

APPENDIX B

Deficiencies and Conditions Applicable to Bear Valley Electric Service

BVES-1	Focus on grid hardening
Class	B
Deficiency	<p>BVES is focused almost entirely on grid hardening without much analysis of whether this is the most cost effective and efficacious approach. Without a stated long-term vision, it is not possible to assess why BVES has this singular focus.</p> <p>BVES does provide RSE estimates for a significant number of initiatives and provides a high-level comparative analysis in Figures 3-4 and 3-5 of its WMP. However, BVES reports that “Underground of the Ute line” has a wildfire RSE of 0.13 in Figure 3-4 and that the same initiative has a PSPS RSE of 0.3. It is not clear how BVES calculated these or what assumptions it made. Therefore, it is unclear specifically how BVES applies these estimates to inform its allocation of resources across initiatives and whether the spend allocated to undergrounding is the most effective use of BVES’ limited resources.</p>
Condition	<p>In a first quarterly report, BVES shall:</p> <ol style="list-style-type: none"> i. explain why it is focused heavily on system hardening, including giving information on how other mitigations compare in terms of cost and efficacy; ii. articulate a vision for where it plans to go over the next 3 and 10 years; iii. provide an explanation for the RSE estimates in Figures 3-4 and 3-5 of the BVES WMP, including the assumptions made and how wildfire RSE and PSPS RSE were calculated; and iv. outline in detail how BVES’ RSE estimates were used to determine which initiatives it is pursuing, including the level of spend allocated to its undergrounding program.

BVES-2	Wildfire cameras do not provide good coverage of service territory.
Class	B
Deficiency	BVES has four existing cameras on the mountain top ridge southwest of BVES' service territory. In viewing them on alertwildfire.org they are clustered near each other and do not appear to provide good coverage from different angles. The WMP says BVES plans to work with partners to install more but no number or details are given. In remote rugged terrain with limited cell coverage such as BVES, cameras provide high situational awareness value.
Condition	In its first quarterly report, BVES shall detail: <ul style="list-style-type: none"> i. whether it has sufficient cameras, including the observations from alertwildfire.org, and ii. plans, including a timeline to improve its camera coverage moving forward.

BVES-3	High spend per circuit mile
Class	B
Deficiency	BVES plans to spend more than three times as much per circuit mile as the large electrical corporations. While BVES has lower economies of scale given its small size, the expense of its program may cause significant impact to ratepayers.
Condition	In its first quarterly report, BVES shall provide: <ul style="list-style-type: none"> further quantitative justification and explanation that from a total cost of ownership perspective, the amount of ignition risk that its initiatives will reduce warrants the extra expense, including whether alternatives could enable BVES to achieve the same level of risk reduction using fewer resources.

BVES-4	LiDAR patrol targets not met.
Class	B
Deficiency	BVES reports that it did not meet 2019 targets for LiDAR inspections. BVES' target for 2019 was 211 circuit miles of LiDAR patrols, but BVES shows zero circuit miles actually surveyed.
Condition	In a first quarterly report, BVES shall: i) explain its LiDAR inspection plan and results including the targets that it has set for this program and how these it expects to actually achieve this performance.

BVES-5	Compliance focus rather than proactive wildfire risk mitigation
Class	C
Deficiency	<p>BVES' vegetation management practice is based around following minimum regulations and requirements, and any additional analysis and initiatives are not discussed. Further, the plan is very general in its description of the vegetation management program and not clear on how often inspections occur. It simply states a contractor completes work under company direction to meet minimum required regulatory requirements.</p> <p>BVES needs to focus on relying less on contractor opinion, and work to set up internal procedures to ensure consistency across work and allow for evaluation of effectiveness for future improvement. Additionally, to allow for maximum effectiveness and minimize oversight, BVES should perform or adopt "at-risk" species analysis similar to other utilities, based on tree growth rate and failure likelihood.</p>
Condition	<p>In its 2021 WMP, BVES shall:</p> <ol style="list-style-type: none"> <li data-bbox="443 862 1929 943">i. explain whether focusing simply on compliance with GO 95 achieves adequate wildfire mitigation in light of the requirements of SB 901 and AB 1054, and <li data-bbox="443 943 1929 1026">ii. whether it needs to go beyond rules that predate the WMP statute in order to achieve wildfire mitigation that addresses current risks in its service territory.

BVES-6	Community Outreach.
Class	C
Deficiency	BVES provides no discussion of community outreach or public education in its vegetation management section. It acknowledges the importance of such measures but provides no solution moving forward to set up a program.
Condition	In its 2021 WMP, BVES shall: <ul style="list-style-type: none"> i. supply the missing information on its community outreach and public education related to vegetation management.

BVES-7	Fuels management.
Class	C
Deficiency	BVES provides discussion on slash treatment or fuels reduction around facilities, and just states that practices are incorporated into vegetation management practices with no details on how.
Condition	In its 2021 WMP, BVES shall: <ul style="list-style-type: none"> ii. provide detailed information on its fuels management and slash reduction practices.

BVES-8	Patrols for asset and vegetation inspections combined.
Class	B
Deficiency	BVES conducts two patrols a year but these are not specific to vegetation management; asset and vegetation patrols are conducted together.
Condition	In its first quarterly report, BVES shall detail: <ul style="list-style-type: none"> i. why it combines its asset and vegetation inspections, ii. how it verifies and ensures effectiveness of these inspections, iii. whether it plans to establish two distinct inspection processes for assets and vegetation, in order to more thoroughly inspect vegetation, and iv. how it complies with the Public Resources Code 4291 et seq. and associated regulations to conduct inspections on annual basis.

BVES-9	Tracking of tree status.
Class	C
Deficiency	BVES does not discuss whether it has a tracking system for trees, other than one to ensure its contractor is completing required work.
Condition	In its 2021 WMP BVES shall detail: <ul style="list-style-type: none"> i. how it tracks its trees or groups of trees to ensure they are treated according to an appropriate schedule and appropriate specifications that ensure they do not pose a risk of wildfire, and ii. whether this tracking documents the condition of trees to ensure they are maintained in proper condition over time.

BVES-10	PSPS
Class	B
Deficiency	<p>Because BVES' PSPS activity is governed at least in part by what SCE does, BVES should have better plans in place in the event a PSPS event occurs in its service territory. It is not adequate simply to state that BVES has not had a PSPS event. In combination with BVES' failure to have information on its access and functional needs population, BVES lacks overall preparedness.</p> <p>BVES' statement that "Customer Service staff and/or additional staff may be called out to assist with notification procedures as needed" shows a lack of understanding of the information and notification demands required during and in advance of a PSPS. Short of the effort to work closely with stakeholders, no information is provided on the strategy to minimize public safety risk. In terms of customer communications and mitigating the public safety impact of PSPS on first responders, health care facilities, operations of telecommunications infrastructure and water utilities/agencies, BVES' only statement is that it has worked and will continue to work with the named entities. Finally, Bear Valley lacks a communication strategy for providing in-language material, and material for customers with AFN. Several Commission decisions already impose these requirements, but it is unclear whether BVES is currently in compliance with any of them.</p>
Condition	<p>In its first quarterly report, BVES shall detail:</p> <ol style="list-style-type: none"> <li data-bbox="443 1036 1925 1242">i. its strategy to minimize public safety risk during high wildfire risk conditions (including the list and description of community assistance locations and services provided during a de-energization event and a communication strategy) sufficient to address the needs of the population in those areas, including Limited English Proficiency and Access and Functional Needs (AFN) populations <li data-bbox="443 1247 1925 1372">ii. a plan for customer communications and mitigating the public safety impact of PSPS on first responders, health care facilities, operations of telecommunications infrastructure and water utilities/agencies <li data-bbox="443 1377 1925 1404">iii. how it would restore power after a PSPS event.

BVES-11	BVES did not report an ability to identify and support customers with access and functional needs (AFN).
Class	B
Deficiency	BVES is required both in the context of PSPS and for disaster preparedness purposes generally to know which of its customers have access and functional needs so that they can receive assistance in preparation for and during an emergency.
Condition	In a first quarterly report, BVES shall describe: <ul style="list-style-type: none"> i. how it will identify and support customers with access and functional needs during PSPS, emergencies or other disasters.

BVES-12	Undergrounding (Related to BVES-1).
Class	B
Deficiency	BVES plans to underground most of its assets even though it has had no ignitions, fires or PSPS events and has seen a decreasing trend in near miss incidents in recent years.
Condition	In its first quarterly report, BVES shall describe: <ul style="list-style-type: none"> i. all reasonable alternatives it has considered in addition to undergrounding, ii. whether an option other than undergrounding will achieve comparable reduction in outage and ignition frequency and probability, iii. how the capital and maintenance cost for undergrounding and alternatives compare, and iv. the expected life of undergrounded vs. overhead assets.

BVES-13	Overall lack of an emergency preparedness plan.
Class	C
Deficiency	BVES must have an emergency plan in place, both for wildfire and PSPS events, as discussed in the section on Grid Operations and Protocols. Lack of ignition in the past does not mean the utility will not have events in the future, and we are concerned it is generally unprepared to meet this challenge.
Condition	<p>In its 2021 WMP, BVES shall:</p> <ul style="list-style-type: none"> i. set forth its emergency planning and preparedness for wildfire, including customer support before, during and after a wildfire, including support for low income customers, billing adjustments, deposit waivers, extended payment plan, suspension of disconnection and nonpayment fees, and repairs, ii. describe emergency communications before, during, and after a wildfire in English, Spanish, and other languages required by the Commission, and iii. address plans for coordination with first responders and other public safety organizations, plans to prepare for and restore service, including workforce mobilization and repositioning of equipment and employees, and a showing that it has an adequate and trained workforce to promptly restore service after a major event.

BVES-14	"As needed" community engagement insufficient.
Class	C
Deficiency	It is not sufficient for BVES simply to state that it will engage with its community "as needed." It must plan now in the event of wildfire or PSPS emergencies later. No established program is in place for community engagement, which is conducted on an "as-needed" basis. BVES needs to take the initiative to better work with the community, with areas of focus such as PSPS, vegetation management, and inspections.
Condition	In its 2021 WMP, BVES shall: <ul style="list-style-type: none"> i. establish and describe its program regarding customer outreach and engagement, including community meetings with proper input from the community, such as surveys, with a process to change procedures and the WMP based off such input.

BVES-15	Collaboration.
Class	B
Deficiency	In terms of collaboration with outside agencies and entities in order to make use of best practices and lessons learned, in table 30, BVES states there is existing cooperation but gives no details.
Condition	In its first quarterly report, BVES shall describe how: <ul style="list-style-type: none"> i. it collaborates with outside agencies, ii. it uses best practices, and iii. it acts on lessons learned from this collaboration.

(End of Appendix B)

APPENDIX C

Deficiencies and Conditions Applicable to All Electrical Corporations

Guidance-1	Lack of risk spend efficiency (RSE) information
Class	B
Deficiency	<p>2020 WMP submissions contain sparse and sporadic detail regarding the RSE of WMP initiatives. RSE calculations are critical for determining whether utilities are effectively allocating resources to initiatives that provide the greatest risk reduction benefits per dollar spent, thus ensuring responsible use of ratepayer funds. Although RSE concepts have been considered for several years through Commission GRCs, utilities still display unrefined and limited abilities to produce such information. Considering that utilities propose to spend billions of dollars on WMP initiatives, not having quantifiable information on how those initiatives reduce utility ignition risk relative to their cost severely limits the WSD’s ability to evaluate the efficacy of such initiatives and each utility’s portfolio of initiatives, as outlined in 2020 WMPs.</p> <p>Further, RSE is not an appropriate tool for justifying the use of PSPS. When calculating RSE for PSPS, electrical corporations generally assume 100% wildfire risk mitigation and very low implementation costs because societal costs and impact are not included. When calculated this way, PSPS will always rise to the top as a wildfire mitigation tool, but it will always fail to account for its true costs to customers. Therefore, electrical corporations shall not rely on RSE calculations as a tool to justify the use of PSPS.</p>
Condition	<p>In its first quarterly report, each electrical corporation shall provide the following:</p> <ul style="list-style-type: none"> i. its calculated reduction in ignition risk for each initiative in its 2020 WMP; ii. its calculated reduction in wildfire consequence risk for each initiative in its 2020 WMP; <p>and</p> <ul style="list-style-type: none"> iii. the risk models used to calculate (i) and (ii) above.

Guidance-2	Lack of alternatives analysis for chosen initiatives
Class	B
Deficiency	2020 WMP submissions contain little to no detail regarding utilities' process for comparing potential WMP initiatives. While most WMP initiatives are generally assumed to reduce utility wildfire risk, there are typically several alternatives that can address specific drivers of utility ignitions and near misses. However, 2020 WMPs generally do not include any discussion of which alternatives were considered, how the utility evaluated the efficacy of each alternative, and how the utility ultimately decided upon the suite of initiatives presented in its 2020 WMP.
Condition	In its first quarterly report, each electrical corporation shall provide the following: <ul style="list-style-type: none"> i. all alternatives considered for each grid hardening or vegetation management initiative in its 2020 WMP; ii. all tools, models, and other resources used to compare alternative initiatives; iii. how it quantified and determined the risk reduction benefits of each initiative; and iv. why it chose to implement each initiative over alternative options.

Guidance-3	Lack of risk modeling to inform decision-making
Class	A
Deficiency	<p>Electrical corporations do not provide sufficient detail in their 2020 WMPs to demonstrate how they are leveraging risk models to target the highest risk portions of the grid. While most utilities indicate current progress and work on developing models to estimate risk across their service territories, there is a lack of focus on how these models can be used in practice to prioritize initiatives to address specific ignition drivers and geographies. Specifically, utilities fail to outline in detail how they determine where to prioritize to improve asset management or determine portions of circuits that would benefit the most from hardening and vegetation management.</p> <p>By continuing to improve wildfire risk modeling and basing its wildfire mitigations on its wildfire risk modeling outputs, electrical corporations can potentially achieve a greater level of risk reduction with the same resources.</p>
Condition	<p>Each electrical corporation shall submit in its remedial correction plan (RCP) the following:</p> <ol style="list-style-type: none"> i. how it intends to apply risk modeling and risk assessment techniques to each initiative in its WMP, with an emphasis on much more targeted use of asset management, vegetation management, grid hardening and PSPS based on wildfire risk modeling outputs; ii. identify all wildfire risk analyses it currently performs (including probability and consequence modeling) to determine which mitigation is targeted to circuits and assets where initiatives will provide the greatest benefit to wildfire risk reduction; iii. a timeline to leverage its risk modeling outputs to prioritize and target initiatives and set PSPS thresholds, including at least asset management, grid operations, vegetation management, and system hardening initiatives; iv. how it intends to incorporate future improvements in risk modeling into initiative prioritization and targeting processes; and v. how it intends to adapt its approach based on learnings going forward.

Guidance-4	Lack of discussion on PSPS impacts
Class	B
Deficiency	Across 2020 WMP submissions, utilities indicate goals of reducing the scope, frequency and duration of PSPS events but also indicate intentions of continuing to implement PSPS as a wildfire mitigation measure in the immediate future. Considering the rapid expansion of PSPS use as a wildfire mitigation measure, and the numerous hardships, inconveniences and hazards created by its vast implementation, it is concerning that 2020 WMPs provide no discussion of how the chosen portfolio of initiatives will allow the utility to achieve its goals for reducing PSPS impacts. Specifically, no 2020 WMPs discuss the relationship between various grid hardening, vegetation management, and asset management initiatives and the corresponding impacts on thresholds for initiating PSPS events.
Condition	In its first quarterly report, each electrical corporation shall detail whether and how each initiative in its WMP: <ul style="list-style-type: none"> i. affects its threshold values for initiating PSPS events; ii. is expected to reduce the frequency (i.e. number of events) of PSPS events; iii. is expected to reduce the scope (i.e. number of customers impacted) of PSPS events; iv. is expected to reduce the duration of PSPS events; and v. supports its directional vision for necessity of PSPS, as outlined in Section 4.4 of its WMP.

Guidance-5	Aggregation of initiatives into programs
Class	B
Deficiency	In their 2020 WMP submissions, electrical corporations often combine various initiatives into broader programs and report cost, risk and other related data at the program level. This aggregation of initiatives and bundled reporting creates several issues. First, because cost data is typically reported across programs and not individual initiatives, it is not possible for the WSD to evaluate the efficacy of each initiative. Second, when initiatives are bundled and reported together as programs, it prevents the WSD from being able to assess which initiatives are effectively reducing utility wildfire risk. Consequently, this creates the challenge that ineffective elements of broad programs cannot be determined and future considerations of initiatives within programs can only be done collectively.
Condition	In its first quarterly report, each electrical corporation shall: <ul style="list-style-type: none"> i. break out its programs outlined in section 5.3 into individual initiatives; ii. report its spend on each individual initiative; iii. describe the effectiveness of each initiative at reducing ignition probability or wildfire consequence; iv. list all data and metrics used to evaluate effectiveness described in (iii), including the threshold values used to differentiate between effective and ineffective initiatives; and v. provide the information required for each initiative in section 5.3 of the Guidelines.

Guidance-6	Failure to disaggregate WMP initiatives from standard operations
Class	B
Deficiency	<p>While WMPs are designed to outline and detail filer’s plans and initiatives for mitigating wildfire risk, many existing programs also provide wildfire risk reduction benefits. For example, General Order 165 requires annual patrol inspections and detailed inspections every five years for electrical infrastructure. These programs and initiatives are often referenced in 2020 WMPs as “supporting,” “routine,” “enabling,” “standard,” or “foundational” work. For these types of programs, in most cases, electrical corporations do not report cost or risk reduction data, as the work is considered part of their electric operations and it is indicated that this information is not tracked independently.</p> <p>Several electrical corporations state that their programs for inspecting and maintaining crossarms, poles, transformers, transmission towers and similar infrastructure, which also reduce wildfire risk, are embedded within standard maintenance programs litigated in GRCs. Consequently, it is difficult to determine whether and how these programs incrementally impact wildfire risk reduction or if related WMP initiatives are redundant and unnecessary. While utilities may not have historically considered the costs and effectiveness of such programs and initiatives, given that numerous WMP initiatives have apparent overlap or potential redundancy, it is imperative that utilities provide such data to validate the need for and effectiveness of additional programs.</p> <p>It is not clear how electrical corporations are tracking their WMP activities in memorandum accounts if they do not budget for them by type of initiative. The Commission will scrutinize electrical corporations’ memorandum accounts for WMP carefully, and if all costs are simply lumped together or included in general operations and maintenance accounts, electrical corporations risk failing to provide entitlement to cost recovery.</p>
Condition	<p>In its first quarterly report, each electrical corporation shall:</p> <ol style="list-style-type: none"> i. clearly identify each initiative in Section 5.3 of its WMP as “Standard Operations” or “Augmented Wildfire Operations;” ii. report WMP required data for all Standard Operations and Augmented Wildfire Operations; iii. confirm that it is budgeting and accounting for WMP activity of each initiative; and iv. include a “ledger” of all subaccounts that show a breakdown by initiative.

Guidance-7	Lack of detail on effectiveness of “enhanced” inspection programs
Class	B
Deficiency	Utilities engage in numerous ‘enhanced’ inspection programs, but it is unclear if such ‘enhanced’ programs are incrementally effective over routine patrol and detailed inspections, particularly if patrol and detail inspections are scheduled based on risk rather than GO 95 minimums.
Condition	In its first quarterly report, each electrical corporation shall detail: <ul style="list-style-type: none"> i. the incremental quantifiable risk identified by such ‘enhanced’ inspection programs; ii. whether it addresses the findings uncovered by ‘enhanced’ programs differently than findings discovered through existing inspections; and iii. a detailed cost-benefit analysis of combining elements of such ‘enhanced’ inspections into existing inspection programs.

Guidance-8	Prevalence of equivocating language – failure of commitment
Class	C
Deficiency	<p>While there have been many improvements and advancements reflected in 2020 WMPs, a key concern remains regarding discussion of WMP objectives and the prevalent use of “equivocating language” to avoid making measurable, quantifiable, and verifiable commitments. While electrical corporations make promises to quantifiably reduce PSPS impacts and the frequency of near misses and ignitions, other promises are far less specific. Terms such as, “track,” “assess,” “evaluate,” and “evolve” are repeated hundreds of times throughout the 2020 WMPs. Without sufficient details, none of these terms provide the WSD or the public with a measurable, quantifiable, and verifiable goal against which electrical corporations could be held.</p>
Condition	<p>In its 2021 WMP update, each electrical corporation shall:</p> <ol style="list-style-type: none"> <li data-bbox="464 743 1921 824">i. include objectives for each of its initiatives that are measurable, quantifiable, and verifiable by the WSD; <li data-bbox="464 828 1921 909">ii. provide targets and timelines for all strategies, plans, and approaches to wildfire mitigation that are measurable, quantifiable and verifiable by the WSD; and <li data-bbox="464 912 1921 1031">iii. dispense with empty rhetoric and not use terms that are ambiguous, misleading, or otherwise have the result of diluting commitments. Continued use of equivocating language may result in denial of future WMPs.

Guidance-9	Insufficient discussion of pilot programs
Class	B
Deficiency	Electrical corporations do not describe how they will evaluate and expand the use of successfully piloted technology or which piloted technology has proven ineffective. To ensure pilots that are successful result in expansion, if warranted and justified with quantitative data, electrical corporations must evaluate each pilot or demonstration and describe how it will expand use of successful pilots.
Condition	In its quarterly report, each electrical corporation shall detail: <ul style="list-style-type: none"> i. all pilot programs or demonstrations identified in its WMP; ii. status of the pilot, including where pilots have been initiated and whether the pilot is progressing toward broader adoption; iii. results of the pilot, including quantitative performance metrics and quantitative risk reduction benefits; iv. how the electrical corporation remedies ignitions or faults revealed during the pilot on a schedule that promptly mitigates the risk of such ignition or fault, and incorporates such mitigation into its operational practices; and v. a proposal for how to expand use of the technology if it reduces ignition risk materially.

Guidance-10	Data issues - general
Class	B
Deficiency	<p>Although the availability of data, including GIS data, provides unprecedented insight into utility infrastructure and operations, inconsistencies and gaps in the data present a number of challenges and hurdles. As it relates to GIS data, electrical corporation submissions often had inconsistent file formats and naming conventions, contained little to no metadata, were incomplete or missing many data attributes and utilized varying schema. These deficiencies rendered cross-utility comparisons impossible without substantive, resource- and time-consuming manipulation of the data. Additional data challenges included varying interpretations of WMP Guideline data requirements, leading to inconsistency of data submitted.</p>
Condition	<p>Electrical corporations shall ensure that all future data submissions to the WSD adhere to the forthcoming data taxonomy and schema currently being developed by the WSD. Additionally, each electrical corporation shall file a quarterly report detailing:</p> <ol style="list-style-type: none"> <li data-bbox="464 829 1923 954">i. locations where grid hardening, vegetation management, and asset inspections were completed over the prior reporting period, clearly identifying each initiative and supported with GIS data, <li data-bbox="464 958 1923 1036">ii. the type of hardening, vegetation management and asset inspection work done, and the number of circuit miles covered, supported with GIS data <li data-bbox="464 1039 1923 1117">iii. the analysis that led it to target that specific area and hardening, vegetation management or asset inspection initiative, and <li data-bbox="464 1120 1923 1208">iv. hardening, vegetation management, and asset inspection work scheduled for the following reporting period, with the detail in (i) - (iii).

Guidance-11	Lack of detail on plans to address personnel shortages
Class	B
Deficiency	Electrical corporations do not explain in detail the range of activities that they are undertaking to recruit and train personnel to grow the overall pool of talent in areas of personnel shortage.
Condition	In its first quarterly report, each electrical corporation shall detail: <ul style="list-style-type: none"> i. a listing and description of its programs for recruitment and training of personnel, including for vegetation management; ii. a description of its strategy for direct recruiting and indirect recruiting via contractors and subcontractors; and iii. its metrics to track the effectiveness of its recruiting programs, including metrics to track the percentage of recruits that are newly trained, percentage from out of state, and the percentage that were working for another California utility immediately prior to being hired.

Guidance-12	Lack of detail on long-term planning
Class	B
Deficiency	Electrical corporations do not provide sufficient detail regarding long-term wildfire mitigation plans and how the initiatives in their WMPs align with and support those long-term plans.
Condition	In their first quarterly report, each electrical corporations shall detail: <ul style="list-style-type: none"> i. its expected state of wildfire mitigation in 10 years, including 1) a description of wildfire mitigation capabilities in 10 years, 2) a description of its grid architecture, lines, and equipment; ii. a year-by-year timeline for reaching these goals; iii. a list of activities that will be required to achieve this end goal; and iv. a description of how the electrical corporation’s three-year WMP is a step on the way to this 10-year goal.

(End of Appendix C)