BEFORE THE OFFICE OF ENERGY INFRASTRUCTURE SAFETY
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Office of Energy Infrastructure Safety
Natural Resources Agency

COMMENTS OF THE GREEN POWER INSTITUTE ON THE REVISED DRAFT WMP GUIDELINES

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ON THE REVISED DRAFT WMP GUIDELINES

The Green Power Institute (GPI), the renewable energy program of the Pacific Institute for Studies in Development, Environment, and Security, provides these *Comments of the Green Power Institute on the Revised Draft WMP Guidelines* (Package 1).

GPI reviewed the Revised Draft WMP Guidelines (Package 1), issued on January 17, 2025. GPI generally supports the improvements made to the Revised Base WMP Guidelines. We provide comments on the following topics roughly in order of Package 1 contents:

- Minor Revisions to Revised Draft WMP Guidelines Package 1 Redline
- Section 5.3.1 Design Basis Scenario revisions avoid creating a condition of lax enforcement.
- [Sections 6 and 8] GPI supports the addition of reporting requirements that align with a shift towards integrated planning required by D.24-10-030 issued in proceeding R.21-06-017 and recommends minor language revisions.
- [Section 7. PSPS and Section 4.3 Frequently Deenergized Circuits] The new PSPS reporting/planning threshold must be clarified; it fails to consider event duration and scope; it should be justified based on data analysis; and the revision may inadvertently create a WMP planning standard and evaluation metric.
- [Section 8.2 Grid Design and System Hardening] Revise the new statement about mitigations in combination to improve reporting requirement clarity and WMP quality.

Comments

Minor Revisions to Revised Draft WMP Guidelines Package 1 Redline

Revised Draft WMP Guidelines Package 1 Redline Page no.	**Issue** **– Recommended or Supported Revision**

p. 3, 10	Section I.4. Maturity Survey. [Footnote 6] See Energy Safety Policy Division Process Guidelines for additional information regarding submission schedules. Section II.4.1.2 [Footnotes 10 and 12] See Energy Safety Policy Division Process Guidelines for additional information regarding submission schedules. - The Draft Process Guidelines do not contain any information on submission schedules for WMP filing components. Deadline day counting methods are not schedules. GPI recommends revising the Draft Process Guidelines to include a schedule for all 2026-2028 WMP filing components. Alternatively, issue a separate 2026-2028 WMP filing schedule in a public filing and update or delete any incorrect footnotes as needed in the Revised Draft MP Guidelines Package 1.
p. 4	[Footnote 7] The electrical corporation may not redact titles, credentials, and components of main contact person or people for Data Requests. - This is a filing requirement and is more germane to the Process Guidelines for Data Requests. GPI recommends either duplicating or moving the information to the Process Guidelines and referencing the Process Guideline document for guidance on how to correctly file Data Requests inclusive of impermissible redactions. Filing requirements and format standards should not be issued in footnotes where they may be easily overlooked.
Terminology updates	GPI supports the removal and replacement of the term "initiative activities" to "activities" e.g. p. 13 and the development of a more clear terminology hierarchy that follows: Category, Initiative, Activity. (Appendix A) GPI supports the terminology update to "Base" WMP. e.g. p. 16 GPI supports the removal of the term "mature" in certain locations that are not referring to, or are not measured based on, the Maturity Survey. e.g. p. 40

Section 5.3.1 Design Basis Scenario revisions avoid creating a condition of lax enforcement.

GPI appreciates the effort to improve Section 5.3.1. Design Basis Scenarios. Removal of language establishing minimum requirements and instead fielding summaries of electrical corporation risk model design relative to the listed conditions should improve the value of electrical corporation responses for cross-comparing wildfire risk modeling approaches and risk tolerances. Whether responses support work in the RMWG, improve risk modeling and alignment, or inform WMP adequacy remains to be seen.

GPI generally supports the decision to remove the 30-year data requirement since the data input timeframe can influence the "weight" of more recent years that may better reflect climate change impacts and future conditions.[1] GPI previously commented on data timeframe reporting requirements in comments on the 2023 WMP Guidelines, which is worth restating here:

> This section implies the average, typical, or "general" climate conditions (e.g. temperature, precipitation) are defined as the average of conditions recorded over the last 30-40 years. Due to climate change trends in these metrics the window of data selection (i.e. year range) will significantly alter the final average. This was recently observed in the CPUC Integrated Resources Planning proceeding when the data integration window for temperature was shortened from 30 to 20 years. GPI recommends defining the years over which all utilities should provide average climate metrics (e.g. 2000-2020). This will support comparison across utilities reports and will better reflect recent trends.[2]

We note that the relative influence of 20 versus 30-year dataset inputs on risk planning model outputs could presumably be assessed through sensitivity modeling, assuming electrical corporations have 30-year datasets.

GPI also recognizes that language changes to Section 5.3.1 eliminate Design Scenario response content as a basis for WMP compliance/non-compliance. This comports with the current track record for WMP ACI content and plan approval issuance and avoids inadvertently creating a condition of lax enforcement or oversight failure. However, it also implies that as per the 2023-2025 WMP cycle a wide range of responses will be deemed acceptable for the purpose of WMP compliance.

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[1] Revised Draft WMP Guidelines (Package 1) Redline, e.g. p. 44.
[2] Comments of the Green Power Institute on the Draft 2023 WMP Guidelines, October 26, 2022. pp. 14-15.

GPI is optimistic that efforts led by Jensen Hughes and supported by the RMWG will inform future improvements to this and other related WMP sections.

[Sections 6 and 8] GPI supports the addition of reporting requirements that align with a shift towards integrated planning required by D.24-10-030 issued in proceeding R.21-06-017 and recommends minor language revisions.

The Draft WMP Guideline Revision includes three new reporting requirements in Sections 6.1.3.1 Identifying and Evaluating Activities, 6.1.3.2 Activity Prioritization, and 8.2 Grid Design and System Hardening that addresses alignment with D.24-10-030. GPI supports these additions and recommends the following minor revisions (additions underlined, deletions in strikethrough):

> 6.1.3.1 Identifying and Evaluating Activities …
>
> - How the electrical corporation uses multi-attribute value functions (MAVFs), cost- benefit analysis (CBA), and/or other specific risk factors (as identified in relevant CPUC Decisions) in evaluating different activity alternatives.
> - This must include how the electrical corporation considers cost efficiencies when evaluating activities, including <u>but not limited to considerations for future grid needs (e.g., load capacity, peak demand, system flexibility, interconnection) and</u> overlap with <u>planned or</u> projected upgrades ~~due to future grid needs (e.g., load capacity, peak demand, system flexibility)~~.[48]
>
> [Footnote 48] These considerations must be in alignment with the CPUC's Decision Adopting Improvements to Distribution Planning and Project Execution Process, Distribution Resource Planning Data Portals, and Integration Capacity Analysis Maps, D.24-10-030 <u>and with the CPUC's Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future, R.21-06-017</u>.[3]

And

> 6.1.3.2 Activity Prioritization…• Describe how grid needs, including future projected needs, (e.g., load capacity, peak demand, system flexibility)[52] influence activity prioritization.

[3] Revised Draft WMP Guidelines (Package 1) Redline, p. 69

> [Footnote 52] These considerations should be in alignment with the CPUC's Decision Adopting Improvements to Distribution Planning and Project Execution Process, Distribution Resource Planning Data Portals, and Integration Capacity Analysis Maps, D.24-10-030 and with the CPUC's Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future, R.21-06-017. ~~with the CPUC's Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future, R.21-06-017~~[4]

And

> Section 8.2 Grid Design and system hardening… o As applicable, a discussion of any evaluations related to scoping grid hardening projects to account for future grid needs (e.g., load capacity, peak demand, system flexibility, interconnection) and overlap with planned or projected upgrades.[71]
>
> [Footnote 71] These considerations must be in alignment with the CPUC's Decision Adopting Improvements to Distribution Planning and Project Execution Process, Distribution Resource Planning Data Portals, and Integration Capacity Analysis Maps, D.24-10-030 and with the CPUC's Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future, R.21-06-017. [5]

GPI recommends updating all three footnotes to equivalently reference alignment with both the "CPUC's Decision Adopting Improvements to Distribution Planning and Project Execution Process, Distribution Resource Planning Data Portals, and Integration Capacity Analysis Maps, D.24-10-030 and with the CPUC's Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future, R.21-06-017." R.21-06-017 is an open proceeding and additional developments regarding integrated planning that includes wildfire mitigation efforts on the distribution system are anticipated to develop in the coming months and years.

[Section 7. PSPS and Section 4.3 Frequently Deenergized Circuits] The new PSPS reporting/planning threshold must be clarified; it fails to consider event duration and scope; it should be justified based on data analysis; and the quantitative revision may inadvertently create a WMP planning standard and evaluation metric.

The Revised Draft WMP Guidelines establish a new quantitative reporting threshold in Section 4.3 Frequently Deenergized Circuits for Table 4-3:

[4] Revised Draft WMP Guidelines (Package 1) Redline, pp. 69-70.
[5] Revised Draft WMP Guidelines (Package 1) Redline, p. 89.

> Frequently deenergized circuits are circuits which have had three or more PSPS events per calendar year. The table and map must include frequently deenergized circuits from the previous six calendar years.[6]

Clarify whether the new quantitative standard defining a "frequently de-energized circuit" as "three or more PSPS events per calendar year" means that a circuit must have been de-energized three times per year in at least one of the total six reporting years, or if a given circuit must have experienced three PSPS events in each of the six reporting years. That is, does a circuit de-energized three times in only one of the six reporting years count as a "frequently deenergized circuit"?

We anticipate that the same impact metrics required for reporting in Section 7. PSPS, which include PSPS event duration, frequency, and scope – number of customers, are likely important metrics for setting quantitative reporting/planning thresholds used to assess system designs and whether they balance reliability, sustainability/safety, and cost.[7] The quantitative event per year reporting metric for table 4-3 does not take into consideration the relative impacts of each event such as duration and number of individuals affected. These metrics are presumably relevant to determining PSPS risk buydown and project prioritization, though GPI is not specifying the relative priority of each metric for the purpose of setting quantitative reporting thresholds that may also serve as planning thresholds and WMP evaluation metrics.

As a theoretical example, a circuit that experiences three relatively short PSPS events in one of six total years may have different implications compared to a circuit that experiences one long duration PSPS every year for six years. Event duration affects factors such as but not limited to net business and household losses (e.g. spoilage, operating hours), and potential health impacts severity (e.g. associated with AFN medical equipment operation).

In Integrated Resources Planning (IRP) the planning standard is 0.1 Loss of Load Expectation (LOLE, e.g. rolling blackouts), meaning peak demand is expected to exceed installed resource capacity on one day every ten years. The magnitude of an LOLE event is measured by Expected

[6] Revised Draft WMP Guidelines (Package 1) Redline, pp. 27-28.
[7] Revised Draft WMP Guidelines (Package 1) Redline, p. 82

Unserved Energy (EUE) in hours. At present, EUE is a complementary metric that is not directly used to determine resource portfolio adequacy. However, a recent white paper by the Energy Systems Integration Group explores the relevance of multi-metric planning criteria, stating:

> Loss-of-load expectation as the sole resource adequacy criterion represents only a single dimension of risk. It needs to be supplemented. A significant limitation of the single criterion approach is its failure to differentiate among the size, frequency, duration, and timing of shortfalls. This is a critical omission, as damages associated with power system shortfalls are nonlinear. Longer and larger disruptions lead to disproportionately greater damages, yet the LOLE metric treats all resource adequacy shortfalls equally. This equal weighting does not accurately reflect the real-world impacts of loss of load, which vary greatly in severity and consequences.[8]

The 1-in-10-year LOLE event IRP planning standard is a much lower risk tolerance threshold compared to the newly established three-times-per-year in the last six years PSPS reporting/planning metric. Meaning, we may be "getting away with" less focus on the duration of a 1-in-10-year LOLE event due to the relatively low permissible event frequency. GPI is concerned that duration and scope may be an even more important metric for PSPS impact and suitable system design planning if/when multiple events are occurring on an annual frequency (i.e. a multiplier of non-linear impacts). GPI recommends detailing if and how PSPS event duration and scope were considered when establishing the quantitative PSPS reporting threshold for Table 4-3 and whether/how those metrics were ruled out as quantitative reporting/planning standard metrics.

Why it matters: Section 7. PSPS states:

> The narrative must summarize how the electrical corporation will reduce the need for, and impact of, future PSPS implementation on circuits that have been frequently deenergized, as listed in Table 4-3 in Section 4.3.[9]

[8] Energy Systems Integration Group. A Report by the Energy Systems Integration Group's Resource Adequacy Task Force (March 2024). https://www.esig.energy/wp-content/uploads/2024/03/ESIG-New-Criteria-Resource-Adequacy-report-2024.pdf.
[9] Revised Draft WMP Guidelines (Package 1) Redline, p. 82.

This statement requires electrical corporations to link WMP actions (i.e. the "how" equates to mitigation activities) to the reduction of impacts associated specifically with "frequently deenergized circuits" listed in Table 4-3, which are now defined based on a single-metric (event, frequency) quantitative reporting threshold. The Section 7 linkage of mitigation activities for the purpose of reducing the frequency and impact of PSPS events for circuits listed in Table 4-3 converts quantitative the reporting threshold to a *planning threshold or standard*. The "three PSPS events per year" planning threshold/standard is now also a metric upon which to evaluate WMP adequacy and compliance. Previously, the absence of a quantitative definition of what qualifies as a "frequently deenergized circuit" for reporting in Table 4.3 left this determination to each electrical corporation. This technically should have put the onus on the electrical corporations to create a suitable impact assessment and resulting single- or multi-metric quantitative reporting/planning standard that stands up to OEIS and stakeholder scrutiny and ultimately OEIS approval. In this case, ECs should be required to report on what "done" looks like based on their own PSPS impact assessment and an internal single- or multi-metric quantitative reporting/planning standard that could similarly translate to a specific PSPS risk reduction target (e.g. no more than *n* PSPS outage minutes per customer per year).

The new "frequently deenergized circuit" quantitative reporting/planning standard in the Guidelines now places the onus on the OEIS to ensure that the threshold appropriately balances system reliability, safety/sustainability, and cost (incl. all PSPS impact metrics frequency, duration, scope), and is used as an evaluation metric for the 2026-2028 MWP cycle. The pros and cons of each are multiple and beyond the scope of these comments, as it would require a deeper dive into the implications of the selected reporting/planning standard. At this time, GPI recommends caution and careful consideration before adopting the quantitative "frequently deenergized circuit" reporting standard changes to Section 4.3, Table 4-3.

Planning standards and/or risk thresholds should be based on transparent data analysis and selected such that they balance system reliability, sustainability/safety, and cost. OEIS should summarize the basis upon which the three events per year "frequently de-energized circuit" threshold was determined. This should include any data analysis inclusive of considerations for cost, reliability, and safety (i.e. ratepayer impact analysis), resulting figures (e.g. de-

energizations per year by circuit for electrical corporations, ratepayer impacts), and any literature that informed the basis of the quantitative threshold.

[Section 8.2 Grid Design and System Hardening] Revise the new statement about mitigations in combination to improve reporting requirement clarity and WMP quality.

Section 8.2 Grid Design and System Hardening is revised to include (OEIS Revision additions in red):

> Compatible activities:
> o A list of other activities the electrical corporation uses in combination with the activity to increase risk reduction effectiveness, including the section number and a link to the corresponding WMP section. This must be consistent with the evaluations performed in Section 6.1.3.1 and must include all activities that can be feasibly deployed in combination.[10]

These requirements are in conflict. The first sentence requires a report on the activities *used* in combination, while the second requires reporting on all activities that *can be used* in combination. The former may be a subset of the latter. GPI recommends the following revisions to improve reporting requirement clarity and WMP quality (additions are underlined, deletions are in strikethrough):

> Compatible activities:
> o A list of all activities that can be feasibly deployed in combination and which of these activities the electrical corporation is deploying ~~other activities the electrical corporation uses~~ in combination with the activity to increase risk reduction effectiveness, including the section number and a link to the corresponding WMP section. This must be consistent with the evaluations performed in Section 6.1.3.1 ~~and must include all activities that can be feasibly deployed in combination~~.[11]

Conclusion

We urge the OEIS to adopt our recommendations herein.

[10] Revised Draft WMP Guidelines (Package 1) Redline, p. 89.
[11] Revised Draft WMP Guidelines (Package 1) Redline, p. 89.

Dated February 6, 2025.

Respectfully Submitted,

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