Portland General Electric Company
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portlandgeneral.com

July 27, 2022

Via Electronic Filing

Public Utility Commission of Oregon
Attention: Filing Center
P.O. Box 1088
Salem, OR 97308-1088

Re: UE XXX – PGE Amortization of Boardman deferral

Dear Filing Center:

Attached for filing in the above referenced matter please find the following:

- Direct Testimony of
  - Chris Liddle, Jaki Ferchland (PGE / 100) and Exhibits 101, 102, 103, 104

Work papers will be submitted to puc.workpapers@puc.oregon.gov.

Sincerely,

/s/ *Jay Tinker*

Jay Tinker
Director, Regulatory Affairs

BEFORE THE PUBLIC UTILITY COMMISSION

OF THE STATE OF OREGON

UE XXX

PORTLAND GENERAL ELECTRIC COMPANY

Direct Testimony of

Chris Liddle
Jaki Ferchland

July 27, 2022

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I. Introduction

Q. Please state your names and positions with Portland General Electric (PGE).

A. My name is Chris Liddle. I am the Senior Director, Controller and Assistant Treasurer at PGE.

My name is Jaki Ferchland. I am the Manager of Revenue Requirement in Regulatory Affairs at PGE.

Our qualifications are provided at the end of this testimony.

Q. What is the purpose of your testimony?

A. The purpose of our testimony is to: 1) summarize the revenue associated with the Boardman plant closure as approved for deferral in Docket No. UE 394 (UE 394); and 2) provide the annual earnings test results for 2020 and 2021 to determine amortization of this deferral. The earnings tests will be performed in accordance with Public Utility Commission of Oregon (Commission or OPUC) Order No. 22-129 in UE 394.

Q. What was the basis of the Boardman deferral?

A. The Boardman deferral was jointly filed by the Alliance of Western Energy Consumers and the Oregon Citizens' Utility Board and is based on the revenue PGE collected for the Boardman plant from when the plant closed on October 15, 2020, until May 9, 2022, the rate effective date of PGE's subsequent general rate case (GRC), UE 394. The Commission docketed the Boardman deferral as UM 2119 and approved it by Order No. 22-129.

Q. Does this filing address amortization by year or in aggregate?

A. By year. In Order No. 22-129, the Commission specifies that with “a year-by-year method for the three deferrals,[1] we are able to evaluate the costs deferred in a year against the company's earnings in the same year. We find that the approach appropriate for these significant deferrals that extend beyond a year is to match the costs with the earnings for each year.”[2] Specifically, this filing addresses the years 2020 and 2021.

Q. How is your testimony organized?

A. We begin by summarizing the Boardman revenue that was deferred. We then provide the earnings test results for 2020 and 2021 in accordance with the parameters prescribed by Commission Order No. 22-129. Based on the earnings tests, we provide the amounts that PGE proposes for amortization by year. Finally, we provide our qualifications.

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[1] The three reference deferrals are the Wildfire Emergency (Docket UM 2115), Ice Storm Emergency (Docket UM 2156), and Boardman (Docket UM 2119).
[2] Public Utility Commission of Oregon, Order No. 22-129, page 52.

II. Revenue Subject to Deferral

Q. Please summarize the revenue PGE received for Boardman after the plant closure and subject to the UM 2119 deferral.

A. PGE received the following revenue after the Boardman closure:

- $14.0 million from October 16 through December 31, 2020;
- $66.5 million from January 1 through December 31, 2021; and
- $23.6 million from January 1 through May 8, 2022.

Q. What is the basis of these amounts?

A. These amounts are based on the revenue requirement of the Boardman plant as it was included in PGE's 2019 GRC, Docket UE 335 (UE 335). In other words, these are the amounts PGE collected in rates from the time the Boardman plant closed until UE 394 prices went into effect, at which time the Boardman plant was removed from base rates[3]. PGE Exhibit 101 provides details regarding these amounts.

Q. Do all the amounts listed above apply to this amortization filing?

A. No. Only the 2020 and 2021 amounts apply to this filing. This is because PGE has prepared and filed its 2020 and 2021 Results of Operations Reports (ROOs), which are the basis of those years' earnings tests. PGE will submit a 2022 Boardman amortization filing after the 2022 ROO is completed and submitted in the second quarter of 2023.

[3] Approximately $2 million of annualized expenses associated with the Carty reservoir were transferred from Boardman to Carty as the expenses remain and are included in customer prices approved by Order 22-129.

Q. Has PGE made any adjustments to derive the Boardman revenue requirement?

A. No. The amounts listed above and in Column C of PGE Exhibit 101 are Boardman costs as they were included in PGE's revenue requirement for UE 335 and collected in base rates until May 9, 2022, the rate effective date of UE 394.

III. Earnings Test and Request for Amortization

A. Defining the Earnings Test

Q. Please describe the basis of your earnings test.

A. The earnings test compares PGE's actual earnings test return on equity (ROE) to a target ROE.[4] For the Boardman deferral, Commission Order No. 22-129 specifically identified the target ROE as PGE's authorized ROE, which for 2020 and 2021 was 9.5%,[5] PGE is required to refund deferred amounts for Boardman only to the extent PGE's earnings are above 9.5% and refunding of such amounts does not cause PGE's earnings to drop to 9.5% or below.

Q. Did PGE prepare separate earnings tests for 2020 and 2021 or one combined earnings test?

A. As noted in Section I above, Commission Order No. 22-129 specifies that PGE's emergency deferrals are subject to an earnings test for the specific calendar year in which the costs were incurred. Consequently, we apply separate year-by-year earnings tests for these deferrals.

Q. How did PGE determine its earnings test ROE for 2020 and 2021?

A. PGE determined its earnings test ROEs by using our annual ROO as filed for calendar years 2020 and 2021.

Deriving the earnings test ROE involves the following steps and reflects ROO categories as listed in Figure 1, below:

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[4] To simplify terminology, this testimony will refer to the earnings test ROE as specified by Commission Order No. 22-129 as the "target" ROE, and the final actual result to compare that against, as calculated in PGE's Results of Operation Report, as the "earnings test" ROE.
[5] See Commission Order 18-464, Appendix A, page 2.

Figure 1
Categories of Results in ROO

Actual Utility Results	Type I Accounting Adjustments	Regulated Utility Results	Type I Regulatory Adjustments	Regulated Adjusted Results	Type I Deferral Reversals	Regulated Adjusted with Deferral Reversals
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		(1+2)		(3+4)		(5+6)

Steps to derive the earnings test ROE based on the ROO categories (Columns) listed in Figure 1:

- Column 1 reflects PGE's actual accounting results, which tie to PGE's Federal Energy Regulatory Commission Form 1;
- Column 2 applies Type I Accounting Adjustments to derive Column 3, which provides the Regulated Utility Results;
- Column 4 applies Type I Regulatory Adjustments to derive Column 5, which provides the Regulated Adjusted Results; and
- Column 6 reverses all applicable costs that have been deferred during the year to derive Column 7, which is the Regulated Adjusted Results with Deferral Reversals.

In summary, Column 7 provides the earnings test ROE that can be compared to the target ROE. PGE may be required to refund in rates Boardman deferred amounts such that earnings test ROE does not drop to or below the target ROE of 9.5%. We provide the complete 2020 and 2021 ROOs as PGE Exhibits 102 and 103.

Q. Are these the same steps PGE used the last time it filed for amortization of a large deferral?

A. No.

Q. When was the last time PGE filed for the amortization of a large deferral and what steps were used then?

A. PGE's last large deferral amortization filing occurred in 2014 in Docket No. UE 292. In that filing for a 2013 earnings test, PGE reversed the applicable costs that had been deferred during the year in Column 2 as a part of the Type 1 Accounting adjustments. We then applied the Type 1 Regulatory adjustments in Column 4, resulting in a Column 5 earning test ROE value inclusive of the expenses to be deferred. We then reversed the expenses in Column 6 to show the result of fully collecting the deferral in Column 7.[6]

Q. Why did PGE not apply that treatment to this filing?

A. On April 15, 2022, PGE met with OPUC Staff to discuss the Company's filed 2020 ROO. The primary reason for the meeting was to address questions from Staff about the Type 1 adjustments for deferred amounts. In an April 4, 2022 email to PGE, Staff indicated that:

> "Staff believes PGE is not in compliance with ROO instructions using FERC standard accounting and long-standing PUC practices for the ROO. We are open to resolving this issue with PGE; alternatively, staff could request an investigation be opened into PGE's 2020 ROO filing. There are two issues, treatment of the PCAM[7] and treatment of the deferrals."

At that April 15 meeting, Staff adamantly disagreed with any treatment that would adjust the deferred amounts prior to Column 5 despite that being consistent treatment with PGE's most recent earnings review of a major deferral in UE 292.[8] Without such an adjustment,

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[6] *See* Docket UE 292; In the Matter of Portland General Electric Company, Request for Authorization to Defer Costs Associated with Four Capital Projects, Exhibits 102 and 103. *See also* Docket RE 119, PGE's 2013 Results of Operation Report, pg. iii (Describing Type 1 Utility Accounting Adjustments to reverse Capital Project Deferral: "This entry reverses the preliminary accrual made for PGE's four capital projects deferral to reflect the regulated utility actual results with no deferral effect.") This same process was also used in Docket No. UE 275 for amortizing the 2012 deferral of the four capital projects.

[7] PGE agreed with Staff's position on the treatment of the purchased cost adjustment mechanism (PCAM) in the ROO and subsequently reversed this treatment in its April 29, 2022 supplemental filing to its 2020 ROO.

[8] *See* November 6, 2014 Staff Report in Docket No. UE 292 (Staff conducted an earnings review that recognized PGE's regulated adjusted ROE calculation, which included a deferral adjustment).

Column 5 shows a much higher ROE because it does not include the expenses from the emergency events.

Q. Do you agree with Staff's position regarding the ROO reflecting standard FERC accounting, particularly as it relates to Column 5?

A. No. PGE's ROO has consistently included Type I Accounting adjustments (Column 2) that revise the Actual Utility Results (Column 1) to establish the Regulated Utility Actuals (Column 3). The largest of these annual entries moves sales for resale and other production-related revenues from Revenue to Net Variable Power Costs. This is done to make Column 3 consistent with <u>a rate case format,</u> but it also means that Column 3, and Column 5 by extension, are <u>not</u> in strict alignment with standard FERC accounting. Consequently, accounting entries to reverse applicable deferred amounts are most appropriately included in Type I Accounting adjustments (Column 2), which was how PGE presented its earnings tests in Dockets UE 196, UE 275 and UE 292. Further, no party to those dockets questioned that approach, and for UE 275 and UE 292 in particular, the Commission approved full amortizations based on Staff's recommendations and PGE's earnings tests, which included the deferred costs in the ROO calculations.[9]

Q. Given Staff's position during the April 15 meeting about the ROO, what did PGE propose instead?

A. We proposed to leave Column 5 as Staff insisted (without the expenses associated with the deferrals) and to add a different Column 6 and Column 7, which include the deferred expenses and, therefore, would reflect the earnings test ROE. With the goal of maintaining consistency

[9] See Commission Order Nos. 10-051 (UE 196; see Section V, Part A.1., "Undisputed Issues – Earnings Test"), 13-440 (UE 275), and 14-394 (UE 292).

with the principles and methods applied in previous cases where PGE had a large outstanding deferral, we viewed this approach as reasonable and appropriate given Staff's insistence with respect to Type 1 adjustments.

Q. After applying the ROO formatting that accommodated Staff, what did PGE determine the earnings test ROE to be for calendar years 2020 and 2021?

A. The earnings test ROE was 9.47% for 2020 and 5.19% for 2021, as found in Column 7 of the ROO.

Q. What would the earnings test ROE results be if you relied solely on Column 5 of the ROO, as Staff wanted, and did not include the relevant deferred expense?

A. The Column 5 earnings test ROEs would incorrectly show 10.40% for 2020 and 8.72% for 2021.

Q. Why are the Column 5 ROE numbers of 10.40% and 8.72% incorrect?

A. They are incorrect because they do not include all the expenses for which the earnings test is intended to evaluate. In other words, the Commission can only evaluate a utility's ability to absorb a deferred cost if that cost is actually included in the corresponding ROE result. We believe this is consistent with the Commission's own perspective as stated in Order No. 22-129: "application of the earnings test must consider how a utility's earnings would be affected if it had to instead absorb the deferred expenses."[10]

If that cost is absent from Column 5, then the Column 5 ROE will be artificially high and provide an erroneous indication about the utility's ability to absorb the cost. Conversely, with the cost properly reflected in the ROE, then the Commission has an accurate indication of the impact from not authorizing recovery.

[10] Order No. 22-129, p.54, paragraph 1.

Q. Why then is it important to include Columns 6 and 7, as described, in this ROO?

A. It is important because Column 5 in its current form provides an incomplete and misleading ROE result depending on how much or little a utility defers in a year out of the possible total approved deferral amounts. A utility has the discretion based on the facts and circumstances surrounding an event to choose or not choose to defer the amounts associated with a filed deferral application. If a utility chooses to not defer any amounts until they have the certainty of an order authorizing amortization, then Column 5 would provide an earnings test ROE that would be the same as Column 7, because Column 6 would have only zeros and Column 7 would, therefore, equal Column 5.

However, if a utility assesses that collection or refund is warranted and likely, and therefore, elects to defer certain approved amounts not yet subject to amortization, then Column 5 would have an inaccurate ROE for earnings test purposes. This is because the ROE in Column 5 would be based on amounts residing on the utility's balance sheet assumed to be approved for recovery in the future.

Column 6 normalizes for the differing decisions made by utilities, therefore, only Column 7, in this case, would provide an accurate and consistent basis for performing the earnings test.

Q. Please give an example.

A. Consider two utilities that have different policies for treating the same type of deferral event whose incremental cost amounts to 50 bps of ROE. For simplicity assume also that both utilities would earn their authorized 9.5% ROE absent that deferral event and that authorized ROE is the specified target ROE for this deferral. If Utility 1 defers the incremental event cost, its Column 5 ROE will equal 9.5% because the deferred accounting moves the event cost out of the income statement and onto the balance sheet for later amortization. If Utility 2 chooses to not defer any of the incremental event cost pending prudence review and authorization for amortization, its Column 5 ROE will equal 9.0% because all the incremental event costs are still on the income statement. Basing the earnings test on Column 5 would provide an inconsistent result where, all else equal:

- Utility 1 would not be allowed to defer or amortize any of the incremental event cost because the Column 5 ROE equals the target ROE; and
- Utility 2 would be allowed to defer and amortize the entire incremental event cost because the Column 5 ROE is 50 bps below the target ROE and equals the impact of the incremental event cost.

This inconsistent outcome would be inappropriate for two similarly situated utilities, thus the need for Columns 6 and 7 to provide a clear assessment of results for consideration in the application of an earnings test.

Q. How do you correct for this?

A. To correct the potentially ambiguous and inconsistent results of Column 5, we need to incorporate all deferred costs (i.e., apply a Column 6 adjustment that reverses the deferral entries) so that Column 7 provides a true earnings test ROE. Based on this approach, the Column 7 ROE for both utilities in the above example would equal 9.0% and both would be allowed to defer and amortize prudently incurred incremental event costs. In summary, Column 7 provides the consistent, unambiguous, and accurate earnings test ROE for the emergency deferrals as shown in Figure 2, below.

Figure 2
Example Results in ROO

	Column 5 Regulated Adjusted ROE	Column 6 Reverse Deferrals (ROE Impact)	Column 7 Earnings Test ROE
Utility 1	9.5%	(0.50%)	9.0%
Utility 2	9.0%	0.0%	9.0%

Q. Does PGE have deferral reversing entries in every year's ROO?

A. No. Although PGE has a number of deferrals as discussed in PGE Exhibit 2300 of Docket UE 394, deferral reversals in the ROO are infrequently needed for the following reasons:

- Few of PGE's deferrals are subject to an earnings test, but instead are more typically based on balancing account mechanisms (e.g., Multnomah County Business Income Tax and Metro Supportive Housing Services Tax), automatic adjustment clauses (e.g., demand response pilots), and on-going deferrals or ones that specifically preclude earnings tests (e.g., R&D Tax Credit, Intervenor Funding, and OPUC Fee).
- PGE does not defer certain amounts because a Commission decision on PGE's deferral application is pending at the time of the filing of the ROO on May 1. An example of this is the 2017 deferral request for restoration costs for the four Level III events of that year. A Commission decision in that docket was not issued until August of 2019.
- Several pilots with authorized deferrals (e.g., transportation electrification) have only begun operations in recent years and are either limited in scale and/or have had PGE's ramping efforts limited by the impacts of the COVID lockdowns. Consequently, these deferrals have incurred minor costs whose reversals would have had little or no impact on the earnings test results.

Q. Are the varying treatments you describe above in conformance with the FERC Uniform System of Accounts (USOA)?

A. Yes. The FERC USOA is the prescribed system of utility accounting at the federal level. It outlines the basic account descriptions, instructions, and accounting definitions that an electric utility must follow to maintain its books and records. While it is detailed in the Code of Federal Regulations,[11] the Commission has adopted rules requiring PGE to maintain records consistent with the USOA.[12] The described treatments are both acceptable and in conformance with the USOA.

Q. What directs an electric utility to file a ROO each year?

A. Oregon Administrative Rule 860-027-0070 states the following:

> Annual Reports must be submitted by electric, gas, and steam heat utilities. The report must be submitted on or before May 1, using the most current forms approved by the Commission. For energy utilities, the annual reports include but are not limited to the FERC 1 (including the Oregon Supplement) or the FERC 2 (including the Oregon Supplement), and the Results of Operations.

Q. What is the "most current form" referenced above?

A. The utility is provided a form for completing its filing of the FERC Form 1 for its Annual Report and Oregon Supplements, but it does not receive a form for its results of operation report.

Q. Is PGE aware of any other statute, administrative rule, or prior commission order directing electric utilities to complete their results of operation analysis using specific methods?

[11] 18 CFR Part 101.
[12] OAR 860-027-0045.

A. No. Utilities received a letter with guidance from a member of Staff in 1992. This was the last direction received. Not only was this letter not from the Commission or approved by the Commission to PGE's knowledge, but it is also 30 years old, and much of it is no longer applicable.

Q. Is PGE, therefore, "out of compliance" by making a recommendation in this filing as to what expenses should be included when determining the earnings test ROE?

A. No.

B. 2020 and 2021 Earnings Tests

Q. What are PGE's earnings test results for 2020?

A. As provided in PGE Exhibit 102, PGE's Column 7 earnings test ROE is 9.47% for 2020.

Q. What does this imply for the Boardman deferral?

A. PGE's 2020 earnings test ROE of 9.47% is lower than the 9.5% target ROE as specified by Commission Order No. 22-129. Consequently, PGE should not amortize any of the 2020 Boardman revenue.

Q. PGE has also filed for amortization of the 2020 Labor Day Wildfire Emergency and the 2021 Ice Storm Emergency. Do these filings impact the result of the earnings test for Boardman in 2020?

A. No. PGE is not collecting any amounts for the Wildfire Emergency for 2020, and the Ice Storm did not occur until 2021. Therefore, the earnings test ROE for 2020 remains at 9.47% and is below the 9.5% target ROE.

Q. What are PGE's earnings test results for 2021?

A. As provided in PGE Exhibit 103, PGE's Column 7 earnings test ROE is 5.19% for 2021.

Q. What does this imply for the Boardman deferral?

A. PGE's 2021 earnings test ROE of 5.19% is 4.31% (or 431 basis points) lower than the 9.5% target ROE specified by Commission Order No. 22-129. Consequently, PGE should not defer or amortize any of the 2021 Boardman revenue either.

Q. Do the amortization filings for the Wildfire Emergency and Ice Storm Emergency impact the result of earnings test for Boardman in 2021?

A. No. PGE incurred $97.6 million of expense for the emergency events in 2021, which is equal to 271 basis points of ROE. Should all of these expenses be deemed prudent and recoverable, PGE's earnings test ROE would only increase to 7.90%, which is still 160 basis points below the target ROE of 9.5%.

Q. Do these represent the final earnings test results for 2020 and 2021?

A. Yes for 2020 and no for 2021. PGE's earnings test results are not complete until the Commission has made a final determination in the power cost adjustment mechanism proceeding (PCAM) for that year. This occurs because a decision in the PCAM could result in power costs being added or removed from PGE's regulatory results, and hence the earnings test ROE. Because the 2020 PCAM is complete, there are no further adjustments to PGE's 2020 earnings test ROE. The 2021 PCAM, however, will not receive a final Commission order until the third quarter of 2022, at which time PGE's final 2021 earnings test ROE will be established.

Q. Will a 2021 PCAM decision likely impact the earnings test result for the Boardman deferral?

A. No. The 5.19% represents PGE's ROE including an estimate of PCAM collections, as recognized in PGE's 2021 financial results. The difference between the current 2021 earnings test ROE, including estimated PCAM collections, and target ROE is so large that there is no possibility a decision in the 2021 PCAM will impact the earnings test ROE such that it will allow any amount of 2021 Boardman revenue to be eligible for amortization.

Q. Did PGE review earnings for this deferral using any other method?

A. Yes. For illustrative purposes only, we analyzed earnings over a rolling 12-month period beginning from October 2020, the month Boardman was shut down, to understand how the post-closure Boardman revenues match the earnings of the equivalent period. This effort replicates the rolling earnings test as applied in Docket UE 196, the last occurrence where PGE filed for amortization of a major deferral spanning multiple years.

Q. Why did PGE not provide this illustrative data in UE 394?

A. PGE could not provide this data in UE 394 because the 2021 results of operations report had not yet been filed, nor had PGE's 2021 FERC Form 1, which serves as the basis of the results of operations report.

Q. What was the result of examining earnings on a rolling rather than calendar basis?

A. The results are available in PGE Exhibit 104, and they show that PGE's earnings test ROE does not even exceed 5.93% for any rolling 12-month period from October 2020 through December 2021, in contrast to the 9.47% for the 2020 calendar year.

Q. What conclusions does the company draw from this result?

A. This highlights the abnormality of PGE's 2020 earnings in the anomalous year, which included multiple "black swan" events. It further reflects that actual earnings achieved by the company were markedly low over the period that matches the timeframe of post-closure Boardman revenues.

C. Request for Amortization

Q. What do you request of the Commission in this proceeding?

A. Based on the earnings test results listed above for 2020 and 2021, we request that the Commission find that there are zero amounts of Boardman revenue to amortize for those years.

IV. Qualifications

Q. Mr. Liddle, please state your educational background and experience.

A. I received a Bachelor of Science in Business Administration with a finance emphasis from the University of Oregon in 2004 and a Master of Business Administration from Portland State University in 2009. I joined PGE's Corporate Finance Department in 2005 and have held a wide array of roles including Investor Relations, Treasury, Financial Planning & Analysis, Forecasting, Regulatory Affairs, and Utility Asset Management. In my current role I am responsible for Accounting, Reporting, SOX, Tax, Financial Operations, Finance Systems, and Treasury. I also serve on the Board of Trustees for the Portland State University Foundation including its Finance and Audit Committees.

Q. Ms. Ferchland, please state your educational background and experience.

A. I received a Bachelor of Science in electrical engineering and a Master of Business Administration both from the University of Denver and a Post-Baccalaureate in accounting from Portland State University. I joined PGE in 2015 as an Investor Relations Analyst and transitioned to the Principal Treasury Analyst role in 2017 where I worked with PGE's revolving credit facility, debt issuances, and annual rating agency presentations. I became the Manager of Revenue Requirement within Rates and Regulatory Affairs in November 2019.

Q. Does this conclude your testimony?

A. Yes.

List of Exhibits

PGE Exhibit	**Description**
101	Boardman Revenue Requirement
102	PGE 2020 Results of Operations Report
103	PGE 2021 Results of Operations Report
104	PGE 2020-2021 Rolling ROO

Exhibit 101 is voluminous in size and provided only in electronic format

Exhibit 102 is voluminous in size and provided only in electronic format

Exhibit 103 is voluminous in size and provided only in electronic format

Exhibit 104 is voluminous in size and
provided only in electronic format

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE XXX

In the Matter of PORTLAND GENERAL ELECTRIC COMPANY Amortization of Boardman Deferral.	**NOTICE OF PORTLAND GENERAL ELECTRIC COMPANY'S DIRECT TESTIMONY AND EXHIBITS**

On July 27, 2022, Portland General Electric Company (PGE) filed Direct Testimony and Exhibits with the Public Utility Commission of Oregon (Commission or OPUC) to support PGE's Request for Amortization of Boardman Deferral.

Persons who wish to obtain a copy of PGE's Direct Testimony and Exhibits will be able to access it on the OPUCwebsite.

Dated this 27th day of July, 2022.

/s/ Jay Tinker

Jay Tinker Ferchland
Director, Regulatory Affairs
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CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the **Direct Testimony and Exhibits of Portland General Electric Company**, to be served by electronic mail on those parties whose email addresses appear in the attached service list for OPUC Docket No. UE 394.

Dated at Portland, Oregon, this 27th day of July, 2022.

/s/ Jay Tinker

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