120 feet tall and would have drilled pier foundations. d. N/A, no underground design is proposed for the Metcalf to Grove 500 kV AC transmission line under Alternative Grove 3.
3	Confirm all changes required for the connection between the Metcalf to Grove 500 kV AC transmission line and the PG&E Metcalf Substation under Alternative Grove 3.	Since the Metcalf to Grove 500 kV AC station tie line for Alternative Grove 3 would be overhead, it would not require a steel substation termination/riser structure to transition the cable to a substation dead-end structure like the proposed Grove terminal. Instead, the Metcalf to Grove 500 kV AC station tie line would be overhead from the LSPGC-owned dead-end structure within the Grove terminal to a PG&E-owned dead-end structure inside the Metcalf substation.
4	Provide construction information, and as they relate to each other, for the Grove terminal, Metcalf to Grove 500 kV AC transmission line, and modifications to the existing PG&E Metcalf Substation. a. Construction methodology/installation techniques, staging areas, equipment, construction schedule, demolition, temporary and permanent impacts, excavation (e.g., cut and fill).	The following describes the major differences in construction information for Alternative Grove 3 as compared to the proposed Grove terminal and the Metcalf to Grove 500 kV AC transmission line. 1) Staging Areas

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		Under Alternative Grove 3, LSPGC would no longer utilize Staging Area 1 for temporary construction activities. Instead, LSPGC would use other staging areas to support the construction of the Grove terminal and the Metcalf to Grove 500 kV station tie line. 2) Demolition Under Alternative Grove 3, the infrastructure currently located at PG&E's existing General Contractor Yard would require relocation or demolition. Materials, vehicles, equipment, and storage containers would be removed and relocated as needed. Certain facilities, including the existing office building and other permanent structures, would be demolished along with the asphalt lot covering a majority of the Alternative Grove 3 terminal site. Construction debris volumes generated from preparing the site for redevelopment are estimated at approximately 8,000 cubic yards. 3) Equipment Alternative Grove 3 would require additional construction equipment compared to the proposed Grove terminal due to expanded demolition and excavation activities. Heavy demolition equipment, such as excavators with breakers, loaders, and dump trucks, would be needed to remove existing infrastructure and asphalt. Site development would also require additional excavation machinery to accommodate greater earthwork volumes. Furthermore, because Alternative Grove 3 offers less on-site storage space, additional material delivery vehicles trips would be necessary to support construction logistics. Finally, LSPGC plans to use the existing groundwater well at the proposed Grove terminal for construction water at the proposed Grove terminal, whereas all construction water would need to be trucked from local sources to the site for Alternative Grove 3. Equipment for the Metcalf to Grove 500 kV station tie line would largely be shared with that used for the Grove terminal and Metcalf substation work, promoting efficiency. While Alternative Grove 3 requires more equipment during initial site preparation, this increase would be more than offset by eliminating the need for underground construction activities associated with the proposed underground Metcalf to Grove 500 kV AC transmission line, as well as a reduction of the length of the underground Grove to Skyline 320 kV DC transmission line by more than one mile. 4) Construction Methodology/Installation Techniques

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		Under Alternative Grove 3, construction methodologies and installation techniques would generally remain similar to those planned for the proposed Grove terminal as the same general substation equipment would be required, with a few key differences. Site development would involve expanded demolition and excavation scopes to remove existing infrastructure and to accommodate required grading activities. Additional off-site construction materials management and delivery would be required due to limited on-site storage capacity at the Alternative Grove 3 site. With the Metcalf to Grove 500 kV station tie line constructed as an overhead transmission line, no underground trenching or duct bank installation would be required under Alternative Grove 3 for the Metcalf to Grove 500 kV connection. 5) Construction Schedule The overall construction schedule for the Grove terminal under Alternative Grove 3 would generally align with the schedule proposed for the Project. Within the construction schedule, however, certain activity durations may extend by a couple months. For example, additional time would be required for site development activities due to the expanded demolition and excavation scope, and for subsequent below-grade and above-grade construction given the need for more frequent material deliveries caused by reduced storage capacity at the site. While individual scopes of work may take longer to complete, LSPGC would plan to increase work scope overlap to maintain a similar overall schedule. The construction schedule for the Metcalf to Grove 500 kV station tie line would be substantially shorter than the previously proposed underground 500 kV AC transmission line segment due to the use of overhead construction methods and the much shorter line length. 6) Temporary and Permanent Impacts **Attachment C** to this response provides a detailed summary of estimated temporary and permanent work area impacts associated with each Project component under Alternative Grove 3. 7) Excavation (e.g., cut and fill) Under Alternative Grove 3, significantly less material would be excavated (cut), while substantially more material would be placed (fill) compared to the proposed Grove terminal. Cut activities for Alternative Grove 3 would involve removing unsuitable materials, including the existing asphalt and

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<tr><th>Request No.</th><th>DATA REQUEST</th><th>LSPGC RESPONSE</th></tr>
<tr><td></td><td></td><td>underlying subbase as required, across much of the Alternative Grove 3 site. Substantial fill quantities would be required to elevate portions of the site above the surrounding floodplain to mitigate flood risks at Alternative Grove 3.
<table>
<tr><th colspan="3">Alternative Grove 3 Preliminary Grading, Excavation, and Material Removal Summary</th></tr>
<tr><th>Grading Description</th><th>Approximate Quantity (Cubic Yards [CY])</th><th>Activity Description</th></tr>
<tr><td>Underground Transmission Cut</td><td>90,000</td><td>Installation of underground transmission duct banks, trenchless crossings, and splice vaults.</td></tr>
<tr><td>Underground Transmission Fill</td><td>70,000</td><td>Backfill in and around underground duct bank, trenchless crossings, and splice vaults.</td></tr>
<tr><td>Grove Terminal Cut</td><td>10,000</td><td>Grading and excavations at Grove terminal site.</td></tr>
<tr><td>Grove Terminal Fill</td><td>50,000</td><td>Raising portions of the Grove terminal site above the surrounding floodplain.</td></tr>
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<tr><td>5</td><td>Under Alternative Grove 3, confirm if the PG&E water source line upgrade is needed.</td><td>Pending PG&E response.</td></tr>
<tr><td>6</td><td>Under Alternative Grove 3, confirm where PG&E’s Yard would be relocated.</td><td>Pending PG&E response.</td></tr>
<tr><td>7</td><td>Under Alternative Grove 3, confirm if additional upgrades or modifications to the PG&E Metcalf Substation are needed.</td><td>Pending PE&E response.</td></tr>
<tr><td>8</td><td>Confirm all changes to the Grove to Skyline 320 kV DC Transmission line under Alternative Grove 3.
a. Provide a figure for updates to the Grove to Skyline transmission line under Alternative Grove 3 (e.g. Figure 3-4 Project Route</td><td>Under Alternative Grove 3, the Grove to Skyline 320 kV DC transmission line would depart Monterey Road at the Metcalf Road intersection and cross Coyote Creek via attachment to the Metcalf Road bridge. The Grove to Skyline 320 kV DC transmission line would then continue within Metcalf Road for approximately 200 feet before crossing Coyote Ranch Road and entering the Alternative Grove 3 terminal site.</td></tr>
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	Map in the PEA). b. Describe any project components that would be eliminated or no longer needed from the proposed project under Alternative Grove 3. c. Describe the reduction in project footprint (permanent and temporary) associated with Alternative Grove 3.	a. An updated figure incorporating the revised Grove to Skyline 320 kV DC transmission line under Alternative Grove 3 has been included as **Attachment D** to this response. b. Alternative Grove 3 would reduce the overall length of the Grove to Skyline 320 kV DC transmission line by approximately 1.2 miles, including the elimination of the approximately 600-foot-long HDD under Fisher Creek. Additionally, Alternative Grove 3 would eliminate approximately three splice vaults. c. Under Alternative Grove 3, the Project footprint would be reduced. **Attachment C** to this response provides estimated work area totals (including both temporary and permanent footprints) for the Grove to Skyline 320 kV DC transmission line.