LS Power Grid California

August 06, 2025

DATA REQUEST RESPONSE
LS POWER GRID CALIFORNIA (LSPGC)

Data Request No: OEIS-P-WMP_2025-LSP-001

Request Party: Office of Energy Infrastructure Safety

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Please find enclosed LSPGC's response to OEIS data request Q01 – Q05. The following information is provided by the following individuals:

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01 – 03	Rituraj Yadav, Associate Manager, Wildfire Mitigation	Employee	208-281-8255 / ryadav@lspower.com	1122 S. Capital of Texas Hwy, STE 100, Austin, TX 78746
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If you have any questions, please contact me at ryadav@lspower.com or 208-281-8255.

Sincerely,
Rituraj Yadav

OEIS Data Request Q01

Regarding the Standardized Monthly Inspection Form:
On page 74 of its 2026-2028 WMP, LSPGC states, "All findings are recorded on a standardized monthly inspection form" in reference to the monthly visual inspection performed at substations.

a) Provide a blank copy of the standardized monthly inspection form.

b) Provide the most recently completed standardized monthly inspection form for the Orchard Substation.

Response to OEIS Data Request Q01

a) Please refer to attachment "LSPGC_DR1Response_SubstationInsepection_BlankForm"
b) Please refer to attachment "LSPGC_DR1Response_SubstationInspection_JulyForm" This attachment was filed confidentially.

OEIS Data Request Q02

Regarding Maintenance Issue Priority Scales:
On page 74 of its 2026-2028 WMP, LSPGC states, "LSPGC employs a priority scale of 0-3. A priority of zero would necessitate a repair within 4 weeks of finding the issue. A priority of one would necessitate a repair from 4 weeks to 1 year of the finding. A priority of two would necessitate a repair of 1-3 years of the finding. And a priority of three would be an issue that is not imminent, and repair timeframe is greater than 3 years if not prescribed monitoring for further degradation which would necessitate the priority to be escalated." On page 90 of its 2026-2028 WMP, LSPGC states, "As deficiencies are identified during inspection activities, Field Operations personnel will assign a priority to each work order consistent with the requirements of the LSPGC CAISO Maintenance Procedures and CPUC General Order (GO) 95 Rule 18."

a) Explain when the priority scale of 0-3 is used for maintenance issues.
    i. Explain why this priority scale does not include a priority level to represent an immediate safety and/or reliability risk that requires action be taken immediately, either by fully repairing the condition, or by temporarily repairing and reclassifying the condition to a lower priority?
b) Explain when the priority scale laid out in CPUC General Order (GO) 95 Rule 18 is used for maintenance issues.

Response to OEIS Data Request Q02

a) LSPGC uses its internally defined 0–3 priority scale to assign corrective maintenance timelines for deficiencies identified during inspection activities. This priority scale is established in the 2026–2028 Wildfire Mitigation Plan (WMP) and is applied consistently across work order processes to ensure timely and risk-informed maintenance responses. The scale is defined as follows:
    1. Priority 0 (P0): Repair immediately or within 4 weeks of identification
    2. Priority 1 (P1): Repair within 4 weeks to 1 year
    3. Priority 2 (P2): Repair within 1 to 3 years
    4. Priority 3 (P3): Repair beyond 3 years, with monitoring as needed

   This scale is used broadly across LSPGC's Field Operations and Asset Management functions for work prioritization and scheduling.

   i. While the 0 - 3 scale does not explicitly define a separate "immediate" priority level, Priority 0 (P0) is intended to encompass conditions that require immediate response. The four-week timeframe associated with P0 represents the outer boundary for repair in the event there is not an immediate safety hazard, not a delay in action.
   In practice, when Field Operations personnel identify a condition that presents an imminent safety or reliability risk, they take immediate action, either through direct repair or temporary mitigation, and then classify the remaining corrective work as P0 or lower as applicable. This built-in operational sentiment ensures that all urgent or hazardous conditions are acted upon immediately, even if the full repair is completed later.
   Thus, immediate response is inherent within the P0 classification, and LSPGC's procedures are designed to escalate and act on such issues without delay.

c) LSPGC also recognizes and aligns with the prioritization structure established in CPUC General Order (GO) 95 Rule 18, which defines:
    i. Level 1: Immediate safety risk requiring prompt action

ii. Level 2: Condition requiring correction within 6–12 months
iii. Level 3: Condition to be addressed through routine maintenance

While LSPGC's internal 0–3 scale governs operational work order management, assignments are made in a manner consistent with GO 95 Rule 18. Field personnel apply professional judgment and risk assessment to ensure that each issue is prioritized appropriately under both internal and regulatory frameworks.
To ensure transparency and regulatory alignment, LSPGC provides the following mapping between its internal scale and GO 95 Rule 18 levels:

LSPGC Priority	Timeframe	Mapped GO 95 Rule 18 Level
P0	Repair within 4 weeks (with immediate action if needed)	Level 1
P1	Repair within 4 weeks to 1 year	Level 2
P2 / P3	Repair within 1 to 3+ years	Level 3

This mapping reflects LSPGC's commitment to ensuring that all safety-related conditions are promptly addressed while maintaining compliance with applicable CPUC requirements.

LSPGC will file a substantive errata to update Section 8.6 – Work Orders, specifically Table 8-3: Work Order Prioritization, to reflect the mapping between LSPGC's internal priority scale and CPUC GO 95 Rule 18.

OEIS Data Request Q03

Regarding Processes to Identify and Select Appropriate Mitigation Activities:
On pages 52-56 of its 2026-2028 WMP in section 6.1.3 Activity Selection Process, LSPGC states it is "in the process of creating and implementing more formal processes to identify and select

appropriate wildfire mitigation activities and to monitor the implementation of the WMP."

a) For section 6.1.3.1 Identifying and Evaluating Activities, provide a timeline and the date that LSPGC expects to implement formal procedures to identify and evaluate mitigation activities.
b) For section 6.1.3.2 Activity Prioritization, provide a timeline and the date that LSPGC expects to implement formal procedures for activity prioritization.

Response to OEIS Data Request Q03

a) LSPGC's second asset (Fern Road Substation), which represents approximately 94% of its total wildfire risk, is scheduled to energize in Q1 2026, with the remaining assets expected to energize by Q2 2028. To ensure that formal identification and evaluation procedures reflect actual system operations and risk exposure, LSPGC plans to begin developing these procedures in Q4 2026, once operational data becomes available. The procedures will be refined throughout 2027, with the goal of finalizing a formalized process in Q2 2028, in time to support the development of the next Wildfire Mitigation Plan (WMP) cycle.
b) Given that the majority of LSPGC's wildfire risk begins with the energization of its first asset in Q1 2026, early mitigation activities will be prioritized using existing criteria such as High Fire-Threat District (HFTD) designations and general risk assessments. LSPGC will begin developing formal activity prioritization procedures in Q4 2026, using insights from initial operations to guide the process. A preliminary prioritization framework will be implemented in 2027, with the full procedure finalized by Q2 2028, to inform the next WMP cycle.

OEIS Data Request Q04

Regarding Wildfire Risk Calculations:

On page 30 of its 2026-2028 WMP in section 5.2.2.3 Risk, LSPGC provides the general formula it uses for wildfire risk calculations.

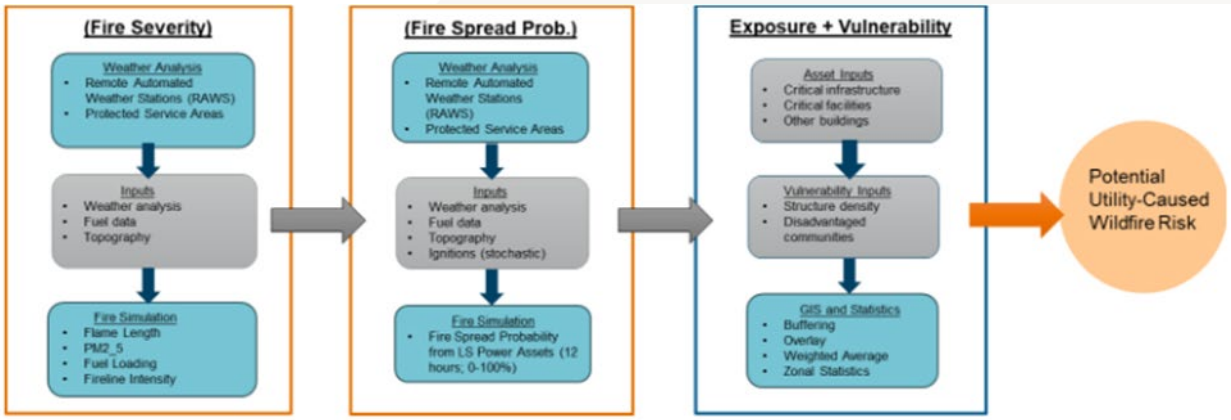
a) Provide a step-by-step calculation of the wildfire risk for Fern Substation. Include a detailed description of how each component of the calculation is normalized using the scales listed on page 30 of the WMP (ex: Fire Severity 0-5, and Asset Density weighting 1-2).

Response to OEIS Data Request Q04

a) Step-by-step Wildfire Risk Calculation for Fern.

The risk calculation for Fern substation is based on the following risk calculation formulation (in mathematical and graphical form):

$$Risk = [Fire\ Severity \times Fire\ Spread\ Probability] \times (Exposure + Vulnerability)$$



Step 1 - Calculate the fire hazard components "fire severity" of the risk equation. The fire severity component is comprised of several fire behavior outputs (i.e., flame length, PM2_5, fuel loading and fireline intensity). Each output is rescaled from 0-5 before linearly combining with the other outputs to get a single "fire severity" layer. This layer is then rescaled again from 0-5.

Step 2 - Calculate fire spread probability – the estimated probability of fire spread from LSPGC's assets – assuming ignition occurs at each substation and along each unit mile individually [e.g., 80-100% likelihood].

Step 3 - Generate Asset Density Layer – This layer is the density of non-LSPGC values or assets at risk in the surrounding landscape and proximate communities from fire exposure. The assets include

buildings, critical facilities (e.g., fire stations, hospitals), critical infrastructure (e.g., roads, communication systems) and environmental resources (e.g., critical habitats). Each asset is assigned to an asset type (e.g., buildings, critical infrastructure). A 0.25-mile buffer is then applied to each asset type, before overlaying atop all other asset groups to get an asset density (number of times asset types stack atop each other). The asset density layer is weighted as follows:

- Asset Density Layer = 3*Critical Infrastructure + 1*Natural Resource + 1*Social Vulnerabilities + Structure*Structure density factor.
- The structure density factor is based on how closely a structure is to the nearest structure. The classification based on separation distance is as follows:
    - Very Low Density: >= 60 ft gets a factor of 1.5
    - L: >=30 and < 60 ft gets a factor of 1.83
    - MH: >= 10 and < 30 ft gets a factor of 2.16
    - H: < 10 ft gets a factor of 2.5

Given the asset density layer equation and associated components and weights, the values range from 0.5 to 13.15.

Step 4 - Multiply Asset Density Layer by Fire Spread Probability Layer – To account for the probability of fire spread from a potential utility fire source and the proportional risk to assets, the asset density layer is multiplied by a probability band weight. The probability band weights are as follows:

- 0-19% = 0
- 20 – 39% = 1.25,
- 40 – 79% = 1.5,
- 80 – 100% = 2

Step 5 – Multiply "Fire Severity" component in Step 1 with the Probability Band Weighted Asset Density Layer in Step 4 to obtain Risk.

Step 6 – Rescale the Risk Layer from 0 to 5, based on the maximum value of risk calculated. For example, with the Fern substation, the rescaling equation was as follows:

- Rescale Factor = Max Risk Value / 5 = 80.47 / 5
- Risk Rescaled (Fern) = Risk Raster (Fern) / Rescale Factor

Step 7 - Final Risk Score and Ranking – The final risk score was then calculated based on the sum of all unit areas of risk that were classified as moderate or higher (i.e., Risk = 3, 4, 5). For example,

- Risk Score Raw (Fern) = Sum of areas of Rescaled Risk from Step 6 that are moderate or higher for Fern = 115,311.18

Step 8 – Enterprise-Wide Risk Scoring and Ranking – The raw risk scores are rescaled across all substations and lines, based on the maximum value of risk calculated for all LSPGC equipment locations. Note: This was done so that risk could be ranked enterprise wide.

- Rescaling Factor = Highest Raw Risk Score among Substations and Lines / 5 = 115,311.18/ 5
- E.g. Risk Score (Fern) = Risk Score Raw (Fern) / Rescaling Factor =115,311.18 / (115,311.18/ 5) = 5

OEIS Data Request Q05

Regarding Normalization of Wildfire Risk Calculations:

On page 31 of its 2026-2028 WMP in section 5.2.2.3 Risk, LSPGC states, "Once the absolute risk scores are calculated per the above formulation for each substation and each unit-mile of overhead line, the risk scores are normalized from 1-6 (where true 0 is reserved for "unburnable" landscapes such as water features, barren land and urban areas)." On page 43 in Table 5-5 Summary of Top-Risk Circuits, Segments, or Spans the overall utility risk scores of LSPGC assets are provided. Other than Fern ST which has an overall utility risk score of 5.0, all other LSPGC assets have risk scores below 1.

a) Have these scores other than Fern ST been normalized as detailed in section 5.2.2.3, or through another method?

b) Provide an explanation of why these scores other than for Fern ST are not within the intended normalization window (1-6).

Response to OEIS Data Request Q05

a) Yes, all scores are normalized by the same methods.
b) This was a typo and should read "the risk scores are normalized from 0-5 (where true 0 is reserved for "unburnable" landscapes." Given the risk scores from 0-5, risk ranking and prioritization were further delineated by other areas including risk that were determined to be medium to very high (i.e., 3-5 score). This further delineation was adopted to limit the influence of relatively low risk areas (such as grass dominated landscapes) that tend to have larger fire spread footprints from biasing the risk calculation.