BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Office of Energy Infrastructure Safety Natural Resources Agency

COMMENTS OF THE GREEN POWER INSTITUTE ON RESPONSES TO THE 2022 BVES WMP REVISION NOTICE

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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 Responses to the 2022 BVES WMP Revision Notice*.

GPI highlights that the Bear Valley Electric Service's Revision Notice and responses are issued after most of the plan implementation year has passed. While WMPs include some targets for years forward, much of the work that the WMP updates are intended to cover has either already happened, or the opportunity for substantial additional progress has passed.

GPI also notes that we were unable to locate the redlined version of BVES's 2022 WMP Update Revision, either on BVES's website or through the efiling listserv emails as of September 16, 2022. This hampered our review.

General Critical Issues

RN-BVES-22-01: BVES has not responded to "Additional Issues"

ISSUE [5.3.A.2]: BVES states that it "has an ongoing program to assess and remediate noncompliant distribution poles" but does not provide any actual details on what that program consists of, if it differs outside of routine GO 95 and 165 efforts, or how BVES actually plans on targeting "priority pole replacements and remediations."

REMEDY: BVES must explain its distribution pole replacement and remediation program, including how BVES identifies, targets, and prioritizes the highest-risk poles; and how BVES defines a "priority pole replacement and remediation." Section 7.3.3.6 addresses Distribution pole replacement and reinforcement, including with composite poles. In Section 7.3.3.6.1 Distribution Pole Replacement and reinforcement – GO 95 Projects, BVES add the following text with respect to Regional Prioritization:

BVES is proactively performing pole loading test beyond the GO 95 / 165 requirements, including the heavy loading requirements. The pole loading program is combined with the covered conductor program, outlined in section 7.3.2.2.2, which is prioritized to address the highest risk areas of the service territory.

BVES does not clarify the work schedule, scope, or methods they are using that exceeds GO 95/165 requirements. Further, the Covered Conductor program does not appear to be targeting the highest risk circuits within the Tier 2/3 HFTD. BVES only materially updated text in the Regional Prioritization sub-sections within Section 7.3.3.6.

RN-BVES-22-01 [5.3.A.2] is not met. GPI observes that this shortfall continues to be associated with vague implementation methods. There are at least two possible causes that include: (i) the fundamental lack of a clear or comprehensive program plan, including method development, or (ii) shortcomings in terms of the ability to develop a clear program report that adequately explains all key elements. Notably, the structure of each section in the WMP prompts the problem statement (Risk to be mitigated), why the work is needed (Initiative Selection, Alternatives), where the work is planned (Region Prioritization), work status/ timeline phase (Progress on initiative), and next steps (Future improvements to initiative). This report structure does not include core elements of a project proposal, namely "how" the work will be done (Methods section), scope of the project (Scope of work), or when the project is scheduled (Complete project timeline, Gantt Chart).

These program elements require specific responses, such as via what additional or existing inspections or work will this specific project be achieved, how many poles are in scope for this project, and over what timeline and when will the work be completed. While adding these core project/program element sections to the 2023 WMP guidelines cannot ensure that utilities have a well-developed program that follows project development and management standards, it will at least minimally clarify that these core program elements

are expected, while also facilitating review. These same observations are relevant to information shortcomings identified in RN-BVES-22-01, Issues such as 5.3.B, 5.3.E, and 5.5.C.

GPI also recommends requiring that BVES report on Target% / Top Risk% based on their Fire Risk Matrix and Consequence scores, not a Tier2/3 basis, as this obscures whether work is completed per relative risk rankings at a higher granularity. We provide addition discussion in our comments on RN-BVES-22-03.

ISSUE 5.5.C: Condition BVES-R2 requires BVES to "provide detailed information on its fuels management and slash reduction practices." Instead of describing its own fuels management practices, BVES instead discusses fuels management activities performed by other entities including Big Bear Fire Department and Bear Valley Community Service District. While it is laudable that the Big Bear Valley Community as a whole is addressing fuels management issue, Energy Safety expects BVES to detail its own fuels management activities and how it has contributed to the community fuels management activities it describes. BVES states that fuels management activities are required "by GOs and applicable standards." General Orders (GOs) do not mention fuels and "slash" management; instead, these standards are outlined by the Board of Forestry's Forest Practice Rules and Public Resources Code 4293; as such, Energy Safety is concerned that BVES is not implementing "applicable standards."

REMEDY: In Section 7.3.5.5, BVES must provide detailed information on its fuels management and slash reduction practices including methods used and destination of downed woody debris (e.g., biomass energy facility, landfill, etc.).

BVES has only provided a summary of their low-income firewood program (BVES 2022 WMP Update Revision 1 p. 289). They do not provide information on the destination of the remainder of the woody debris. GPI recommends specifically requiring this information in the 2023 MWP guidelines/template in the form of a narration, with a future deadline for when utilities will be expected to complete a table on the destination of woody debris.

We provide additional comments on fuels management in our response to RN-BVES-22-05 and RN-BVES-22-09 following.

RN-BVES-22-02: BVES has not provided adequate detail on mitigation initiative progress

In its revised 2022 Update, BVES must clearly and fully detail its wildfire mitigation initiatives in accordance with the requirements set forth in the 2022 WMP Guidelines 12 throughout Section 7.3 of its WMP so that Energy Safety can evaluate BVES' operations and progress towards reducing wildfire risk in service territory.

GPI has provided comments in response to RN-BVES-22-03, -04, -05, -07 and -09 below that address specific elements of issue RN-BVES-22-02.

Grid Design and System Hardening

RN-BVES-22-03: BVES has not sufficiently connected its risk assessment with its mitigation initiative prioritization

In the relevant WMP section(s) of its revised 2022 Update, BVES must: (a) Integrate its response to BVES-21-07, found in Appendix A, into WMP Section 7.3.3 "Grid Design and System Hardening." (b) Demonstrate that its risk assessments directly inform the prioritization of initiatives, instead of broadly stating that risk is a consideration or defaulting prioritization to only HTFD Tier 2 and Tier 3 designations. (c) Demonstrate that its future planned grid hardening mitigation initiatives, particularly covered conductor, will address the highest risk circuits as self-assessed and identified by BVES and its relevant contractor(s). (d) Describe how its elected the location of its covered conductor pilot program.

Comments regarding remedies (a) and (c) are provided in response to RN-BVES-22-07. The updates to Section 7.3.3.3 Covered Conductor Installation "regional prioritization" responses reference the added project selection and prioritization process in Section 7.1 and flow chart in section 7.3. However, we note that regional prioritization responses in the Covered Conductor mitigation programs remain largely focused on generally

performing work in the HFTD Tier 2 and 3, which constitute the entirety of the BVES service territory. In another reference BVES defined high-risk areas as based on high vegetation density (BVES 2022 WMP Update Revision 1, p. 165)." BVES does not appear to respond to remedy (d) in any section of the revised WMP. Given these relatively minimal WMP revisions GPI is concerned that if BVES continues to use its project selection and prioritization process, its 6-year and 10-year covered conductor implementation plans will continue to prioritize projects with the least "resistance," versus projects located in the highest risk locations. Pushing high-barrier projects with high-risk rankings to the end of the 10- or 6-year work plans will result in more risk vulnerability, and may even slow progress in later years when only the less "viable" projects remain.

GPI previously raised concerns that BVES's program Target % / Top Risk % metric in Table 5.3-1 "List and description of program targets, last 5 years" is listed as 100 for all programs, referencing that the entire territory therefore constitutes top risk and all the work therefore takes place in the top risk area. Requiring BVES to report a more useful metric, such as target percentage of work in top 25 percent of risk ranked circuits, would more readily show whether planned work is located in top-risk circuits per their relative circuit risk ranking and the Reax consequence results.

BVES is also missing: (a) the ability to convert wildfire spread simulations into consequence values via a transparent MAVF; and (b) the ability to generate a complete risk score by multiplying probability of ignition risk by consequence risk – core capabilities in WMP risk analysis. As a result, BVES operates using a separate Fire Safety Circuit Matrix and Reax generated consequence map. Even if BVES begins to better align regional prioritization with their Fire Safety Circuit Matrix, this rudimentary risk ranking approach is not accounting for simulated ignition consequence (e.g. See BVES 2022 WMP Update Revision 1, Table 4.2-1 Evaluation of Higher Fire-Threat Areas). In addition to our recommendations above, BVES should be directed to develop a comprehensive risk ranking that includes ignition consequence in their 2023 WMP.

Asset Management and Inspections

RN-BVES-22-04: BVES has not provided sufficient information on quality assurance & quality control (QA/QC)

In the relevant WMP section(s) of its revised 2022 Update, BVES must: (a) Provide details on progress made developing and implementing its formal QA/QC process, including implementation timing. (b) Provide results of the "interim" QA/QC processes BVES has used for assets, including details on what type of QA/QC was performed, the percentage of asset inspections on which BVES completed QA/QC, and the results of the QA/QC performed since the 2021 WMP Update.

BVES includes an Appendix F: BVES Asset and Inspection Quality Management Program. However, this appendix is neither summarized nor even referenced in the WMP narration Section 7.3.4.14, "Quality assurance/ quality control of inspections". This Appendix also does not describe a QA/QC plan for evaluating the efficacy and success of asset inspections. Within the 2022 WMP revision there are two inaccurate references to an Appendix F regarding Emergency Response Workflows (BVES 2022 WMP Update Revision 1, p. 484, 485).

In the WMP narration, BVES added boilerplate QA/QC efforts to each equipment and vegetation inspection type. For example:

BVES will continue to cross check the effectiveness of its patrol inspections by validating the results with other asset inspections (Detailed Inspections, LiDAR, UAV Imagery, 3rd Party Ground Patrol Inspections, etc.) to improve its patrol inspection techniques.

They also updated Section 7.3.4.14 "Quality assurance/ quality control of inspections." The updated text does not provide concrete targets required to implement and subsequently evaluate the success of their proposed QA/QC program. BVES should provide measurable objectives and targets for their QA/QC program. For example, re-inspect 5 percent of assets within n days of the initial detailed (patrol, etc.) inspection and use these data to determine a contractor or employee inspection accuracy rate, with a goal of no less than 95 percent inspection success. BVESs should also provide an actionable plan for how they are or will use the QA/QC results to improve inspection quality. BVES should also provide additional information on the new Table 7.3-4, Example Quality Control Program Tracking. It is not entirely clear if the data in the table are listing inspections of new equipment installations, or if they somehow reflect a QA/QC process on inspections. In their additions to the Progress on Initiative section BVEs does not provide any results or outcomes of their QA/QC process, such as their inspection accuracy rate based on work completed in 2021, or what inspection practice improvements were made at the cost of \$19,870.

BVES does provide a more comprehensive QA/QC plan with metrics and reporting standards in Section 7.3.5.6, Improvement of Inspections, and Section 7.3.5.13, Quality Assurance/ quality control of inspections. GPI recommends expanding these to include Level 2 and Level 3 vegetation discrepancy results in addition to the planned Level 1 discrepancy metric (BVES 2022 WMP Update Revision 1, p. 226). We also recommend that the listed VM Program Annual QA Audit Areas include an assessment of whether fuels removal work is completed on time and up to standards. The level of detail provided in the VM QA/QC program should be replicated for asset inspections and work.

BVES has not fully met remedy (a) or (b) requirements for RN-BVES-22-04, particularly with respect to asset inspections based on our review of sections 7.3.4 and 7.3.5, which is listed as the location for responses to RN-BVES-22-04 in BVES's August 29, 2022, Revision Notice submission letter. BVES did not provide results of the QA/QC process, nor provide an adequate, trackable QA/QC program plan for asset inspections.

Appendix E, sub-Appendix C, Vegetation Management Quality Control Form should include additional metrics such as the total QC evaluations performed and any clarifying metrics (e.g. line miles), as well as the percent of VM inspection discrepancies, including metrics such as specifics on misclassified level 1-3 tags and type (e.g. clearance, hazard tree, etc.). GPI is concerned that the barebones Quality Control form will not be able to provide sufficient direction to either external stakeholders or BVES employees regarding inspection success and required adjustments/remedies. BVES should also clarify the aspects of the QA/QC program for inspection QA/QC versus VM work QA/QC, and

provide a trackable number (or percent) of QC checks for each as well as a complete list of evaluation metrics and anticipated outcomes.

Vegetation Management and Inspections

RN-BVES-22-05: BVES claims aspects of its vegetation management program are "enhanced" despite meeting only minimum regulatory requirements

In the relevant WMP sections of its revised 2022 Update, BVES must: a) Clearly and fully articulate its detailed inspections, fuels mitigation, patrol inspections, and hazardous tree removal practices. b) Clarify how these mitigation initiatives are "enhanced," exceeding the regulatory requirements it cited or alluded to throughout Section 7.3.5 "Vegetation Management and Inspections." of its 2022 Update. If these mitigation initiatives are not "enhanced," BVES must dispense with such language.

As part of these required remedies, BVES must also remedy RN-BVES-22-01 and RN-BVES-22-02.

BVES responds to this section in 7.3.5 Vegetation Management and Inspections of their Revised 2022 WMP Update. Our response focuses on fuels mitigation practices. BVES addresses Fuels mitigation and management in Section 7.3.5.1 "Additional Efforts to manage community and environmental impacts," and Section 7.3.5.5 "Fuel management (including all wood management) and reduction of 'slash' from vegetation management activities."

In Section 7.3.5.1 BVES engagement with USFS and other land management agencies regarding fuels management programs is repeatedly described as providing "support." The only measurable action described in this section was community outreach focused:

In 2019, 2020, and 2021, BVES community briefs on wildfire mitigation included discussion on BVES's enhanced vegetation efforts, treatment of at-risk species, and removal of hazard trees (BVES 2022 WMP Update Revision 1, p. 220).

It is not entirely clear what BVES means in terms of "support," and how this supporting role as well as the community outreach has totaled \$35,822. This issue essentially boils

down to a persistence of vague language. In their 2023 WMP, BVES should specify what "support" constitutes in terms of objectives, outputs, and outcomes. For example, whether support means awarding small grants to local organizations to implement fuel mitigation work, or providing some other form of funding or in-kind resources for third party efforts. GPI also notes that costs for this community outreach should not be duplicated in/from the Stakeholder Cooperation and Community Engagement section.

In Section 7.3.5.5 "Fuel management (including all wood management) and reduction of 'slash' from vegetation management activities," BVES describes that: "BVES's vegetation clearance contractor clears vegetation and removes all vegetation waste and slash from the area." With respect to regional prioritization, BVES describes that VM work is conducted on a cycle schedule and that fuels and slash identified during inspections will result in removal efforts. Progress on this initiative includes a directive that the contractor removes all slash around the time VM work is completed. The removal of all slash and VM residues at the time of work is an improvement over traditional VM slash management practices described by the IOUs. In their 2023 WMP, BVES should perform and report QC checks on the contractor's success in executing this new VM slash removal requirement.

BVES should also provide specifics regarding the existing collaborations with the USFS – this is discussed further in response to RN-BVES-22-09.

Resource Allocation Methodology

RN-BVES-22-07: BVES does not describe how quantifiable risk reductions and RSE estimates inform initiative selection

In the relevant WMP section(s) of its revised 2022 Update, BVES must provide:

(a) An overview of its decision-making framework that includes the rankings of relative decision-making factors (e.g., planning and execution lead times, resource constraints, etc.) and pinpoints where quantifiable risk reductions and RSE estimates are considered in the initiative selection process.

BVES references section 7.1 regarding its response to RN-BVES-22-07. The additional description provided in Section 7.1 gives some additional detail on how projects are selected and prioritized. According to the Identification of Potential Projects, step 1, the initial project list is based on project viability, including "...project need, wildfire risk reduction value, timing, and execution challenges (BVES 2022 WMP Update Revision 1, p. 124)." Based on these methods it is still not clear what the relative importance of wildfire risk reduction values are given in order to develop this initial project list. For example, whether a high-risk-ranked circuit with some viability challenges is given priority of resources over easier to implement, lower risk ranked projects. This potential project list may eliminate high-risk-ranking segments if those projects have other limitations. It also not apparent to what extent progress is planned or made to reduce project viability barriers for the highest risk segments.

Under Selection of Projects BVES then states "The risk reductions and RSEs, developed using the Risk-Based Decision Making process per the previous step, are utilized to establish an initial project selection screening (BVES 2022 WMP Update Revision 1, p. 125)." However, it is possible that the highest risk and highest RSE projects were already removed in the previous step. According to sequencing of projects, BVES states: "A project may have a large risk reduction but permitting for the project is lengthy and may still be in progress; therefore, other projects with consequential risk benefit are sequenced ahead of the high risk-benefit project until it is ready to execute. This approach allows BVES to continuously make risk reduction progress in its grid hardening efforts (BVES 2022 WMP Update Revision 1, p. 126)." And: "In achieving the highest risk reduction, BVES most allow temper execution within the typical project constraints related to siting, designing, permitting, costs, access to labor, availability of equipment and material, mobilization/demobilization, etc. (BVES 2022 WMP Update Revision 1, p. 126)." It is not entirely clear what this statement is asserting; however we interpret it to mean that mitigation work in the highest risk circuits is, at least in some cases, hindered by operational and implementation constraints.

Given this late-stage of 2022 plan implementation, GPI suggests that BVES should be required to identify the primary factors (e.g. permitting, workforce, cost, etc.) limiting mitigation project implementation in the highest wildfire risk locations and provide a plan for how it will reduce these barriers in order to complete work in higher risk locations and accelerate its risk buydown beginning in 2023.

(b) A cascading, dynamic "if-then" style flow chart to effectively demonstrate this prioritization process.

BVES provides flow charts in Sections 7.1 and 7.3 regarding project selection and prioritization. The requested cascading if-then flow chart is provided in Section 7.3.3 Grid Design and System Hardening of their 2022 WMP Update Revision 1 (p 161). The flowchart references a Project Identification document stating "see full document for list of criteria and inputs". BVES should provide a formal reference to this document and where it is available, and/or include it with their next WMP filing. BVES also appears to imply that a project portfolio is developed stating "Does the project fit into current mix to deliver maximum risk reduction overall?" However, BVES does not define "fit" or what the project "mix" constitutes or is based on. That is, what are the parameters determining project fit and the project portfolio as a whole? BVEs should provide additional information or internal document references in their 2023 WMP as needed to clarify this flowchart.

Stakeholder Cooperation and Community Engagement

RN-BVES-22-09: BVES uses vague language to describe United States Forest Service and fuel reduction cooperation activities

In Section 7.3.10.4 of its revised 2022 Update, BVES must: a) Provide information on and specific examples of its "strategies" and "actions" to engage with forest management and fuel reduction stakeholders, including with which entities and stakeholders BVES is currently engaging. b) Provide information on its utility cooperation strategy and joint stakeholder roadmap, including the progress and current status of this strategy/roadmap, as well as which stakeholders are involved.

As part of these required remedies, BVES must also remedy RN-BVES-22-02.

BVES cites that it responds to RN-BVES-22-09 in updates to Section 7.3.5. In Section 7.3.5.5 BVES states: "BVES collaborates with the US Forest Service to remove trees near lines and removes the slash as agreed upon by the local US Forest Ranger (BVES 2022 WMP Update Revision 1, p. 224)." No other details are provided in regards to the existing BVES-USFS collaboration other than intentions to: "improve its collaboration with the USFS." In Section 7.3.5.1 BVES refers to conducting outreach with the USFS, with future plans for collaborative fuels work, stating:

BVES will work to establish more frequent and regular communications and coordination with the USFS to determine future interest in collaborative fuels management work such as enhanced clearances or species treatment activities (BVES 2022 WMP Update Revision 1, p. 220).

Updates to Section 7.4.10.4 are nominal aside from additions to "Future improvements to initiative" which states:

Developing a more formal joint strategy and policy with the USFS to cooperate on handling fuel reduction in the BVES right of ways.

Working with a local charity organization that collects and distributes firewood to lowincome members of the community. BVES will work with its vegetation contractor to partner with the charity organization and supply wood (for firewood) to the charity. This effort helps low-income members of the community get through cold winters with low costs, promotes goodwill in the community, and it minimizes the amount of wood waste that is transported out the BVES service area.

The updates regarding BVES's collaboration with the USFS are inconsistent, suggesting an existing collaboration in Section 7.3.5.5 and an as yet to be developed collaboration in Sections 7.3.5.1 and 7.4.10.4.

BVES has not satisfied RN-BVES-22-09 based on our assessment here, as well as our assessment regarding RN-BVES-22-05 (see above).

GPI recommends that BVES clarify the details of its current working relationship with the USFS, including whether it is a collaboration formalized by an MOU or other documentation, or if it is simply an informal agreement. BVES should also: (i) identify and eliminate the discrepancies regarding whether they have a current collaboration with the USFS; (ii) develop and provide a high-level description of the collaboration elements; and (iii) provide additional details for each element as requested by RN-BVES-22-09 in the appropriate section(s); with (iv) internal references to supporting details in other sections that together provide a complete description of the collaboration. BVES should be held to clarifying its fuels management collaboration in its 2023 WMP, including details on the current state of its collaboration with the USFS.

Conclusions

We urge the OEIS to adopt our recommendations herein.

Dated September 19, 2022.

Respectfully Submitted,

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