

PUBLIC UTILITIES COMMISSION

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January 21, 2021

Wildfire Safety Division Draft Evaluation of PacifiCorp's First Quarterly Report

The Wildfire Safety Division (WSD) finds that PacifiCorp's First Quarterly Report (QR) is Insufficient. WSD reviewed PacifiCorp's QR in accordance with guidance set out in Resolution WSD-002, Resolution WSD-008 and the WSD letter titled "Guidance on the Remedial Compliance Plan & Quarterly Report Process Set Forth in Resolution WSD-002," provided to electrical corporations on July 17, 2020.¹

1. Introduction

These findings act on the First Quarterly Report (QR) submitted by PacifiCorp on September 9, 2020. QR submittals were required in the Wildfire Safety Division's (WSD) "Conditional Approval" of PacifiCorp's 2020 Wildfire Mitigation Plan (WMP). QRs were required to address all Class B deficiencies identified by the WSD in its review of PacifiCorp's 2020 WMP. In this document, the WSD issues its determination of whether PacifiCorp's QR is "Sufficient" or "Insufficient." In accordance with the letter titled "Guidance on the Remedial Compliance Plan & Quarterly Report Process Set Forth in Resolution WSD-002" (RCP & QR Guidance Letter) issued by the WSD on July 17, 2020, if a QR is deemed "Sufficient" no further action related to the QR is required; however, in the event that a QR is found "Insufficient," the WSD may provide further direction on actions PacifiCorp must take to deliver a sufficient QR. The WSD may also recommend potential enforcement action.

The WSD finds that PacifiCorp's QR is Insufficient. PacifiCorp was required to satisfy the Class B deficiencies shown in Table 1 and set forth in Resolution WSD-002 and Resolution WSD-008.

¹ https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About_Us/Organization/Divisions/WSD/WSD%20Guidance%20Statement%20on%20RCP%20QP%2020200717.pdf

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Table 1: Class B Deficiencies from PacifiCorp's 2020 WMP

Deficiency/Condition No.	Class	Deficiency Title	Sufficiency Finding
Guidance-1	B	Lack of risk spend efficiency (RSE) information	Insufficient
Guidance-2	B	Lack of alternatives analysis for chosen initiatives	Sufficient
Guidance-4	B	Lack of discussion on PSPS impacts	Insufficient
Guidance-5	B	Aggregation of initiatives into programs	Sufficient
Guidance-6	B	Failure to disaggregate WMP initiatives from standard operations	Sufficient
Guidance-7	B	Lack of detail on effectiveness of “enhanced” inspection programs	Sufficient
Guidance-9	B	Insufficient discussion of pilot programs	Sufficient
Guidance-10	B	Data issues - general	Insufficient
Guidance-11	B	Lack of detail on plans to address personnel shortages	Insufficient
Guidance-12	B	Lack of detail on long-term planning	Insufficient
PacifiCorp-1	B	PacifiCorp’s WMP does not report adequate planning for climate change	Insufficient
PacifiCorp-2	B	PacifiCorp has not demonstrated effective weather station utilization	Sufficient
PacifiCorp-3	B	PacifiCorp did not explain how it would track effectiveness of its covered conductor initiative	Insufficient
PacifiCorp-4	B	PacifiCorp’s WMP lacks a QA/QC program for inspections	Insufficient
PacifiCorp-6	B	PacifiCorp does not have a specific data governance wildfire mitigation program	Insufficient

Due to the WSD’s determination that PacifiCorp’s QR is Insufficient, PacifiCorp is required to address all actions identified in Section 5.1 of this document in its 2021 WMP Update.

2. Background

On February 7, 2020, electrical corporations submitted their 2020 WMPs in accordance with the 2020 WMP Guidelines issued through an Administrative Law Judge (ALJ) Ruling on December 16, 2019. Pursuant to its statutory mandate, the WSD reviewed and issued its disposition of electrical corporation's 2020 WMPs via the 2020 WMP Resolutions.² Upon review of electrical corporations' 2020 WMPs, the WSD identified several elements that were missing or inadequate in the filings. Each of these issues was identified as a "Deficiency." A corresponding "Condition," intended to remedy the identified deficiency, was imposed on the electrical corporation as part of the WSD's "Conditional Approval" of 2020 WMPs. Each deficiency and associated condition were categorized into one of the following classifications, with Class A being the most serious:

- **Class A** - Aspects of the WMP are lacking or flawed;
- **Class B** - Insufficient detail or justification provided in WMP; and
- **Class C** - Gaps in baseline or historical data, as required in 2020 WMP Guidelines.

Consequently, upon review of PacifiCorp's 2020 WMP, the WSD issued a "Conditional Approval." The Conditional Approval is predicated on PacifiCorp satisfying the set of conditions set forth in Resolution WSD-002 and Resolution WSD-008. Table 2 below presents a summary of the number of conditions, grouped by classification.

Class B conditions are intended to address aspects of moderate concern within the electrical corporations' 2020 WMPs for which the WSD found that utilities did not provide sufficient detail or justification. Class B conditions require each electrical corporation to file a QR, which is broadly defined in Resolution WSD-002 as follows:

Class B deficiencies are of moderate concern and require reporting on a quarterly basis by the electrical corporation to provide missing data or update its progress in a quarterly report. Such information shall be submitted either one time in the first quarterly report or on an ongoing basis as specified by each condition.

Pursuant to Ordering Paragraph (OP) 8 of Resolution WSD-002, PacifiCorp was required to submit a QR within 90 days of the California Public Utilities Commission's (CPUC or Commission) ratification of PacifiCorp's 2020 WMP Resolution, WSD-008. The Commission ratified the 2020 WMP Resolutions³ on Thursday, June 11, 2020; therefore, PacifiCorp was required to file a QR by September 9, 2020. PacifiCorp timely submitted its QR on Friday, September 9, 2020. Public comment on electrical corporations' QRs were submitted on September 30, 2020 by the Commission's Public Advocates Office (Cal Advocates), Green Power Institute (GPI), Mussey Grade Road Alliance (MGRA), and Small Business Utility Advocates (SBUA). PacifiCorp submitted reply comments on October 14, 2020.

² These included Resolutions WSD-002, WSD-003, WSD-004, WSD-005, WSD-007, WSD-008, WSD-009, and WSD-010.

³ These included Resolutions WSD-002, WSD-003, WSD-004, WSD-005, WSD-007, WSD-008, WSD-009, and WSD-010.

Table 2: 2020 WMP Resolutions - Conditions Summary for PacifiCorp

Condition Class	WSD-002	WSD-008	Total
Class A	1	0	1
Class B ⁴	10 (1)	5 (0)	15 (1)
Class C	1	2	3
Total	12	7	19

3. Summary of WSD's Assessment of QRs

A QR's intent is for electrical corporations to provide updated information or additional detail to resolve WMP deficiencies with the level of specificity, detail, and scope outlined in the respective condition. Accordingly, the WSD has determined whether an electrical corporation's QR filing sufficiently resolves the deficiency and meets the intent of the condition. To make this determination, the WSD looked to Resolution WSD-002 and the factors used to evaluate 2020 WMPs. While all four factors used in evaluating WMP approval were not applicable,⁵ the WSD evaluated the sufficiency for each Class B deficiency and QR filing in accordance with the following factors:

- Completeness – The QR is complete and comprehensively responds to the condition;
- Effectiveness - The plans and remedies outlined in the QR will reasonably resolve the deficiency;

Outlined in Table 3: QR Evaluation Criteria, below, are the approval criteria the WSD used to evaluate whether a QR filing is sufficient. In this document, the WSD issues one of the following determinations:

- Sufficient - The QR is sufficient, and no further action is required;
- Insufficient - The QR is insufficient.

If the WSD finds that a QR is Insufficient, the WSD will require the electrical corporation to address the insufficiencies in its 2021 WMP Update, in accordance with the specific actions outlined in Section 5.1 of this document. The WSD will assess the responses and will factor noncompliance into its review and, in the case of noncompliance, may also recommend that the CPUC take enforcement action.

⁴ Values in parenthesis indicate the number of Class B deficiency and condition pairs that require ongoing reporting. All other Class B deficiency and condition pairs will be addressed in the electrical corporations' first quarterly report submission.

⁵ Feasibility and forward-looking growth are not applicable to assessing sufficiency of QRs because the QR is simply intended to provide additional information on existing efforts detailed in the 2020 WMP.

Table 3: QR Evaluation Criteria

Category	Criteria
Completeness	Does the QR provide all the information identified in the condition?
	If not, does the utility provide an explanation of why the QR is incomplete and a timeline for when the completed information will be provided?
	Does the QR include a timeline for implementation and completion of remedial actions?
Effectiveness	Does the QR identify reasonably effective plans and remedies to resolve the identified deficiencies?
	Is the timeline identified in the QR sufficient, given the importance of the deficiency and its potential impact on wildfire risk?

4. Public and Stakeholder Comments

On September 30, 2020, Cal Advocates and SBUA submitted comments on PacifiCorp’s QR. Provided below is a non-exhaustive summary of the major issues raised in stakeholder comments.

Public Advocates Office (Cal Advocates)

- PacifiCorp shall present a plan to complement expert judgment with empirical evidence when estimating mitigation effectiveness of its WMP activities.

Small Business Utility Advocates (SBUA)

- PacifiCorp shall supplement or revise its quarterly report to incorporate climate change into risk modeling (PacifiCorp-1).

5. Discussion of the WSD’s QR Assessment

In accordance with guidance set out in Resolution WSD-002 and the RCP & QR Guidance Letter, in Table 4 below the WSD presents its findings of sufficiency for PacifiCorp’s QR in totality.

Table 4: Review of PacifiCorp’s QR by Evaluation Criterion

Category	Criteria	Yes	No
Completeness	Does the QR provide all the information identified in the condition?		X
	If not, does the utility provide an explanation of why the remedy is incomplete and a timeline for when the completed information will be provided?		X
	Does the QR include a timeline for implementation and completion of remedial actions?		X
Effectiveness	Does the QR identify reasonably effective plans and remedies to resolve the identified deficiencies?		X
	Is the timeline identified in the QR sufficient, given the importance of the deficiency and its potential impact on wildfire risk?		X

Accordingly, the WSD finds PacifiCorp’s QR to be Insufficient.

WSD requests clarification or additional information to remediate its finding of Insufficient QR elements. In its 2021 WMP Update, PacifiCorp is required to address all actions identified in Section 5.1.

5.1. Discussion of the WSD’s Condition Assessment

Pursuant to WSD-002, these findings and the subsequent discussion comprise the WSD’s review of PacifiCorp’s QR, which includes input from the public and other stakeholders. The following is an assessment of PacifiCorp’s response to each Class B condition, as presented in its QR. Provided in the discussion are the detailed elements pertaining to the requirements for each PacifiCorp Class B condition, with a corresponding required “action” to sufficiently address the scope, purpose, and intent of the specific element in each applicable condition. Each action identified in the subsequent sections is individually numbered and must be completely addressed in PacifiCorp’s 2021 WMP Update to meet the WSD’s expectation of a sufficient QR.

**5.1.1. Condition (Guidance-1, Class B):
Lack of risk spend efficiency (RSE) information**

WSD finding for PacifiCorp’s Condition Guidance-1 response: Insufficient

Below is an analysis of the itemized requirements within Condition Guidance-1, corresponding discussions of specific insufficiencies in PacifiCorp’s response to Guidance-1, and the actions required to make PacifiCorp’s QR Sufficient:

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In its first quarterly report, each electrical corporation shall provide the following:

i. its calculated reduction in ignition risk for each initiative in its 2020 WMP

PacifiCorp indicates it is developing more sophisticated models to better calculate reasonable estimations of ignition risk reduction and wildfire consequence avoidance and describes plans for implementing modeling by developing six risk quantification layers. PacifiCorp states that lack of real-world ignition and near-miss data will result in reliance on modeling. In its 2020 WMP, PacifiCorp reported tracking 29 ignitions⁶ involving its facilities; however, it is unclear whether PacifiCorp is incorporating this data into the development of its risk models. The WSD recommends PacifiCorp clarify its inclusion of existing ignition data into the development of its risk models. Nevertheless, PacifiCorp does not provide a calculated reduction of ignition risk for each 2020 WMP initiative, as required by this condition.

PacifiCorp indicates that in its 2021 WMP it will “plan to accomplish more localized and granular risk assessments by assigning a specific risk assessment score at the grid module level.”⁷

Action PC-1: In its 2021 WMP Update, PacifiCorp shall provide a high-level description of its risk-informed decision-making approach used to select the portfolio of mitigation initiatives presented in its 2020 WMP.

Action PC-2: In its 2021 WMP Update, PacifiCorp shall provide quantitative values for ignition risk reduction for each initiative in its 2020 WMP.

ii. its calculated reduction in wildfire consequence risk for each initiative in its 2020 WMP

PacifiCorp describes its analysis modeling development plan based on location and weather conditions, as opposed to by initiative. PacifiCorp will estimate reduction in wildfire consequence attributable to an initiative by bringing together: (a) reduction in ignition probability; (b) the probability of destructive fire spread from a particular location; and (c) the actual or planned deployment of a particular initiative at a particular location.⁸ PacifiCorp does not provide a calculated reduction of wildfire consequence risk for each 2020 WMP initiative.

Action PC-3: In its 2021 WMP Update, PacifiCorp shall provide quantitative values for wildfire consequence risk reduction for each initiative in its 2020 WMP.

iii. the risk models used to calculate (i) and (ii) above

PacifiCorp states "the risk assessment models that will be used to calculate (i) and (ii) above are substantially the same models that are being used to complete a localized risk assessment and assignment of risk assessment scores at the grid module level."⁹

⁶ PacifiCorp's 2020 WMP Final Resolution Appendices at p. B24.

⁷ PacifiCorp's QR at p. 9.

⁸ PacifiCorp's QR at p. 12.

⁹ PacifiCorp's QR at p. 12.

Action PC-4: In its 2021 WMP Update, PacifiCorp shall: 1) outline its risk assessment models, 2) demonstrate the inclusion of existing ignition data into the development of its risk assessment models, and 3) provide a table describing its risk assessment techniques used for each initiative in the format used by Southern California Edison (SCE).¹⁰ If subparts 1 and 2 cannot be completed, PacifiCorp shall provide an update on the development of its risk assessment models with a detailed timeline including progress metrics.

**5.1.2. Condition (Guidance-2, Class B):
Lack of alternatives analysis for chosen initiatives**

WSD finding for PacifiCorp's Condition Guidance-2 response: Sufficient

In its first quarterly report, each electrical corporation shall provide the following:

i. all alternatives considered for each grid hardening or vegetation management initiative in its 2020 WMP

PacifiCorp has systematically identified alternatives with respect to each grid hardening and vegetation management initiative. PacifiCorp provides a description for comparing WMP initiatives in Attachment A: Alternatives to Initiatives (Guidance-2 Worksheet). The worksheet conveys an effective method for presenting initiative alternatives, with descriptions, categories, applicability for PacifiCorp, notes, and rationale for selection.

ii. all tools, models, and other resources used to compare alternative initiatives

PacifiCorp provides reasons for choosing alternatives but lacks the explanation of tools, models, and specific resources used to make determinations/decisions. The WSD recommends including more detailed discussion for the tools, models, and specific resources used to make determinations/decisions in its future WMP submittals.

iii. how it quantified and determined the risk reduction benefits of each initiative

iv. why it chose to implement each initiative over alternative options

Although a rationale is provided for each selection, the response lacks supporting evidence for the decision. Each selection should be supported by quantifiable values and qualitative analysis. Once PacifiCorp has completed its wildfire risk model, as discussed in Condition Guidance-1, the WSD expects PacifiCorp to provide quantitative values for the risk reduction benefits of each initiative and quantitative support for implementing one initiative over alternative options.

¹⁰ SCE's RCP at p. 9.

**5.1.3. Condition (Guidance-4, Class B):
Lack of discussion on PSPS impacts**

WSD finding for PacifiCorp's Condition Guidance-4 response: Insufficient

Below is an analysis of the itemized requirements within Condition Guidance-4, corresponding discussions of specific insufficiencies for PacifiCorp's response to Guidance-4, and the actions required to make PacifiCorp's QR Sufficient:

In its first quarterly report, each electrical corporation shall detail whether and how each initiative in its WMP:

i. affects its threshold values for initiating PSPS events

PacifiCorp states that because the company has not had to implement a PSPS prior to 2020 and is employing covered conductor installation for its HFTD Tier 3 and Tier 2 areas, it does not need to develop a specific threshold-based plan categorized by WMP initiative.

The information provided did not address or answer the request for threshold values or provide information about the relationship of initiatives to making decisions about implementing PSPS. Prior to this QR submission PacifiCorp justified its lack of PSPS planning stating, "it hasn't implemented a PSPS to date, and is optimistic that it won't need to be based on implementation of covered conductor installations."¹¹ Just days after submitting its QR, PacifiCorp implemented its first PSPS event on September 13, 2020 and initiated a PSPS "watch" event to consider implementing PSPS on October 21, 2020.¹²

Action PC-5: In its 2021 WMP Update, PacifiCorp shall: 1) discuss the relationship between various grid hardening, vegetation management, and asset management initiatives and the corresponding impacts on thresholds for initiating PSPS events, and 2) specifically how each initiative in its WMP affects its threshold values for initiating PSPS events.

ii. is expected to reduce the frequency (i.e. number of events) of PSPS events

PacifiCorp provided only a generalized, non-specific answer: "each mitigation activity is expected to have an incremental impact in reducing the frequency of PSPS events. Where installation of covered conductor is complete, implementation of a PSPS event, as currently envisioned, is highly unlikely."

Action PC-6: In its 2021 WMP Update, PacifiCorp shall discuss how the various grid hardening, vegetation management, and asset management initiatives are expected to reduce the frequency (i.e., number of events over time) of PSPS events.

¹¹ PacifiCorp's QR at p. 19.

¹² <https://www.cpuc.ca.gov/pmps/>

iii. is expected to reduce the scope (i.e. number of customers impacted) of PSPS events

The focus by PacifiCorp is on a single mitigation strategy (covered conductor installation) eliminating need for PSPS in Tier 3 (populated, high risk areas). PacifiCorp also indicates that its work schedule is specifically prioritized to reduce the scope of PSPS events. As projects are completed, line segments will be taken out of scope, meaning that customers served from those lines will remain in power during a potential PSPS event in the area.

Action PC-7: In its 2021 WMP Update, PacifiCorp shall discuss how the various grid hardening, vegetation management, and asset management initiatives are expected to reduce the scope (i.e. number of customers impacted) of PSPS events for its entire service area, not just Tier 3 areas.

iv. is expected to reduce the duration of PSPS events

PacifiCorp's response to this subpart uses the logic that by reducing the number of PSPS events, it would then reduce the duration of PSPS events. This response fails to address how individual initiatives will reduce the average duration of individual PSPS events.

Action PC-8: In its 2021 WMP Update, PacifiCorp shall discuss how the various grid hardening, vegetation management, and asset management initiatives are expected to reduce the duration of individual PSPS events.

v. supports its directional vision for necessity of PSPS, as outlined in Section 4.4 of its WMP

PacifiCorp fails to explain how the initiatives connect to the strategies listed in Section 4.4.7 of its 2020 WMP (Planned Evolution) and the Timeframe Table.¹³

Action PC-9: In its 2021 WMP Update, PacifiCorp shall discuss how the various grid hardening, vegetation management, and asset management initiatives supports its Planned Evolution and Timeframe Table, as outlined in Section 4.4.7 of its 2020 WMP.

5.1.4. Condition (Guidance-5, Class B): Aggregation of initiatives into programs

WSD finding for PacifiCorp's Condition Guidance-5 response: Sufficient

In its first quarterly report, each electrical corporation shall:

i. break out its programs outlined in section 5.3 into individual initiatives

PacifiCorp disaggregates all programs into individual initiatives, which are listed by separate line item as a table in Attachment B: Initiative Level Detail.

¹³ PacifiCorp's 2020 WMP at p. 85.

Action PC-10: In its 2021 WMP Update, PacifiCorp shall provide initiative-level details on the current and future approaches to its decision-making in selecting WMP initiatives, identifying where systematic and programmatic advancements are expected. These initiative-level details shall include: 1) an identification the specific risk being mitigated, or problem being addressed, 2) how the initiative or program was selected, 3) how prioritization or targeting is approached for each initiative or program, 4) future plans to improve risk modeling for the initiative or program, and 5) a timeline for the implementation and updating of risk modeling to support the decision-making for each initiative or program. At a minimum, these details shall be provided for every initiative associated with asset management, vegetation management, grid hardening, and PSPS identified in PacifiCorp's 2020 WMP.

ii. report its spend on each individual initiative

Some level of spend has been identified in Attachment B: Initiative Level Detail. The current spend on each initiative in the 2020 WMP is listed in column M of Attachment B. The WSD notes that 36 of the 111 initiatives in this table have no spending budgeted or incremental spend designated. The WSD is concerned with the repetition of identical expenditures and zero-dollar totals.

Action PC-11: In its 2021 WMP Update, PacifiCorp shall provide discussion for the repetition of identical and zero-dollar totals for 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

v. provide the information required for each initiative in section 5.3 of the Guidelines

Upon the completion of wildfire risk model, as described in its response to Condition Guidance-1, the WSD expects PacifiCorp to provide quantitative support for subparts iii, iv, and v of Condition Guidance-5.

5.1.5. Condition (Guidance-6, Class B):

Failure to disaggregate WMP initiatives from standard operations

WSD finding for PacifiCorp's Condition Guidance-6 response: Sufficient

In its first quarterly report, each electrical corporation shall:

i. clearly identify each initiative in Section 5.3 of its WMP as "Standard Operations" or "Augmented Wildfire Operations"

For each initiative in Section 5.3 of its 2020 WMP, PacifiCorp has designated the initiative as "Standard Operations" or "Augmented Wildfire Operations," as shown in column E of Attachment B.

ii. report WMP required data for all Standard Operations and Augmented Wildfire Operations

PacifiCorp did provide such data in Attachment B, except as is required to complete the risk spend efficiency analysis.

Action PC-12: In its 2021 WMP Update, PacifiCorp shall report the RSE analysis for all Standard Operations and Augmented Wildfire Operation upon completion of the work described in its response to Condition Guidance-1.

iii. confirm that it is budgeting and accounting for WMP activity of each initiative

Budgeting and accounting information for each 2020 WMP initiative, where available, is included in Attachment B.

iv. include a "ledger" of all subaccounts that show a breakdown by initiative.

For each WMP initiative, accounting information in Attachment B is reflective of either the subaccount for that specific initiative or of a reasonable estimate of the initiative-related amounts in the most detailed subaccount relative to that initiative.

5.1.6. Condition (Guidance-7, Class B):

Lack of detail on effectiveness of "enhanced" inspection programs

WSD finding for PacifiCorp's Condition Guidance-7 response: Sufficient

In its first quarterly report, each electrical corporation shall detail:

i. the incremental quantifiable risk identified by such 'enhanced' inspection programs

PacifiCorp clarifies that the sole "enhanced inspection program" that it currently employs is the Infrared (IR) inspections of transmission lines and equipment, as described in Section 5.3.4.5 of its 2020 WMP. This technology's application is a distinct initiative from normal patrols because this approach attempts to identify conditions which would not normally be observable by the human eye.

PacifiCorp is evaluating the significance of the conditions which may be spotted through IR inspections and whether they reflect a greater incremental risk compared to other conditions. PacifiCorp is also evaluating what impact the timing of the inspection has on its effectiveness in identifying conditions of greater incremental risk.

Action PC-13: In its 2021 WMP Update, PacifiCorp shall clearly distinguish and report on benefits of IR and LiDAR "enhanced" inspections, as currently implemented, compared to established "routine" inspections that may exist across its programs.

ii. whether it addresses the findings uncovered by 'enhanced' programs differently than findings discovered through existing inspections

PacifiCorp questions whether it is differently addressing conditions uncovered by "enhanced" IR inspections, calling the difference "nuanced."¹⁴ If a condition is found via any inspection program, it is treated similarly regardless of what type of inspection was used to identify the condition. However, generally, PacifiCorp is evaluating its IR inspection findings differently. These inspections reflect a different condition type (namely, a condition resulting in a release of heat energy), so PacifiCorp is evaluating what information or conclusions can be drawn from identifying such a condition. The WSD expects PacifiCorp to report the findings and conclusions for the IR inspections and other relevant programs in its 2021 WMP Update.

iii. a detailed cost-benefit analysis of combining elements of such 'enhanced' inspections into existing inspection programs

PacifiCorp states this condition does not apply. "By clearly delineating between PacifiCorp's single enhanced inspection initiative and PacifiCorp's existing inspection programs, this condition does not apply."¹⁵ Cost benefit analysis has not been sought by PacifiCorp. The WSD expects PacifiCorp to include cost benefits as part of the analysis of its "enhanced" inspection programs.

**5.1.7. Condition (Guidance-9, Class B):
Insufficient discussion of pilot programs**

WSD finding for PacifiCorp's Condition Guidance-9 response: Sufficient

In its quarterly report, each electrical corporation shall detail:

i. all pilot programs or demonstrations identified in its WMP

All pilot programs were identified.

ii. status of the pilot, including where pilots have been initiated and whether the pilot is progressing toward broader adoption

Descriptions of progress, status, findings, and potential for broader adoption are provided for each pilot.

iii. results of the pilot, including quantitative performance metrics and quantitative risk reduction benefits

PacifiCorp does not provide quantitative values, instead using a qualitative narrative to discuss risk reduction. This is insufficient, as it does not allow for adequate and comprehensive comparison of risk reduction across pilots. Once PacifiCorp has completed its wildfire risk

¹⁴ PacifiCorp's QR at p. 31.

¹⁵ PacifiCorp's QR at p. 32.

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model, as discussed in its response to Condition Guidance-1, the WSD expects PacifiCorp to provide quantitative values for both performance and risk reduction.

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

PacifiCorp includes adequate discussion on how it will apply the lessons learned from its pilot programs, regarding ignitions or faults, into its operational practices.

v. a proposal for how to expand use of the technology if it reduces ignition risk materially.

Potential plans, proposals, scope, geographic application, and timelines are provided for each pilot.

5.1.8. Condition (Guidance-10, Class B): Data issues – general

WSD finding for PacifiCorp's Condition Guidance-10 response: Insufficient

Below is an analysis of the itemized requirements within Condition Guidance-10, corresponding discussions of specific insufficiencies for PacifiCorp's response to Guidance-10, and the actions required to make PacifiCorp's QR Sufficient:

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:

- 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*
- ii. the type of hardening, vegetation management and asset inspection work done, and the number of circuit miles covered, supported with GIS data*
- iii. the analysis that led it to target that specific area and hardening, vegetation management or asset inspection initiative*
- iv. hardening, vegetation management, and asset inspection work scheduled for the following reporting period, with the detail in (i) – (iii)*

Outside of referencing where information publicly available from other sources (i.e., red flag warning data, fire weather zone data, etc.) could be obtained, PacifiCorp did not provide any spatial data in adherence to the WSD's GIS data reporting requirements. PacifiCorp generally repeated a few reasons for its lack of spatial data throughout its response in the WSD's GIS data status tracker templates, including "data exists but not in GIS format" and "data does not exist – changes to data capture tools required." Even in instances where PacifiCorp did have the data in GIS format, it did not provide any GIS data files, instead indicating that it still needed to translate the data to the WSD data taxonomy.

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For information it already has in GIS format, PacifiCorp indicates that it will require until the 2021 WMP Update to translate such data into the WSD data schema. For data it currently has and collects, but is not available in GIS format, PacifiCorp anticipates providing the data in its 2022 WMP Update. For data it does not currently collect, PacifiCorp indicates it will require another two years to provide this data in GIS format, presumably in time for the 2023 WMP submissions.

While the WSD understands and appreciates that there was limited time between the issuance of its GIS data schema and reporting requirements and the submittal of the first QR, the WSD finds PacifiCorp's timelines for providing GIS data compliant with the WSD's standards to be unacceptably long. It is noteworthy that no other electrical corporation subject to these GIS data reporting requirements needs as much time as PacifiCorp to bring their data submissions into full compliance with the WSD's requirements. Furthermore, all other electrical corporations subject to these GIS data reporting requirements has committed to and provided data in 2020.

Action PC-14: In its 2021 WMP Update, PacifiCorp shall detail all actions it has taken and will take prior to its 2022 WMP submittal to bring its data submissions into full compliance with the WSD's GIS data reporting requirements.

5.1.9. Condition (Guidance-11, Class B):

Lack of detail on plans to address personnel shortages

WSD finding for PacifiCorp's Condition Guidance-11 response: Insufficient

Below is an analysis of the itemized requirements within Condition Guidance-11, corresponding discussions of specific insufficiencies for PacifiCorp's response to Guidance-11, and the actions required to make PacifiCorp's QR Sufficient:

In its first quarterly report, each electrical corporation shall detail:

i. a listing and description of its programs for recruitment and training of personnel, including for vegetation management

PacifiCorp provides a general discussion on its recruitment, apprenticeship, and labor management strategy for line personnel and vegetation management, the latter of which is 100% contracted. The labor management strategies described are indicated to be effective for the company's operations. PacifiCorp indicates that it has no labor shortage. Some statistics will provide better assessment capability of labor status for specified categories and initiatives.

Action PC-15: In its 2021 WMP Update, PacifiCorp shall: 1) provide a table with the current number of employees and vacancies for apprenticeship, line, and vegetation management personnel, and 2) a description of its recruitment, training, and retention strategies.

ii. a description of its strategy for direct recruiting and indirect recruiting via contractors and subcontractors

PacifiCorp states that it works with contractors on a short-term planning horizon specific to the contract, and the contractors it uses are responsible for their own recruitment. There does not appear to be a “direct” company strategy presented in the QR. PacifiCorp did not provide any description of what its hiring targets are, how many vacancies exist, and how its strategic action or policy will be designed to achieve and maintain its overall recruitment goals.

Action PC-16: In its 2021 WMP Update, PacifiCorp shall provide an overall description of its recruiting strategy.

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.

PacifiCorp tracks the recruitment process primarily through the following metrics: number of applicants; number of qualified applicants; number of qualified minority, women, disabled and veteran applicants; number of declined offers; length of employment; training delivered to newly hired employees; training delivered to all employees; and internal employee movement (e.g. from one job classification to another or from one location to another).¹⁶

The purpose of this condition was to ensure California utilities are not simply hiring away employees from other California utilities, which would not increase the overall, in-state workforce. Information regarding percentage from out of state, and the percentage that were working for another California utility immediately prior to being hired are not addressed. Effectiveness of the metrics presented is not described.

Action PC-17: In its 2021 WMP Update, PacifiCorp shall 1) provide percentage numbers of personnel employed from out of state, and 2) the percentage that were working for another California utility immediately prior to being hired.

**5.1.10. Condition (Guidance-12, Class B):
Lack of detail on long-term planning**

WSD finding for PacifiCorp's Condition Guidance-12 response: Insufficient

Below is an analysis of the itemized requirements within Condition Guidance-12, corresponding discussions of specific insufficiencies for PacifiCorp's response to Guidance-12, and the actions required to make PacifiCorp's QR Sufficient:

¹⁶ PacifiCorp's QR at p. 51.

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In their first quarterly report, each electrical corporation shall detail:

- 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*

PacifiCorp states that it will make a greater effort to share the details of its long-term vision, and how individual initiatives align with it, in future WMP filings. PacifiCorp indicates it is reluctant to begin developing detailed 3-year and 10-year planning or detail how initiatives in their WMP aligns with and support long-term planning:

PacifiCorp's long-term planning is rooted in developing a reliable "framework" for future decision making, rather than a long-term plan based on absolute numerical certainty. For this reason, PacifiCorp was hesitant to set forth specific 10-year figures in many template boxes in the 2020 WMP. Even now, the company is unable to identify definite projects beyond the current timeline for completion of finite Tier 3 hardening projects currently scheduled for completion in 2023. PacifiCorp can, however, do a better job of describing the framework that the company expects to use in making future decisions on a long-term basis.¹⁷

PacifiCorp indicates it is leaving itself room to adapt based on the evolving nature of wildfire risk assessment, evaluating the effectiveness of individual initiatives, evaluating the potential for new initiatives suitable for widespread application, and the potential impacts to wildfire mitigation of other trends in the electric utility industry. While the WSD understands that forecasting long-term plans on the order of 10 years is difficult and will likely include estimates subject to change, it is not the WSD's intent to hold PacifiCorp to "absolute numerical certainty," but quantitative values are imperative to setting and tracking progress against wildfire risk reduction goals. PacifiCorp must effectively plan for the long-term and implement its WMP initiatives with those long-term goals in mind.

PacifiCorp also lists factors influencing its planning or lack of planning. These factors can assist with informing a plan and can be incorporated into planning, including the evolving understanding of wildfire risk, effectiveness of individual initiatives, evaluation and prioritization of initiatives determined to be effective, and wildfire mitigation trends in the electric utility industry.

PacifiCorp states the following regarding long-term planning:

Moving from the "standard" to the "augmented" programs, PacifiCorp anticipates that it will likely be pursuing similar strategies in the years after 2023, as were employed in Tier 3 areas from 2019-2023. The core of these strategies will include: (i) multi-point grounding to ensure sensitivity to fault conditions; (ii) additional reclosers and other sectionalizing equipment, allowing for isolation strategies and wildfire mitigation relay settings; (iii) fuse coordination, including with deployment, where appropriate, of non-

¹⁷ PacifiCorp's QR at p. 52.

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expulsion devices; and (iv) covered conductor conversions, including pole replacements and other line elements, as necessary. The specific locations will be highly dependent on the more localized and granular risk assessments that PacifiCorp is currently developing (as described in response to Guidance-03).¹⁸

PacifiCorp tries to explain how the company is addressing long-term planning and expects to provide more evidence (e.g., a written strategic plan) to support this explanation in its 2021 WMP Update.

Action PC-18: In its 2021 WMP Update, PacifiCorp shall provide a more detailed and structured 10-year plan that is comprehensive and provides its long-term, directional vision. The updated 10-year plan, at a minimum, shall include: 1) either a) anticipated annual quantitative benchmarks that are reasonable and achievable for each goal, or b) explain how it intends to track progress of each goal if a quantitative benchmark is not provided, and 2) a list of activities with metrics to track progress toward annual benchmarks.

iii. a list of activities that will be required to achieve this end goal

A list of activities was not provided. PacifiCorp indicated it will provide this in its 2021 WMP Update. The response is insufficient, with further recommended action provided in PC-18, above.

iv. a description of how the electrical corporation's three-year WMP is a step on the way to this 10-year goal

PacifiCorp states completing the work detailed in its 2020 WMP will have a profound impact by dramatically reducing the risk profile in the Tier 3 areas of its service territory. The company indicates that this work is a major component of its 10-year goal, and mitigation of risk in Tier 3 areas will then facilitate greater resource allocation to Tier 2 areas.

In the 2021 WMP Update and beyond, PacifiCorp indicates it will apply its continuously maturing risk assessments to identify discrete projects planned for the extended 10-year timeframe. As reflected in its response to subpart (iii) of this Condition, PacifiCorp identifies its WMP as a key activity in the framework for making long-term decisions. Preparation of a WMP allows for considerable reflection on programs and reevaluation of priorities. Above all, PacifiCorp states that the WMP requires an annual assessment of the effectiveness of wildfire mitigation initiatives, which is critical information for framing its future long-term planning.

PacifiCorp indicates that the 3-year WMP period is assisting with incrementally learning and applying lessons learned toward effective development of a 10-year strategic plan.

¹⁸ PacifiCorp's QR at p. 58.

5.1.11. Condition (PacifiCorp-1, Class B):

PacifiCorp's WMP does not report adequate planning for climate change

WSD finding for PacifiCorp's Condition PacifiCorp-1 response: Insufficient

Below is an analysis of the itemized requirements within Condition PacifiCorp-1, corresponding discussions of specific insufficiencies for PacifiCorp's response to PacifiCorp-1, and the actions required to make PacifiCorp's QR Sufficient:

In its first quarterly report, PacifiCorp shall:

i. describe how it incorporates climate change into risk models

PacifiCorp acknowledges the issue of climate change but does not describe how it will analyze the issue separately from other analysis or address future climate trends to support its programmatic planning. PacifiCorp also does not appear to evaluate the issue distinctly from its existing, ongoing risk analysis programs, as it states, "PacifiCorp does not perceive that this issue necessarily implicates a separate planning process. Instead, the company believes that the impacts of climate change are assessed through the same risk assessment tools and fire modeling work utilized to develop the WMP."¹⁹ The company indicates that while it has not historically faced the challenges of Diablo type winds, it anticipates climate change scenarios will weigh more heavily in future risk assessment quantification.

Action PC-19: In its 2021 WMP Update, PacifiCorp shall investigate and discuss how it may apply existing risk analysis models to consider future climate scenarios rather than the current state of climate-caused risk.

ii. outline in detail how it plans to use these risk models to deploy wildfire initiatives

PacifiCorp is participating in the Pyregence Initiative²⁰ to take advantage of fire science modeling advancements to better understand long-term climate forecasting and plan for its impacts. As modeling capability matures, PacifiCorp can take the knowledge and integrate it into its own initiatives.

Action PC-20: In its 2021 WMP Update, as part of its indicated coordination with the Pyregence Initiative, PacifiCorp shall explain how it plans to integrate expertise and lessons learned into its analysis and planning to deploy wildfire initiatives.

¹⁹ PacifiCorp's QR at p. 58.

²⁰ PacifiCorp's QR at p. 59.

5.1.12. Condition (PacifiCorp-2, Class B):

PacifiCorp has not demonstrated effective weather station utilization

WSD finding for PacifiCorp's Condition PacifiCorp-2 response: Sufficient

In its first quarterly report, PacifiCorp shall:

i. explain in detail how it chooses to locate its weather stations and explain gaps or areas of lower weather station density

PacifiCorp has provided detail in terms of methodology, criteria, and coverage, inclusive of populated areas (e.g., Scott's Valley, Yreka or Hornbrook) to expand weather station coverage in its service territory. The expansion of the weather station network and timeline appear to address increasing PacifiCorp's general situational awareness, improving its risk modeling efforts in populated areas, and, as suggested by the WSD, developing a better understanding of how weather systems are moving across its entire service territory.

ii. provide a cost/benefit analysis of the impact of having a higher density of weather stations across its territory

PacifiCorp does not provide the required cost/benefit analysis.

Action PC-21: In its 2021 WMP Update, PacifiCorp shall provide a cost/benefit analysis of the impact of having a higher density of weather stations across its territory.

5.1.13. Condition (PacifiCorp-3, Class B):

PacifiCorp did not explain how it would track effectiveness of its covered conductor initiative

WSD finding for PacifiCorp's Condition PacifiCorp-3 response: Insufficient

Below is an analysis of the itemized requirements within Condition PacifiCorp-3, corresponding discussions of specific insufficiencies for PacifiCorp's response to PacifiCorp-3, and the actions required to make PacifiCorp's QR Sufficient:

In its first quarterly report, PacifiCorp shall:

present and explain a methodology for tracking and measuring the effectiveness of its covered conductor installations at reducing the frequency and probability of (1) outages for top 10 outage causes based on best available historical data, and (2) ignitions for all CPUC reportable ignitions

While PacifiCorp agrees with the objective of this condition, it fails to provide the requested information.

Action PC-22: In its 2021 WMP Update, PacifiCorp shall present and explain a methodology for tracking and measuring the effectiveness of its covered conductor installations at reducing the frequency and probability of: 1) outages for its top 10 outage causes based on best available historical data, and 2) ignitions for all CPUC reportable ignitions.

**5.1.14. Condition (PacifiCorp-4, Class B):
PacifiCorp's WMP lacks a QA/QC program for inspections**

WSD finding for PacifiCorp's Condition PacifiCorp-4 response: Insufficient

Below is an analysis of the itemized requirements within Condition PacifiCorp-4, corresponding discussions of specific insufficiencies for PacifiCorp's response to PacifiCorp-4, and the actions required to make PacifiCorp's QR Sufficient:

In its first quarterly report, PacifiCorp shall:

provide details in specific asset management and inspection quality control, including providing planned spend information for these initiatives

PacifiCorp has not changed its answer from its WMP in which it indicates that it did not "have a specific asset management and inspections program for wildfire risk mitigation that is focused on quality assurance/quality control of inspections. More precisely, PacifiCorp does not have a separate QA/QC program administered outside of the normal inspection process and budget."²¹ However, PacifiCorp feels that not providing discrete administrative accounting numbers for asset management and inspection programs does not mean standard operations are weak on wildfire mitigation.

The WSD finds it insufficient and concerning that in the QR Attachment B table, Column M, there is no spend indicated for any Asset Management and Inspection initiatives, as reporting of this information is required.²²

Action PC-23: In its 2021 WMP Update, PacifiCorp shall 1) detail its QA/QC measures for asset management and inspection initiatives and 2) provide planned spend for these initiatives.

**5.1.15. Condition (PacifiCorp-6, Class B):
PacifiCorp does not have a specific data governance wildfire mitigation program**

WSD finding for PacifiCorp's Condition PacifiCorp-6 response: Insufficient

Below is an analysis of the itemized requirements within Condition PacifiCorp-6, corresponding discussions of specific insufficiencies for PacifiCorp's response to PacifiCorp-6, and the actions required to make PacifiCorp's QR Sufficient:

²¹ PacifiCorp's QR at p. 65.

²² PacifiCorp's QR at p. 79.

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In its first quarterly report, PacifiCorp shall:

i. list and describe its data collection and governance policies

While PacifiCorp indicates it has “robust systems for collecting and storing data... historically developed to support operation of the transmission and distribution electrical network,”²³ it declines to specify data collection and governance policies addressing wildfire mitigation and risk reduction tracking.

Action PC-24: In its 2021 WMP Update, PacifiCorp shall describe its efforts to develop policies regarding (a) data collection and governance, (b) data transparency, and (c) information sharing, beyond supporting network operations, to demonstrate support of wildfire mitigation activities.

ii. describe how it plans to track key aspects of WMP data

PacifiCorp responded as follows regarding data tracking:

PacifiCorp plans to collect and store data in its well-developed systems designed to support ongoing transmission and distribution operations. At regular intervals, and as otherwise needed, the company will pull and assemble data to support risk assessment activities, plan future wildfire mitigation projects, track project progress, and evaluate the effectiveness of various wildfire mitigation initiatives.²⁴

The WSD expects that in its 2021 WMP Update PacifiCorp will describe how data governance protocols are implemented to provide greater insight and transparency into its mitigation measures and initiatives. Similar conclusions were reached by the WSD in analysis of Guidance-10 and are covered by Action PC-14 of this document. Sufficiently taking that action will address concerns raised here.

6. Conclusion

Catastrophic wildfires remain a serious threat to the health and safety of Californians. Electric utilities must continue to make progress toward reducing utility-related wildfire risk. With the finding of “Insufficient” for PacifiCorp’s QR, the WSD intends to send a clear message to PacifiCorp that its WMP, RCP, and QRs must be of the highest quality and include sufficient detail and plans to facilitate transparency, allow for efficient review, and effectively implement potentially lifesaving wildfire risk mitigation initiatives. The WSD will continue to ensure PacifiCorp is held accountable for successfully executing the wildfire risk reduction initiatives presented in its 2020 WMP, RCP, and other required updates through the Division’s continued audit and compliance work. As indicated in Section 5.1 above, PacifiCorp shall address the insufficient elements of its QR submission by taking the actions identified by the WSD and presenting the required information and detail in its 2021 WMP Update.

²³ PacifiCorp’s QR at p. 68.

²⁴ PacifiCorp’s QR at p. 68.

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Finally, along with the issuance of this action statement, the WSD concurrently issues a Notice of Noncompliance document summarizing the findings and noncompliance issues detailed herein. The WSD notes that nothing in this action statement or the concurrent Notice of Noncompliance precludes the Commission from exercising its enforcement authority related to any findings or matters addressed in the present document.

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Thomas Jacobs', with a stylized flourish at the end.

Caroline Thomas Jacobs
Director, Wildfire Safety Division California Public Utilities Commission