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March 27, 2025

Michelle Wilson
Project Manager
California Public Utilities Commission
505 Van Ness Avenue, 4th floor
San Francisco, CA 94102

Re: Minor Project Refinement No. 5 for the Round Mountain 500 kV Dynamic Reactive Support Project

Mr. Sanchez:

LS Power Grid California, LLC (LSPGC) is hereby requesting approval of Minor Project Refinement No. 5 (MPR-5) from the California Public Utilities Commission (CPUC) for the Round Mountain 500 kilovolt (kV) Dynamic Reactive Support Project (Fern Road Substation or Project). Approval of MPR-5 would authorize the installation of an approximately 1,900-foot long underground 12 kilovolt (kV) distribution line along the northern edge of the existing Fern Road Substation access road. This underground distribution line is being proposed as an alternative to the overhead distribution line on approximately 35 wood poles that was described in the Project's Final Initial Study/Mitigated Negative Declaration (IS/MND). MPR-5 also includes the installation of an approximately 1,650-foot long underground fiber optic telecommunications line along the southern edge of the existing Fern Road Substation access road to provide service to both the LSPGC and Pacific Gas and Electric (PG&E) transmission facilities. In addition, one existing PG&E distribution pole on the east side of Fern Road would be replaced to facilitate the transition down to the proposed 12 kV underground distribution line. In total, MPR-5 would temporarily impact approximately 0.28 acre of previously disturbed/developed land that does not contain any sensitive resources.

Please refer to **Attachment B, MPR-5 Figure** and **Attachment C, MPR-5 Photograph Log** to view the Project components discussed within MPR-5.

The Fern Road Substation layout is included in **Attachment B, MPR-5 Figure** and includes some components (such as the PG&E Communications Monitoring Building) that were anticipated and analyzed within the Final IS/MND but were not included on the NTP-1 Figure as their locations were being determined in final engineering. These components are included as a mapping correction/update only, as LSPGC is not proposing any new substation components, expansion of the substation footprint, or infrastructure beyond what was anticipated within the Final IS/MND.

Attachment A: MPR-5 Form
Attachment B: MPR-5 Figure
Attachment C: MPR-5 Photograph Log

Preconstruction Requirements and Permit/Approvals

Approval of MPR-5 will not change the conditions set forth in the Final IS/MND, nor will it change the type of equipment, number of construction personnel, or the status of any Mitigation Monitoring, Compliance, and Reporting Plan pre-construction or construction requirements. Encroachment permits from Shasta County will be obtained by PG&E/LSPGC as needed prior to performing any work within the Fern Road public right-of-way.

MPR-5 Request for Approval

LSPGC respectfully requests approval of MPR-5 for the installation of the underground 12 kV distribution line and underground fiber optic telecommunications line, and the reframing work on the existing PG&E distribution pole, as described within this request by April 04, 2025. Should you have any questions or need additional information, please do not hesitate to contact me at djoseph@lspower.com.

Sincerely,

Dustin Joseph
Director of Environmental Permitting

cc: Matthew Fagundes, ESA
Maria Hensel, ESA
David Wilson, LSPGC
Emily Critchfield, KPE

ATTACHMENT A
MPR-5 Form



Round Mountain 500 kilovolt (kV) Dynamic Reactive Support Fern Road Substation Project CPUC Minor Project Refinement Form

Minor project refinements are strictly limited to changes that will not trigger an additional permit requirement, do not substantially increase the severity of a previously identified significant impact, create a new significant impact, would clearly and strictly comply with the intent of the IS/MND mitigation measures, and that don't conflict with any applicable law or policy.

Date Requested: March 27, 2025

Report No.: 5

Date Approved: TBD

Approval Agency: California Public Utilities Commission (CPUC).

Property Owner(s): The proposed Minor Project Refinement No. 5 (MPR-5) area is located within LS Power Grid California, LLC (LSPGC)-owned property as well as within Shasta County right-of-way (ROW) and Pacific Gas & Electric Company (PG&E) ROW.

Location/Milepost: 12341 Fern Road, Whitmore CA 96096.

Land Use/Vegetative Cover: The MPR-5 areas total approximately 12,050 square feet (0.28 acre) and are within previously disturbed/ developed land.

Sensitive Resources: The MPR-5 areas are located in an area with undetermined and high paleontological potential. See resource discussions below.

Modification From:

☐ Permit	☐ Plan/Procedure	☐ Specification	☐ Drawing
☐ Mitigation Measure	☒ Other:		

LSPGC is requesting approval of MPR-5 to install approximately 1,900 feet of underground 12 kilovolt (kV) distribution and approximately 1,650 feet of underground telecommunications for the Round Mountain 500 kV Dynamic Reactive Support Project (Fern Road Substation or Project), as described below and shown in **Attachment B, MPR-5 Figure**. In addition, one additional existing PG&E distribution pole would be replaced, and a substation mapping update is included as described below.

- **Underground 12 kV Distribution:** As discussed in Section 2.6.3 of the Final Initial Study / Mitigated Negative Declaration (IS/MND), an electric distribution line will be installed along the Project's existing access road to provide power for Fern Road Substation facilities from the existing PG&E distribution line that runs parallel to Fern Road. This 12 kV distribution line was originally proposed as an overhead line on approximately 35 wood poles; however, this is now being proposed as a 1,900-foot long underground line,

to be installed along the northern edge of the existing Fern Road Substation access road. This portion of the scope of the MPR-5 request is related the PG&E Facilities (Section 2.6) component of the Approved Project. Installing the distribution line underground will provide multiple benefits, including safety benefits due to avoiding overhead distribution crossings of the site access road and reliability benefits due to eliminating the need for onsite overhead distribution infrastructure that could be subject to risks such as weather and fire. The distribution line would transition down from the distribution pole to the north of the Project site entrance (see **Attachment B, MPR-5 Figure**) and continue underground along the east side of Fern Road, then southeast along the access road to the Fern Road Substation, where it will terminate at the PG&E switchgear, located near the microwave tower. An encroachment permit will be obtained from Shasta County by LSPGC for the underground work within the Fern Road public ROW.

- **Distribution Pole Replacement on Fern Road:** As discussed in Section 2.6.3 of the Final IS/MND, the Project requires distribution modifications for eight poles along PG&E's existing distribution line on the west side of Fern Road which includes replacing the existing poles and converting them from a single-phase 12 kV to a three-phase 12 kV. It was assumed that the overhead distribution line that would connect into the Fern Road Substation would tap into the eighth, northernmost pole, located immediately west of the Project site entrance. As the 12 kV distribution line will now be underground, a ninth pole will need to be replaced on the east side of Fern Road, north of the site entrance, to avoid trenching across Fern Road (see **Attachment B, MPR-5 Figure**). The new wood pole will be replaced in the same location as the existing pole and will be approximately the same height (40 feet). The new three-phase pole will allow for a larger crossarm to connect the phases to the underground distribution line. The existing down guy wire will also be replaced to reinforce and strengthen the wire. As a result of the additional new pole, an additional 200 feet of overhead reconductoring will be performed by PG&E. This portion of the scope of the MPR-5 request is related the PG&E Facilities (Section 2.6) component of the Approved Project. A truck-mounted auger and crane would be utilized for pole replacement. An encroachment permit will be obtained from Shasta County by PG&E for the overhead reconductoring and pole replacement work.
- **Underground Telecommunications:** MPR-5 activities would include the installation of a 1,650-foot long underground fiber optic telecommunications line along the southern edge of the existing Fern Road Substation access road. This would require two, four-inch conduits to be installed within the same duct package. The line would be installed from the point of interconnection with an existing Frontier telecommunications line just south of the access road entrance off Fern Road, and would continue southeast along the access road to the Fern Road Substation, where the line would split and terminate within the PG&E Communications Monitoring Building and the LSPGC GIS Control Enclosure. LSPGC plans to obtain an encroachment permit from Shasta County for installation of the fiber optic telecommunications line within County ROW.
- **Mapping Update:** There are a few substation components that were described and approved within the Final IS/MND, but their location was not yet determined within the substation footprint at the time of NTP-1 approval. As such, components such as the PG&E Communications Monitoring Building were not included in Project mapping. Therefore, an updated substation layout is included in **Attachment B, MPR-5 Figure**. This is included as a mapping correction/update only, as LSPGC is not proposing any new substation components or infrastructure beyond what was anticipated within the Final IS/MND. The components included on **Attachment B, MPR-5 Figure** were

described within the Final IS/MND (Sections 2.5.1.1 and 2.6.1), the only exception being the PG&E switchgear. However, switchgear was always anticipated as the point of interconnection for the approved internal PG&E distribution line described in Section 2.6.3. The PG&E Switchgear will be contained within a small enclosure approximately 5 feet by 8 feet, within the substation footprint.

Similar methods would be utilized for installation of both the underground 12 kV distribution line and the underground telecommunications line. Open-cut trenching techniques would be implemented and a backhoe or mini excavator would be utilized to excavate the trench. Each trench would be approximately 12 inches wide and 36-54 inches deep. The distribution and fiber optic cables would be pulled through conduit within the trenches, and pull boxes would be installed along both routes to facilitate cable pulling and future maintenance. Approximately two pull boxes would be installed along the underground 12 kV distribution route and five pull boxes would be installed along the underground telecommunications route. The pull boxes would be approximately three feet wide by five feet long by four and a half feet deep.

The construction and installation of the underground telecommunications line is currently anticipated to occur first, with construction starting immediately following MPR-5 approval. The underground 12 kV distribution line installation and pole replacement is anticipated to begin by late Spring 2025. Installation of the lines would take approximately two months each. Erosion and sediment control for the temporary disturbance areas during construction will be provided in accordance with the Project's Stormwater Pollution Prevention Plan (SWPPP). Following installation of the underground 12 kV distribution line and underground telecommunications line, the temporarily disturbed areas would be stabilized in accordance with the Project's SWPPP.

Describe how project refinement deviates from current project. Include photos.

Original Condition: The MPR-5 area is within the geographic study area of the Final IS/MND; therefore, it has been previously analyzed.

Justification for Change:

- **Underground 12 kV Distribution:** As discussed in Section 2.6.3 of the Final IS/MND, a distribution line was anticipated to provide power for Fern Road Substation facilities. The line was originally planned to be an overhead line on wood poles; however, an underground line is being proposed in MPR-5 to avoid overhead distribution line crossings of the site access road, increase reliability, and to promote fire hardening.
- **Distribution Pole Replacement on Fern Road:** As the overhead 12 kV distribution line connecting into the Fern Road Substation is now proposed as an underground 12 kV line, the line will transition from overhead to underground via the pole north of the site entrance on the east side of Fern Road rather than the pole located immediately west of the site entrance. This will avoid the need to trench across Fern Road, causing potential traffic issues. Transitioning down from the pole on the northern side of Fern Road will require the pole to be replaced.
- **Underground Telecommunications:** An underground fiber optic telecommunications line is being proposed in addition to the Supervisory Control and Data Acquisition (SCADA) system to provide service to both the LSPGC and PG&E transmission facilities. This will ensure a reliable and secure connection in case of interference or equipment failure of the SCADA system. This will also improve response times in case of system failures, and increase bandwidth and remote access capabilities.

Maps & Figures: Refer to **Attachment B, MPR-5 Figure**, for a map of the proposed MPR-5 underground lines and replaced distribution pole. Refer to **Attachment C, MPR-5 Photograph Log**, for pictures of the current conditions within the proposed MPR-5 areas.

Environmental Impact: MPR-5 would not change the nature or substantially increase the severity of any impacts disclosed within the Final IS/MND; would not result in alteration to Applicant Proposed Measures (APMs) or existing Mitigation Measures (MMs); would not require new mitigation measures.; and would not require new permits or new regulatory approval (County encroachment permits anticipated in Final IS/MND). MPR-5 would impact approximately 12,050 square feet (0.28 acre) of previously disturbed/developed land. The MPR-5 areas will be stabilized in accordance with the SWPPP. Specific discussions for each resource area are provided below.

Concurrence (if appropriate): Concurrence is not required as the proposed MPR-5 underground lines are located within the geographic study area analyzed in the California Environmental Quality Act (CEQA) review process.

<u>Resources:</u>			
Biological	☒ No Resources Present	☐ Resources Present	☐ N/A, Change would not affect resources
Previous Biological Survey Report Reference: Biological resources within and surrounding the Project area (including the MPR-5 areas) were studied, reviewed, and documented as part of LSPGC's application for a Permit to Construct (PTC) for the Project and Proponent's Environmental Assessment (PEA). Biological resources were also discussed within the CPUC-conducted CEQA review process (see Final IS/MND Section 3.4). Pre-construction roosting bat surveys (MM BIO-1) and nesting bird surveys (APM BIO-4 and APM BIO-5) were performed in February 2024 which included the MPR-5 areas. There were no active nests or roosting bats observed during these surveys. The Project site has remained active with construction since these surveys. However, as the pole replacement site has not had active construction, a pre-construction nest survey will be conducted from the pole site south to the Project site entrance prior to MPR-5 activities taking place within that area, if they begin within the nesting season (February 15-August 31). Additional roosting bat surveys are not required as there is no tree removal proposed. Botanical surveys were conducted for the Biological Resources Technical Report (BRTR) in April and May, 2020 and April and May, 2021. An additional biological field survey was performed on February 6, 2025, in which a qualified biologist verified the current conditions of the proposed MPR-5 areas. There were no special-status plant or wildlife species identified within the MPR-5 areas during the botanical surveys performed in 2020 and 2021 per APM BIO-9 or the field survey performed on February 6, 2025. Streams and wetlands onsite have been flagged for protection and do not intersect the MPR-5 areas. There is a seasonal wetland area (W-1 and W-2) south of the Project site entrance (see Attachment B, MPR-5 Figure). This area will not be affected by MPR-5 activities. No sensitive biological areas exist within the MPR-5 areas that require avoidance per APM BIO-10.			
Cultural	☒ No Resources Present	☐ Resources Present	☐ N/A, changes would not affect resources

Previous Cultural Survey Report Reference:

Cultural resources within the Project's study area (including the proposed MPR-5 area) were studied, reviewed, and documented as part of LSPGC's application for a Permit to Construct (PTC) for the Project and PEA. These resources were also discussed within the CPUC-conducted CEQA review process (see the Project's Final IS/MND, Sections 3.5 and 3.18). The potential for the presence of unrecorded archaeological resources in the proposed MPR-5 area is low. Though no cultural resources have been identified by previous surveys and a discovery is unlikely, the potential remains for unrecorded subsurface archaeological material to be discovered during ground disturbing activities. Therefore, LSPGC would implement APMs CUL-1 and CUL-3 during MPR-5 activities if needed to reduce potential impacts on archaeological resources.

Paleontological☐

No
Resources
Present

☒

Resources
Present

☐

N/A, Change would
not affect
resources

Previous Paleontological Survey Report Reference:

Paleontological resources within the Project's study area (including the proposed MPR-5 areas) were studied, reviewed, and documented as part of LSPGC's application for a PTC for the Project and PEA. These resources were also discussed within the CPUC-conducted CEQA review process (see the Project's Final IS/MND, Section 3.7). No records of paleontological resources were identified within the Project site in the records search performed by San Diego Natural History Museum (SDNHM) and the University of California Museum of Paleontology (UCMP); however, the presence of nearby fossil discoveries listed within the Project's Paleontological Resources Technical Report for the PEA indicates that the potential exists to encounter paleontological resources. The sedimentary deposits of the Tuscan Formation and the Montgomery Formation located beneath the alluvial deposits of the Project area have an undetermined and high potential to contain paleontological resources, respectively.

Paleontological monitoring for Project construction began in June 2024 and has continued as needed during excavation activities. There was one non-significant specimen containing two plant leaf fossils observed within the Fern Road Substation pad excavation area on June 26, 2024. No other paleontological resources have been encountered during construction.

In accordance with APM PALEO-1 within the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) and requirements in the Paleontological Resources Monitoring and Mitigation Plan (PRMMP), paleontological monitoring will take place during ground disturbing activities exceeding two feet below ground surface (bgs) in undisturbed areas. Although trench excavation and pole replacement work is anticipated to occur at a depth greater than two feet bgs, the majority of ground disturbance would occur within previously disturbed soils. Paleontological monitoring would occur at the discretion of the Project's qualified paleontologist for any excavation activities in undisturbed soils.

Disturbance Acreage Changes:☒

Yes

☐

No

Combined, the proposed underground 12 kV distribution line and telecommunications line would result in an additional 500 square feet of temporary impacts to disturbed/developed land compared to the previous disturbance estimate reflecting only an overhead distribution line. Although the total disturbance area for both underground lines would be approximately 3,550

square feet (0.08 acre), the majority of this disturbance would take place within the limits of disturbance approved and accounted for as part of the access road in Notice to Proceed No. 1 (NTP-1).

There is no change in temporary or permanent impacts resulting from the distribution pole replacement itself as it will be installed in approximately the same location. However, the distribution overland travel area will need to be increased by approximately 8,500 square feet (see **Attachment B, MPR-5 Figure**) in order to facilitate the pole replacement and additional 200 feet of PG&E overhead reconductoring work.

The following table includes environmental analysis representative of the CEQA Appendix G Checklist Sections addressed in the Final IS/MND as it relates to MPR-5. MPR-5 would have no potential to impact the following environmental resource areas and therefore are not included in the table below: Aesthetics, Agriculture and Forestry Resources, Energy, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation.

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
Air Quality	☒ Y	MPR-5 would not result in new construction activities or methods that have not been previously analyzed and disclosed within the Project's Final IS/MND. There is no change to the overall construction schedule or new equipment used that will result from the installation of the proposed underground lines. Construction of the 12 kV distribution line was also analyzed within the Final IS/MND, Section 3.3 as an overhead line on approximately 35 wood poles. As the line is now being proposed as underground, this eliminates the need to drill those pole foundations and place the poles using a crane. As such, it is anticipated that underground installation may result in moderately lower air emissions compared with installing overhead distribution. Additionally, all MPR-5 activities would take place in accordance with the Shasta County Standard Mitigation Measures (SMMs) defined in APM AQ-1 and Dust Control Plan measures defined in APM AQ-2. These measures include: • AQ-SMM-1: Maintain all construction equipment in proper tune according to manufacturer specifications, • AQ-SMM-2: Fuel all off-road and portable diesel-powered equipment with California Air Resources Board (CARB)-certified motor vehicle diesel fuel, • AQ-SMM-3: Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner
	☐ N	

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
		off-road heavy-duty diesel engines and comply with the State Off-Road Regulation. • AQ-SMM-4: Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines and comply with the State on-road regulation. • AQ-SMM-5: All on and off-road diesel equipment shall not idle for more than five minutes. • AQ-SMM-6: Diesel idling within 1,000 feet of sensitive receptors is not permitted. • AQ-SMM-7: Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors. • AQ-SMM-8: Electrify equipment when feasible. • AQ-SMM-9: Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel. • Dust Control Plan measure: Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site, and • Dust Control Plan measure: All dirt stock-pile areas should be sprayed daily as needed. MPR-5 activities would also comply with MM AQ-1. Therefore, the use of the MPR-5 work areas as proposed herein would not result in new significant impacts or a substantial increase in the severity of impacts analyzed and disclosed within the Project's Final IS/MND, Section 3.3. No new or altered APMs or MMs would be required.
Agency Consultation?	☐ Y	MPR-5 activities would not require agency consultation relating to air quality.
	☒ N	
Biological Resources	☒ Y	A biological field survey of the proposed MPR-5 work areas was performed on February 6, 2025 to verify the current conditions of the site. The disturbance areas proposed within MPR-5 do not contain any sensitive biological resources. MPR-5 work areas are more than five feet from the streams and wetlands, which have been flagged for avoidance as required by APM BIO-10. Seasonal wetland areas W-1 and W-1 are located approximately 30 feet south of the proposed underground telecommunications
	☐ N	

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
		route and will be avoided during MPR-5 activities. As required by APM BIO-6, all excavated trenches that are not filled at the end of a work day would be covered, or a wildlife escape ramp would be installed to prevent the inadvertent entrapment of wildlife species. A pre-construction nesting bird survey (APM BIO-4) would be performed for the area of the pole replacement site south to the access road entrance prior to work within that area if activities begin during the nesting season (February 15-August 31). Nesting surveys would not be required for the rest of MPR-5 components as they are within areas that have remained active with construction since the start of the Project. In compliance with APM BIO-5, if a nest is observed onsite and the nest is determined to be active, a biological monitor would monitor the nest to ensure that avian nesting or breeding activities are not substantially adversely affected by construction activities. If the biological monitor determines that activities associated with the Project are disturbing or disrupting nesting or breeding activities, the monitor would make recommendations to reduce noise or disturbance in the vicinity of the nest, such as temporarily suspending work in the area. Indirect impacts are not anticipated, but to the extent that any indirect impacts may occur to sensitive species in the vicinity of the MPR-5 work areas, those impacts will be mitigated through the implementation of APM BIO-1 through APM BIO-13, and MM BIO-1. Therefore, impacts to biological resources would remain similar to those addressed in the Project's Final IS/MND, Section 3.4. No new or altered APMs or MMs would be required.
Agency Consultation?	☐ Y ☒ N	MPR-5 activities would not require agency consultation relating to biological resources.
Cultural and Tribal Cultural Resources	☒ Y ☐ N	As described in Sections 3.5 and 3.18 of the Project's Final IS/MND, there are no known cultural or tribal cultural resources within the Project area, including the proposed MPR-5 areas. As such, cultural and tribal monitoring is not anticipated to be required for MPR-5 activities. Although no direct impacts to cultural or tribal cultural resources are anticipated as a result of the use of the MPR-5 activities,

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
		any indirect impacts that may occur will be mitigated through implementation of APM CUL-1 through APM CUL-4. Therefore, impacts to cultural and tribal cultural resources would remain within the envelope of those addressed within the Project's Final IS/MND, Sections 3.5 and 3.18. No new or altered APMs or MMs would be required.
Agency Consultation?	☐ Y	MPR-5 activities would not require agency consultation relating to cultural or tribal cultural resources.
	☒ N	
Geology and Soils	☒ Y	Both the distribution and telecommunications lines proposed in MPR-5 are underground and there are no new above ground structures or new grading proposed. Therefore, approval of MPR-5 would not create any new geological related hazard not previously disclosed in the Project's Final IS/MND, Section 3.7. The MPR-5 underground lines and pole replacement site are located in an area with high and undetermined paleontological potential which requires monitoring for ground disturbing activities in undisturbed soils below two feet per APM PALEO-1 and the Project's PRMMP. Although ground disturbance is anticipated to be more than two feet bgs during MPR-5 trenching and pole replacement activities, the pole replacement site and areas where trenching would occur have been predominately previously disturbed. Paleontological monitoring would occur at the discretion of the Project's qualified paleontologist for any excavation activities in undisturbed soils. No impacts to paleontological resources are anticipated beyond what was disclosed within the Project's Final IS/MND, Section 3.7. All MPR-5 activities will be performed in compliance with APM GEO-1, APM GEO-2, APM PALEO-1, and APM PALEO-2. All MPR-5 construction activities will adhere to requirements in the SWPPP, including the implementation of erosion control BMPs. No new or altered APMs or MMs would be required.
	☐ N	
Agency Consultation?	☐ Y	MPR-5 activities would not require agency consultation relating to geology, soils, or paleontological resources.
	☒ N	

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
Greenhouse Gas Emissions	☒ Y	MPR-5 activities would not result in new construction activities or methods that have not been previously analyzed and disclosed within the Project's Final IS/MND. There is no change to the overall construction schedule or new equipment that will result from the installation of the proposed underground lines. Construction of the 12 kV distribution line was also analyzed within the Final IS/MND, Section 3.8, as an overhead line on approximately 35 wood poles. As the line is now being proposed as underground, this eliminates the need to drill those pole foundations and place the poles using a crane. As such, it is anticipated that underground installation may result in moderately lower greenhouse gas emissions compared with installing overhead distribution. In addition, MPR-5 activities would comply with APM GHG-1. Therefore, the use of the MPR-5 work areas as proposed herein would not result in new significant impacts or a substantial increase in the severity of impacts analyzed and disclosed within the Project's Final IS/MND, Section 3.8. No new or altered APMs or MMs would be required.
	☐ N	
Agency Consultation?	☐ Y	MPR-5 activities would not require agency consultation relating to greenhouse gases.
	☒ N	
Hazards and Hazardous Materials	☒ Y	There are no new hazardous materials proposed for use as part of MPR-5 activities that were not accounted for in Section 3.9 of the Project's Final IS/MND. The Project's Worker's Environmental Awareness Program (WEAP) training will be provided throughout construction, as needed, to accommodate new Project personnel and emphasize safety and spill prevention measures. The 12 kV distribution line along the internal access road was anticipated to be an overhead line with approximately 35 wood poles in the Project's Final IS/MND, which is now being proposed as an underground line in MPR-5. This change will provide reliability benefits due to eliminating the need for onsite overhead distribution infrastructure that could be subject to risks such as weather and fire. MPR-5 activities would comply with the Project's Hazardous Materials Management Plan (HMMP). Therefore, potential impacts related to hazards or hazardous materials resulting from MPR-5 would be similar or less than those disclosed in the Final IS/MND,
	☐ N	

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
		Section 3.9. No new or altered APMs or MMs would be required.
Agency Consultation?	☐ Y	MPR-5 activities would not require agency consultation relating to hazards or hazardous materials.
	☒ N	
Hydrology and Water Quality	☒ Y	There are no jurisdictional aquatic features within the MPR-5 work areas and MPR-5 activities do not involve the installation of any new above-ground permanent facilities. All MPR-5 activities would adhere to requirements within the SWPPP. Although impacts to hydrology and water quality are not anticipated, any indirect impacts that might occur would be mitigated in accordance with the implementation of APM WQ-1, APM WQ-2, and the Project SWPPP, which contains measures to reduce or eliminate pollutants in storm water discharges from the site during construction that may otherwise violate water quality standards. As MPR-5 is proposing the 12 KV distribution line as underground rather than overhead as it was analyzed in the Final IS/MND, potential impacts related to hydrology or alteration of existing drainage patterns would be less than those addressed in the Project's Final IS/MND, Section 3.10. No new or altered APMs or MMs would be required.
	☐ N	
Agency Consultation?	☐ Y	MPR-5 activities would not require agency consultation relating to hydrology or water quality.
	☒ N	
Noise and Vibration	☒ Y	As discussed in Section 3.13 of the Final IS/MND, the closest sensitive receptors are approximately 1,500 feet west of the Fern Road Substation, with some residences as close as 250 feet from the access road improvements and PG&E distribution modifications along Fern Road. Although MPR-5 is proposing pole replacement work at the existing distribution pole on the east side of Fern Road and associated overhead reconductoring, this pole is located approximately 300 feet from the closest residence and equipment would be the same as what was analyzed for the other PG&E distribution line modifications / pole replacements in the Final IS/MND. Installation of the 12 kV distribution line along the Project access road was analyzed and accounted for in the
	☐ N	

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
		IS/MND as an overhead line. The type of equipment needed for installation of an overhead line (drill rig, crane, etc.) would generally be expected to generate more noise than the equipment anticipated to be required for the underground line installation (backhoe, mini excavator). Additionally, noise levels at the closest sensitive receptors would not persist for extended durations as construction would progress linearly along both the underground telecommunications line and the underground 12 kV distribution line. The MPR-5 underground telecommunications and 12 kV distribution lines would not result in any new operational noise sources for nearby sensitive receptors. Accordingly, MPR-5 would not be expected to create any new impacts relating to noise and vibration not already analyzed and disclosed within in the Project's Final IS/MND, Section 3.13. No new or altered APMs or MMs would be required. MM NOI-1 and MM NOI-2 are not anticipated to be applicable to MPR-5 as there is no blasting anticipated.
Agency Consultation?	☐ Y	MPR-5 activities would not require agency consultation relating to noise and vibration.
	☒ N	
Transportation	☒ Y	As shown on Attachment B, MPR-5 Figure, a portion of the underground 12 kV distribution line would be installed along Fern Road, as well as the replacement of the existing distribution pole on the east side of Fern Road. Work and traffic control within Fern Road was previously analyzed as part of the PG&E distribution modifications. As described in Section 3.17 of the Project's Final IS/MND, Project construction would require single-lane closures along Fern Road but would not require the full closure of the roadway. MPR-5 activities would not require more than one lane to be closed at one time, and traffic control would be implemented in accordance with the Project's Traffic Control Plan. The proposed underground telecommunications line would not affect Fern Road. MPR-5 activities would comply with APM TRA-1 and potential impacts related to transportation resulting from MPR-5 would be similar to those disclosed in the Final IS/MND, Section 3.17. No new or altered APMs or MMs would be required.
	☐ N	

CEQA Section	Applicable	(Y) Define potential impact or (N) briefly explain why CEQA section isn't applicable. If (Y), describe original and new level of impact, and avoidance/minimization measures to be taken.
Agency Consultation?	☒ Y	Encroachment permits would be obtained by LSPGC and PG&E for work within Shasta County ROW as required.
	☐ N	
Utilities and Service Systems	☒ Y	MPR-5 would involve the installation of an underground telecommunications line and an underground 12 kV distribution line. APM UTIL-1 would be implemented during construction, requiring LSPGC to mark and notify all utility companies of proposed underground utility work to ensure there are no conflicts with existing utilities. As such, potential impacts related to utilities and service systems resulting from MPR-5 would be within the envelope of those disclosed in the Final IS/MND, Section 3.19. No new or altered APMs or MMs would be required.
	☐ N	
Agency Consultation?	☒ Y	As required by APM UTIL-1, LSPGC will notify all utility companies with utilities within the Project ROW where underground work is required, including Shasta County if applicable.
	☐ N	
Wildfire	☒ Y	LSPGC and its contractors will conduct all activities in accordance with the Project's Construction Fire Prevention Plan (CFPP), APMs FIRE-1 through FIRE-5, and APM HAZ-4. The Project's WEAP training will be provided throughout construction, as needed, to accommodate new Project personnel per the Project's CFPP. The 12 kV distribution line along the internal access road was anticipated to be an overhead line with approximately 35 wood poles in the Project's Final IS/MND, which is now being proposed as an underground line in MPR-5. This change will increase fire hardening for the Project. MPR-5 activities would comply with APM PS-1, and APM FIRE-1 through APM FIRE-5. Therefore, potential impacts related to wildfire resulting from MPR-5 would be similar or less than those disclosed in the Final IS/MND, Section 3.20. No new or altered APMs or MMs would be required.
	☐ N	
Agency Consultation?	☐ Y	LSPGC will continue to coordinate with local emergency response agencies such as fire departments and police during Project construction as needed. Emergency access will be maintained throughout construction.
	☒ N	

ATTACHMENT B
MPR-5 Figure

FERN ROAD SUBSTATION
MPR-5
Shasta County, CA

LEGEND

MPR-5 Components

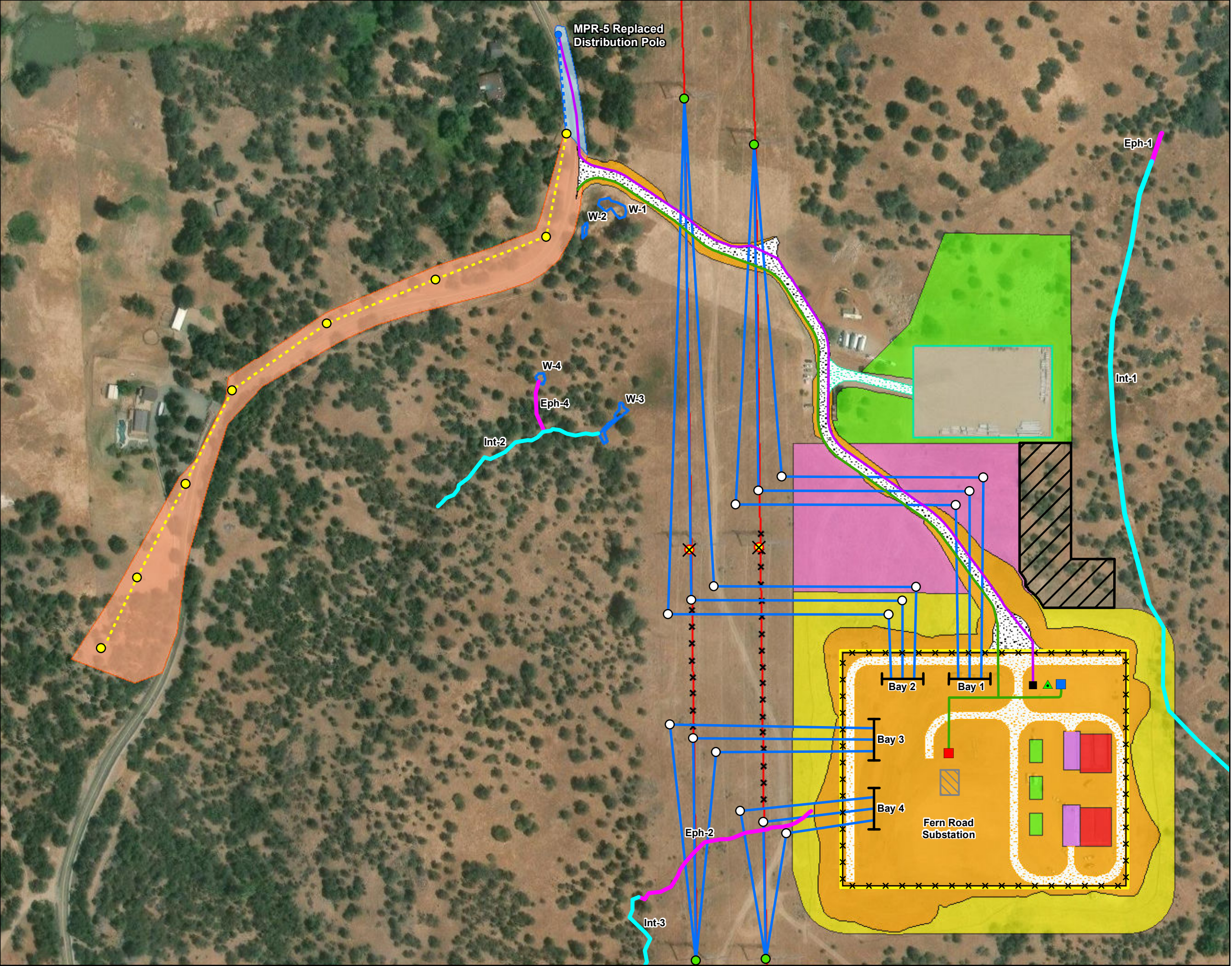
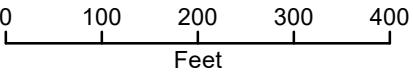
- MPR-5 Replaced Distribution Pole
- Underground 12kV Distribution Line
- Underground Telecommunications Line
- Overhead Rebuilt Distribution Line
- MPR-5 Distribution Overland Travel

Project Components

- Tree Clearing Area Previously Approved in MPR-2
- Project Area Previously Approved in NTP-1
- New 3-Pole Dead-End Pole
- Existing Structure to be Removed
- Rebuilt Distribution Pole
- PG&E Switchgear
- Microwave Tower
- Communications Monitoring Building
- LSPGC Control Enclosure
- Project Tie Line
- Overhead Rebuilt Distribution Line
- Existing 500kV Transmission Line to be Removed
- Fern Road Substation Bay
- Substation Fence
- Transformer
- Reactor
- Converter & Control Enclosure
- Metal GIS Enclosure
- Interior Access Road
- Exterior Access Road
- Construction Staging Area Access Road
- Construction Staging Area
- Distribution Overland Travel
- Graded Area
- Site Boundary - Approx. 7.5 Acres
- Expanded Staging and Parking Area
- Materials Storage within MPR-2 Work Area
- Materials Storage - No Tree Removal
- Aquatic Resources
 - Eph - Ephemeral Stream
 - Int - Imittent Stream
 - W - Seasonal Wetland

General Features

- Existing Structure
- Existing 500kV Transmission Line



ATTACHMENT C
MPR-5 Photograph Log

Fern Road Substation
MPR-5 Site Photographs



Photograph 1:

North-facing view of the existing distribution pole location where the pole would be replaced and the proposed underground 12 kV distribution line would begin on the east side of Fern Road.



Photograph 2:

South-facing view of the existing distribution pole location where the pole would be replaced and the proposed underground 12 kV distribution line would begin on the east side of Fern Road.

Fern Road Substation
MPR-5 Site Photographs



Photograph 3:

East-facing view of the Project site entrance.



Photograph 4:

Southeast-facing view of the Project access road from northern end of access road.

Fern Road Substation
MPR-5 Site Photographs



Photograph 5:

Southeast-facing view of Project access road west of the expanded staging and parking area.



Photograph 6:

South-facing view of the Project access road where it enters into the Fern Road Substation area.