BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 420

In the Matter of PACIFICORP d/b/a PACIFIC POWER, 2024 Transition Adjustment Mechanism	OPENING BRIEF OF SIERRA CLUB

Opening Brief of Sierra Club

Public Version

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I. Introduction

Sierra Club submits this Opening Brief urging the Public Utility Commission of Oregon ("Commission") to reject PacifiCorp's Preferred Scenario in the 2023 Jim Bridger Long Term Fuel Supply Plan ("LTFSP" or "Plan"), including its proposed operating plan for the Bridger Coal Company ("BCC" or "Bridger") mine contained within the Preferred Scenario. The LTFSP is fundamentally flawed and PacifiCorp's ("Company") portfolio selection results in higher production at the Bridger mine than is prudent.

Scrutiny of the LTFSP is critical for two separate, but interrelated, reasons. First, Jim Bridger is one of PacifiCorp's most expensive coal plants,[1] and has been for years.[2] In fact, Jim Bridger experienced one of highest fuel cost increases amongst PacifiCorp's coal supplies in this year's Transition Adjustment Mechanism ("TAM").[3] As a result, reducing reliance on this plant in favor of lower cost alternatives will ultimately be in ratepayers' interest. Second, minimizing

[1] Opening Test. of Ed Burgess and Maria Roumpani on Behalf of Sierra Club, Ex. SC/100 at Burgess and Roumpani/10:1 [hereinafter "SC/100"].
[2] *Id.* at 10:8-9.
[3] *Id.* at 11:10-16. Although Jim Bridger's fuel costs decreased in PacifiCorp's Reply Testimony, these costs are still projected to be approximately [redacted] percent higher in 2024 than forecasted in the 2023 TAM Reply. *See* SC/100 at Burgess and Roumpani/11:17-12:1 Conf. Table 3 (identifying Bridger Coal Company fuel costs at $[redacted]/ton, as identified in PacifiCorp's 2023 TAM Reply Testimony) *and* PacifiCorp Reply Test. of James Owen, Ex. PAC/500 at Owen/3:1 (hereinafter "PAC/500") (identifying Bridger Coal Company fuel costs at $[redacted]/ton).

Oregon's reliance on coal is aligned with Oregon's commitment to exit coal by 2030 and meet ambitious greenhouse gas reduction targets by the same year.[4] In order to facilitate this transformation of Oregon's energy supply, the Commission must closely analyze PacifiCorp's planned coal operations, particularly at high cost plants like Jim Bridger. The TAM is the only venue in which the Commission has an opportunity to examine detailed near-term and long-term fueling options for the plant. And while PacifiCorp is beginning to phase out coal operations at Jim Bridger, the Commission should scrutinize whether the Company is moving quickly enough.

The Commission should take the following actions to protect ratepayers and ensure that PacifiCorp's coal operations align with Oregon's climate goals:

1. Direct PacifiCorp to adopt Scenario 4 as its Preferred Scenario under the 2023 Jim Bridger Long Term Fuel Supply Plan;

2. Direct PacifiCorp to update its LTFSP every year.

II. Scenario 4 in the Jim Bridger Long Term Fuel Supply Plan is Lower Risk than, and Similar Cost to, PacifiCorp's Preferred Scenario.

Over the past several years, PacifiCorp has sporadically prepared a long-term fuel supply plan for the Jim Bridger plant, typically at the direction of this Commission.[5] A more holistic evaluation of fueling options at Jim Bridger, the plan evaluates different operating levels at the Bridger mine as well as other fuel source options, primarily the third-party owned Black Butte mine and coal from the southern Powder River Basin. While PacifiCorp typically prepares an annual mine plan for the Bridger mine—the costs of which are recovered in the TAM—when a LTFSP is prepared, the BCC mine plan becomes a component of the LTFSP. As a result, in

[4] O.R.S. 757.518(2); O.R.S. 469A.410.

[5] PacifiCorp has prepared a LTFSP in December 2015, March 2018, March 2019, and April 2022, in addition to its most recent 2023 LTFSP. The last three were all required by this Commission. PacifiCorp Corrected 2023 Jim Bridger Long-Term Fuel Supply Plan, Ex. PAC/902 at Owen/4 (hereinafter "PAC/902").

determining whether PacifiCorp's proposed BCC fuel costs in the 2024 TAM are prudent, the Commission must evaluate the prudency of the LTFSP itself.

In the 2023 LTFSP, PacifiCorp evaluated six potential fueling scenarios for Jim Bridger, between 2023 and 2029, when Units 3 and 4 are projected to convert to burning gas:

1. Scenario 1: [redacted]
2. Scenario 2: [redacted]
3. Scenario 3: [redacted]
4. Scenario 4: [redacted]
5. Scenarios 5 and 6: [redacted][6]

Scenario 6 assumed no minimum take requirement. Under both Scenario 5 and 6, because the model did not select any coal from Black Butte and selected all available incremental coal from the BCC mine,[7] PacifiCorp concluded that Scenarios 5 and 6 were essentially the same and represented the least-cost, least risk options, referring to them collectively as the "Preferred Scenario." Throughout this Brief, Sierra Club will refer to the Preferred Scenario as Scenario 5.

Broadly, Scenario 5 allows PacifiCorp to avoid a new coal supply agreement with the Black Butte mine,[8] which would likely have included a significant minimum take requirement. [redacted] Black Butte has historically been [redacted]

[6] PAC/500 at Owen/31:1-15.
[7] PAC/902 at Owen/6 ("Option 6 was modeled assuming no minimum take-or-pay obligations for the Bridger mine or Black Butte Coal Company. Based on PacifiCorp's evaluation using the PLEXOS model, all of the available incremental coal from the Bridger mine would be cost-effective. As a result, the fueling plans in Scenario 5 and Scenario 6 are essentially the same.")
[8] PAC/500 at Owen/35:6-9.

[redacted], including in the 2024 TAM,[9] and avoiding purchases from Black Butte reduces net power costs ("NPC").[10] Relying on the Company's own mine to supply Jim Bridger, with some supplemental coal from the southern Powder River Basin, also allows PacifiCorp to capitalize upon the flexibility that the Company has long touted as a primary benefit of mine ownership, because the Company can control the level of production.

However, PacifiCorp selection of Scenario 5, which includes [redacted], is not supported by the Company's analysis, which contained significant errors (discussed below) and is not best suited to minimize Oregon ratepayers' reliance on high-cost Bridger coal. Scenario 4, in contrast, limits ratepayers' exposure to BCC coal, is more aligned with Oregon's goals of reducing and eventually eliminating coal consumption, and likely has only *de minimis* cost differences with Scenario 5.

A. Scenario 4 is Lower Risk for Oregon Ratepayers.

As Sierra Club has pointed out for several TAM cycles,[11] Jim Bridger's fuel is very expensive compared to other coal supplies, despite the fact that the plant is supplied largely by a PacifiCorp-owned mine. In the 2024 TAM, Jim Bridger coal is the [redacted] most expensive of any of PacifiCorp's coal supplies,[12] and, worse, experienced significant price increases compared to the 2023 TAM, with the costs rising by approximately [redacted] percent.[13] This increase was [redacted] plant's coal supply, which, as PacifiCorp explained, [redacted]

[9] SC/100 at Burgess and Roumpani/11:17-12:1, Conf. Table 3.
[10] PAC/500 at Owen/35:9-11.
[11] SC/100 at Burgess and Roumpani/10:8-9.
[12] Conf. Workpaper Accompanying PacifiCorp's 2024 TAM Appl., "(C)_OR UE-420 ORTAM24_Mitchell_Reply_July 2023 CONF" at "NPC" tab.
[13] *See* SC/100 at Burgess and Roumpani/11:17-12:1 Conf. Table 3 (identifying Bridger Coal Company fuel costs at $[redacted]/ton, as identified in PacifiCorp's 2023 TAM Reply Testimony) *and* PAC/500 at Owen/3:1 (identifying Bridger Coal Company fuel costs at $[redacted]/ton). Notably, this price increase significantly declined once PacifiCorp removed assumed Black Butte coal purchases from the TAM. *See* SC/100 at Burgess and Roumpani/11:13-16 (noting that, based on PacifiCorp's Opening Testimony, BCC supply was [redacted]% more expensive than in 2023 and the Black Butte supply was [redacted]% more expensive).

[redacted].[14] In comparison, all other coal supplies' prices increased by less than [redacted] percent.[15] Given these economics, PacifiCorp should be actively working to reduce its reliance on Jim Bridger coal operations, something the Company implicitly acknowledges through its Integrated Resource Plan ("IRP"), which forecasts converting all units to gas by 2030.[16]

Nevertheless, PacifiCorp selected a Jim Bridger fuel supply plan that will allow it to [redacted] from the Bridger mine, a scenario that benefits PacifiCorp—but not necessarily ratepayers. For example, as Mr. Burgess and Ms. Roumpani noted, PacifiCorp has independent incentives to avoid accelerated reduction or closure of the mine, because such an outcome could jeopardize the Company's authorized regulated rate of return, put additional pressure on the Company to retire the Jim Bridger plant, risk the Company not collecting sufficient revenue to support mine reclamation, and/or create negative repercussions with the Company's Wyoming stakeholders.[17] The Company's denial that it could be influenced by any of these factors does not make them any less true. While PacifiCorp asserts that these incentives are "speculative" and "devoid of any evidence,"[18] there is no speculation in the fact that the BCC mine is included in PacifiCorp's rate base in all jurisdictions except for California or that utilities are incentivized to make large capital investments (which would not exist at Jim Bridger if the plant were to retire early) because the Company earns a rate of return on those investments.[19]

Adopting a lower-production operational plan at BCC, as in Scenario 4,[20] is also not higher risk for ratepayers than a higher-production operational plan. The LTFSP states multiple

[14] PacifiCorp Direct Test. of James Owen, Ex. PAC/200 at Owen/5:3-5 (hereinafter "PAC/200"); *See also* Highly Conf. Tr. at 10:5-7 (Sept. 8, 2023) (Owen) ("[redacted].")
[15] SC/100 at Burgess and Roumpani/11:15-16.
[16] PAC/902 at Owen/16.
[17] SC/100 at Burgess and Roumpani/21:13-24.
[18] PAC/500 at Owen/38:7.
[19] SC/100 at Burgess and Roumpani/21:14, 20-21.
[20] PAC/500 at Owen/37:17-18 ("Scenario 4 (BCC's low production scenario)").

times that [redacted][21] At hearing, Mr. Owen attempted to walk this back, essentially arguing that the [redacted].[22] It is not clear why this should be the case. Mr. Owen discussed [redacted].[24] In other words, [redacted] The point being: PacifiCorp's [redacted] does not appear to capitalize upon all of the purported benefits of ratepayers covering the costs of a Company-owned mine.

B. The Cost Differences Between Scenarios 4 and 5 are *De Minimis.*

Not only is Scenario 4 better aligned with Oregon's long-term energy strategy, but it is also financially on par with Scenario 5. The LTFSP compared the costs of various fueling options in two ways. First, the Plan included a Present Value Revenue Requirement ("PVRR") calculation, considering the costs of fueling Jim Bridger between 2023 and 2029. Second, the

[21] PAC/902 at Owen/19. *See also id.* at Owen/6.
[22] Highly Conf. Tr. at 52:5-53:2 (Sept. 8, 2023) (Owen)
[23] *Id.*
[24] *Id.* at 56:19-57:15.

Plan included a yearly break-down of costs for each Scenario. Under either metric, a close examination of the LTFSP demonstrates that the costs between Scenarios 4 and 5 are likely *de minimis* and the plans should be treated as synonymous for cost purposes.[25]

1. Differences in PVRR calculations for Scenarios 4 and 5 are not significant.

PacifiCorp's originally submitted LTFSP claimed that Scenario 5 was approximately $[redacted] higher cost than Scenario 4 on a PVRR basis.[26] Yet, after correcting an error regarding off-system sales between the scenarios that Sierra Club identified in Opening Testimony,[27] that differential dropped by $[redacted]—nearly [redacted]—to $[redacted].[28] Despite this significant error, PacifiCorp stopped short of fully examining and correcting all errors, resulting in the manipulation of information in order to favor the Company's preferred outcome.

Sierra Club identified several of these flaws in Opening Testimony, including:

- PacifiCorp's inclusion of 2023 costs despite the fact that 2023 costs are irrelevant for the 2024 TAM;[29]
- Unsupported cost assumptions in Scenario 5 that do not align with previous cost assumptions;[30]
- An unexplained increase in "other generation" in Scenario 5 over Scenario 4;[31]

Rather than correct these errors on Reply, PacifiCorp made only limited changes to the LTFSP and claimed that other discrepancies or unjustified cost assumptions would not alter the Company's conclusion that Scenario 5 is more economic than Scenario 4. The combination of

[25] Rebuttal Test. of Ed Burgess on Behalf of Sierra Club, Ex. SC/200 at Burgess/5:13-14 (hereinafter "SC/200").
[26] Highly Conf. Jim Bridger 2023 Long-Term Fuel Supply Plan, Ex. SC/107 at 14.
[27] SC/100 at Burgess and Roumpani/30:1-12 (describing unexplainable increase in wholesales in Preferred Scenario compared to other scenarios); *see also* PAC/500 at Owen/39:13-15 ("PacifiCorp has identified an error in the reporting of market purchases and sales in the 2023 Fuel Plan results, which made wholesale sales appear to be a larger portion of the benefits in Scenario 5 than was actually the case.").
[28] PAC/500 at Owen/36:4, n.31
[29] SC/100 at Burgess and Roumpani/22:29-23:4
[30] SC/100 at Burgess and Roumpani/25:1-13; *see also* SC/200 at Burgess/5:3-9.
[31] SC/100 at Burgess and Roumpani/29:11-30:3.

numerous errors and inconsistencies, however, collectively erodes confidence in the Company's analysis and makes clear that Scenarios 4 and 5 do not have significant cost differences, if any.

First, PacifiCorp's inclusion of 2023 costs in the PVRR calculation is not justified, as these costs have no impact on 2024 and beyond. PacifiCorp acknowledges that removing 2023 costs reduces the PVRR cost differential between Scenarios 4 and 5 by $[redacted],[32] and provides no convincing argument for why 2023 costs should be considered in this TAM that forecasts costs for 2024.[33]

Second, many cost assumptions in Scenario 5 are unjustified and counter-intuitive. For instance, Scenario 5's assumed costs for BCC incremental coal inexplicitly go down for years 2027 and 2028.[34] Whereas incremental coal costs were approximately [redacted] per ton in earlier years, in 2027 and 2028 they suddenly, and without reason, drop to only [redacted] per ton.[35] This sudden cost decrease was not addressed by PacifiCorp's Rebuttal or Reply Testimonies. Moreover, the cost per ton of BCC coal in Scenario 5 is significantly less than what was provided in PacifiCorp's Compliance Filing in Order No. 22-389, even though the total tons delivered is identical in each year. Mr. Burgess estimated that aligning the dollar per ton in Scenario 5 with PacifiCorp's compliance filing would increase Scenario 5 costs by $[redacted], which would decrease any cost differential between Scenarios 4 and 5.[36]

Third, Scenario 5 has higher "other generation" (e.g., hydro, wind, etc.) than Scenario 4, even though Scenario 5 also includes higher output from Jim Bridger. PacifiCorp claims that this discrepancy is normal because the model optimized for use of stockpiled coal in different ways

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[32] SC/200 at Burgess/4:1-2.; PacifiCorp Surrebuttal Test. of James Owen, Ex. PAC/900 at Owen/19:13-16 (hereinafter "PAC/900").
[33] PAC/500 at Owen/39:1-8 (merely stating that 2023 costs are aligned with the 2023 IRP).
[34] PAC/902 at Owen/36.
[35] PAC/902 at Owen/36.
[36] SC/200 at Burgess/5:3-9.

across the years, depending on coal production from BCC.[37] This explanation, however, does not address the issue as it does not explain why a scenario with higher output from Jim Bridger would also include higher levels of "other generation." While the difference in "other generation" between Scenarios 4 and 5 is slight after PacifiCorp's re-calculation in Reply Testimony, it still raises questions as to the robustness of the analysis.

Finally, approximately $[redacted] of the differential between Scenarios 4 and 5 accounts for cost differences post-2024.[38] Sierra Club does not dispute that a long-term fuel supply plan should consider costs over the long-term, but the Commission should be cautious of how much weight is given to long-term cost estimates, particularly when it is evaluating the prudency of spending over just a single year, as in the TAM. As in an IRP, many changes can impact long-term costs. For instance, and as discussed more fully below, Inflation Reduction Act incentives could significantly lower reclamation and other fixed costs, which would entirely change the current cost analysis. As a result, while a long-term view is necessary and appropriate, it should be given its appropriate weight in light of the rapidly evolving energy sector.

Considering the above holistically, Mr. Burgess reasonably concluded that the PVRR cost differential between Scenarios 4 and 5 is *de minimis* and the Commission should consider them roughly on par from a cost perspective.[39]

2. 2024 Fuel Cost Differences Between Scenario 4 and 5 are Small and Result from Assumed, Higher Off-System Sales in Scenario 5.

Aside from the PVRR cost comparison between Scenario 4 and 5, the anticipated <u>2024</u> costs between these scenarios also only has slight cost differences. Specifically, PacifiCorp

[37] PAC/900 at Owen/20.
[38] SC/200 at Burgess/4:11-16.
[39] SC/200 at Burgess/5:13-17.

estimated that Scenario 4 would cost approximately $[redacted] more in 2024 than Scenario 5.[40] However, this cost differential does not take into account any of the needed adjustments noted above, and, at any rate, it is not significant compared to PacifiCorp's entire NPC. To put this figure in context, $[redacted] equates to about [redacted] percent of PacifiCorp's estimated wholesale transactions and would be similar to PacifiCorp underestimating wholesale power prices by about $[redacted]/MWh.[41]

Even more noteworthy, this cost differential appears to entirely consist of differences in wholesale sales between Scenarios 4 and 5. PacifiCorp found that 21 percent of the incremental Jim Bridger generation in 2024 under Scenario 5 (compared to Scenario 4) would go to wholesale sales.[42] This equates to $[redacted] in benefits[43]—almost exactly the same price difference between Scenarios 4 and 5 for 2024. While wholesale sales are part of a complete NPC analysis and customers can benefit from wholesale sales, these sales are not guaranteed. If they do not materialize, any cost difference between Scenarios 4 and 5 would be non-existent. Moreover, Sierra Club questions the prudency of encouraging PacifiCorp to produce more coal generation for off-system sales when Oregon is seeking to curb its own greenhouse gas emissions and eliminate coal from rates.

3. The Commission Should Direct PacifiCorp to Adopt Scenario 4 as Its Preferred Scenario.

In light of the above information, two conclusions can be made: (1) Scenario 4 is lower risk than Scenario 5 because it lowers customers' exposure to high-cost Jim Bridger fuel costs, and, in any event, does not [redacted]; and (2) the cost differential between Scenarios 4 and 5 is *de minimis*. As a result, the

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[40] SC/200 at Burgess/5; PAC/900 at Owen/18:7-8.
[41] SC/200 at Burgess/5:22-25.
[42] PAC/500 at Owen/39:18-20.
[43] SC/200 at Burgess/5:27-6:1.

Commission should direct PacifiCorp to adopt Scenario 4 as its Preferred Scenario under the 2023 Jim Bridger LTFSP.

III. Yearly Updates to the LTFSP are Needed and Justified.

As Commissioner Tawney noted at hearing, the LTFSP provides "[redacted]."[44] There is no dispute that energy markets are quickly changing, and PacifiCorp acknowledges that "energy market volatility and changing environmental legislation continues to create uncertainty around the future of Jim Bridger."[45] In this type of environment, a prudent utility continuously evaluates whether its current investments make the most economic sense for ratepayers, and there is no reason why PacifiCorp should skip planning years, particularly at a high-cost plant with a future that the Company itself has described as "uncertain."

Delaying an updated LTFSP until PacifiCorp's next IRP or some other event puts ratepayers at risk that PacifiCorp will continue with a "business as usual" approach even as the economics supporting that approach have rapidly eroded. As one concrete example, reclamation costs account for a significant portion of BCC costs.[46] In fact, PacifiCorp identified differences in reclamation costs as a major difference between each of the six scenarios.[47] In Mr. Burgess's Reply Testimony, he explained that programs like the Energy Infrastructure Reinvestment ("EIR") program, authorized under the Inflation Reduction Act, could meaningfully reduce reclamation and other fixed costs if Jim Bridger transitioned to clean energy.[48] The EIR program

[44] Highly Conf. Tr. at 46:23-25 (Sept. 8, 2023) (Comm'r Tawney).
[45] PAC/902 at Owen/19.
[46] SC/200 at Burgess/6:14-18 (noting that PacifiCorp considers over [redacted] percent of BCC costs to be "fixed," which would primarily consist of reclamation and depreciation expense).
[47] *See, e.g.,* PAC/500 at Owen:37:9-15 (arguing that BCC operating costs are "impacted significantly by mine planning assumptions" and that reclamation costs are recovered during the mine's operating life, meaning that assumed BCC closure dates significantly impact overall costs).
[48] SC/200 at Burgess/6:27-7:2.

is designed to provide low-cost financing to facilitate the retooling, repowering, repurposing, or replacing of fossil infrastructure to reduce greenhouse gas emissions.[49] According to the director of the Loans Program Office at the U.S. Department of Energy, which will distribute EIR financing, qualifying projects could include remediation at coal facilities.[50] The current LTFSP did not consider whether or how the EIR could be used to reduce reclamation or other fixed costs at BCC and thus is already out of date.[51] Allowing years to go by without an updated LTFSP that takes into account this financing, and other potential regulatory changes or other developments, puts ratepayers at risk.

Accordingly, the Commission should require yearly updates to the LTFSP, which would allow PacifiCorp to holistically analyze fueling at the plant with the best available information.

IV. Conclusion

For the reasons set forth above, Sierra Club respectfully recommends that the Commission take the following actions:

1. Direct PacifiCorp to adopt Scenario 4 in its 2023 Jim Bridger Long Term Fuel Supply Plan as its Preferred Scenario; and
2. Direct PacifiCorp to provide a yearly update to its Jim Bridger Long Term Fuel Supply Plan.

Respectfully submitted,

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[49] SC/200 at Burgess/6:25-27.
[50] *Id.* at 6:27-7:2 (citing *Tapping into DOE's $250B of Loan Auth. for Projects that Reinvest in U.S. Clean Energy Infrastructure*, Util. Dive (July 6, 2023), *available at* https://www.utilitydive.com/news/department-of-energy-doe-250-billion-loan-authority-solar-wind-storage-nuclear-clean-energy/653530/#:~:text=Opinion-,Tapping%20into%20DOE's%20%24250B%20of%20loan%20authority%20for%20projects,for%20the%20clean%20energy%20future.)
[51] SC/201, PacifiCorp Response to Sierra Club Data Request 5.2.