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September 30, 2016

Via Electronic Filing and U.S. Mail

OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX: 1088
SALEM OR 97308-1088

RE: Docket No. UM 1789 – In the Matter of
PORTLAND GENERAL ELECTRIC COMPANY,
Application to Defer Revenues and Costs Related to the Environmental Remediation Costs Recovery Adjustment, Schedule 149.

Enclosed for filing is Staff's Reply Testimony:

- Exhibit 100 – 103 (Mitchell Moore)
- Exhibit 200 – 210 (Scott Gibbens)
- Exhibit 300 – 305 (Marianne Gardner)
- Exhibit 400 – 107 (Rose Anderson)

The following Confidential pages/exhibits are being mailed to parties who have signed Protective Order No. 16-270:

- Exhibit 100 pages 7, 10, 12 – 15, 17, 22 – 23, 34, 42 & 51
- Exhibit 103
- Exhibit 200 pages 7 – 8, 10 -14, 20 – 25
- Exhibit 203 to Exhibit 206
- Exhibit 207 to Exhibit 209 (electronic)
- Exhibit 304
- Exhibit 400
- Exhibit 403 and
- Exhibit 405

A Certificate of Service and Service list are included with this filing.

/s/ Kay Barnes
kay.barnes@state.or.us

CERTIFICATE OF SERVICE

UM 1789

I certify that I have, this day, served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 30th day of September, 2016 at Salem, Oregon

Kay Barnes

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CASE: UM 1789
WITNESS: MITCHELL MOORE

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 100

Reply Testimony

REDACTED
September 30, 2016

Q. Please state your name, occupation, and business address.

A. My name is Mitchell Moore. I am a Senior Utility Analyst employed in the Energy Rates, Finance and Audit Division of the Public Utility Commission of Oregon (OPUC). My business address is 201 High Street SE, Suite 100, Salem, Oregon 97301.

Q. Please describe your educational background and work experience.

A. My witness qualification statement is found in Exhibit Staff/101.

Q. What is the purpose of your testimony?

A. My testimony discusses PGE's three consolidated filings, which include an application for a property sale, a deferral, and an automatic adjustment clause mechanism to recover costs associated with PGE's environmental remediation obligations. I present PGE's proposal, Staff's review and analysis, and Staff's recommendations.

Q. Did you prepare any exhibits for this docket?

A. Yes. I prepared the following exhibits:

Exhibit Staff/101	Witness Qualification Statement
Exhibit Staff/102	Company response to Staff DR's: 1, 3, 4, 7, 8, 10, 12, 15, 23, 25, 28, 29, 35, 36, 44, and 81.
Exhibit Staff/103	Confidential Company response to Staff DR's: 7, 8, and 27.

Q. How is your testimony organized?

I. OVERVIEW OF CONSOLIDATED FILINGS

Q. Please provide a general overview of this consolidated docket.

A. UM 1789 is a consolidated docket that includes UP 344 and UE 311. The three filings are interrelated in that they all involve Portland General Electric's (PGE or Company) recovery of future restoration and remediation costs related to the Portland Harbor Superfund Site located in and along the Willamette River. PGE anticipates incurring environmental damages in two forms, Natural Resource Damages (NRD) assessed by the Natural Resource Trustees, which PGE expects in the second quarter of 2017, and environmental remediation damages assessed by the U.S. Environmental Protection Agency (EPA), which PGE expects in 2020.

In anticipation of its liability for NRD damages expected in 2017, PGE proposes to build an environmental restoration project on 62 acres of utility property that would offset its NRD damages as well as a significant amount of its environmental remediation liability. To accomplish this, PGE seeks authority to place a deed restriction on utility property and sell credits that would be generated from the restoration project (UP 344). PGE requests to defer into a regulatory balancing account the costs and revenues associated with the restoration project, as well as other costs and revenues related to environmental remediation (UM 1789). Further, PGE proposes an automatic adjustment clause (AAC) mechanism for the treatment of these deferred environmental remediation-related costs and revenues associated with the Portland Harbor Superfund Site (UE 311).

Q. Please provide a summary of each individual docket.

A. First, in UP 344, PGE requests approval to place a deed restriction on utility property located within the Portland Harbor Superfund Site for the purpose of developing an environmental restoration project called the Harborton Restoration Project (Harborton Project), as a means to generate specific restoration "credits" that can be monetized and used to pay off PGE's NRD obligation and offset other remediation costs. The proposed Harborton Project and credits fall under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) regulatory scheme that requires natural resources be restored to their original state. PGE anticipates that the Harborton Project will generate a significant amount of additional restoration "credits" beyond PGE's anticipated NRD liability. PGE proposes to sell these surplus restoration credits to other liable parties and apply the surplus revenue toward the environmental remediation liability that it expects to incur from the EPA between 2020 and 2022. In other words, PGE estimates that additional proceeds will be generated by the Harborton Project, above its NRD liability that PGE will be able to apply toward its EPA liability. After the Harborton Project is deemed by the Trustees to be complete, which is estimated in 2028, a conservation easement would replace the deed restriction on the property and would run in perpetuity; thus, the property could never be used for any purpose other than the restored site.

Second, in UM 1789, PGE requests approval of a deferral, with specialized accounting treatment, to separately account for the costs and revenues generated by the Harborton Project, costs related to remediation of the Portland Harbor Superfund site and Downtown Reach site, costs related to pursuing insurance recoveries, and insurance proceeds received. PGE explains in its filing that the deferral was filed specifically to support the Schedule 149 environmental cost recovery mechanism proposed in UE 311, and that deferred amounts would be amortized in accordance with the process described in UE 311.

Third, in UE 311, PGE seeks approval of a cost recovery mechanism called the PHERA, which is an automatic adjustment clause (AAC) designed to ensure that all environmental remediation-related revenues, i.e., restoration credit sales (DSAYs) and insurance proceeds, are used to offset environmental remediation-related costs, i.e., NRD and environmental remediation obligations. The mechanism would apply revenues evenly across the life of the Harborton Project (through 2028) for the purpose of intergenerational equity, while costs that were not offset by annual allocated revenues and PGE over earnings, would be amortized over a five-year period. The proposed mechanism includes numerous special conditions, including a prudence review of all costs and revenues and an earnings test, which are discussed in detail in "IV. UE 311." PGE notes that the structure of the proposed mechanism and its underlying principles were informed by and modeled after Northwest Natural's environmental cost recovery mechanism, the SRRM.[2]

[2] See Docket No. UM 1635, Order No. 15-049 (Feb. 20, 2015).

Although PGE's three filings are interwoven, Staff's testimony discusses each filing individually for clarity. The Commission may choose to approve individual filings only, or the consolidated filing as a whole.

Q. What are Staff's Key findings and recommendations regarding the mechanism?

A. Assuming that the following provisions are incorporated into PGE's proposal, Staff recommends that the Commission approve the UE 311 filing:

1) PGE should collect $2 million in customer rates to smooth out rate volatility because costs and revenues are incurred and received in "lumpy" amounts over varying periods of time.
2) There is currently $3.56 million embedded in base rates for environmental remediation activities in Portland Harbor and Downtown Reach. This amount should be recognized as revenue in the PHERA each year until removed from base rates.
3) A fixed $5.5 million in costs should be exempt from the earnings test at this time, which may be revised up or down in the future when more is known about actual costs and revenues.
4) The Commission should review the PHERA mechanism every two years, with any proposed changes every three years to ensure it is working to the benefit of customers and the company.
5) The effects of taxes and interest should be incorporated into the PHERA mechanism.

6) The environmental remediation costs associated with the [redacted] properties that have not been documented as ever having provided service or benefit to customers should not be included in the PHERA mechanism until further documentation is provided.

7) Environmental remediation assessments, recorded separately for each individual property, should be identified and reported to the Commission when the information becomes available to PGE.

II. UP 344 – DEED RESTRICTION ON UTILITY PROPERTY AND AUTHORITY TO SELL DSAYS

A. PGE'S Proposal

Q. Please provide an overview of the CERCLA regulatory framework governing PGE's proposal, including the role of Trustees and DSAYs.

A. The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA or Superfund) requires the cleanup of contaminants that are released and pose a threat to human health and the environment. In addition to "cleanup" or "remediation," CERCLA also requires that natural resources be "restored" to the state they were in before contamination. The Trustee Council (Trustees)[1] is the governing body that oversees restoration-related damages. The Trustees seek compensation from parties responsible for the release of contaminants, if the natural resources affected are not restored, in the form of

[1] The Trustee Council for the Portland Harbor Superfund Site includes representatives from the National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife, and several Oregon Confederated Tribes. PGE/100, UE 311/Behbehani-Brown-Stevens/7.

Natural Resource Damages (NRD). The amount of NRD is measured in Discount Service Acre Years (DSAYs). Thus, after determining the total amount of NRD damages within a site, the Trustees allocate liability to each potentially responsible party (PRP) expressed in "DSAY debits."

A PRP may fulfill its NRD obligation by paying off the Trustees or by developing a restoration project for which the Trustees will issue "DSAY credits" that the PRP-developer may use to offset its NRD liability and/or sell to other PRPs.[2] PGE proposes to take the latter approach, i.e., to build a 62-acre restoration project to help offset its NRD liability. Importantly, the mitigation of NRD is discounted three percent each year, meaning that mitigation of natural resource damages in year 2017 is worth three percent more than the same mitigation performed in 2018, thus providing an incentive for PRPs to act early.

Q. Please describe PGE's Harborton Project proposal.

A. PGE owns 78.5 acres of riverfront property within the Portland Harbor Superfund site. PGE plans to design, construct, monitor, and maintain a natural resource damage assessment restoration project, i.e, the Harborton Project, on this property. The Harborton Project will utilize 62.8 acres of the property, most of which is currently open space and prone to flooding. The remainder of the property houses a substation and pole yard, but is not affected by the proposed project.[3] The restoration project includes removal of fish passage barriers, enhancement of fish habitat and riparian habitat characteristics, preservation

[2] UE 311/PGE/100, Behbehani-Brown-Stevens/7
[3] See UP 344 filing at 1.

and enhancement of wetland areas, enhancement of shoreline, site re-vegetation, and more.

The timeline for the Harborton Project completion is expected to run through 2028, with varying amounts of DSAY credits released over that period in set intervals as long as the project meets pre-determined performance milestones set by the Trustees. At the end of the 10-year period, PGE intends to convert the deed restriction on the property into a conservation easement as required by the Trustees, and turn the ongoing maintenance required for the life of the site over to a non-profit entity.[4] The property will not be open for public use; rather, it must be maintained as a restored natural area in perpetuity.

The Harborton Project costs identified by PGE in its filing include design and construction costs; legal fees; administration costs; development costs; operating, monitoring, and maintenance costs; an endowment fund if monitoring and maintenance is outsourced; and the decrease in land value as a result of placing a conservation easement on the land. PGE estimates that the total cost of the Harborton Project will be between \$12.5 million and \$15.5 million, which is inclusive of approximately \$10-12 million in development costs, \$1-2 million in O&M costs over the life of the project (through 2028), and \$1.5 million in endowment costs.[5] Additionally, PGE estimates that placing the

[4] Staff Exhibit/102 – PGE response to Staff DR Nos 28 and 29.
[5] See UP 344 filing at 3.

proposed conservation easement on the property will devalue the property by $3,232,000.[6]

Thus, PGE filed UP 344 seeking authority to place a deed restriction on the 62-acre property so that it may begin construction of the Harborton Project in early 2017. As noted above, the deed restriction and eventual conservation easement is required by the Trustees as a condition of restoration project approval. Additionally, PGE seeks authority to sell DSAY credits generated from the Harborton Project.

Q. Describe the Company's proposal regarding the sale of DSAY credits.

A. DSAY credits generated by a restoration project reflect quantified units of restored natural resources.[7] [redacted], PGE anticipates that the Harborton Project will generate approximately [redacted] DSAY credits over a period of ten years.[8] PGE indicated that it cannot estimate its own DSAY liability at this time, but is confident that their DSAY credits will exceed their NRD liability given that the Trustees have identified [redacted][9] for the Portland Harbor, which includes approximately 100 PRPs.[10] Therefore, PGE estimates that the Harborton Project will generate enough DSAY credits to pay off its NRD obligation, with a significant remainder that can be sold to other liable parties. PGE proposes to use the anticipated revenue from excess DSAY credits to offset project

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[6] See UP 344 filing, Att I-1 at 2 (however, PGE's response to Staff DR 4 indicates a slightly higher devaluation calculation of $4.2 million); UP 344 filing at 9 (original book cost of property is $405,674).
[7] See UE 311/PGE/100, Behbehani-Brown-Stevens/6.
[8] Staff Confidential Exhibit/103 PGE confidential response to Staff DR No. 7.
[9] Staff Confidential Exhibit/103 PGE confidential response to Staff DR No. 7.
[10] Staff Exhibit/102 – PGE response to Staff DR No. 10

development and operational costs, associated legal expenses, and importantly, environmental remediation costs assessed by the EPA in 2020.

<u>B. Staff's Analysis</u>

Q. What standard does the Commission rely on to evaluate PGE's property sale request?

A. The UP 344 filing is governed by ORS 757.480(a) and (b), and OAR 860-027-0025. Staff reviews transactions under ORS 757.480 to ensure that they are consistent with the public interest, i.e., cause no harm to the public. Staff also reviews the scope and terms of the agreement, allocation of gain, public interest compliance, and records availability.

Q. What did Staff consider when evaluating whether the development of the Harborton Project is in the public interest?

A. Staff considered whether the total estimated DSAY revenues would be greater than the total cost of the Harborton Project, the likelihood that a market for PGE DSAY credits develops, the likelihood that DSAY revenues would offset additional environmental obligations, the value of the property if sold unencumbered at market price, and the risks of the Harborton Project borne by customers.

Q. How is the monetary value of DSAY credits determined?

A. The actual market value of DSAY credits is currently unknown and will develop over time as a function of supply and demand. The Trustees assess liability to PRPs in terms of DSAYs, and they have estimated that the cash-out value for one DSAY credit is worth [redacted].[11] In other words, a PRP could pay off its NRD liability by paying [redacted] per DSAY (the "cash-out" value) to the Trustees. Alternatively, a PRP could purchase DSAYs from restoration project developers, such as PGE. For example, [redacted] purchased DSAYs from a PRP developer for [redacted] per DSAY.[12] Finally, PRPs could design and develop their own restoration project (as PGE is proposing) to satisfy their NRD obligation.

Q. What is the incentive for PRPs to purchase DSAYs from PGE, rather than just cashing out at [redacted] per DSAY?

A. The Trustees estimated the DSAY cash-out price as a blended price of within-harbor and out-of-harbor expected DSAY prices. PRPs can satisfy their NRD obligation using up to 50 percent of DSAYs produced outside of the Portland Harbor Superfund Site. PRPs would have an incentive to purchase DSAYs from PGE if they can purchase them at a price where the melded price of in-harbor and out-of-harbor DSAYs is less than or equal to the Trustees cash-out price.[13] PGE asserts that the estimated market value of [redacted] per DSAY is a conservative estimate.[14]

Q. What is the assurance that the market value for DSAY credits produced by the Harborton project will be near the [redacted] cash-out price?

A. The Trustees determine the total number of DSAY liability per site and per PRP, as well as the number of DSAYs that an individual project will produce. It also

[11] Staff Confidential Exhibit/103 PGE confidential response to Staff DR No. 7.
[12] Staff Confidential Exhibit/103 – PGE confidential response to Staff data request No. 7
[13] Staff Confidential Exhibit/103 – PGE confidential response to Staff data request No. 8
[14] Staff Confidential Exhibit/103 - PGE confidential response to Staff data request No. 8.

limits the total number of projects that develop DSAYs within the Superfund site area. The market price is affected by the supply and demand for DSAYs at any given time. Thus, the Trustees try to roughly match the demand for DSAYs with the number of DSAYs generated by projects. [15] Currently, the Trustees have indicated in a memorandum that they are currently not accepting any more submissions for DSAY projects and are limiting the number of projects within the harbor to six, which includes PGE's proposed Harborton Project.[16]

Q. What is PGE's NRD obligation relative to the total NRD liability in the Superfund Site?

A. PGE's NRD liability is unknown at this point. As discussed above, PGE expects to receive its DSAY obligation in the second quarter of 2017. The Trustees have currently identified [redacted] DSAYs of NRD liability for the entire Portland Harbor, and based on the project design, the Trustees have forecasted that the Harborton project will generate approximately [redacted] DSAYs.[17] Although PGE does not know its DSAY obligation at this time, it expresses much confidence that it will be significantly less than the value of DSAYs that will be generated by the Harborton Project, such that there will be excess revenues to cover the costs of project development, maintenance and on-going monitoring, in addition to offsetting a "significant portion" of its environmental remediation costs.[18] Given that the DSAY allotment for the Harborton Project is

[15] Staff Confidential Exhibit/103 - PGE confidential response to Staff DR No. 8.
[16] Staff Confidential Exhibit/103 - PGE confidential response to Staff DR No. 8; Staff Exhibit /102 - PGE response to Staff DR Nos. 35 and 36.
[17] Staff Confidential Exhibit/103 – PGE confidential response to Staff DR No. 7
[18] Staff Confidential Exhibit/103 - PGE confidential response to Staff DR No. 8.

approximately [redacted] of the total DSAY liability for the entire Portland Harbor [redacted], Staff does not find PGE's assertion unreasonable.

Q. What is the benefit to rate payers of PGE trying to generate DSAYs?

A. Because PGE happens to own open-space riverfront property within the Superfund site, it decided to develop a restoration project to leverage the value of the land to pay for its NRD obligation, as well as offset some of its EPA environmental remediation obligation. If the monetary value generated by the project is greater than the value of selling the property outright, this benefits both PGE and rate payers.

Q. Is the potential value of the Harborton Project greater than the value of selling the property at market price?

A. Most likely it is [redacted]. If PGE's projections about the market value of DSAYs remain intact, the Harborton Project would generate approximately [redacted]. Subtracting $15.5 million[19] to develop the project, continue O&M, and provide an endowment, leaves [redacted] to [redacted] in value left over to apply against NRD and environmental remediation obligations that rate-payers would otherwise have to pay.

By contrast, the Company contends that although approximately two-thirds of the property is zoned "Heavy Industrial Use" and approximately one-third is zoned as "Open Space," the property's potential for industrial development is limited given that two of the four subareas are prone to

[19] This is the high-end estimate given that the total cost of the Harborton Project is estimated between $12.5 million and $15.5 million.

flooding.[20] The current appraised market value of the 62 acres slated for the Harborton Project is between $3.23 and $4.23 million, as compared to [redacted] in net DSAY revenue.[21]

Q. What other issues has Staff considered regarding the UP 344 proposal?

A. After reviewing the filing and attachments, and issuing numerous data requests, Staff finds that the main risk to customers is that the DSAY market does not develop as PGE has projected, and as a result, PGE will be unable to generate enough revenue from DSAY sales to cover the cost of developing the Harborton Project. However, this scenario appears extremely unlikely given that: a) the Trustees have reviewed PGE's design and provided an estimate value of [redacted] DSAYs for the project; b) the Harborton Project is contained within the in-harbor Superfund study area, and at least 50 percent of a PRP's DSAYs must be from the in-harbor study area; c) Harborton is one of only six projects being managed by the Trustees, and it is the largest; and, d) there is currently a moratorium on projects. Given that the trustees have limited the number of projects that can produce DSAYs to roughly match the expected demand, Staff agrees that PGE can be reasonably assured that the Harborton Project will more than pay for its development costs.

Q. Please explain what would happen if the DSAY market does not develop enough to cover the costs of the Harborton Project?

[20] See UP 344 filing, Attachment I-1.
[21] UP 344 filing, Attachment I-1 at 2; Staff Exhibit/102 - PGE response to Staff data request Nos. 3 and 4

A. PGE states that it would terminate the Harborton Project, return all released DSAY credits to the Trustees and repay them for other costs, and then either pay out its NRD obligation in cash or purchase other DSAYs on the open market.[22] Importantly, PGE states that it would not request that customers pay Harborton development or termination costs in the event that the project is terminated.[23] Additionally, the deed restriction on the property would be rescinded, thus restoring most of the market value of the land.

Q. Are there other risks that attend to this proposal?

A. Generally in a property sale, any proceeds would flow directly to customers. In this case, proceeds will not flow directly to customers, but will instead be used to offset environmental remediation-related costs. Thus, customers could potentially be harmed if proceeds from DSAY sales are used to offset costs that are not appropriate for recovery. However, this risk is adequately mitigated by the annual prudence review of environmental remediation costs that Staff will perform before allowing costs to be amortized through the proposed PHERA mechanism.

Q. Is PGE's proposal in UP 344 to place a deed restriction on the property and sell DSAY credits in the public interest?

A. Yes. The overall value to ratepayers from the Harborton Project (DSAY credit value) is likely to be significantly greater than the costs of developing the project; project development and maintenance costs are estimated at

[22] UP 344 filing at 4, fn 1; Staff Exhibit/102 - PGE response to Staff DR No. 1.
[23] Staff Exhibit/102 - PGE response to Staff DR No. 1

approximately $12.5 to15.5 million over the life of the project, while the anticipated value generated by the project is approximately [redacted],[24] which is significantly greater than both the overall cost of the project and the land value combined.[25] Additionally, Staff did not find any unusual terms in the agreement.

Q. Why does PGE think it is important to act now?

A. PGE asserts that the biggest risk is that the Harborton Project is delayed and PGE cannot begin marketing its DSAY credits ahead of other projects in the harbor in order to obtain the maximal value from the sale. Staff agrees that if the UP 344 docket is to be approved, it should be in a timely manner to allow for construction to begin, which the Company has slated for early 2017. It should also be noted that the natural resource restoration represented by a DSAY decreases in value by three percent each year. Therefore, any delay in the project only serves to reduce the total value generated by the project. Staff agrees that acting sooner rather than later is important for PGE to be able to maximize the value of the project to offset restoration and remediation costs.

Q. Are there alternative options for the Commission with regard to this docket?

A. The Commission could deny PGE's request to place a deed restriction on the property and to sell DSAYs, which would result in PGE paying for its NRD

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[24] If the project meets all of its performance milestones and [redacted], resulting in additional DSAY sales revenue. Staff Confidential Exhibit/103 - PGE confidential response to Staff DR Nos. 7 and 27.

[25] The market value of the land if sold outright is $4.2 million. Staff Exhibit/102 - PGE response to Staff DR No. 4.

liability by paying the cash-out price to the Trustees or buying DSAYs from other PRP project developers within the harbor.

The Commission could also consider this property sale on a stand-alone basis and not integrate it with the other two dockets and let the mechanisms developed in those dockets be independent of the economic effects of this proposed property sale. Staff is not recommending this approach because it is the environmental remediation requirements at large that give rise to the value of this proposed property sale, and so there is a nexus among the three dockets.

C. Conclusion

Q. What is Staff's conclusion with regard to PGE's UP 344 proposal?

A. Staff concludes that customers and the public have little risk with regard to PGE placing a deed restriction on the property (and eventual conservation easement) in order to generate DSAYs, as long as the costs that are offset by the proceeds are appropriate for recovery. Staff believes that customers will most likely receive a significant benefit from the Harborton Project.

Staff recommends the Commission approve PGE's UP 344 application subject to the following condition:

1. If no DSAY market develops such that the Company cannot cover the cost of its development and maintenance, then customers will not be charged for costs associated with the Harborton Project; and

2.

III. UM 1789 – DEFERRAL OF COSTS AND REVENUES RELATED TO SCHEDULE 149

A. PROPOSAL

Q. Please explain what PGE is proposing in UM 1789.

A. PGE seeks authorization under 757.259(2)(e) to defer for later rate-making treatment Portland Harbor-related, and other environmental remediation costs and proceeds. The deferral was filed to support Schedule 149, the cost recovery mechanism proposed in companion docket UE 311. PGE will seek amortization of the deferred amounts as described in Schedule 149.

The proposed deferred costs would be related to the following sites: Portland Harbor Superfund Site (federal), Downtown Reach (state), Harborton Restoration Project (federal). Further, PGE proposes that costs includable in the deferral would include, but not be limited to, environmental remediation costs, NRD damages, the cost of pursuing recovery from insurers, and the development of the Harborton Project. [26] The proceeds generated from the sale of DSAY credits, as well as proceeds recovered from insurance companies related to environmental defense costs and remediation liability would also be deferred.

PGE seeks approval to defer the costs and revenues identified above beginning as of the date of application, July 15, 2016. However, as of May 31,

[26] See UM 1789 filing at 3.

2016, PGE has spent approximately $2.2 million on design and permitting work to develop the Harborton Project, which it has capitalized in FERC Account 107 – Construction Work in Progress (CWIP).

Q. What accounting treatment does PGE propose in this filing?

A. Besides requesting approval to defer costs and revenues for later ratemaking treatment, PGE also requests alternative accounting treatment for the costs and revenues identified above.

For costs tracked in this deferral, PGE proposes to accrue estimates to a separate liability account within FERC Account 253 – "Other Deferred Credits", for each liability in accordance with ASC 410-30, Environmental Obligations. The proposed balance sheet accounts are:

- 253.xxx Other Deferred Credits – Portland Harbor Environmental Obligation
- 253.xxx Other Deferred Credits – Natural Resource Damages (NRD)
- 253.xxx Other Deferred Credits – Environmental Administrative and Legal Costs

Once the actual costs related to the estimated accrual accounts are incurred, they will be deferred into the following regulatory asset accounts on the balance sheet:

- 182.3xx Other Regulatory Assets – Portland Harbor Environmental Costs
- 182.3xx Other Regulatory Assets – Natural Resource Damages
- 182.3xx Other Regulatory Assets – Environmental Administrative and Legal Costs

Absent deferral approval, PGE would record the offset amounts in the subaccounts of FERC account 401 – Utility Operation Expense.

For costs incurred from the Harborton Project development, PGE requests to defer the capital and ongoing O&M costs into the sub accounts of 182.3xx – Other Regulatory Assets – DSAY Inventory. Without the deferral, these amounts would be recorded in balance sheet subaccount 156 – Other Materials & Supplies Inventory – DSAYs.

Proceeds from the sale of DSAYs and insurance recoveries will be recorded with the subaccounts of 182.3 – Other Regulatory Asset/Liability – Environmental Balancing, for the purpose of offsetting deferred environmental costs and recovery through the Schedule 149 recovery mechanism proposed in UE 311 – Portland Harbor Environmental Remediation Balancing Account (PHERA). Both costs and proceeds that would be transferred to the PHERA are subject to a prudency review.

For a more detailed discussion of the proposed accounting, please see the testimony of Staff Witness Marianne Gardner in Exhibit/200.

B. Staff's Analysis

Q. What is the standard for Staff's review of a deferral?

A. PGE seeks authorization of this deferral pursuant to ORS 757.259(2)(e) and OAR 860-027-0300, for the purpose of minimizing the frequency of rate changes and more appropriately matching the costs borne by and benefits received by customers.

Q. What PGE properties are subject to environmental remediation costs that PGE proposes to include in the mechanism?

A. Staff reviewed all of the environmental remediation sites that PGE proposes to include in the Schedule 149 mechanism to determine whether they provided service or benefits to customers. Of the [redacted] the Company proposes to include, [redacted] properties have not yet been documented as providing service or benefit to customers. For discussion of Staff's review, please see Staff Witness Rose Anderson's testimony, Staff Exhibit/400.

Q. What is PGE's preliminary estimate of the amounts that will be subject to the deferral?

A. PGE provided estimates of costs and revenues through 2028 that will be subject to this deferral in Confidential Attachment A. However, the Confidential Attachment A only provided estimated costs and revenues associated with the development and maintenance of the Harborton Project, as well as revenues from DSAY sales. In the companion filing UE 311, PGE provides a more complete picture of costs that can be reasonably estimated for all the costs associated with the Portland Harbor Superfund site. For example, Confidential Exhibit 106C in UE 311[27] includes, in addition to the Harborton Project capital and O&M estimates, estimates of legal and other technical support fees associated with activities such as defending PGE's total liability for Portland Harbor and Downtown Reach, fees associated with pursuing recovery from Insurers, and estimated insurance reimbursement for defense activities. However, there are several large expense items that PGE cannot reasonably estimate at this point in time, primarily its NRD liability and environmental

[27] UE 311, Confidential Exhibit 106C.

remediation liability, which will be assessed in 2017 and 2020-2022, respectively.[28] PGE also cannot estimate the insurance recovery proceeds that will be obtained and is only in the preliminary stages of pursuing recovery.

In the year 2028, the forecasted end of the Harborton Project, PGE estimates it will have spent a total of [redacted] in O&M expense and [redacted] in capital costs.[29] The capital costs pertain specifically to Harborton Project development, and the O&M costs are related to all environmental remediation sites. The estimated revenue generated by DSAY sales if sold at the estimated market price of [redacted] is approximately [redacted] estimated DSAYs generated by the project + [redacted] DSAY credits upon meeting specified performance conditions = approximately [redacted] total DSAYs x [redacted] in revenue per DSAY).[30]

Therefore, if PGE's estimates provided in UE 311, Confidential Exhibit 106C are accurate, the Company would be ahead approximately [redacted] in the year 2028 before factoring in NRD damages, Portland Harbor environmental remediation liability, and insurance recovery receipts.

Q. Will there be an earnings test associated with this deferral?

A. Yes. PGE's proposed earnings test threshold is set at the Company's authorized ROE.

Q. Does Staff support the earnings test as proposed by PGE?

[28] Staff notes that UE 311/PGE/106C, Behbehani-Brown-Stevens/1 shows Portland Harbor environmental remediation damages hitting in [redacted].
[29] See UE 311, Confidential Exhibit 106C, and Company response to Staff data request No. 45.
[30] See UE 311, Confidential Exhibit 106C, and Company response to Staff data request No. 45.

A. Yes. Setting the earnings test threshold at the Company's AROE allows the Company the opportunity to earn its authorized ROE, but applies excess earnings to expenses in years that the Company could have absorbed such expenses.

Moreover, under the prudence standard, it is difficult to challenge costs resulting from environmental remediation activities and to second guess PGE's insurance efforts to recover proceeds and contributions after they have occurred during a prudence review. Staff believes that PGE has some ability to control remediation costs by advocating for the least cost, best benefit plan to clean the sites that will eventually be assessed damages by the EPA, in addition to contesting liability with other PRPs.[31] As noted earlier, PGE is only in the very beginning stages of pursuing historic insurers; thus, PGE should be incentivized to control costs by aggressively seeking third party contribution and insurance proceeds.

Q. Does PGE propose an interest rate for deferred amounts?

A. Yes. And Staff supports PGE's proposal that deferred costs and revenues earn interest at the Company's authorized rate of return prior to prudence review because there should be a matching of the interest rate earned by the Company on deferral balances and the interest rate earned by customers on proceed amounts. Staff also supports PGE's proposal that post-prudence review amounts earn interest at the PURE rate, which is further described in "IV. UE 311."

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[31] Staff Confidential Exhibit/103 - PGE confidential response to Staff DR No. 12.

Q. How will the deferred balances be amortized into customer rates?

A. This question is the subject of PGE's companion filing UE 311, which requests an automatic adjustment clause mechanism (called the PHERA) that would net proceeds against costs that are subject to this deferral. Staff's analysis of the issues around amortization, an earnings review, prudence review, appropriate sharing of costs between ratepayers and shareholders, and rate spread/design is discussed below in "IV. UE 311" and in Scott Gibbens' testimony, Staff Exhibit/200.

Q. Does Staff have any concerns about the alternative accounting proposed in this application for deferral?

A. Overall, Staff does not have concerns with the proposed deferral accounting treatment; however, there is some lack of clarity regarding cash versus accrual accounting for regulatory purposes, as well as tax treatment and the recording of interest. Please refer to Marianne Gardener's testimony in Staff Exhibit/300 for a detailed discussion of the proposed accounting treatment and Staff's analysis.

Q. Does Staff think that a deferral application suffices for PGE's proposal?

A. Staff notes that PGE filed a deferral application to support its PHERA mechanism. However, PGE also requests to defer and capitalize, as regulatory assets, costs associated with its environmental remediation projects. Staff is investigating whether an accounting order may also be necessary in this instance and will further develop this issue in subsequent testimony and/or briefing.

C. Conclusion

Q. What does Staff conclude about PGE's request in to defer costs and revenues as described in this filing?

A. Staff concludes that the deferral meets the requirements of ORS 757.259(2)(e) and OAR 860-027-0300 and should be approved.

IV. UE 311 – Schedule 149, Environmental Remediation Cost Recovery Mechanism

A. PGE's Proposal

Q. What does PGE propose in UE 311?

A. In UE 311, PGE filed Advice No. 16-11 pursuant to ORS 757.210 and OAR 860-022-0025, proposing Schedule 149, an automatic adjustment clause (AAC) mechanism that will begin tracking expenditures and revenues associated with PGE's Portland Harbor Superfund site. Schedule 149, also called the PHERA, will record GAAP accounting accruals, incurred costs, and proceeds received into a regulatory deferred balancing account requested for approval in UM 1789.

All costs and revenues in the deferred accounts will accrue interest at the Company's authorized rate of return until reviewed by the Commission for prudence. Revenues received will be allocated across the remaining life of the project, i.e., spread equally through 2028. Annual costs will be offset by annually allocated revenues and rollover credits, and any balance greater than the greater of $6.5 million or the annual allocated revenues plus interest will be subject to an earnings test at PGE's authorized ROE. Any over earnings would then be used to offset the annual balance, which is then transferred to the PHERA where it earns interest at the "PURE" rate developed in the UM 1635 docket (5-year U.S. Treasury rate plus 100 basis points) and amortized over a five-year period.

PGE has designed the PHERA in a similar fashion to Northwest Natural's environmental remediation recovery mechanism, the SRRM, with final conditions adopted by the Commission in Order 15-049.

The above high-level summary of PGE's proposed mechanism is described in more detail by Staff's paraphrase of the special conditions in the Schedule 149 tariff:

1. The balance of costs and revenues transferred to the PHERA are determined annually and is subject to an earnings test. The amount transferred to the PHERA is the prudently incurred costs after being offset by an "Annual Allocation of Revenues," plus any accumulated balance remaining from previous years that is "rolled forward" to offset current costs.

2. The Annual Allocation of Revenues includes any Schedule 149 rates collected in that year, plus that year's allocation of proceeds from DSAY sales, insurance receipts, and interest accrued. As DSAY and insurance proceeds are received, that amount will be allocated evenly across the remaining life of the Harborton Project.

3. An earnings test is applied to the offset balance after the Power Cost Adjustment Mechanism earnings test. If the PCAM review absorbs all earnings over the Company's AROE, then an earnings test is not applied. However, the first $6.5 million in annual costs is exempt from the earnings test. In addition, development costs and O&M costs for the Harborton Restoration Project are also not subject to the earnings test.

4. If costs (except for Harborton development costs) in any year exceed the greater of $6.5 million or the Annual Allocated Revenues plus interest, then the excess amount is subject to the earnings test. This excess balance would be reduced by any over earnings and transferred to the PHERA balancing account for recovery over the following five years.

5. If costs in any year are less than the annual allocated revenues plus interest, then the surplus balance will be transferred to the PHERA and used to offset accumulated costs. Any remaining positive balance (more allocated revenues than current and accumulated costs) would roll forward as an addition to the next year's Annual Allocated Revenues.

6. Costs recovered through Schedule 149 will be spread among rate-payer classes based on the historic nature of the costs with regard to whether the facilities were transmission, generation, or distribution related. Long-Term Direct Access customers will be priced at Cost-of-Service for purpose of cost allocation.

7. In the event that the amount in the PHERA balancing account could result in a refund to customers, the Company, subject to approval by the Commission, will determine if the refund should be applied to Customer bills, or if the credit balance should carry to a future period to offset future costs. The Commission may determine whether or not the credit balance should carry forward to a future period.

8. By March 15 of each year, the Company will submit the prior year's environmental remediation costs for prudence review by the Commission, which the Commission shall complete within 120 days of submittal. Prudence review will include a report of all activity associated with environmental remediation costs, including insurance or other related third-party proceeds. All costs and proceeds deemed prudent will be netted, subjected to the earnings test, and then transferred to the PHERA for amortization.

9. Interest will accrue to both costs and revenues at the Company's AROR prior to the prudence review. After prudence review, the offset balance that has transferred to the PHERA will earn interest at the "PURE" rate.

10. Adjustments under Schedule 149 will continue for five years after the last environmental remediation expenses are incurred, or until another date determined by the Commission.

11. Special accounting: development costs for Harborton will be deferred as regulatory assets; all costs associated with environmental liabilities will be deferred and capitalized according to ASC 410 and GAAP; GAPP

accounting accruals will not be subject to interest computation or earnings test.

Q. When does PGE plan to implement Schedule 149?

A. The Company has requested an effective date of August 17, 2016.[32] The tariff would start with a rate of zero until applicable offset costs are greater than revenues and ready to be amortized on a five year rolling schedule. Each year, on or before June 15, PGE would submit an advice filing indicating whether it expects to change the Schedule 149 tariff rate on the following January 1, and if so, will provide information regarding the proposed change.[33]

B. Staff's Analysis

Q. Please walk through the methodology of PGE's proposed mechanism in detail.

A. Given the complexity of PGE's proposed cost recovery mechanism and the importance of the order in which each step in the methodology (i.e., special condition) is applied, Staff presents its testimony below in the order in which the methodology is applied and discusses any issues or concerns regarding each step in the methodology.

1. Costs and Revenues Includable

Q. What costs and revenues does PGE propose to include in the PHERA?

A. Below are the costs and revenues includable in the mechanism[34]:

- Costs
  - The costs of developing the Harborton Project

[32] However, in its UE 311 filing, PGE notes that it will have created the PHERA annual account as of August 3, 2016. See Schedule 149-1.
[33] See UE 311/PGE/100, Behbehani-Brown-Stevens Pg. 17 at line 16.
[34] UE 311/PGE/100, Behbehani-Brown-Stevens/11-12.

- Ongoing monitoring and maintenance expense related to Portland Harbor Superfund Site, Harborton, Downtown Reach Sites
- Endowment fund for future non-profit owner of Harborton
- Harborton land cost
- Costs of pursing legal claims against historic insurers
- The costs of mitigating, remediating, and monitoring Portland Harbor NRD obligations
- The cost of mitigation Portland Harbor liabilities other than NRD, i.e., EPA damages
- Interest expense calculated on the balancing account

- Revenues
  - Revenues from the sale of DSAY credits
  - Insurance proceeds from claims for Portland Harbor and Downtown Reach
  - Revenues collected from PGE customers
  - Interest income calculated on the balancing account

2. Prudence Review of Costs and Revenues

Q. Will a prudency review be performed?

A. Yes. Both costs and revenues will be reviewed for prudence. Each year the Company will submit a report on March 15, and PGE proposed that the Commission have 120 days to review. Costs will be examined for reasonableness and accuracy. Review of revenues will include whether the Company received the highest market value for its DSAYs, and whether it made reasonable efforts to obtain the highest insurance recovery.

The annual prudence review report will include all incurred remediation costs and revenues. Additionally it will include the details of the DSAY inventory and sales. Staff would have the ability to audit these reports at any time.[35]

Staff would like to reserve the right to inquire about the timing of deferred expenses and revenues, and to be able to argue that a different timing

[35] UE 311/PGE/100, Behbehani-Brown-Stevens/17.

should be imputed in an instance where Staff believes that the timing was influenced by the Company's anticipated or calculated earnings.

Q. Will different interest rates be applied pre-prudency and post-prudency?

A. Yes. Before the prudence review, both costs and revenues will earn interest at the Company's authorized rate of return. Costs that have been deemed prudent will accrue interest at the "PURE" rate[36], developed in the Northwest Natural SRRM docket UM 1635. Pre-prudence interest rate at the Company's AROR is consistent with how deferral balances are generally treated, as prescribed by Commission Order No. 05-1070.

3. Allocation of Costs and Revenues

Q. Explain how costs and revenues are allocated over time in the PHERA.

A. In PGE's proposal, costs and revenues are treated asymmetrically. Revenues from DSAY sales, insurance proceeds, Schedule 149 tariff revenue, and interest accrual are allocated evenly over the remaining life of the Harborton Project (estimated around 2028).

Costs, once they have been offset by allocated revenues and subjected to an earnings test (if triggered) are spread over five years.

Q. Does Staff support this method of allocating costs and revenues? If so, why?

A. Staff agrees with PGE's method of allocating costs and revenues. Spreading revenues over the life of the project helps to ensure that costs are recovered in

[36] "PURE" rate – "Prudence-Reviewed Unamortized Environmental Remediation Expense" is established each year by OPUC Staff and represents the 5-year US Treasury rate plus 100 basis points.

rates somewhat proportionally over time and better matches the benefits with the burdens. Insurance proceeds and DSAY revenues will be received in lump sums, and will not likely match the timing and amounts of environmental remediation costs. The principle known as “intergenerational equity”, endorsed by the Commission in UM 1635,[37] ensures that future ratepayers also receive the benefit of revenues to offset the remediation costs they will be paying.[38] In other words, remediation costs are expected to go on for the next twelve years (Harborton Project through 2028) and possibly well beyond that for remediation required by the EPA. Thus, if insurance proceeds and DSAY revenues were allocated in the year received and used up, future customers would not receive the benefit of offsetting future costs.

Amortizing offset costs over a five-year period is a reasonable time that balances a utility’s desire to recover costs immediately while smoothing out the rate impact to customers to prevent “rate shock.” Based on the estimates PGE has provided, Staff supports the current proposed allocation methodology. However, depending on the timing and amounts of costs incurred and revenues received, a different allocation methodology and cost amortization schedule may be warranted. The Commission may want to reserve the right to revisit this issue in a future review of the mechanism.

[37] Docket No. UM 1635, Order No. 15-049 at 6 (Feb. 20, 2015) (“We agree with Staff . . . that intergenerational equity favors allocating the $150.5 million in insurance proceeds across the entire estimated period of the remediation project.”)
[38] Staff Exhibit/102 – PGE response to Staff DR No. 23

The testimony of Staff Witness Scott Gibbens in Exhibit Staff/200 provides additional discussion as to why Staff finds PGE's approach reasonable as to the amortization periods for revenues and costs.

4. Amounts Exempt From Earnings Test

Q. What costs does PGE propose be exempt from an earnings test, and on what basis?

A. PGE proposes that it be guaranteed recovery of the greater of $6.5 million or Annual Allocated revenues plus interest in prudently incurred costs by exempting that amount from an earnings test. It also asserts that development costs associated with the Harborton Project be excluded in addition to the $6.5 million. PGE goes further to the rationale behind guaranteed recovery of Harborton Project costs in stating that it's a voluntary project that PGE took on that will likely provide significant benefits to customers. Absent the Harborton Project, ratepayers would have to pay most, if not all, of the Company's environmental remediation-related costs that are not offset by insurance proceeds. Staff supports exclusion of Harborton costs from the earnings review.

However, PGE's rationale for exempting $6.5 million from the earnings test is not clear. Staff understands the $6.5 million to be an estimate of what PGE believes is reasonable based on the Commission's decision in UM 1635, the Northwest Natural environmental remediation docket, to exempt $10 million in recovery from an earnings test[39]. PGE expects similar treatment from the Commission. PGE anticipates that its environmental obligation will be less than that for Northwest Natural, and therefore proposes excluding a lesser amount of environmental remediation costs from an earnings test.[40] However, the rationale for why $6.5 million is a reasonable number to exclude from an earnings test in this particular case, based on these particular facts, is unclear to Staff.

Q. Does Staff have a different recommendation for an amount that should be exempt from the earnings review?

A. Yes. Given the limited amount of information available regarding future costs and revenues, Staff believes $5.5 million exempted from the earnings test is a more reasonable amount at this point in time. The $5.5 value is calculated by adding together two values. The first value is $2 million that Staff proposes (see Mr. Gibbens' testimony in Staff/200), to be collected in rates beginning in 2017 to smooth out the rate impact over the life of the remediation obligation.

Added to the $2 million value is the [redacted] as well as the total maximum Harborton costs of $15.5 million.

Staff recommends removing the bonus DSAY allocation as they are not guaranteed. Staff recommends removing Harborton development costs because Staff supports those costs as being exempt from an earnings review.

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[39] The $10 million excluded from earnings represents $5 million collected in rates, and $5 million in allocated insurance proceeds. See Commission Orders in UM 1635 and UM 1706.
[40] Staff Exhibit/102 - Company Response to Staff Data Request No. 15.

Using the above framework roughly equals $5.5 million, and it is that amount that Staff recommends any annual environmental remediation costs incurred, besides the Harborton development costs, be exempt from an earnings review. This is a reasonable amount that can be supported at this point in time.

Q. Could the $5.5 million value be revisited over time?

A. Yes. Staff recommends revisiting the mechanism every two years, with any proposed changes no less than every three years. As additional information is known, Staff believes the $5.5 value could be adjusted.

Q. The Company proposes the greater of $6.5 million or the Annual Allocated Revenues plus interest. Do you support that approach?

A. No. With this approach PGE essentially proposes an automatic annual revisiting of the level of expenses that would be exempt from the earnings test. This approach allows the amount to potentially change year-to-year depending on the level of DSAY and insurance revenues achieved. Although Staff currently derives a $5.5 million exemption, Staff supports revisiting this amount in future periods, but recommends that it be done through a process where the Commission decides what that value should be. That is, Staff does not support an automatic floating of exempt level of expenses.

Q. How much recovery is included in present rates as determined from the most recent general rate case?

A. It should also be noted that for the last two years, the Company states that it has included $3.56 million in base rates for environmental remediation activities in the Portland Harbor and Downtown Reach portion of the river.[41] In response to a Staff data request, PGE noted that the two Downtown Reach projects cost approximately $3 million and are basically complete, with a little monitoring left to do.[42] However, PGE will continue to collect that $3.56 million until its next general rate case, which is unknown.. Staff proposes that the amount currently in base rates be accounted for in the PHERA until such time it is removed in the next general rate case.

Q. Why is it reasonable that the Company have a guaranteed recovery of a certain portion of costs?

A. Generally it is reasonable that the Company have certainty in recovering some of its environmental remediation-related costs because the Company incurred those costs in the course of providing service to customers, and has little control over the amount of the costs as they are mandated by a government agency. It is consistent with past Commission practice to exempt a certain portion of costs from an earnings test.[43]

5. Earnings Test

Q. Why are earnings tests necessary and appropriate for good regulatory policy?

A. The Commission's primary objective in regulation is to establish rates that are fair and reasonable. Ratemaking is holistic and the overall result must be fair and reasonable, meaning that a single expense, such as environmental

[41] Staff Exhibit/102 - Company Response to Staff Data Request Nos. 44 and 81
[42] Staff Exhibit/102 - Company Response to Staff Data Request No. 44.
[43] Commission Order No. 15-049.

remediation, is not generally reviewed in isolation. Deferred accounting, as PGE proposes in this case, is an exception to normal ratemaking and allows for retroactive ratemaking for extraordinary events that occur between rate cases and, through amortization, include expenses that the utility cannot otherwise absorb and maintain fair and reasonable rates. Therefore, the application of an earnings test to deferred account balances is an essential check on single issue ratemaking and determines whether the costs in the year deferred were in fact exceptional, or whether they could have been absorbed by the company while operating within its fixed rates.[44] Thus, an earnings test is conducted when deferred amounts are requested to be amortized in order to determine whether or not the company could have absorbed some or all of the costs that were deferred.

Q. Describe the proposed earnings test in UE 311 and when it would apply.

A. The earnings test threshold proposed by PGE is set at the Company's Authorized ROE.[45] Earnings above that threshold would absorb remediation costs that are the greater of $6.5 million or the Annual Allocated Revenues plus interest. This earnings threshold mirrors that in the Northwest Natural SRRM set forth in Commission Order No. 15-049. In that Order, the Commission found no justification for an earnings threshold above NW Natural's ROE because it could give the Company a better result than it might have achieved

[44] Order No. 15-049 at 12 ("Deferred accounting is, essentially, single-issue ratemaking, where rates are set based on a change to only one component of costs without considering whether changes to other costs might have offset the increase . . . the [earnings] test ensures that rate payers are not required to pay deferred expenses when the utility' s earnings are high, and that the utility is not required to refund deferred revenues when earnings are low.").
[45] UM 1789 pg 5; UE 311/PGE/100 pg 10

in a rate case.[46] It rejected NW Natural's claim that an earnings test set at ROE would unfairly cap the Company's earnings at ROE for the remainder of the liability period – approximately 20 years. Because NW Natural had $10 million in remediation expenses exempt from an earnings test, it would fully recover $10 million of that year's expenses independent of its earnings. Applying the same principle for PGE, Staff supports $5.5 million in remediation costs protected from the earnings test, for the reasons discussed above.

Q. Does Staff support the earnings test as proposed at the Company's authorized ROE?

A. Yes. Setting the earnings test threshold at the Company's AROE allows the Company the opportunity to earn its authorized ROE, but applies excess earnings to expenses in years that the Company could have absorbed such expenses and allows the Company to over-earn if the expenses are greater than $5.5 million (or $6.5 million as proposed by PGE), but less than the Company's over earnings.

In addition, under the prudence standard, it is difficult to challenge costs resulting from environmental remediation activities and to second guess PGE's insurance efforts to recover proceeds and contributions after they have occurred during a prudence review. An earnings test incentivizes PGE to control costs, which it has some ability to do by advocating for the least cost, best benefit remediation plan, in addition to contesting liability with other PRPs, and pursuing insurance recovery. Further evaluation of the earnings test when

[46] Docket No. UM 1635, Order No. 15-049 at 12-13 (Feb. 20, 2015).

implemented in Staff's model is discussed by Staff Witness Scott Gibbons in Exhibit/200.

Q. Why is the earnings test applied after the PCAM earnings test? Is this beneficial to rate payers?

A. PGE proposes that the earnings test in the Schedule 149 mechanism is applied after the PCAM earnings test for three reasons.[47] First, PGE believes that the PCAM mechanism should be applied first because delivering electricity to customers is the Company's primary business, and the PCAM adjusts power costs that are recovered from customers. Second, applying the PHERA mechanism first requires a 120 day prudence review of costs and revenues. PGE believes there would not be enough time to process the PCAM mechanism afterwards and be able to report the results in the appropriate fiscal year. Third, it is to the benefit of ratepayers because the PCAM deadband could absorb some power costs, and there would still be room for the PHERA to absorb earnings. The PCAM deadband is set at authorized ROE plus 100 basis points, while the PHERA threshold is authorized ROE. If PGE earns above its PCAM deadband and earnings absorb some power costs, there is still an opportunity for earnings to absorb PHERA costs. Whereas, if the earnings tests are applied in the opposite fashion, and the PHERA absorbs earnings first, less PCAM costs would be absorbed by earnings. PGE provides the following example:

[47] Staff Exhibit/102 - Company response to Staff DR No. 25.

Assume that: PGE's authorized ROE is 10%, PGE earned more than 11% in a given year, power costs that were $10 million above the deadband, and that PHERA costs subject to the earnings test were also $10 million. Next assume that by applying the PCAM first, PGE's ROE is reduced to the deadband level of 11% and $10 million is returned to customers. Then applying the PHERA mechanism further reduces PGE's ROE by $10 million to 10.6%. Applying the tests in this order returns $20 million to customers. However, applying the PHERA first in this example reduces PGE's ROE to 11%. The PCAM would not trigger since 11% is the upper end of the PCAM earnings deadband. The result is that only $10 million is returned to customers.[48]

Q. Does Staff have any other concerns?

A. Yes, the earnings test is a safeguard against ratepayers paying for costs while the utility is earning excess profits. Staff's rationale is that, in theory, if the utility is earning above its authorized ROE, it should not be collecting money from customers because the deferred costs are not extraordinary and could have been absorbed by the utility.

Additionally, Staff questions whether money already collected from consumers via Schedule 149 should have any bearing on the amount PGE can absorb. In other words, if PGE is over-earning, perhaps the amount collected via Schedule 149 that year should be refunded back to customers or carried

[48] Staff Exhibit/102 – PGE response to Staff DR No. 25

forward as opposed to going towards costs that the Company would have otherwise absorbed. This approach would be inconsistent with the treatment of costs in general which is that embedded in rates are the recovery of costs projected in the test year. If a utility's earnings are greater than authorized, the utility keeps any excess earnings, and when the utility underearns customers do not make up the under earning amounts. In other words, rates are prospective in nature. When a utility has in rates the recovery of environmental remediation costs, those rates are presumed reasonable until a subsequent rate case. Therefore it is not consistent with standard ratemaking practices to require the return of monies targeted for environmental remediation if the company's earnings are above authorized levels.

Staff understands that the Commission already approved the SRRM mechanism in UM 1635 in which the amount collected in rates is exempt from any earnings review. Staff agrees that PGE's environmental remediation obligation is somewhat comparable to NW Natural's "future"-period remediation obligation. PGE should receive comparable treatment to NWN.

Q. Explain the offset balance that will be amortized in the balancing account.

A. Each year PGE will take the current year's expenditures and subtract tariff revenue, the annual allocation of revenues including interest, and any accumulated surplus balance from prior years. Any annual expenditures over the PGE-proposed $6.5 million, or Annual Allocated Revenues plus interest, whichever is greater, will be subjected to an earnings test. Any amount not absorbed by over-earnings will be amortized into the balancing account over a five-year period.

Q. PGE proposes that the earnings test apply to any annual environmental remediation expense that is above the greater of $6.5 million or the Annually Allocated Revenues. Does Staff support that proposal?

A. No. Staff supports adopting a fixed value of $5.5 million and not allowing the amount of costs protected from the earnings review to vary upwards depending on the level of DSAY and insurance revenue allocated in a year. However, the $5.5 million value could be revisited in the future reviews of this mechanism. As noted above, Staff constructed the $5.5 million value by using "conservative" [redacted] and Harborton development costs. As more data becomes available, the $5.5 million value could be updated as well.

Over time, a value greater than $5.5 million could potentially be justified using the suggested Staff approach. And Staff's method would provide PGE incentives to obtain greater DSAY revenues, or achieve bonus DSAYS, as it could potentially lead to an increase in the amount of costs protected from application of the earnings test.

6. Alternatives

Q. Did Staff consider alternatives to PGE's proposed earnings test?

A. Yes. Staff considered the effects of 90-10 straight sharing of environmental remediation costs.

Q. Does Staff recommend the 90-10 sharing mechanism in this case?

A. No. The purpose of a sharing mechanism is to incent PGE to maximize DSAY revenue as well as insurance proceeds, and to minimize remediation costs. These incentives are somewhat muted under the mechanism proposed by PGE. Further, under straight sharing, it might not be reasonable to require PGE to bear a portion of costs when PGE is under-earning, or to share with PGE revenues when PGE is over-earning.

A sharing mechanism carries with it the idea that the costs and benefits need to be assigned to stakeholder and ratepayer alike; however, the Commission decided against a sharing mechanism in its most recent environmental remediation case based in part on the fact that the work required is being mandated and thus the utility has limited discretion in the work it is required to do.[49]

In sum, in Staff's view, an earnings test ensures that customers are protected from bearing costs when company earnings are above the Commission authorized level and can be reasonably absorbed by the company. In the event that remediation-related costs are well beyond PGE's estimations, more earnings reviews will result and with them the assurance that customers are not paying when PGE is over-earning. Further, Staff acknowledges that the restoration and remediation work will be mandated by federal and state environmental agencies; thus, Staff concludes that a

[49] See Docket No. UM 1635, Order No. 15-049 at 11 (Feb. 20, 2015). However, Staff notes in PGE's case, the EPA has yet to apportion liability for the Portland Harbor, thus PGE may have more discretion in contesting the work EPA will assign to PGE. See Docket No. UG 211, Order No. 12-427 (Nov. 16, 2012) (Commission declined to adopt a sharing mechanism, but determined that an earnings test would be applied prior to any deferred amounts being placed in rates).

prudency review and earnings test will be sufficient to protect ratepayers in this circumstance.

Under PGE's proposal, the maximization of revenues and minimization of costs is the best way for PGE to ensure that they do not absorb any costs. Any year in which costs exceed revenues carries with it the chance that some costs may not be recovered due to the earnings review. This should result in PGE maximizing the revenues associated with DSAY and insurance, as well as reducing costs to the extent possible. Staff does have concerns over the complexity of PGE's proposed cost recovery mechanism, as well as the incentive for PGE to encourage maximization of Schedule 149 rates, however, Staff believes the proposal is consistent with Commission precedent in UM 1635 and is fair and reasonable, especially given Staff's recommendation to revisit the mechanism in three years.

The implementation effects of 90-10 sharing are discussed by Staff Witness Scott Gibbens in Staff/200.

7. Rate Spread

Q. What is PGE's proposal regarding the spreading of costs across customer classes?

A. PGE proposes that costs to be amortized in rates should be functionalized to distribution, generation, and transmission based on the historical function of the contaminated site and allocated to each rate schedule as functionalized. Staff supports this approach. Staff Witness Scott Gibbons reviews the proposed rate spread in Exhibit/200.

In order to implement this rate spread, Staff recommends that PGE keep records of the damages assessed by the EPA per each individual property rather than as a lump sum damage assessment from EPA so that the allocation of costs to customers based on historical function of the individual property can be achieved.

8. Additional Considerations

Q. What prior Commission policy has PGE relied on in constructing its PHERA mechanism?

A. In its filing, PGE expresses that it has modeled its environmental remediation recovery mechanism after Northwest Natural's SRRM mechanism approved by the Commission in Orders 15-049 and 15-276, specifically with regard to proposing a mechanism that tracks costs and revenues, uses a prudency review, applies revenues to offset prudently incurred costs, provides for a guaranteed amount of cost recovery that is exempt from an earnings test, applies an earnings test at the Company's AROE, and applies the principle of intergenerational equity.

Q. Are there significant differences between PGE and NWN's situation with regard to environmental remediation liability?

A. Yes. First, and most significantly, in NWN's case, a large deferral balance of past remediation expenses had already built up to the amount of $94 million, and proceeds from insurance receipts had been settled, thus, NW Natural knew the full amount of insurance proceeds it would have to offset costs. Further, NW Natural's liability for future remediation expense for the next twenty years was estimable (though a broad range between $98 million and $350 million), when the recovery mechanism was implemented by the Commission. Finally, in NW Natural's case, the EPA and DEQ had required that NW Natural take a number of environmental remediation actions with regard to six remediation projects, whereas PGE has not yet been required to take remediation action because the EPA process is still in the beginning stages of preparing allocation of liability to PRPs.

By contrast, PGE has incurred very few costs to date, and little is known about its expected remediation liability and projected revenues. The Company's DSAY revenue projections, while they cannot be estimated with certainty, appear to be calculated on a reasonable basis. However, the Company has only recently begun the process of seeking recovery from insurers, and while it has provided an estimate of its litigation costs, it has no way of predicating the amount of insurance proceeds it will recover. Additionally, the Company's environmental liability and NRD damages are completely unknown. PGE is expected to receive its NRD damages assessment in the second quarter of 2017 and its environmental remediation assessment around 2020-2022.

Second, PGE's proposal is different from Northwest Natural in that it has the additional Harborton Project component. Specifically, PGE requests approval to use a parcel of utility property that is currently unused, to develop the Harborton Project, which it estimates will generate significant proceeds to offset its NRD and environmental remediation liability, in addition to future insurance proceeds recovered. Staff views UP 344 and PGE's proposal to develop Harborton as a course of action that will likely result in substantial benefit to ratepayers.

Q. Given that many costs and revenues are unknown and can only be roughly estimated at this point, why is PGE pursuing implementation of a cost recovery mechanism now?

A. PGE believes the timing is crucial to move forward on the Harborton Project and get out in front of the other restoration projects that are planned in the same area, so that it can be ready to market DSAYs as soon as possible after NRD damages are allocated to the PRPs in the second quarter of 2017 (PGE estimate). PGE believes that being able to sell DSAYs sooner rather than later will maximize the market price they will receive for the DSAYs. Further, the value of remediation work is "discounted" three percent each year. Thus, PGE seeks Commission approval to place the deed restriction on the Harborton property so it can begin construction. PGE explains that it needs approval of deferred accounting to begin tracking costs associated with the Harborton development, soon-to-be-issued NRD damages, and costs associated with pursuing insurance recovery.

Beyond a deferral or accounting order approving alternative accounting treatment, PGE further argues that it is crucial that a mechanism be established now so that it knows that revenues produced from Harborton DSAY sales will be used for the sole purpose of offsetting environmental remediation costs. PGE is hesitant to develop the project if revenues generated passed directly to

PGE customers and it is left to deal with its forthcoming environmental remediation costs without the benefit of the DSAY revenues.

Q. Could the Commission approve the UP 344 and UM 1789 filings (the property sale and deferral application) now, and not approve PGE's proposed mechanism to recover costs until a later point in time when actual costs and revenues are known, or are at least more certain?

A. Yes. Staff does not believe that all three dockets are so interrelated that they must all three be approved together, or none at all. The Commission may consider each docket individually. However, if the UP 344 docket is approved, it also makes sense to approve a deferral or accounting order so that PGE may capture for later ratemaking treatment the costs and revenues associated with the project.

Q. Does Staff support approval of PGE's application to create the PHERA mechanism in UE 311 at this time?

A. Yes. Staff supports approval of the mechanism at this time for two primary reasons.

First, approval of UE 311 at this time provides a regulatory incentive to the Company to take its own initiative to develop a project that provides a significant benefit to customers by offsetting its environmental liability, and therefore reduces the amount PGE will seek to recover from customers,

Second, PGE seeks to have the mechanism in place now for reporting purposes, so that it can demonstrate that costs are recoverable. Staff thinks it is reasonable to provide the Company with an understanding as to how costs and revenues will be treated and be able to share that with investors. Third, Staff proposed a re-examination provision below.

Q. What is the risk to rate payers of approving the mechanism at this point in time, before costs and proceeds are known?

A. The risk to rate payers of approving the mechanism at this point in time is primarily that actual costs and revenues as well as the timing of when PGE incurs those costs and revenues, could be significantly different than the estimates that Staff has used to model the projections.

To understand how PGE's proposed mechanism would work as actual costs and revenues flow into the balancing account over time, Staff has performed modeling of various cost/revenue/earnings scenarios,[50] including one scenario that uses the Company's predictions as to the most likely inputs. Staff's analysis of these models is discussed by Staff Witness Scott Gibbens in Exhibit Staff/200. Mr. Gibbens' testimony recommends adjustments to PGE's proposed mechanism to help maintain intergenerational equity, safeguard against runaway costs, limit the change in the impact to rates over time, and to properly align the incentives of the Company and ratepayer. His testimony is a more in depth review of how the mechanism would actually perform in practice.

In addition to the suggestions proposed by Mr. Gibbons, Staff recommends the Commission include a condition that the mechanism be re-examined in the future when more is known about actual costs and revenue proceeds.

[50] See Staff Confidential Exhibit/209, Gibbens - Company Response to Confidential Staff Data Request No. 26

Q. Why is a "re-examination provision" critical?

A. PGE expects that its future EPA-related environmental remediation expenses will continue for a period up to thirty years. The timing and amounts of a significant portion of costs and liabilities in this case are unknown; thus it is likely that with future information, changes to the mechanism may be required to result in just and reasonable rates.

C. Conclusion

Q. What is Staff's overall recommendation?

A. Staff recommends approval of the Schedule 149 mechanism with the following three conditions:

1. If the proceeds from the sale of DSAY credits generated from the Harborton Project do not exceed the total costs of the Harborton Project, including all development costs, construction, O&M, monitoring, and endowment, then PGE ratepayers will not be responsible for any of those costs.

2. The mechanism is to be reviewed by the Commission in two years[51], with any proposed changes to be implemented approximately three years after the date of the Commission order in UE 311, with the understanding that the Commission reserves the right to restructure the mechanism in any way, including adding sharing incentives, as a means to determine if the mechanism is working appropriately for customers and the Company.[52]

[51] Consistent with ORS 757.210(1)(b), that AAC's be reviewed by the Commission at least once every two years.

[52] The Commission implemented a similar condition in Northwest Natural, a case that had significantly less uncertainty with regard to future environmental remediation costs and insurance revenues. See Docket No. UM 1636, Order No. 15-049 at 14 (Feb. 20, 2016).

3. Staff's Key Findings and recommendations regarding specific elements of the Schedule 149 mechanism be implemented:

i. PGE should begin collecting $2 million in customer rates now, to smooth out rate volatility because costs and revenues are incurred and received in "lumpy" amounts over varying periods of time.

ii. There is currently $3.56 million embedded in base rates for environmental remediation activities in Portland Harbor and Downtown Reach. This amount should be recognized as revenue in the PHERA each year until removed from base rates.

iii. A fixed $5.5 million in costs should be exempted from the earnings test at this time, which may be revised up or down in the future when more is known about actual costs and revenues.

iv. The Commission should periodically review the PHERA mechanism to ensure it is working as intended.

v. The effects of taxes and interest should be incorporated into the PHERA mechanism.

vi. The environmental remediation costs associated with the [redacted] properties that have not been documented as ever having provided service or benefits to customers should not be included in the PHERA mechanism until further documentation can be provided.

vii. Environmental remediation assessments, separately recorded for individual properties, should be identified and reported to the Commission when the information becomes available to PGE.

With the conditions above, Staff concludes there is little risk in approving the mechanism now relative to the benefits gained from DSAY sales. The mechanism should be approved.

Q. Does this conclude your reply testimony?

A. Yes.

CASE: UM 1789
WITNESS: MITCHELL MOORE

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 101

WITNESS QUALIFICATIONS STATEMENT

September 30, 2016

WITNESS QUALIFICATIONS STATEMENT

NAME:	Mitchell Moore
EMPLOYER:	Public Utility Commission of Oregon
TITLE:	Senior Utility Analyst Energy Rates, Finance and Audit Division
ADDRESS:	201 High Street SE. Suite 100 Salem Oregon 97301-3612
EDUCATION:	Bachelor of Arts, Journalism and Political Science University of Hawaii at Manoa (1992)
EXPERIENCE:	I have been employed by the Public Utility Commission of Oregon since 2009, with my current position being a Senior Utility Analyst in the utility program's Energy Rates, Finance and Audit division. My prior position at the Commission was as a Senior Telecommunications Analyst, where my assignments included reviewing carrier interconnection agreements, wholesale service quality, and resolution of carrier-to-carrier complaints. Prior to my utility regulatory career, I worked with AT&T as a loop electronics coordinator, designing and implementing high-speed broadband and fiber optic services in Los Angeles. I have also worked as an outside plant design engineer with Qwest Corporation, and I spent several years as a newspaper reporter with the Honolulu Star-Bulletin.

CASE: UM 1789
WITNESS: MITCHELL MOORE

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 102

Exhibits in Support
Of Reply Testimony

September 30, 2016

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 001
Dated August 12, 2016

Request:

Regarding the Declaration of Restrictions and Grant of Entry, Attachment I-1, p. 78, which reads: "In the event the market for DSAY credits collapses and [PGE] is unable to sell DSAY credits, [PGE] may terminate the Harborton Project . . . upon . . . (1) returning to the Trustee and Council all DSAY credits previously released to [PGE] . . . and (2) reimbursing the Trustee Council for all costs the Trustee Council has incurred with respect to the review and approval of the Harborton Project . . .," please answer the following:

a. **If the Harborton Project is terminated because the DSAY market did not develop, will customers be required to pay development costs and costs associated with terminating the Harborton Project?**

b. **What is the threshold for a determination by PGE that the DSAY market has not developed and that the project should be terminated?**

Response:

a. If the Harborton Restoration Project (Harborton) is terminated by PGE due to market conditions, PGE would not request that customers pay Harborton development or termination costs.

b. PGE would likely terminate Harborton if the expected revenues of DSAYs created by Harborton are less than development and O&M costs.

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 003
Dated August 12, 2016

Request:

Regarding Attachment I-1, p. 4, the "Summary of Salient Facts and Conclusions" that says that the highest and best use of the property is "Riverfront industrial development and habitat/buffer," and I-1, p. 12, that notes that a large section of the property is zoned "Heavy Industrial Zone" (approximately 2/3 of the property), please describe why PGE found that development of the Harborton Project provides a greater benefit to customers than selling the property for riverfront industrial development.

Response:

Although the site is roughly two thirds zoned for Heavy Industrial use, the property is encumbered with features that make industrial development difficult. Based on the Highest and Best Use section of the appraisal, the primary site is made up of four distinct components that have been labeled subareas 1, 2, 3, and 4. Of these, Subareas 1 and 4 are generally undevelopable and have Highest and Best Use limited to habitat and buffer area. Subarea 2 appears to be developable subject to availability of necessary utilities. If filled, Subarea 3 has some potential for future development; however, the presence of delineated wetlands (35% to 40%) will severely limit the potential net gain of usable land.

Subarea 2 (approximately 26.2 acres) use as industrial property would be less due to the roughly 9.5 acres that will remain as a substation. Subarea 2 includes approximately 900 feet of river frontage. River front industrial sites do not typically yield a significant value premium over nonfrontage sites in the neighborhood. While the frontage may provide some marketing flexibility, it does not materially affect the Highest and Best Use for a standard industrial application. With this in mind, and in light of the limited infrastructure, the Highest and Best Use of Subarea 2 is judged to be for open yard storage, truck/trailer parking, or equipment maintenance. The industrial sales range from $2.61 per square foot to $4.70 per square foot. These prices are generally reflective of prices which would be expected for similar industrial properties. Assuming a midrange price of $3.65 per square foot for 16.7 acres would result in a price of $2.7 million. The redevelopment of the property as a mitigation project will result in a substantially higher value which results in a greater benefit to the customer.

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 004
Dated August 12, 2016

Request:

Regarding Attachment I-1, p. 10, "The appraisal scope is limited to the value impact of the easement on the land. The improvements within the easement do not contribute to highest and best use. Thus, the value estimate was limited to land alone," please provide the market value of the 62 acres slated for the Harborton Project if no conservation easement was placed on the property and it was sold at market price in 2016 or 2017.

Response:

Modifying the acreage based on the latest survey and design and using the values provided on page 32 of Attachment I-1 to reflect the Harborton Project results in the following:

Subarea 1: 8.0 ac x $10,000 = $80,000
Subarea 2: 15.2 ac x $239,580 = $3,641,616
Subarea 3: 17.5 ac x $15,700 = $274,750
Subarea 4: 23.6 ac x $10,000 = $236,000
Total 64.3 ac x $65,822 = $4,232,366

September 23, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE *Revised* Response to OPUC Data Request No. 007
Dated August 12, 2016

Request:

Please provide answers to the following questions, as well as all evidence, data, and information that PGE has relied on to support the Company's answers to the following:

a. **Estimate the number of DSAYs that the Harborton project will produce over the lifetime of the project, and the total value of such DSAYs;**

b. **Provide the particular years that DSAY credits will be released to PGE, the number of credits PGE will receive in the release years, and the estimated value of the DSAYs in each of the release years; and**

c. **Total number DSAYs debits (liability) for the Portland Harbor Natural Resource Damage allocation, the number of parties that will be assessed DSAY debits, and PGE's share of total debits allocated.**

Response (Dated August 19, 2016):

a. The Trustees have sent us a forecast settlement letter indicating that our project is valued at [redacted] DSAYs and will be issued at several milestones over ten years. This number may vary based on the actual construction and outcome of monitoring and maintenance. If performance goals are not met, future DSAYs may not be issued by the Trustees. In addition, there is a potential of a 10% bonus for working with the adjacent project (Miller Creek) and hydraulically connecting the projects. This ten percent bonus would be paid after ten years of performance. The value of the DSAYs is unknown, however, PGE knows that the City of Portland paid [redacted] per DSAY to the Alder Creek project and the Trustees have a buyout value of [redacted].

b. Assuming project approval in 2016 and construction in 2017, the release years are as follows:

Year	DSAYs
2016 –	[redacted] (15% on project approval)
2017 –	[redacted] (35% post-construction)
2020 –	[redacted] (30% after meeting year 3 performance goals)
2022 –	[redacted] (15% after meeting year 3 performance goals)
2027 –	[redacted] (15% after meeting year 3 performance goals)

c. The Trustees have currently identified [redacted] DSAYs of liability for the entire Portland Harbor. At this time, PGE is not able to estimate its DSAY liability.

Revised Response: (Dated September 23, 2016)

An error was discovered in response to part (b). The corrected response is:

b. Assuming project approval in 2016 and construction in 2017, the release years are as follows:

Year	DSAYs
2016 –	[redacted] (15% on project approval)
2017 –	[redacted] (35% post-construction)
2020 –	[redacted] (30% after meeting year 3 performance goals)
2022 –	[redacted] (10% after meeting year 5 performance goals)
2027 –	[redacted] (10% after meeting year 10 performance goals)
2027 –	[redacted] (10% potential bonus credit)

Attachment 007-A contains the unredacted DSAY information.

Attachment 007-A contains protected information subject to Protective Order No. 16-270.

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August 19, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 008
Dated August 12, 2016

Request:

Regarding PGE's statement that it intends to sell DSAY credits at the market price, please answer the following:

a. **Explain the market incentive (or demand) for parties to buy DSAYs, in other words, why parties would pursue buying DSAYs from PGE, rather than simply paying their assessed NRD liability (DSAY debits) in cash.**

b. **What conditions affect the market price?**

c. **What assurances does PGE have that there will be a market for DSAYs, and what are the expected prices for years 2016-2028?**

d. **Does PGE estimate that DSAY sales will fully offset the cost of the Harborton project? If so, provide the total cost that will be offset, broken down into costs included (development, O&M, endowment, etc.).**

e. **Does PGE estimate that DSAY sales will fully offset additional environmental remediation expenses such as the legal expenses associated with Portland Harbor, Downtown Reach, and NRD insurance recovery, environmental remediation and natural resource damage liabilities associated with the Portland Harbor Superfund Site, etc.? Please specify the estimate of costs that will be offset.**

Response:

a. Potentially Responsible Parties (PRPs) can satisfy their NRD obligations by paying the Trustees' cash out price, purchasing DSAYs from project developers, or developing a project that produces DSAYs. The cash out price is a blended price of within the harbor and out of harbor expected DSAY prices. PRPs can satisfy their NRD obligation using up to 50 percent of DSAYs produced out of harbor and no less than 50 percent of DSAYs produced within the harbor. Harborton is within the harbor. PRPs would have an incentive to purchase DSAYs if they can purchase DSAYs such that the melded price of in-harbor and out of harbor DSAYs is less than or equal to the cashout price and development costs of their own project (if any).

b. Market price is affected by the supply of DSAYs and the demand for DSAYs at a given time.

c. PGE's understanding is that the Trustees are limiting the number of projects that can produce DSAYs to roughly match the expected total demand for DSAYs. PGE's conservative estimate is that the market price of DSAYs will be close to [redacted]

d. Yes. Please see UE 311 PGE confidential Exhibit 106C.

e. It is too early to tell. However, PGE expects that DSAY sales will offset a significant portion of its environmental mitigation costs. At this time, PGE does not have an estimate of its potential environmental costs.

Response 008 contains protected information Subject to Protective Order No. 16-270.

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 010
Dated August 12, 2016

Request:

Although PGE does not expect its Portland Harbor Superfund Site liability to be known until 2022, please provide the Company's best estimate of the liability amount, all supporting data, and all assumptions relied on. Please also confirm that Portland Harbor Superfund Site (non-NRD) liability is still expected to be assessed in 2022.

Response:

PGE does not know the amount of our Portland Harbor liability and cannot estimate the liability at this time. Currently there is only a proposed plan from EPA with a preliminary preferred remedy costing $745,660,000 total liability for all PRPs, but no allocation of those costs has been determined or proposed[1]. There are over 100 parties involved with liability due to different contaminants of concern. At this time, PGE cannot determine its liability due to the complex nature of the sites and information being collected by Allocators to make this determination. PGE believes that the allocation of the estimated liability will be assessed around 2020 to 2022.

[1] https://yosemite.epa.gov/R10/CLEANUP.NSF/sites/ptldharbor

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 015
Dated August 12, 2016

Request:

Regarding UE 311/PGE/100, Behbehani – Brown – Stevens/11 Lines 5 through 6: Please provide the justification and reasoning for exempting $6.5 million from the earnings test. Please also provide any data used to arrive at the specific number.

Response:
Environmental Remediation Costs that PGE is and will incur are the result of normal utility operations over decades that were necessary to provide electrical service to our customers. As such, PGE believes that they are appropriately recoverable from customers and should not be subject to an earnings test.

In UM 1635 and UM 1706, the Commission ruled that for Northwest Natural Gas Company more than $10 million ($5 million plus interest from insurance proceeds and $5 million in base rates from a tariff rider) of prudently incurred environmental remediation costs. The Commission also did not adopt Staff's proposal of a 90/10 sharing of costs prior to deferral. (See Orders 12-437, 15-0419, 15-276 and 16-029.)

PGE developed its mechanism in consultation with other parties and heard that we should expect treatment similar to that approved for Northwest Natural in the Commission's orders on UM 1635 and UM 1706 since they are appropriate for PGE's environmental remediation costs.

PGE expects that its Portland Harbor environmental obligation will be less than that for Northwest Natural, and, therefore, proposed excluding a lesser amount ($6.5 million vs. $10 million) in annual environmental remediation costs from an earnings test. PGE believes that excluding $6.5 million to $7.5 million in annual environmental costs is reasonable.

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 023
Dated August 12, 2016

Request:

Special Condition 3 of proposed Schedule 149 requests a five year amortization of net costs incurred. Please describe why five years was chosen as a proper period of amortization, making sure to address the consideration on intergenerational effects.

Response:

The five year amortization period was chosen in part by considering the OPUC's approval of Northwest Natural's environmental mechanism as noted in Order No. 15-049. The order states that in periods where Northwest Natural's environmental remediation costs exceed the annual allocated revenues, the excess is recovered via customer prices over a rolling five-year basis.

In PGE's proposed mechanism, in years where net costs exceed revenues, the net balance will be "amortized" to the balancing account instead of into customer prices. The Company feels that the five year amortization is consistent with Northwest Natural's mechanism, as well as maintains the spirt of intergenerational equity by spreading the costs and benefits over time. Five years is a reasonable amortization period given that the estimated life of the remediation projects extends through 2028.

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 025
Dated August 12, 2016

Request:

Please explain why the PCAM earnings test should be applied first (prior to the Schedule 149/AAC mechanism earnings test). Additionally, if the PCAM earnings test absorbs all of PGE's earnings above AROE for the year, is PGE proposing that no earnings test would be applied in Schedule 149?

Response:

PGE believes that the PCAM mechanism should be applied first because delivering electricity to customers is the company's primary business and the PCAM adjusts the amount of power costs that are recovered from customers.

In addition to the above, we note that the financial information required for the PCAM earnings test is available in the first quarter of the following year, allowing PGE to include the PCAM results in the appropriate fiscal year. Applying the Schedule 149 mechanism first and then applying the PCAM or combining the two in some manner would require parties to first process the prudency of the deferred costs/revenues in the Schedule 149 deferral and then ask for an order from the Commission. PGE would not be able to combine the PCAM result with the appropriate fiscal year and would likely face some uncertainty in its earnings.

Finally, the following example demonstrates that customers should prefer applying the PCAM first. Assume that PGE's authorized ROE is 10%, that PGE earned more than 11% in a given year, that power costs were $10 million above the PCAM deadband (i.e., PGE's authorized ROE plus 100 basis points), and that Schedule 149 costs subject to the earnings test were also $10 million.

Assume next that by applying the PCAM first, we reduce PGE's ROE to the deadband level of 11% and return $10 million to customers. Then, applying the Schedule 149 mechanism further reduces PGE's ROE by $10 million to 10.6%. Applying the earnings tests in this order results in an ROE of 10.6% with $20 million returned to customers.

Applying Schedule 149 first, however, reduces PGE's ROE to 11%. The PCAM would not trigger since 11% is the upper end of the PCAM earnings deadband. The result is that PGE's ROE is 11% and only $10 million is returned to customers.

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August 24, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 027
Dated August 17, 2016

Request:

Regarding UP 344 application, p. 4, fn. 1, "In the event the market for DSAY Credits does not develop and Declarant is unable to sell DSAY Credits, the Declarant may terminate the Harborton Restoration Project and the Harborton Restoration Plan, upon returning to the Trustee Council all credits previously released by the Trustee Council . . . and all costs they have incurred with respect to the review and approval of the Harborton Restoration Plan . . ." please answer the following:

a. **What is the potential risk that the DSAY revenues will not cover the cost of the Harborton project?**

b. **What are the estimated costs of repaying the Trustees in credits and costs for review and approval of the Project?**

c. **Please provide a copy of the "Harborton Restoration Plan" or project proposal under review by the Trustees.**

Response:

a. The total expected cost for the Harborton Restoration Project is approximately $12 million. If you assume that the project does not receive the final 10 percent of the project's DSAYs or the 10 percent bonus for hydraulically connecting the project to the adjacent site, then the project would break even if the average DSAY price received by PGE is approximately [redacted]. Given that the buy-out price is [redacted], the risk that DSAY revenues will not cover the project cost seems minimal.

b. The cost for Trustee oversight for approval of the project will be $[redacted]

August 24, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 028
Dated August 17, 2016

Request:

UP 344, p. 2, states: "This deed restriction is expected to become a conservation easement after the first ten years of project life." Please explain the following:

a. **Is PGE proposing that a conservation easement will not be placed on the 62 acres slated for the Harborton project for ten years? Please describe the process and timeline for the deed restriction to become a conservation easement.**

b. **When does PGE plan to execute and record the conservation easement?**

c. **How is the "Declaration of Restrictions and Grant of Entry" released should PGE terminate the project? For example, Attachment I-1, p. 75, states that the Declaration of Restrictions "shall constitute covenants that run with the land . . . [and] shall continue in perpetuity."**

Response:

a. Correct. A deed restriction will initially be placed on the property. During the ten year monitoring and maintenance period, a conservation easement will be placed on the property. A non-profit entity will be selected as a steward for the property.

b. The conservation easement needs to be recorded prior to turning the property over to the non-profit steward within ten years of construction. PGE anticipates that this would occur late in the ten year period.

c. The deed restriction would only need to be lifted if PGE does not develop the project. PGE is negotiating with the Trustees over how to remove the deed restriction in the event there is no DSAY market.

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August 24, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 029
Dated August 17, 2016

Request:

Similarly, regarding the conservation easement:

a. **Attachment I-1, p. 83, confirms that the Conservation Values of the Property remain "in perpetuity" and that the "Conservation Easement is to ensure that the Property will be retained forever in a condition contemplated by the Conservation Easement." Please explain how the conservation easement is removed once it has been recorded and also provide the estimated cost of removing the easement.**

Response:

A deed restriction will initially be placed on the property. This will occur prior to construction. At some point over the next 10 years, the deed restriction will be changed to a conservation easement. This would only occur after the project has been completed and DSAYs have been successfully marketed. The intent is for the conservation easement to remain in place in perpetuity.

August 24, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 035
Dated August 17, 2016

Request:

Regarding Attachment I-1, p. 150, the March 1, 2016 slides identify six properties/projects that will generate DSAYs. Please discuss the effects of these projects on PGE's Harborton Project, any risks identified with DSAY generation and demand, and further discuss the Trustee Council's moratorium on any new sites.

Response:

The Trustees have approved the development of six projects. The Trustees have responsibility for balancing both the liability side and the asset side of the Natural Resources Damages. The Trustees are pursuing potential responsible parties (PRP) and will assign a DSAY liability to each PRP. The Trustees are working with developers to create an equivalent amount of DSAY credits to offset the number of DSAYs required to fulfill the PRP liability.

By placing the moratorium on any new sites, the Trustees are sending the message that the current projects will provide enough DSAY credits to offset outstanding liability. Since the Trustees are balancing the supply and demand for DSAYs, the primary risk for Harborton is a delay in construction and, as a consequence, being slow to market DSAYs. PGE sees a benefit to marketing DSAYs to PRPs as they receive their liability in 2016 and 2017, and doing so in advance of the other four projects that are not constructed.

August 24, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 036
Dated August 17, 2016

Request:

Regarding Attachment I-1, p. 19, referring to the Trustee's moratorium on DSAY-generating projects, the appraiser states that: "Regardless of the above noted moratorium, the potential number of credits may potentially outstrip demand . . . it is not possible to develop a model which can reliably identify a residual land value without an inordinate level of speculation. As such, the highest and best use conclusion must rely on the limited available market evidence . . . given the uncertain and speculative nature of this sub-market, it is judged that the highest and best use of the subject would be served with a conventional non-project oriented use." Please answer the following:

a. **Given the statement by the appraiser above, explain why the Harborton Project benefits ratepayers and discuss the risks associated with the Project.**

b. **Can PGE confirm that a moratorium on projects has been issued, when the moratorium will be lifted, and whether there could be other projects added.**

c. **Discuss the benefits of projects being located in particular restoration areas, such as within particular river miles of Portland Harbor.**

Response:

a. Please see UE 311 / PGE / 100, page 13 at 8 through 20. The project would benefit customers as it would be part of an overall strategy of minimizing cost to PGE customers. See PGE response to OPUC DR 035 for risk for the project. In addition, as discussed in PGE response to OPUC DR 035, the Trustees have placed a moratorium on restoration projects to balance the supply and demand for DSAYs.

b. The memorandum from the Trustees regarding the moratorium is attached as Attachment 036-A. PGE is not aware if or when the Trustees may lift the moratorium.

c. The project is located within the Portland Harbor study area. The benefit to being in the study area is that PRPs have to use at least 50% of their DSAYs from the study area.

PORTLAND HARBOR
Natural Resource Trustee Council

Important Message Regarding New Third-Party Restoration Projects

The Portland Harbor Natural Resource Trustee Council (Trustee Council) has determined that due to (1) the current resource constraints of its restoration planning representatives, and (2) the need to encourage a balance between the supply of and demand for natural resource damages (NRD) restoration credits, the Trustee Council will not assist third-party restoration proponents on any new restoration projects until further notice.

The Trustee Council is involved in a number of restoration projects that are currently in development. The restoration pause does not affect these current projects. Current projects are those where there is 1) a site-specific MOA between the Trustee Council and restoration proponent in place, 2) a conceptual design for the restoration project received by Trustee Council, and 3) a project-specific scope of work and budget developed by the Trustee Council and restoration proponent providing for the Trustee Council technical assistance for the design of the restoration project. This pause also does not apply to restoration projects proposed by potentially responsible parties who currently are working collaboratively with the Trustee Council to achieve settlement of their NRD liabilities if those projects are intended to resolve all or part of their NRD liability.

This pause does not prevent a third-party restoration proponent from proceeding with a restoration project on its own. However, the third-party proponent would be doing so at its own risk with no guarantees that the project would be suitable for NRD credits or for any specific number of NRD credits. If you have any questions, please contact Julie Weis (weis@hk-law.com) or Deirdre Donahue (deirdre.donahue@sol.doi.gov).

September 2, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE *Revised* Response to OPUC Data Request No. 044
Dated August 17, 2016

Request:

Regarding UE 311/PGE/100 p. 5 at line 18: Expected costs for these two projects in Downtown Reach were included in PGE's base rates and are not part of Schedule 149."

a. **Please identify the amount and category of costs for Downtown Reach that are included in base rates.**

b. **Please explain the Downtown Reach costs that are estimated in Confidential Exhibit 106C. Are these different costs than those that are in base rates? If yes, please explain. If no, explain why discussion of Downtown Reach estimates are included in this filing.**

c. **Please explain whether the amounts in base rates for the two Downtown Reach projects were considered when PGE proposed that $6.5 million be exempt from the earnings review.**

Response (Dated August 24, 2016):

a. The Downtown Reach costs included in the UE 283 and UE 294 rate cases included the cost of remediation at two locations in the Downtown Reach of the Willamette River (River Mile 13.1 and River mile 13.5). The cost to remediate these two areas in the river was estimated at approximately $1.5 million dollars each. This resulted in inclusion of $1.5 million dollars of rate base for cleanup projects.

b. The Downtown Reach cost identified in Exhibit 106C includes: Design and Engineering and Permitting costs in 2016; and remediation cost in 2017. The years following remediation there will be required monitoring and reporting to Oregon DEQ. The cost estimate was based on the level of monitoring required. The cost included in the rate base was based on earlier estimates and did not include ongoing monitoring. The costs in table 106C have been updated to reflect current available information.

Discussion of Downtown Reach estimate in this filing has been included since PGE anticipates recovery of some of the costs of remediation from Insurance Recovery process.

c. The cost of the Downtown Reach projects that is currently in base rates was not a consideration in PGE's proposal to exempt $6.5 million from the earnings review.

Revised Response: (Dated September 2, 2016)

An error was discovered in response to part b. The correct response is:

b. The Downtown Reach cost identified in Exhibit 106C includes: Design and Engineering and Permitting costs in 2016; and remediation cost in 2017. The years following remediation there will be required monitoring and reporting to Oregon DEQ. The cost estimate was based on the level of monitoring required. The cost included in the ~~rate~~ base rates was based on earlier estimates and did not include ongoing monitoring. The costs in table 106C have been updated to reflect current available information.

Discussion of Downtown Reach estimate in this filing has been included since PGE anticipates recovery of some of the costs of remediation from Insurance Recovery process.

August 24, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 045
Dated August 17, 2016

Request:

For Confidential attachment UE 311, Exhibit 106C, please provide a description for each of the rows, explaining what are the major cost or revenue components for each.

Response:

Row 2 – Portland Harbor (O&M) – estimate for technical support during defense activities.

Row 3 - Downtown Reach (O&M) – estimate for all design, permitting, construction and construction oversight to address Downtown Reach sites (River Mile (RM) 13.1).

Row 4 – Portland Harbor – NRDA (O&M) – estimate for technical support for NRD negotiations with the Trustees concerning our potential liability.

Row 5 – Harborton (O&M) – estimate for post-construction site O&M .

Row 7 – legal (O&M) – legal support during defense activities.

Row 8 – insurance recovery (O&M) – estimated insurance reimbursement for defense activities.

Row 9 – Harborton (cap) – design, permitting, development and construction costs for the Harborton Restoration project.

Row 10 – Downtown Reach easements (cap) – cost for the easement to be paid to Oregon Department of State Lands to construct the RM 13.1 cap.

Row 14 – Harborton DSAY sales – estimated revenue from DSAY sales assuming DSAY credits released in accordance to our credit release schedule.

Row 15 – legal - insurance recovery – estimated legal costs to pursue insurance companies to recover our defense and remediation costs.

Row 16 – insurance recovery – remediation – insurance proceeds related to remediation activities.

Row 19 - NRDA liability – NRDA liability.

Row 20 - insurance recovery – insurance recovery related to NRDA liability.

Row 21 – Portland Harbor liability – Portland Harbor liability.

Row 22 - insurance recovery - Portland Harbor – insurance recovery related to Portland Harbor liability.

Oregon

Kate Brown, Governor

Public Utility Commission
201 High St SE Suite 100
Salem, OR 97301
Mailing Address: PO Box 1088
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Consumer Services
1-800-522-2404
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Administrative Services
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Confidential Data Request

September 20, 2016

STEFAN BROWN
MANAGER, REGULATORY AFFAIRS
PORTLAND GENERAL ELECTRIC
121 SW SALMON ST., 1STC0702
PORTLAND, OR 97204
pge.opuc.filings@pgn.com

RE:	Docket No.	Staff Request No.	Response Due By
	UM 1789	DR 78-82	September 27, 2016

Please provide responses to the following confidential request for data by the due date. Please note that all responses must be posted to the PUC Huddle account. Contact the undersigned before the response due date noted above if the request is unclear or if you need more time. In the event any of the responses to the requests below include spreadsheets, the spreadsheets should be in electronic form with cell formulae intact.

Topic or Keyword: Rate Spread

Regarding PGE's supplemental confidential response to Staff DR 11 submitted on 9.19.16, please answer the following three DRs:

78. Please describe PGE's proposed rate spread of cost obligations for "Facilities Type" where the appropriate functionalization (residential, commercial, industrial) is not apparent.

79. How is PGE proposing to spread costs associated with obligations for facility type labeled as:

    a) Substation

    b) General Operations

    c) Plant held for future use

    d) Spills

80. For each “PGE Facility” (site), please also provide the activity that caused or gave rise to the contamination/pollution of each particular site.

81. Please confirm the total amount of environmental remediation costs from Portland Harbor and Downtown Reach which are included in base rates from UE 294. PGE’s response to UE 294 OPUC DR 261 indicates a forecast of $3.56 million ($3.1 million w/o labor) included in the test year, however PGE’s response to UM 1789 OPUC DR 44 indicates only $1.5 million was included in base rates in UE 294. Please reconcile the difference.

82. Please also explain if any other environmental remediation-related costs other than those discussed in Staff DR 81 are currently in rates, and if so, please provide the additional amount.

Please name your responsive file to include the Data Request number and include “conf” in the file name. Once you have posted your response to the Data Request to the PUC Huddle account, use the “Sharing” feature of Huddle to generate an email to authorized parties notifying them that the response has been posted. In the body of the generated email, list the Data Request number associated with your response.

You must mark confidential responses as such and post them to Huddle in the appropriate “Confidential” folder. Access to Confidential folders is limited to individuals who have signed the protective order. You should not send confidential documents (hard copy or electronic) separately to the Commission or its Staff; you should post confidential responses only to the Huddle account.

Should you need to request an extension to the due date for the data responses you will need to contact the staff attorney assigned to the case for approval.

Questions regarding the use of Huddle should be directed to puc.datarequests@state.or.us.

Staff Administrator:
Marc Hellman

Staff Initiator: Mitch Moore   mitch.moore@state.or.us   503-378-6635
Scott Gibbens

September 28, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 081
Dated September 20, 2016

Request:

Please confirm the total amount of environmental remediation costs from Portland Harbor and Downtown Reach which are included in base rates from UE 294. PGE's response to UE 294 OPUC DR 261 indicates a forecast of $3.56 million ($3.1 million w/o labor) included in the test year, however PGE's response to UM 1789 OPUC DR 44 indicates only $1.5 million was included in base rates in UE 294. Please reconcile the difference.

Response:

In PGE's Response to UE 294 OPUC Data Request No. 261 Attachment-B CONF, estimates for both Portland Harbor and Downtown Reach remediation costs are provided. These costs total approximately $3.56 million in 2016. Of the $3.56 million, approximately $1.5 million is related to Downtown Reach.

In PGE's Response to UM 1789 OPUC Data Request No. 044, PGE only speaks to Downtown Reach remediation costs, which is approximately $1.5 million in 2016. Both responses, state the same Downtown Reach remediation cost estimates for 2016.

The difference is that one data response was speaking to both Portland Harbor and Downtown Reach and other was only speaking to Downtown Reach.

CASE: UM 1789
WITNESS: MITCHELL MOORE

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 103

Exhibits in Support
Of Reply Testimony

September 30, 2016

Exhibit 103 is confidential and is subject to

Protective Order No. 16-270.

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 200

Reply Testimony

September 30, 2016

Q. Please state your name, occupation, and business address.

A. My name is Scott Gibbens. I am a Senior Utility Analyst employed in the Energy Rates, Finance and Audit Division of the Public Utility Commission of Oregon (OPUC). My business address is 201 High Street SE, Suite 100, Salem, Oregon 97301.

Q. Please describe your educational background and work experience.

A. My Witness Qualification Statement is found in Exhibit Staff/201.

Q. What is the purpose of your testimony?

A. My testimony responds to the opening testimony in UM 1789 filed by Arya Behbehani, Stefan Brown, and Kirk Stevens of PGE. My testimony specifically addresses Staff's analysis regarding the implementation of Schedule 149, Environmental Remediation Cost Recovery Adjustment (UE 311), and its rate spread.

Q. Did you prepare any exhibits for this docket?

A. Yes. I prepared the following exhibits:

Exhibit Staff/201, Witness Qualification Statement; Staff/202, PGE Response to Staff DR No. 70; Staff/203 - Staff/206, Amortization Method Analysis; Staff/207 - Staff/208, Earnings Test Analysis; Staff/209, PGE Response to Staff DR No. 26; Staff/210, PGE Response to Staff DR No. 13.

Q. How is your testimony organized?

A. My testimony is organized as follows:

BACKGROUND

Q. Please briefly describe Schedule 149 to provide background to your analysis of the implementation effects of Schedule 149.

A. As discussed by Staff Witness Mitchell Moore in Staff/100, PGE anticipates incurring liabilities associated with environmental damage caused by past utility operations, and will be required to pay for its environmental damages through restoration, remediation, and/or monetary compensation. In UE 311, PGE proposes to create a balancing account that will track all of the expenses and revenues associated with its Portland Harbor Superfund Site obligations (Portland Harbor), its Natural Resource Damage (NRD) obligation, the Downtown Reach portion of the Willamette River, and the Harborton Restoration Project. PGE proposes that Schedule 149 be utilized to recover or refund the environmental remediation-related costs or revenues to customers. For a detailed description of all costs and revenues that PGE proposes to include in this automatic adjustment clause (AAC), please refer to Staff/100.

Q. Please describe the specifics of PGE's proposed mechanism.

A. Under PGE's proposal, all revenues received in a year from DSAY sales and insurance proceeds are allocated equally across the subsequent remaining years of the Harborton Project (prior to any netting of costs), which PGE projects will be deemed complete in 2028. For example, if in the year 2020, the annual revenues from DSAYs and insurance proceeds were to total $20 million, the revenue allocation for 2021 would be $2.5 million ($20 million divided by 8 years remaining in the project life). The total annual revenue

(TAR) for a current year is equal to the sum of the allocated revenue from DSAY sales and insurance proceeds, the amount collected in rates via Schedule 149 and any rollover of revenue from previous years plus interest.

For costs incurred (and for revenues received), first there would be a determination of prudency. The prudent costs would then be netted against the TAR. In years where the annual costs are less than the TAR, the excess revenues are rolled over to be included in the following year's TAR. If the costs are greater than the TAR, an earnings test may be performed. However, because PGE proposes to exempt at least $6.5 million from the earnings test, if the annual cost remaining after application of credits and offsets is less than $6.5 million, PGE proposes that no earnings test is required; conversely, if the annual cost is greater than $6.5 million, then PGE proposes that an earnings test be performed. However, only the amount the excess level would be eligible for earnings test review and for amortization over five years. The table below depicts how the offset works in different hypothetical scenarios.

Table 1: PGE's Proposed Earnings Review Offset

Annual Costs	Total Allocated Revenue (TAR)	Amount Subject to Earnings Review	Next Step assuming no earnings review adjustment
$60 million	$60 million	$0	Nothing
$60 million	$5 million	$53.5 million*	Amortize $53.5M over 5 years
$10 million	$60 million	$0	Rollover $50M to next year's TAR
$5 million	$1 million	$0	Amortize $4M over 5 years

* $60 - $6.5 due to revenue below $6.5M

All costs and revenues earn interest at PGE's authorized rate of return until the Commission determines the level of prudently incurred costs and revenues. Any amounts that are deemed prudent are moved to a different portion of PGE's proposed balancing account and earn interest at the PURE rate.

In the event there are surplus revenues in a year, these revenues are carried forward to the following year to offset future costs, or if deemed necessary, refunded to customers through Schedule 149.

Q. How would the prudently incurred costs recoverable from customers be spread across customers?

A. PGE's proposal is that the costs be allocated based on the historic nature of the costs with regard to whether the facilities were transmission-, generation-, or distribution-related.

Q. What are Staff's general concerns after review of PGE's proposed mechanism?

A. Staff is concerned about intergenerational equity, namely that costs are recovered in rates somewhat proportionally over time, and that the benefits of insurance proceeds and other revenues that are meant for the life of the remediation project are also enjoyed by future customers who will be paying for past and current remediation costs. This is further complicated by the fact that PGE's future revenue and expenditure amounts are largely unknown. Staff believes that an ideal mechanism will limit the change in the impact to rates over the next twelve years (life of the Harborton Project). This will help maintain, to the extent possible, the intergenerational equity of cost recovery.

Staff also believes that an ideal mechanism will insulate ratepayers from extemporaneous risk. The mechanism needs to safeguard against runaway costs and align the incentives of the utility and the ratepayer.

Finally, Staff believes the spread of the burden or benefit of the remediation project should be proportional to the responsibility of each customer class for the costs to be paid.

Q. Do you believe that the proposed mechanism meets these requirements?

A. Generally, yes. As Staff reviewed the proposed mechanism, several issues arose requiring careful analysis. In my following testimony, I will discuss how the proposed mechanism compares to an optimal treatment for the remediation projects and costs.

ISSUE 1. COST AND REVENUE AMORTIZATION

Q. Please describe PGE's proposed cost and revenue amortization schedule.

A. Under PGE's proposal, any prudent expenditure above and beyond offsetting revenues that pass an earnings test during a given year will be amortized over a five-year period. Alternatively, all revenues earned from the Harborton Project are allocated based on the remaining expected life of the project itself, through 2028. Staff understands that PGE chose this treatment to mirror the Commission's decisions in UG 221 and UM 1635 regarding NW Natural's environmental remediation cost recovery mechanism (the SRRM).

Q. What issues has Staff identified?

A. Staff has two concerns. The first issue is that the costs and benefits associated with the remediation projects are not treated the same in that the amortization periods are different. In the cost instance, customers are expected to pay off any debt burden within five years; however, they do not receive the same benefit associated with those five years of the project. The benefit they receive is based on the number of years remaining of the project.

The second issue stems from the first. One of the few pieces of information that is actually known at this point in time regarding the cost/benefits, is the timing of the DSAY revenue receipt (granted PGE meets its project year goals). For example, a total of [redacted] of the total DSAY payout is set to occur in the final year of the project. This payout is dependent on PGE meeting certain performance standards and a potential [redacted]

[redacted] for hydraulically connecting the Harborton Project with a neighboring project. However, PGE stated they are "reasonably confident" that they can meet the performance goals and achieve the full payout available to them in the final year of the project.[1] Because the benefits are based on the number of years left in the Harborton Project, this [redacted] is completely allocated to the last year of the project, along with a portion of the revenues that have accrued to the final year over time. This means that 2028 customers will receive a much larger benefit from the project over any customers who pay in year 2027 and prior years. In most models that Staff analyzed, the result is a large refund to customers in the last year of the project.

Q. How would Staff improve upon the mechanism?

A. Staff is concerned with the final rate impact. With this in mind, Staff reviewed different amortization schemes and time frames to identify within the general framework of the mechanism, a schedule that was both fair and minimized rate impact.

Q. What did Staff's analysis of amortization schemes involve?

A. Staff built three separate models and examined their performance based on PGE's estimated cost schedule. The models were:

1. PGE's proposed amortization. Costs amortized over a number of years, revenues allocated based on project life span.
2. Expense and Revenue amortization. Revenues and costs both amortized over a set number of years.

[1] See PGE's response to Staff DR No. 70, Exhibit Staff/202.

3. Expense and Revenue allocation based on project life span.

Table 2: Amortization Models

Model	Cost Allocation	Revenue Allocation
1	Set Amortization	Lifespan
2	Set Amortization	Set Amortization
3	Lifespan	Lifespan

Within each model, the length of amortization and minor tweaks to project life span allocation were also examined using PGE's estimated expense and revenue schedule. In measuring the performance of each model, Staff also altered the amounts of the costs and revenues by an increase of 20% and a decrease in 20%. Additionally, the timing of insurance proceeds was varied to test for equality across time. Information regarding the timing of DSAY payouts[2] and a portion of costs is reasonably known so those particular inputs were not altered in Staff's models.

Q. What were the results of Staff's analysis?

A. PGE's choice of using a five-year amortization for cost recovery appears reasonable. A shorter amortization increased rate volatility and a longer amortization had no substantial improvement over a five-year amortization period.

With respect to spreading DSAY revenues, when looking at the project lifespan allocation, Staff did notice that changing the revenue allocation to end a year prior to the final payout, assuming that the final payout would occur,

[2] See Exhibit Staff/102, PGE Confidential Response to Staff DRs No. 7 and 8; UE 311/PGE/106C.

results in a smoother spread of benefits across the lifespan of the project and reduces rate volatility. Given this finding, Staff implemented the change in the two models that included this final year allocation for further analysis. Exhibit Staff/203 depicts the change in rate volatility from a one-year change in revenue allocation.

1. Model No. 1 – PGE's Proposed Amortization

[redacted] Should the Commission adopt [redacted] in rates, Staff believes it should be spread based on the expected overall percentage of costs assigned to distribution, generation, and transmission costs. This will ensure that customers contribute their fair share to the remediation of environmental damages.

[redacted]

[redacted] (Millions) [redacted]

2. <u>Model No. 2 – Expense and Revenue Amortization</u>

[redacted]

[redacted]

3. Model No. 3 – Expense and Revenue allocation based on project life span

[redacted]

[3] Average rate difference due to rounding.

[redacted]

[redacted]

[redacted]

With results being comparable between Model 1 and Model 3, Staff examined these two models under differing payouts and costs to examine durability of the models. Based on the unknowns regarding PGE's future liabilities, Staff examined three different scenarios for the two models, including:

1. Rate impacts when Portland Harbor remediation costs were double what had been estimated.
2. PGE recouped no insurance proceeds over the course of the project.

[4] Difference in average due to extra year of Schedule 149.

3. Remediation costs were split into more years than PGE estimated, but costs remained at the total estimated amount.

Confidential Staff Exhibit 207 shows how the two differing models performed in each of the scenarios. Overall, the amortization schemes resulted in similar impacts to customers.

1. Scenario No. 1

   When remediation costs are double the estimated amount, the additional year required to achieve full payback of Model 3 outweighs the portion of earlier costs which are not yet paid back with project lifespan allocation. This results in a slightly smoother payback and lower maximum impact to customers. Although, as evident in Staff Table 3 displayed in my testimony below, the difference is marginal. Staff was concerned, however, that a doubling of expected costs, though unlikely, resulted in such a large impact to ratepayers in a relatively small timeframe.

2. Scenario No. 2

   The removal of insurance proceeds increased ratepayers cost obligation proportionally and had no delineating effect between the two models. This makes sense, given that the difference between the two models is solely on the cost allocation schedule.

3. Scenario No. 3

   [redacted] Model 1 outperforms Model 3. This is mainly due to the fact that costs which occur after the year 2022 are still given a five-year amortization and the cost recuperation over time is smoother. Given that costs may in fact extend beyond 2028, this is a scenario to examine. It brings up the question of intergenerational equity, given that the revenues are allocated only into 2028. This fact, coupled with the large impact to rates displayed in Scenario 1, leads Staff to recommend that the Commission require a revisiting of the cost recovery mechanism in the future. Staff's proposed revisitation in two years, with proposed changes in three years, is discussed in Staff/100.

Staff agrees that PGE's allocation method would result in PGE recouping costs in a timely and predictable manner. Should costs be back loaded, it would also avoid an extreme burden being imposed on ratepayers just prior to 2028. Please refer to confidential exhibit Staff/207 for a more detailed look at how the models performed in each scenario.

Q. You identify $2 million per year as an amount that smooths out overall rates to address intergenerational equity. What is the dollar level of costs currently embedded in rates?

A. Currently in rates there is roughly $3.5 million identified with relevant environmental remediation costs.

Q. How then do you recommend that the amount currently in rates be reflected in the mechanism?

A. The mechanism should reflect the fact that customers are currently paying at least $3.5 million in rates (this value changes as retail loads change) and prudently incurred environmental remediation costs would be credited each year by that amount until such time the Commission issues a general rate case order for PGE. Staff does not recommend a credit be inserted at this time to change the $3.5 million in rates to $2 million.

Q. What is Staff's recommendation for amortization and allocation methods?

A. Due to the fact that Model 1 and Model 3 resulted in similar intergenerational spread in all three scenarios tested, Staff recommends that the Commission adopt PGE's proposed allocation method with the inclusion of $2 million rate in Schedule 149 in order to even out rate payer obligations overtime. This adjustment was tested in all subsequent analysis and model alternatives described in the rest of my testimony and improve the rate volatility in every instance.

Staff believes that the final year of revenue allocation is still an issue; however it is uncertain if PGE will receive the last payout of DSAYs. Due to this, Staff recommends that the final year of revenue allocation be revisited once fewer unknowns exist during the Commission's review of the mechanism.

ISSUE 2. RISK AND REVIEW

Q. Please describe the background regarding the risk and review process.

A. Under PGE's proposal, the risks ratepayers face are managed via an annual prudency review and an earnings test. The prudency review applies to all costs and revenues occurring over the course of a year, however, the earnings test has several caveats.

Under PGE's proposal, the revenues and costs associated with the Harborton Project and the revenues from insurance payouts are not subject to the earnings review. This is done in practice by removing those costs from earnings test consideration. This effectively results in no earnings review when prudently incurred costs for that year are less than $6.5 million, and a guaranteed recovery of $6.5 million in all other circumstances. The table below shows examples of the offset.

Staff has concerns regarding the implementation of the earnings review and the dollar amount of guaranteed recovery. This guaranteed recovery and the order in which review and offsetting occurs is of concern to Staff as it represents a transfer of risk from the Company to ratepayers.

Finally, PGE proposes that the Schedule 149 earnings test is performed after the Power Cost Adjustment Mechanism (PCAM) earnings test should they both be necessary.

Q. Why is Staff concerned about the implementation of the earnings test?

A. The earnings test ensures that the Company does not earn above its authorized return on equity and yet at the same time surcharge customers to recover environmental remediation costs that it could have absorbed in that year. Many different options exist in the implementation of the earnings test which can change both the incentives for PGE and the protection the earnings test affords customers.

Q. What is Staff's view of the earnings test design?

A. PGE states that if the revenues associated with DSAY sales are not subject to an earnings test, then the costs associated with the Harborton Project should be fully recoverable. In other words, it would not be fair for ratepayers to receive the full benefit from the Harborton Project without paying the full cost of the Harborton Project. Even if one accepts PGE's position as reasonable, Staff notes that the development cost for Harborton is exempt from the earnings test as well.

Staff agrees with PGE's response to Staff DR 25 that performing the earnings test after the PCAM earnings test is reasonable. The PCAM earnings test calculation is filed in June of each year, while a Schedule 149 rate change would be filed in November. Staff takes this position because excess earnings cannot be used twice, thus, a decision must be made as to which mechanism has "first rights" to excess earnings. In the event that both of the tests are triggered, the fact that the proposed earnings test in the Schedule 149 mechanism has no deadband means that ratepayers potentially receive more benefit with the PCAM earnings test first than if the order of the earnings test is reversed.

However, Staff does have concerns regarding the order of events and amount of recovery guarantees proposed for Schedule 149.

Q. What about the order of events is of concern?

A. The order in which expenses are offset with revenues and subject to an earnings review changes the potential protection amount of the earnings review and the incentives of the utility. Which revenue amounts should be included in the offset also has material effects. Staff examined several different options for design of the earnings test.

Under PGE's proposal, the annual expenses are first offset by the amount collected via Schedule 149 and revenues allocated for the year, all prior to a potential earnings test. Allowing PGE to offset its costs with DSAY and insurance proceeds can benefit ratepayers from the standpoint that it provides an incentive for PGE to maximize revenues in order to avoid having to absorb costs through the earnings test. This should result in ratepayers being minimally impacted due to less than optimal revenue from the other potential streams. However, Staff notes that the proposed mechanism is administratively burdensome, convoluted and could result in large portions of revenues paying for costs that would have otherwise been absorbed due to over earning.

As an alternative to PGE's proposal, the Commission could require that an earnings test be required in any year that expenses exceed a set amount of costs. As discussed in Staff/100, Staff views PGE's proposed $6.5 million exclusion from the earnings review as lacking a clear basis for that specific value, however, Staff believes that $5.5 million could be used as a reasonable threshold for application of the earnings test. Staff arrives at $5.5 million given that [redacted] Staff's proposal benefits from its simplicity, if costs exceeded $5.5 million in one year, the earnings test would be triggered. By contrast, under PGE's proposal, high costs and high allocated revenues in one year would offset each other prior to application of an earnings review, thus, only a small portion of total costs would be subject to the earnings review and potentially absorbed by the Company. In sum, Staff supports a scenario in which all but $5.5 million in costs would be subject to an earnings review, and any amount that PGE was over-earning would be carried forward as revenue to offset costs in the following year.

Q. Please discuss the alternatives to PGE's PHERA mechanism that Staff examined.

A. To examine alternatives in the design of the PHERA mechanism, Staff looked at two separate design proposals against PGE's proposed mechanism. The first model is the model described on the previous page of my testimony. The model has a flat $5.5 million guaranteed recovery in every year with no offsetting of revenues prior to an earnings review. For the second alternative, Staff analyzed the effects of implementing at a 90-10 cost and revenue sharing mechanism. In UM 1635, Staff proposed a sharing mechanism that worked by sharing the costs and revenues with ratepayers and stakeholders after an earnings test was performed. In that docket, Staff proposed that the sharing would occur should NW Natural's rate of return fall outside of a range around their authorized rate of return.[5] The mechanism that Staff examined for this docket is a little more generous to customers. The main reason for this is that a stand-alone sharing mechanism would maximize PGE's incentive to generate revenues and minimize costs, whereas a sharing mechanism that operates in conjunction with an earnings test still relies on PGE over-earning.

To compare the models, Staff looked at four separate alternatives:

[redacted]

3. [redacted]

[5] See Docket No. UM 1635, Staff/100, Johnson/13 (May 3, 2013).

[redacted]

In lieu of discussing all nine different model/scenario combination, Staff will briefly discuss how each of Staff's alternative models performs in the scenarios generally, and include a table below of key metrics in each model/scenario combination.

[redacted]

[redacted]

For a further explanation of the results of each simulation, please refer to confidential Exhibit Staff/208.

Modelling Alternative	Scenario	Total Environmental Remediation Costs (Millions)	Total Revenues (non rates) (Millions)	% of Total Environmental Remediation Costs Exempt from Earnings Test	% of Total Environmental Remediation Costs paid by shareholders	% of Total Environmental Remediation Costs Paid by Customers	Net Costs Paid via Schedule 149 (Millions)
[redacted]							

ISSUE 3. RATE SPREAD

Q. Please describe the background regarding rate spread.

A. PGE has proposed to spread costs using historic site information and their most recent long-run marginal cost study (LRMC). PGE will functionalize costs based on historical function of the site. Once each site is divided into a percentage of operation in Generation, Distribution, and Transmission, the LRMC will be used to spread the costs to the different customer classes. LRMC examines the incremental cost each class has on each separate function of the utility, the goal being that each class will pay for the portion of costs they are responsible for.

PGE proposes that Long-Term Direct Access customers, who are not normally responsible for generation- or transmission-based costs, will be priced at Cost-of-Service according to PGE's proposal.

Q. Does Staff have any concerns with this cost allocation method?

A. Yes. Staff's main concern is whether the historical function of each site, approximately [redacted] at this point, can be properly identified.[6] In certain circumstances, the historic function is simply unknown at this time.[7] If responsibility is divided by historic use of the site, the information regarding PGE's operations needs to be sound. Staff continues to work with PGE to gain additional information regarding the history of each site and clarify concerns.

Q. Does Staff agree with this cost allocation method?

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[6] See Staff/400 for a discussion of sites PGE proposes to include in the mechanism.
[7] See Staff/406 - PGE's Response to Staff DR No. 13 and Staff/405 - Confidential Supplemental Response to DR 11.

A. Yes. As noted earlier, Staff believes that the mechanism must hold all customers responsible in a just and reasonable manner. The PGE approach of functionalization of costs through the purpose of the facilities that caused the environmental damage is a reasonable approach in Staff's opinion because each customer class has a different burden on the system, as well as different resulting costs to provide power.

Further, as PGE notes in Staff DR No. 13, historical functionalization is the same approach approved by the Commission in the Trojan plant cost recovery mechanism.

With regard to Direct Access customers, due to Staff's understanding based on the information provided by PGE that PGE's use of the sites which require remediation predate direct access legislation, it can be assumed that all customers benefited from the operations at the contaminated sites. Hence, Staff agrees that all customers should bear the remediation costs.

Q. Does this conclude your reply testimony?

A. Yes.

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION OF OREGON

STAFF EXHIBIT 201

WITNESS QUALIFICATIONS STATEMENT

September 30, 2016

WITNESS QUALIFICATION STATEMENT

NAME: Scott Gibbens

EMPLOYER: Public Utility Commission Of Oregon

TITLE: Senior Economist
Energy Rates, Finance and Audit

ADDRESS: 201 High St. SE Ste. 100
Salem, OR 97301-3612

EDUCATION: Bachelor of Science, Economics, University of Oregon
Masters of Science, Economics, University of Oregon

EXPERIENCE: I have been employed at the Oregon Public Utility Commission (Commission) since August of 2015. My current responsibilities include analysis and technical support for electric power cost recovery proceedings with a focus in model evaluation. I also handle analysis and decision making of affiliated interest and property sale filings, rate spread and rate design, as well as operational auditing and evaluation. Prior to working for the OPUC I was the operations director at Bracket LLC. My responsibilities at Bracket included quarterly financial analysis, product pricing, cost study analysis, and production streamlining. Previous to working for Bracket, I was a manager for US Bank in San Francisco where my responsibilities included coaching and team leadership, branch sales and campaign oversight, and customer experience management.

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 202

Exhibits in Support
Of Reply Testimony

September 30, 2016

September 19, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 070
Dated September 12, 2016

Request:

Regarding the Company's response to Staff Data Request No. 7, PGE has indicated that a certain percentage of DSAYs will be awarded in 2027 in the final year of allocation for Harborton revenues.

a) **Please describe how confident PGE is in its ability to meet year 3 performance goals and to hydraulically connect Miller Creek to Harborton. Please provide any analysis performed.**
b) **Has the Company considered the interaction of the proposed revenue allocation and the projected DSAY release schedule with regards to intergenerational equity? Please specifically address the projected allocation differences between 2026 and the end of the project.**

Response:

a. PGE is reasonably confident that we can meet our 3-year performance goals by taking aggressive management of non-native vegetation. We are also confident that Harborton can be hydraulically connected to the Miller Creek project. Attachment 070-A is a confidential summary letter provided to the Trustees by PGE and Wildlands PNW regarding the bonus credit for coordination between the Harborton and Miller Creek sites.

b. PGE did not consider intergenerational equity when designing its mechanism since the expected project life is only twelve years. The activities that lead to the environmental degradation happened in the past. Consideration of intergenerational equity would suggest that those customers that benefited from provision of services should pay for mitigation that resulted from provision of those services. Since past customers cannot be charged for this environmental remediation, the next best approach is to charge current customers rather than future customers.

With regard to DSAY revenue, PGE has owned Harborton for decades. Consideration of intergenerational equity, again, would allocate DSAY revenue associated with the property to past or current customers.

PGE is unclear what Staff is asking in the last sentence, but notes that the DSAY release schedule is set by the Trustees and the timing of the Harborton costs is similarly outside of PGE's control (except for the start date). If funds remain at the end of the period, they will be returned to customers.

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION OF OREGON

STAFF EXHIBIT 203

Exhibits in Support Of Reply Testimony

REDACTED
September 30, 2016

[redacted]

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION OF OREGON

STAFF EXHIBIT 204

Exhibits in Support Of Reply Testimony

<u>REDACTED</u>
September 30, 2016

[redacted]

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 205

Exhibits in Support
Of Reply Testimony

<u>REDACTED</u>
September 30, 2016

[redacted]

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION OF OREGON

STAFF EXHIBIT 206

Exhibits in Support Of Reply Testimony

REDACTED
September 30, 2016

[redacted]

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION OF OREGON

STAFF EXHIBIT 207

Exhibits in Support Of Reply Testimony

REDACTED

September 30, 2016

Staff Exhibit 207 is Confidential and

Is subject to Protective Order No. 16-270.

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 208

Exhibits in Support
Of Reply Testimony

REDACTED
September 30, 2016

Staff Exhibit 208 is Confidential and

Is subject to Protective Order No. 16-270.

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION OF OREGON

STAFF EXHIBIT 209

Exhibits in Support Of Reply Testimony

REDACTED

September 30, 2016

Staff Exhibit 209 is Confidential and

Is subject to Protective Order No.16-270.

CASE: UM 1789
WITNESS: SCOTT GIBBENS

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 210

Exhibits in Support
Of Reply Testimony

September 30, 2016

August 18, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 013
Dated August 12, 2016

Request:

Regarding p. 6, Rate Spread:

a. **Why has PGE decided to allocate costs to customer classes based on the historical function of contaminated site?**

b. **Does PGE have reliable historical data to determine the historical function of each contaminated site? If so, please provide the historical function for each contaminated site.**

c. **Please also further explain the statement that long-term direct access customers will be priced at cost-of-service for purpose of allocating costs. What is PGE's rationale for this proposed allocation?**

Response:

a) Where it is possible to identify the historical function, PGE is proposing to allocate costs to customer classes based on the historical function (therefore generation, transmission, and distribution) of the contaminated site in order to more appropriately allocate costs to the individual rate schedules. This is consistent with how PGE currently allocates historical costs. For example, PGE allocates the costs of decommissioning the Trojan nuclear plant (Trojan) on the basis of generation revenues with direct access customers priced at cost-of-service energy prices. PGE also allocates the United States Department of Energy refund relating to Trojan spent fuel through Schedule 143 Spent Fuel Adjustment on the same basis. Absent PGE's proposed cost allocations, one could reasonably allocate the costs to the rate schedules on the basis of either equal percent of revenues, or equal percent of distribution revenues. However, these two cost allocation methodologies would fail to take into account the historical functions provided by the contaminated sites and also be inconsistent with prior cost allocation methodologies approved by the Commission.

b) Attachment A summarizes the current and historic PGE properties in Portland Harbor.

c) For the cost allocations based on either generation or transmission functions, PGE proposes to allocate the cost to the rate schedules on the basis of transmission or generation revenues with direct access customers priced as if they were receiving these services from PGE's retail tariff rather than from an ESS. Again, this is consistent with how PGE allocates the decommissioning costs of Trojan during general rate proceedings, and is also consistent how PGE is currently allocating the refund relating to Trojan spent fuel through Schedule 143. Both Trojan and the contaminated sites specified in Schedule 149 represent historical sunk costs that predate direct access legislation. Hence, PGE believes that these historical costs and benefits are appropriately borne by all customers in the manner specified by PGE.

UM 1789

Attachment 013-A

Provided in Electronic Format only

PGE Properties in Portland Harbor

CASE: UM 1789
WITNESS: MARIANNE GARDNER

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 300

Reply Testimony

September 30, 2016

Q. Please state your name, occupation, and business address.

A. My name is Marianne Gardner. I am a Senior Revenue Requirement Analyst employed in the Energy Rates, Finance and Audit Division of the Public Utility Commission of Oregon (OPUC). My business address is 201 High Street SE, Suite 100, Salem, Oregon 97301.

Q. Please describe your educational background and work experience.

A. My witness qualification statement is found in Exhibit Staff/301.

Q. What is the purpose of your testimony?

A. My testimony discusses Staff's review of PGE's (Company) proposed deferred accounting treatment of costs and revenues specifically related to Portland Harbor, Downtown Reach, the Natural Resource Damage obligation (NRD), and the Harborton site restoration (Harborton Project).

Q. Did you prepare any exhibits for this docket?

A. Yes. I prepared the following exhibits:

Exhibit 301	Witness Qualification Statement
Exhibit 302	PGE Response to OPUC Data Request (DR) No. 041
Exhibit 303	PGE Response to OPUC DR No. 046
Exhibit 304	PGE Response to OPUC DR No. 073, Attachment A-Confidential
Exhibit 305	PGE Response to OPUC DR No. 057

Q. How is your testimony organized?

A. My testimony is organized as follows:

ISSUE 1. PROPOSED ACCOUNTING ABSENT DEFERRAL APPROVAL

Q. Does the Company explain their accounting treatment absent Commission approval of deferred accounting treatment?

A. Yes. The Company has a brief explanation in its UM 1789 filing of accounting treatment absent deferral approval.[1] PGE explains that if deferred accounting is not approved, instead of debiting a regulatory asset account (balance sheet account) for the incurred or accrued costs related to its environmental obligations, the Company would record these costs in FERC account 401, Utility Operation Expense (income statement account).

The costs incurred related to the Harborton Project DSAY credits would be recorded in the asset account, Other Materials and Supplies Inventory – DSAYs, (balance sheet account) instead of in a regulatory asset account.

Expected proceeds from the sale of DSAYs and insurance proceeds would be recorded as Miscellaneous Revenue (income statement account) rather than deferred as a regulatory liability (balance sheet account).

Q. Is the Company's accounting treatment absent deferral approval consistent with GAAP?

A. Yes. The Company states on page three of its UM 1789 filing that it would accrue estimated environmental costs to liability accounts in accordance with ASC 410-30.

[1] UM 1789/PGE/p. 3-4.

Q. Is there any other guidance Staff can provide regarding GAAP accounting?

A. Yes. Regulated utilities are subject to the Financial Account Standards Board (FASB) for Accounting Standards Codification (ASC) for recording environmental obligations. The relevant accounting treatment is described under ASC 980-Regulated Operations, 410-Asset Retirement and Environmental Obligations. Securities and Exchange Commission (SEC) staff provides additional guidance in Staff Accounting Bulletin (SAB), SAB Topic 10.F. In its interpretive response, SEC staff states,

> "…Statement 5 [paragraph 450-20-25-2] states than an estimated loss from a loss contingency shall be accrued by a charge to income if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. FN7 The staff believes that action of a regulator can affect whether an incurred cost is capitalized or expensed pursuant to Statement 71 [paragraph 680-340-25-1], but the regulator's actions cannot affect the timing of the recognition of the liability. FN7 Registrants also should apply the guidance of SOP 96-1 [Section 410-30-25] in determining the appropriate recognition of environmental remediation costs."[2]

According to a Deloitte Audit and Enterprise Risk Services publication that further explains ASC 450,

> "Not all clean-up costs will represent an environmental liability or have to be accrued. ASC 410-30-25-1 refers to ASC 450, which clarifies that a liability would be recognized when evidence indicates that a liability has been incurred as of the date of the financial statements and the amount of this liability can be reasonably estimated. Given the nature of environmental remediation obligations, the "probable" criteria triggering recognition are presumed to have been met when (1) litigation has commenced or a claim or an assessment has

[2] FASB Financial Accounting Standards Board. Accounting Standards Codification, available at https://asc.fasb.org/section&trid=2560854#d3e660553-123036, accessed 9/27/2016.

> been asserted on or before the balance sheet date or (2) commencement of litigation or assertion of a claim or an assessment is probable on the basis of available information (see ASC 410-30-25-4(a)) and it is probable that this litigation, claim, or assessment will be unfavorable (see ASC 410-30-25-4(b)). Making such a determination in light of the uncertainty that is often associated with a disaster may be extremely difficult. In addition, rubble of damaged buildings and equipment or leaked toxins may never result in litigation or another remediation liability under a law or statute. Clean-up costs, other than those that create an obligation in accordance with ASC 410-30 or that result in other litigation requiring an accrual in accordance with ASC 450, should not be recorded until incurred (i.e., when the clean-up takes place), even though such expenses are triggered by the disaster event."[3]

In other words, under ASC 450, PGE may have to record liabilities associated with PGE's environmental obligations included in this filing. However, assessing the amounts and the timing will be difficult because there a number of uncertainties involved in with PGE's environmental obligations.[4]

Q. What are some of the concerns regarding accounting treatment without Commission approval of deferral accounting?

A. The Company would have to report the environmental liabilities on their SEC financial statements without the benefit of reporting a regulated asset or regulated liability. For regulatory purposes, it likely would be necessary for PGE to request recovery of these costs through a general rate case given that the related costs and revenues would be recognized in its results of operations as incurred. As explained in Staff Witness Mitchell Moore's testimony,

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[3] Deloitte. Audit and Enterprise Risk Services, *Financial Reporting Implications of Disasters*, Practice Guide, November 2012 available at http://deloitte.wsj.com/cfo/files/2012/11/Practice-Guide-November-2012.pdf, accessed 9/27/2016.

[4] See Staff/100, Moore.

projected costs and revenues are expected to be "lumpy".[5] Absent Commission approved deferred accounting, Staff expects the Company would file multiple rate cases. Additionally, due to the timing and uncertainty of the costs and revenues, this may result in large swings in base rates, which raises concerns of intergenerational rate equity.

[5] See Staff/100, Moore.

ISSUE 2. PROPOSED DEFERRED ACCOUNTING

Q. Why is the Company requesting Commission approval of deferred accounting?

A. As stated in its initial UM 1789 filing[6], the Company has already incurred some costs to comply with regulatory requirements related to environmental remediation and expects to incur significant additional costs in the future. The Company's view is that Commission approval of deferred accounting treatment will facilitate:

- The tracking of costs for later prudency review and potential inclusion in rates through either a subsequent rate case or through the Company's proposed Portland Harbor Environmental Remediation Balance Account (PHERA);
- The minimization of the frequency of rate changes; and,
- The matching of costs (expenses) with benefits (revenues).

Q. Does the Company explain its proposed accounting treatment for deferred costs?

A. Yes. In the Company's response to Staff DR No. 41, the Company explains, in order to comply with GAAP, it must report costs on an accrual basis rather than a cash basis.[7] The Company proposes to defer the accrued environmental related costs as a regulatory asset. These costs will not accrue interest. It is not until cash payments are actually made for these accrued costs that the expenditures will accrue interest and will be subject to a prudence review and

[6] UM 1789/PGE/p. 3.
[7] Staff/302, Gardner at 2-3, PGE Response to OPUC DR No. 041.

an earnings test. Costs that meet the prudence review and earnings test will be moved into a balancing account. Once in the balancing account, these cash costs will be recovered through the Company's PHERA recovery mechanism. Staff witnesses Mitchell Moore and Scott Gibbens explain the mechanism in their testimony.[8]

Q. How does the Company propose to account for proceeds from DSAYS sales and insurance recoveries under deferral accounting?

A. In its response to Staff DR No. 41, the Company would defer these amounts as regulatory liabilities. In the PHERA mechanism, these liabilities would offset deferred regulatory assets and offset future environmental remediation costs.

Q. Does the Company explain how income taxes would be affected?

A. In its response to Staff DR. No. 41, the Company states that the proceeds from DSAY sales and insurance recoveries will be recognized as taxable income in the year received.

Q. Why is it important to understand the effect of expenses and revenues on taxable income?

A. It is important because of the timing difference that arises between book and tax reporting of revenue and expenses. Therefore, tax due on the income statement may be different than tax expense calculated for books. For GAAP and rate making purposes, these timing differences should be captured as deferred tax liabilities and deferred tax assets. Additionally, there is a time

[8] Staff/100, Moore; Staff/200, Gibbens.

value of money implicit with cash flow for tax payments versus the reporting of tax expense.

Q. Did Staff request additional details regarding the Company's proposed deferred accounting?

A. Yes. Staff issued DR No. 46 requesting that the Company provide the accounting entries that would be made over the lifetime of the remediation obligation along with the account numbers and an explanation regarding the impact, if any, on the Company's results of operations (ROO). The Company provided the entries in its response, OPUC_DR_046_Attachment A.xls.[9]

Q. Did Staff have any concerns regarding the proposed accounting entries?

A. Yes. The Company did not include any transactions for income tax expense. Additionally, the Company described that accrued interest on the regulatory assets as well as the regulated liabilities would be recorded in the results of operations, which may impact customers' base rates. Staff then reviewed the Company's proposed PHERA mechanism provided in response to Staff DR. No. 26, and it did not include tax expense either.

Q. Did Staff express concerns regarding the omission of the income tax treatment and the proposed inclusion of accrued interest in the Company's ROO?

A. Yes. Staff, during a webinar with the Company, requested that the Company supplement its response to Staff DR Nos. 26 and 46 and include the time-value of money impact for tax expense. Staff followed up this verbal request with

[9] Staff/303, Gardner at 1-3, PGE Response to OPUC DR No. 046.

Staff DR Nos. 73 and 74. The Company provided the updated mechanism and accounting entries in its response to DR No. 73. However, Staff still has an outstanding request in its Staff DR No. 46 Attachment that asked for each accounting entry, and that the Company describe the impact, if any, on its ROO.

Staff has included Scenario 4 of the mechanism from the Company's response to DR No. 73 as Confidential Exhibit 304. The response includes tax entries labeled as (h) and (i) on page 3 of Staff's Exhibit. As the Company noted on page 2, the entries are cross-referenced in the Scenario 4 example of the mechanism. These entries are located in the mechanism example under the Income Tax Schedule. This example does not include the time-value of money impact as Staff requested. Additionally, the financial impact of the tax expense and any return on the deferred tax asset or deferred tax liability is not included within the mechanism's balancing account. Instead, the Company's tax journal entries indicate that the financial effects will impact the ROO.

Staff is also concerned that PGE intends to record interest applied to the regulatory asset and regulatory liability account as shown in journal entry labeled (f) and not in the balancing account.

Q. Did Staff note any other concerns regarding the Company's proposed accounting?

A. Yes. Staff noted the following:

> Company's Advice No. 16-11, Schedule 149, on the page numbered "Original Sheet No. 149-1," the Company states,

> "The balance in the balancing accounting that has not been reviewed by the OPUC for prudence shall accrue interest at the authorized return on equity…". Staff believes this should read, "The balance in the ***annual account*** that has not been reviewed by the OPUC for prudence shall accrue interest at the authorized ***rate of return***…".

Additionally, in the Company's response to Staff's DR. No. 57[10], that requested an explanation of what PGE means by "upon recognition"[11] in terms of when the revenue amount will be deferred into the balancing account, the Company states that the timing and amounts deferred into the balancing account will be consistent with the reporting for GAAP. Given that GAAP is based on accrual accounting, Staff believes this is in conflict with Staff's understanding that only actual incurred and paid costs and actual recognized and received revenues will be included in the annual account and the balancing account. The Company's flowchart[12] that shows the Cost Type as "Cash" for both expenditures and proceeds included in the Annual Account and the Balancing Account boxes appears to corroborate Staff's understanding—it is these actual costs and actual revenues that will be subject to the prudency review and earnings test.

Q. Does Staff have any recommendations that address Staff's concerns provided above?

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[10] Staff/305, Gardner at 1-2, PGE Response to OPUC DR No. 057.
[11] UE 311/PGE/100, Behbehani-Brown-Stevens/13 at 13-14.
[12] See UE 311/PGE/107, Behbehani-Brown-Steven/1.

A. Yes. First, Staff recommends that the tax effects related to the mechanism should be accounted for within the PHERA mechanism and not in base rates or the Company's ROO, so the costs and benefits are accurately captured in the mechanism, especially given that the mechanism spans twelve years or more. This includes the actual tax expense, any related deferred tax assets or deferred tax liabilities, as well as the calculation of the time-value of money related to cash inflows and outflows for tax due. Second, Staff recommends that any interest income due from customers is collected through the mechanism rather than the Company's ROO for the same reasons articulated above. Third, Staff recommends that the Company include subaccounts under the regulated assets and regulated liabilities that clearly separate those costs and revenues that are based on accruals or estimates from the actual incurred and paid costs and actual earned and received revenues that should appropriately be included in the annual account and balancing account.

Q. Does this conclude your reply testimony?

A. Yes.

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 301

WITNESS QUALIFICATIONS STATEMENT

September 30, 2016

WITNESS QUALIFICATION STATEMENT

NAME:	Marianne Gardner
EMPLOYER:	Public Utility Commission of Oregon
TITLE:	Senior Revenue Requirement Analyst Energy Rates, Finance and Audit Division
ADDRESS:	201 High Street SE., Suite 100 Salem, OR. 97301
EDUCATION:	Master of Business Administration Oregon State University, Corvallis, Oregon Bachelor of Science in Accounting Montana State University, Bozeman, Montana CPA, Oregon

EXPERIENCE:

I have been employed by the Public Utility Commission of Oregon since March 2013, with my current position being a Senior Revenue Requirement Analyst, in the Energy - Rates, Finance and Audit Division. My responsibilities include research, analysis, and recommendations on a range of cost, revenue and policy issues for electric and natural gas utilities. As the revenue requirement summary witness, I have provided testimony in dockets UE 263, UG 246, UE 283, UE 294, UG 284, UG 287, UG 288, and UG 305.

I have approximately 20 years of professional accounting experience, including:

- Thirteen years as a cost accountant with responsibilities including cost accounting, budgeting, product costing, and the preparation of management reports;

- Four years experience in public accounting working in the areas of audit, tax and financial accounting for individual and small business clientele; and,

- Three years experience in non-profit accounting for an agency administrating funds under the Federal Job Training Partnership Act.

CASE: UM 1789
WITNESS: MARIANNE GARDNER

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 302

PGE Response to OPUC DR No. 041

Exhibits in Support
of Opening Testimony

September 30, 2015

August 24, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 041
Dated August 17, 2016

Request:

Regarding UM 1789, p. 3-4, "C. Proposed accounting for recording amounts deferred" please provide a narrative explanation of the following:

a. **What does PGE mean when it "proposes to accrue *estimates* of the related environmental costs to a separate liability account within FERC Account 253.XXX Other Deferred Credits, for each liability in accordance with ASC 410-30, Environmental Obligation? (emphasis added).**

b. **Is PGE proposing to accrue estimated costs rather than actual costs? If so, how are the estimated costs being calculated? Please clarify whether PGE is proposing to earn a return on estimated costs.**

c. **Clarify whether, through its deferral application, PGE is requesting to capitalize environmental remediation-related expenses into regulatory asset accounts. If so, explain why PGE believes a deferral suffices for this purpose, rather than an application seeking an accounting order.**

d. **The effect of deferring costs into a regulatory asset account as they "are accrued" versus "as they are incurred."**

e. **Why PGE is asking to record Harborton capital and O&M costs as "DSAY Inventory" rather than "Other Materials and Supplied Inventory – DSAYS".**

f. **What PGE means when it says that DSAY sales and insurance proceeds shall be deferred into the PHERA regulatory balancing account and "not be recorded in the income statement."**

g. **How PGE proposes to record revenue from DSAY sales and insurance proceeds for federal tax purposes.**

Response:

a. In order to comply with generally accepted accounting principles (GAAP), environmental liabilities must be recorded on an accrual basis and not a cash basis. This means that liabilities are recorded on the balance sheet with a corresponding expense recognized in the results of operations prior to any actual cash expenditures to settle such liabilities. These liabilities should be accrued when they are deemed probable and a reasonable estimate can be made of such liability. PGE is proposing to defer accrued environmental expenses (e.g., recognized, but not yet paid) as a regulatory asset. This regulatory asset would not accrue interest and PGE is not requesting a return on this regulatory asset. As these liabilities become known and PGE makes cash payments to settle such liabilities, such amounts will be transferred to a regulatory asset representing actual environmental remediation costs, which will be subject to the PHERA recovery mechanism. Interest on deferred balances would only apply to the deferred actual cash expense (not accrued estimates). The deferral of estimated accrued environmental remediation costs is consistent with that of Northwest Natural Gas Company as approved by the Commission in Order 15-049.

b. Yes, PGE is proposing that as it records accrued estimates of environmental remediation expenses that it would defer such expenses as a regulatory asset pursuant to the deferred application. However, as noted above, only actual cash expenditures will accrue interest and be subject to prudence review and earnings test prior to being transferred to the balancing account. Environmental liabilities will be calculated in accordance with GAAP as prescribed in ASC 410-30, Environmental Obligations. As noted above, PGE is not proposing to earn a return on estimated costs.

c. Yes, PGE is seeking to defer environmental remediation-related expenses into regulatory asset accounts, and recover such costs via the PHERA mechanism. This will allow PGE to defer its accrued and actual environmental expenditures and allow it to recover its prudently incurred costs pursuant to the PHERA as described in Schedule 149. PGE believes that an accounting order could accomplish this as well, and initially proposed an accounting order, rather than a deferral. However, we filed a request for a deferral following discussions with Staff and parties who indicated preference for a deferral.

d. As noted above, and similar to Northwest Natural, PGE is seeking to defer its accrued and actual environmental expenditures. Accrued environmental expenditures are deferred to a regulatory asset account that does not accrue interest and does not earn a return. As the estimated amounts become known and actual cash payments are made, those amounts would be transferred to a regulatory asset that does accrue interest. These actual cash payments would be subject to prudency review and earnings test before being transferred to the balancing account, in accordance with the proposed PHERA mechanism.

e. The sole purpose of the costs to develop Harborton is to create DSAY credits that will generate revenues that may be used to offset future environmental remediation costs on behalf of customers. As such, PGE believes that these DSAY inventory costs are part and parcel of all related environmental accounts within the proposed PHERA mechanism, and should be grouped within such regulatory assets.

f. Absent a regulatory deferral order, proceeds from DSAY sales and insurance proceeds would be recognized as income within the results of operations. Similar to environmental expenses, PGE wishes to defer such amounts as regulatory liabilities within the PHERA mechanism to offset future environmental remediation costs. In short, upon the receipt of cash from either DSAY sales or insurance proceeds, PGE would increase cash (balance sheet account) and increase a regulatory liability (balance sheet account) instead of increasing cash (balance sheet account) and increasing income (income statement account). This deferral treatment of proceeds from third parties is consistent with that of Northwest Natural's.

g. For federal and state income tax purposes, income from the sale of DSAYs and proceeds from insurance is recognized as taxable income in the year that it was received.

CASE: UM 1789
WITNESS: MARIANNE GARDNER

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 303

PGE Response to OPUC DR No. 046

Exhibits in Support
of Opening Testimony

September 30, 2015

August 26, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 046
Dated August 18, 2016

Request:

Regarding PGE's proposed accounting treatment for recording costs and revenue amounts deferred (discussed at UM 1789 p. 3-4 and UE 311 p. 15-21), please fill in the attached excel spreadsheet demonstrating how accounting entries would be made over the lifetime of the remediation obligation. Please add any other entries or information as appropriate to fully explain and clarify the proposed accounting treatment.

Response:

Please see Attachment 046-A.

Accounting entries for recording amounts deferred. (Assumes deferral accounting has been approved.)
For the years in which the deferral and Schedule 149 is in effect:

1 Year 20X1

FERC Acct. No.	FERC Acct. Desc.	Sub-Account No.	Sub-Account Desc.	Debit	Credit
182	Other Regulatory Assets	001	Portland Harbor - Accrual	XXX	
253	Other Deferred Credits	001	Portland Harbor		XXX

Accrue estimated environmental costs (Include an explanation of the type of liability, listing of potential type of costs that are being estimated, and the type of supporting documentation for estimates. Also describe what impact accruing an estimate will have on the Company's ROO.)
Environmental liabilities can relate to Portland Harbor Superfund Site, Natural Resource Damages (NRD), Downtown Reach, Legal costs to pursue insurance, other administrative costs. The most significant liabilities will likely be those related to PGE's allocated share of the Portland Harbor Superfund clean-up. Types of remediation costs that would be estimated include: treatment of contaminated media such as sediment, soil and groundwater, removal and disposal of media, or institutional controls such as legal restrictions on future property use, construction of the remedy, ongoing maintenance, monitoring, NRD claims. Supporting documentation for these will largely be tied to Feasibility Studies (FS), third party invoices, internal estimates for legal & admin, etc. Estimated accrued amounts should have no impact on Company's ROO.

PGE Application for Deferral of Environmental Remediation Costs — Page 3

253.XXX	Other Deferred Credits – Portland Harbor Environmental Obligation
253.XXX	Other Deferred Credits – Natural Resource Damages
253.XXX	Other Deferred Credits –Environmental Administrative and Legal Costs

As the related amounts are accrued or incurred they will be deferred into the following regulatory asset accounts on the balance sheet:

182.3XX	Other Regulatory Assets – Portland Harbor Environmental Costs
182.3XX	Other Regulatory Assets – Natural Resource Damages
182.3XX	Other Regulatory Assets – Environmental Administrative and Legal Costs

<-- In the deferral we said there would be Dr.'s to FERC 182, which is consistent and Cr.'s to FERC 253. This is consistent

2 Year 20X1

FERC Acct. No.	FERC Acct. Desc.	Sub-Account No.	Sub-Account Desc.	Debit	Credit
253	Other Deferred Credits	001	Portland Harbor	XXX	
131	Cash	001	Working Account		XXX
182	Other Regulatory Assets	002	Portland Harbor - Cash	XXX	
182	Other Regulatory Assets	001	Portland Harbor - Accrual		XXX

Record costs incurred (Include an explanation of the types of cost incurred and type of supporting documentation. Also, describe what impact recording the cost will have on the ROO.)
Types of remediation costs that would be estimated include: treatment of contaminated media such as sediment, soil and groundwater, removal and disposal of media, or institutional controls such as legal restrictions on future property use, construction of the remedy, ongoing maintenance, monitoring, NRD claims. Supporting documentation for these will largely be tied to third party invoices, contracts, etc. Recording costs will be deferred as a Regulatory Asset and not recognized in the ROO, so no impact on ROO.

<-- I would characterize these entries has non-substantive record keeping entries to keep track of expenses accrued and expenses paid. They are just reclassifications within the FERC 182 accounts.

3 Year 20X1

FERC Acct. No.	FERC Acct. Desc.	Sub-Account No.	Sub-Account Desc.	Debit	Credit
131	Cash	001	Working Account	XXX	
182	Other Regulatory Assets	003	DSAY inventory		XXX
182	Other Regulatory Assets	004	Accumulated Proceeds - BA		XXX

Record revenues received, earned, realized or realizable. (Include an explanation of the types of revenues and type of supporting documentation for each type of revenue. Also, describe what impact recording the revenue will have on the ROO and customer rates.)
Types of Revenue will largely come from two sources: (1) sale of DSAYs and (2) Insurance Recovery Proceeds. Supporting documentations will be invoices, cash receipts, contract, insurance settlement documents, etc. As revenues will be deferred as a Regulatory Liability, there is no amount recorded in ROO and no resulting impact. Only impact to customer rates would be the decision to refund customers with the proceeds received under Schedule 149.

As it relates to amounts incurred in conjunction with Harborton site restoration for the creation of DSAY credits, PGE requests to defer such capital and on-going O&M costs into the sub accounts of 182.3 (Other Regulatory Assets – DSAY Inventory). In the absence of regulatory accounting, these amounts would be recorded in balance sheet subaccount 156 (Other Materials & Supplies Inventory – DSAYs).

Proceeds from the sale of DSAYs and insurance recoveries will be recorded within the subaccounts of 182.3 (Other Regulatory Asset/Liability – Environmental Balancing) for the purpose of offsetting deferred environmental costs and recovery through the PHERA. In the absence of regulatory accounting treatment, these amounts would be recorded in subaccount 457 (Miscellaneous Revenue).

<-- As stated above, proceeds from sale of DSAYs is recorded in FERC 182. This is consistent with the deferral.

4 Year 20X1

FERC Acct. No.	FERC Acct. Desc.	Sub-Account No.	Sub-Account Desc.	Debit	Credit
182	Other Regulatory Assets	006	Interest on Env. Expenditures	XXX	
421	Misc. Nonop. Income	XXX	Interest on Env. Expenditures		XXX

<-- We did not state what accounts interest would be accrued to in the deferral application.

Record interest applied (Include an explanation of the types of cost incurred and type of supporting documentation. Also, describe what impact recording the cost will have on the ROO and customer rates.)
This entry represents interest accrued on a Regulatory Asset. Interest would also accrue on the proceeds received (Regulatory Liability). Interest will be included on cash expenditures/receipts (not accruals), for the types of environmental liabilities and revenues listed above. This will have an impact on the ROO, as the interest accrued is credited to the results of operations. The increased interest may impact the amount to be collected from customers in customer rates.

5 Year 20X1

FERC Acct. No.	FERC Acct. Desc.	Sub-Account No.	Sub-Account Desc.	Debit	Credit
182	Other Regulatory Assets	005	Accumulated Costs - BA	XXX	
182	Other Regulatory Assets	002	Portland Harbor - Cash		XXX

<-- I would characterize these entries has non-substantive record keeping entries to keep track of expenses accrued and expenses paid and movements within the Balancing Account. They are just reclassifications within the FERC 182 accounts.

Entry made to move environmental remediation costs from the Annual Account to the Balancing Account, after applying allocated revenues and applicable earnings test.

6 Year 20X1

FERC Acct. No.	FERC Acct. Desc.	Sub-Account No.	Sub-Account Desc.	Debit	Credit
182	Other Regulatory Assets	004	Accumulated Proceeds - BA	XXX	
182	Other Regulatory Assets	005	Accumulated Costs - BA		XXX

Apply allocated revenues from the accumulated proceeds account to offset current year expenditures up to the allowed amount.

7 Year 20X1

FERC Acct. No.	FERC Acct. Desc.	Sub-Account No.	Sub-Account Desc.	Debit	Credit
182	Other Regulatory Assets	005	Accumulated Costs - BA	XXX	
182	Other Regulatory Assets	004	Accumulated Proceeds - BA		XXX

Record amount of excess Surplus to be rolled over to next year as accumulated rollover allocation.

Amortization (Include an explanation of the type of supporting documentation. Also, describe what impact amortization will have on the ROO and customer rates.)
See above for amortization entries through the Balancing Account. There is no expected impact to ROO for amortization within the Balancing Account. Customer Rates may be impacted to the extent environmental remediation costs exceed third party proceeds.

CASE: UM 1789
WITNESS: MARIANNE GARDNER

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 304

PGE Response to OPUC DR No. 073

Exhibits in Support
of Opening Testimony

<u>REDACTED</u>
September 30, 2015

September 20, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 073
Dated September 13, 2016

Request:

Please supplement the Company's response to DR 26 with the following information:

a. **The effects of interest for all four scenarios. Include the balancing account's position to the effects it has on allocations, amortizations, and schedule 149 rates.**

b. **An example of disallowance during prudence review, and the resulting treatment to the balance account. (One of the four scenarios should have this event.)**

c. **An example of overearnings, and the resulting treatment to the balance account and to rates. (One of the four scenarios should have this event.)**

d. **During the 9/6/16 PGE webinar discussion of the Company's response to DR 26, PGE said it would provide a simplified example which included a shorter timeframe, explicitly state costs, revenues and resulting rate impact, and would better illustrate the mechanism. Please also provide this simplified example.**

Response:

a. Attachment 073-A contains the requested information.
b. The Scenario 1 tab of Attachment 073-A contains the requested information.
c. The Scenario 2 and Scenario 3 tabs of Attachment 073-A contain the requested information.
d. Attachment 073-B contains the requested information.

Attachment 073-A is Protected Information Subject to protective Order No. 16-270.

UM 1789

Attachment 073-A

Provided in Electronic Format only

Protected Information Subject to Protective Order No. 16-270

Detailed Example of PGE's Portland Harbor Mechanism

Pages 3-10 in Exhibit 304 are confidential and is subject to

Protective Order No. 16-270.

CASE: UM 1789
WITNESS: MARIANNE GARDNER

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 305

Confidential
PGE Response to OPUC DR No. 057

Exhibits in Support
of Opening Testimony

September 30, 2015

August 30, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 057
Dated August 19, 2016

Request:

Regarding Behbehani – Brown – Stevens/13, lines 13-14, please explain what "Upon recognition" means in terms of when revenue amounts will be deferred into the balancing account. Please also explain when (at what time) revenue amounts will be recorded for accounting purposes.

Response:

PGE recognizes its revenues in accordance with generally accepted accounting principles (GAAP). The timing and amounts deferred into the Balancing Account will be consistent with the reporting for GAAP.

PGE will record revenue from the sale of DSAYs after all four of the following conditions are met:

(1) There is persuasive evidence of a contract with the buying party,

(2) The price can be determined (there is an agreed upon price in the arrangement),

(3) Collection is probable (the counterparty is creditworthy and we believe they have the ability to pay), and

(4) Delivery is complete (title to the DSAY credits passes to the counterparty).

The timing for when all conditions are present (and thus revenue is recognized) will generally be the point in time when the counterparty takes over the legal title to the DSAY credits.

PGE will record revenue from insurance proceeds by following GAAP guidance on "gain contingencies". PGE will record and recognize insurance revenues when they are either "realized" or "realizable". For example, insurance proceeds are deemed "realized" when there is an actual receipt of cash from the counterparty, and are considered "realizable" when there is a legally enforceable contract or a settlement for the stated amount. Generally, insurance proceeds are not recognized until they are "realized" and the cash is received.

CASE: UM 1789
WITNESS: ROSE ANDERSON

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 400

Reply Testimony

<u>REDACTED</u>
September 30, 2016

Q. Please state your name, occupation, and business address.

A. My name is Rose Anderson. I am a Utility Analyst employed in the Energy Rates, Finance and Audit Division of the Public Utility Commission of Oregon (OPUC). My business address is 201 High Street SE, Suite 100, Salem, Oregon 97301.

Q. Please describe your educational background and work experience.

A. My Witness Qualification Statement is found in Exhibit Staff/401.

Q. What is the purpose of your testimony?

A. My testimony reviews all of the environmental remediation sites that PGE proposes to include in the Schedule 149 mechanism. Staff has investigated the list of sites that PGE proposes to include in the Schedule 149 mechanism to ensure that they provided service or benefits to customers. With the exception of [redacted] properties that Staff has identified below, PGE has provided documentation verifying how each of the properties it proposes to include in the mechanism provided benefits to customers.

Q. Have you prepared any exhibits for this docket?

A. Yes. I prepared the following exhibits:

- Exhibit Staff/401 is my Witness Qualification Statement.
- Exhibit Staff/402 is a compilation of non-confidential information from PGE's responses to Staff Data Requests.
- Confidential Exhibit Staff/403 is a compilation of confidential PGE responses to Staff Data Requests.
- Exhibit Staff/404 is the PGE response to OPUC Data Request No. 011

- Confidential Exhibit Staff/405 is the PGE response to OPUC Data Request No. 011 Attachment C-Confidential.
- Exhibit Staff/406 is Attachment A from the PGE response to OPUC Data Request No. 013.
- Exhibit Staff/407 is the PGE response to OPUC Data Request No. 067.

Q. Who has jurisdiction over the environmental remediation of these sites?

A. PGE's environmental remediation expenses will result from two primary sites, the Portland Harbor Superfund Site and the Downtown Reach Site. The Environmental Protection Agency (EPA) has jurisdiction over the Portland Harbor Superfund Site, while the Oregon Department of Environmental Quality (DEQ) has jurisdiction over the Downtown Reach Site.

Q. Please identify the specific sites that PGE owns or has owned within the two primary remediation sites listed above, and explain whether those sites provided benefits to customers.

A. In a supplemental response to Staff DR No. 11, PGE provided a list of [redacted] submitted to the EPA in accordance with CERLCA Section 104(e) requirements. PGE proposes to include [redacted] of these sites in the Schedule 149 mechanism if environmental remediation work is required by the EPA.[1] Most of the properties on the list were used or are used for utility purposes, specifically as [redacted]. Other uses identified were to [redacted]

[1] PGE Response to Staff Data Request No. 011 - Attachment C. See Confidential Exhibit Staff/405 and Exhibit Staff/407.

[redacted].[2] Based on the documentation provided by PGE at this time, Staff agrees that [redacted] sites were used to provide utility services to ratepayers, thus, the prudently incurred costs to remediate those sites should be includable in the Schedule 149 mechanism. Please see Confidential Exhibit Staff/405 for a complete list.

Q. Did Staff identify any properties that were clearly non-utility property and provided no benefits to customers?

A. Yes. Only one property is accurately defined by PGE as a non-utility property.[3] This is the RiverPlace Properties at SW Harbor Way, which was owned by joint ventures of PGE's development company from 1986 to 1993. PGE has expressly stated in its response to Staff DR No. 067 that it will not seek to include costs associated with remediating this property in the Schedule 149 mechanism should EPA assesses any liability for this property.[4]

Q. Are there any sites that PGE proposes to include in the Schedule 149 mechanism for which Staff has been unable to identify customer benefits, or that require more information from PGE to establish benefits?

A. Yes. Staff is uncertain of the customer benefits derived from the following [redacted] properties:

---

[2] PGE Response to Staff Data Request No. 013 - Attachment A . See page 1 of Staff/402.

[3] PGE Response to Staff Data Request No. 013 - Attachment A is a presentation that describes fourteen PGE properties using the term "non-utility." In response to DR 067, PGE explains that the presentation used that term "to make it clear to the Trustees that the utility activities that took place at the site were not likely to have resulted in environmental damage." PGE explains that, with the exception of RiverPlace, the properties were all listed as utility properties in PGE's books at one point in time, thus, "non-utility" should not be interpreted literally given that it had a special meaning in the PGE presentation to the Trustees.

[4] PGE Response to OPUC Data Request No. 067. See pages 2-3 of Staff/402.

[redacted]

Q. How does Staff propose to treat the above listed [redacted] properties?

A. Staff is continuing to investigate the above listed sites and will update the list in Staff's surrebuttal testimony if additional information is obtained and so warrants. PGE will have to demonstrate that such properties were used to benefit customers prior to remediation expenses related to such properties being includable in the Schedule 149 mechanism.

Q. Does this conclude your testimony?

A. Yes.

---

[5] PGE Response to Staff Data Request No. 011 - Attachment C. See Confidential Exhibit Staff/405 and Exhibit Staff/407.
[6] PGE Response to OPUC Data Request No. 011 – Attachment 011 – A. See pages 4-6 of Staff/402.
[7] PGE Response to OPUC Data Request No. 067. See Confidential Exhibit Staff/405 and pages 2-3 of Staff/402 .

CASE: UM 1789
WITNESS: ROSE ANDERSON

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 401

WITNESS QUALIFICATIONS STATEMENT

September 30, 2016

WITNESS QUALIFICATION STATEMENT

NAME:	Rose Anderson
EMPLOYER:	Public Utility Commission of Oregon
TITLE:	Utility Analyst Energy Rates, Finance and Audit Division
ADDRESS:	201 High Street SE. Suite 100 Salem, OR. 97301
EDUCATION:	Master of Science, Agriculture and Resource Economics, University of California Davis, Davis, CA Bachelor of Science in International Political Economy Tacoma, WA
EXPERIENCE:	I have been employed at the Public Utility Commission of Oregon since September of 2016. My position is Utility Analyst in the Energy Rates, Finance and Audit Division. My current responsibilities include review of Affiliated Interest filings and utility labor cost analysis. Prior to working for the PUC I was a Research Associate at McCullough Research for two years. My responsibilities included economic analysis of energy markets and utilities.

CASE: UM 1789
WITNESS: ROSE ANDERSON

PUBLIC UTILITY COMMISSION
OF
OREGON

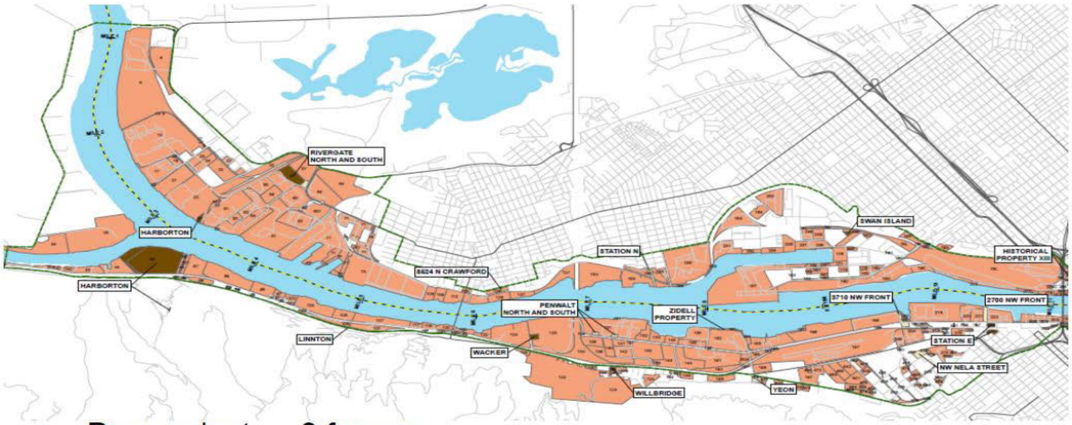
STAFF EXHIBIT 402

Exhibits in Support
Of Reply Testimony

September 30, 2016

The following page contains slides from Attachment A of PGE's response to Staff Data Request 013:

PGE Properties in Portland Harbor



- Power plants – 3 former
- Substations - 8 current (includes Station E), 3 former
- Non-utility properties – 7 former

1

Portland General Electric

Non-Utility Properties

Facility	RM	Timeframe
8524 N Crawford St.	6.3	No operations or facilities (1914 to 1944).
Waterfront parcel adjacent to 6400 NW Front Ave	8.2	No operations or facilities; PGE purchased and sold the property on September 1, 1978.
Yeon	8.3	No operations or facilities (1952 to 2004).
3710 NW Front Ave.	9.7	No operations or facilities (1905 to prior to 1940).
2737 NW Nela St.	9.7	No operations or facilities; road easement for access to the property (1929 to 1945)
N Loring and N Randolph	11.2	Electric light works followed by storage (1892-1909)
SW 1st Avenue and Ash St	12.3	Purchased for a future heating plant but never developed (~1907)
SW 1st and Alder St	12.7	Office building & company HQ (1907-1910)
World Trade Center, 26 SW Salmon Street	*12.9*	*Office and headquarters (1969 to present).*
101 SW Main Street	12.9	No operations; PGE owned building (1976-1977)
SE Market and Clay Waterfront	13.2	Railway and shipping operations (1905-1930)
Riverplace Properties, SW Harbor Way	13.2	No operations or facilities (1986 to 1993)
1626 and 1800 SE Water Ave	13.3	Railway operations and activities associated with Station L (1905/1909-1946)
7568 SW La View Dr.	16.2	No operations or facilities (1907 until sometime prior to 1947).

5

Yellow indicates PGE currently owns property

Portland General Electric

September 8, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 067
Dated September 2, 2016

Request:

Regarding the Company's response to Staff Data Request No. 13, Attachment 013-A, p 1, 2, 5, where eight properties are identified as "non-utility" property: Please clarify whether each of the non-utility properties identified will be included or excluded from the recovery mechanism. If any are to be included, explain the basis for inclusion and provide documentation supporting your answer. If any properties are to be excluded from the mechanism, explain and document what portion of the Company's overall liability they represent. (e.g. what percentage of the total)

Response:

The term "non-utility" was from a presentation that focused on specific historical site activities. In that presentation to the Trustees to provide an overview of historical and current PGE properties within the Harbor, "non-utility" was used to make it clear to the Trustees that the utility activities that took place at the site were not likely to have resulted in environmental damage. With one exception, all properties were identified as utility properties at one time in PGE's books.

Within Portland Harbor (river miles 1.9 to 11.8), there are six historical properties. The N. Loring and N. Randolph property served as a power plant from 1892 to 1909. Yeon provided access to transmission lines. Three other properties were sold in the 1940s and their exact use is unknown. The last property was owned for one day in 1978.

In the Downtown Reach portion of the river (river miles 12-16), there are three properties listed as "non-utility" that served as office space including PGE's former and current company headquarters. One property was purchased for a power plant in 1907 and another for a substation around the same timeframe, but neither was developed. Two other properties were associated with former railway operations and distribution and transmission lines.

Only one property could be considered non-utility: the Riverplace Properties at SW Harbor Way. This property was owned by joint ventures of PGE's development company from 1986 to 1993. Riverplace should have no or minimal liability as there were no industrial operations or other operations associated with electrical generation or distribution that could have impacted the river. To the extent that any liability is assessed for the Riverplace site, it would be excluded from the Schedule 149 mechanism.

y:\ratecase\opuc\dockets\um-1789 (portland harbor deferral)\dr-in\opuc\opuc_dr_067.docx

The following three pages are from Attachment A of PGE's response to Staff Data Request 011:

Property (iii)
List of Occupants Prior to PGE Ownership
From EDR City Directory Search

Year	Address	Occupant Name
1935	1035 SW 1st	White Front Furnished Rooms
1935	1037 SW 1st	B&R Cafe
1940	1031 SW 1st	B&C Transfer Co
1940	1033 SW 1st	United Sheet Metal Works
1940	1035 SW 1st	White Front Lodgings
1940	1037 SW 1st	Main Cafe
1946	1031 SW 1st	Thomas Accettura, United Sheet Metal Works
1946	1037 SW 1st	Leonard Bonaro Main Cafe
1946	119 SW Main	Lee Long R.
1950	1031 SW 1st	United Sheet Metal Works
1950	1035 SW 1st	White Front Rooms
1950	1037 SW 1st	Main Café
1955	1031 SW 1st	United Sheet Metal Works
1955	1035 SW 1st	White Front Rooms Lodging
1955	1037 SW 1st	Main Cafe Tavern
1960	1031 SW 1st	United Sheet Metal Works
1960	1031 SW 1st	A GCA
1960	1037 SW 1st	Main Cafe Tavern
1965	1031 SW 1st	United Sheet Metal Works
1965	1037 SW 1st	Main Cafe Tavern
1970	1031 SW 1st	United Sheet Metal Works
1970	1037 SW 1st	Main Cafe Tavern
1970	115 SW Main	Mrs. Rosie Miller

EDR® Environmental Data Resources Inc

Certified Sanborn® Map Report

Sanborn® Library search results
Certification # 08D3-4D99-9FB3

PGE016
101 SW Main Street
Portland, OR 97204

Inquiry Number 2198285.1s

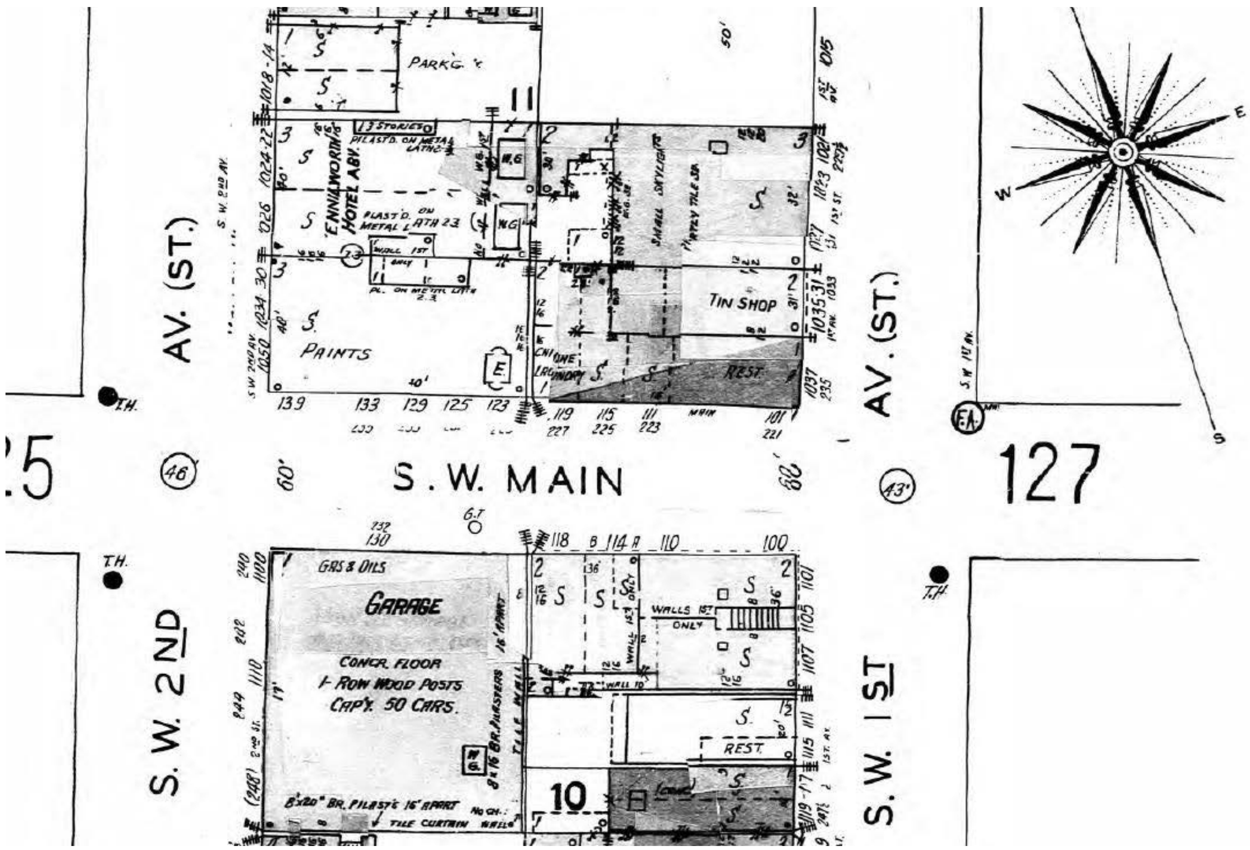
April 21, 2008

The Standard in Environmental Risk Information

440 Wheelers Farms Rd
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com


S.W. MAIN
S.W. 2ND AV. (ST.)
S.W. 1ST AV. (ST.)
127
11
10
PARKG.
ENNALWORTH HOTEL ABV.
PAINTS
TIN SHOP
REST.
SMALL SKYLIGHTS
LAUNDRY
GARAGE
GAS & OILS
CONCR. FLOOR
1- ROW WOOD POSTS
CAP'Y. 50 CARS.
WALLS 1ST ONLY
REST.
T.H.
E
W
S

CASE: UM 1789
WITNESS: ROSE ANDERSON

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 403

Exhibits in Support
Of Reply Testimony

September 30, 2016

Exhibit 403 is confidential and is subject to

Protective Order No. 16-270.

CASE: UM 1789
WITNESS: ROSE ANDERSON

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 404

Exhibits in Support
Of Reply Testimony

September 30, 2016

August 25, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE *First Supplemental* Response to OPUC Data Request No. 011
Dated August 12, 2016

Request:

Please provide a list of all of the contaminated sites that are a source of Portland Harbor remediation or restoration (NRD) liability; further, please provide all evidence, including general historical discussion of those sites, ownership, and relationship to PGE regulated services, that each of those sites provided service or benefits to PGE customers.

Response (Dated August 19, 2016):

Please refer to Attachment 011-A for a list of PGE's sites that may have a Portland Harbor liability. Attachment 011-A includes the information provided to EPA under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104(e).

Due to the volume of material Attachment 011-A is being provided on an external drive and will be delivered to The OPUC via Federal Express. This information includes all PGE property in the Portland Harbor area along with specific information such as ownership, operations, tenants, easements, property use, waste information, etc.

First Supplemental Response (Dated August 25, 2016)

When PGE submitted our response to OPUC Data Request No. 011, we did not indicate that Attachment 011-A contained confidential material. PGE has reviewed the material and has placed the non-confidential material in Attachment 011-A and the confidential material in Attachment 011-B.

Attachment 011-B is protected information subject to Protective Order No. 16-270. Attachments 011-A and 011-B will be sent on external drives to The OPUC via FedEx.

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UM 1789

Attachment 011-A

Provided in Electronic Format only

PGE Portland Harbor Properties

UM 1789

Attachment 011-B

Provided in Electronic Format only

Protected Information Subject to Protective Order No. 16-270

PGE Portland Harbor Properties

CASE: UM 1789
WITNESS: ROSE ANDERSON

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 405

Exhibits in Support
Of Reply Testimony

September 30, 2016

Exhibit 405 is confidential and is subject to

Protective Order No. 16-270.

CASE: UM 1789
WITNESS: ROSE ANDERSON

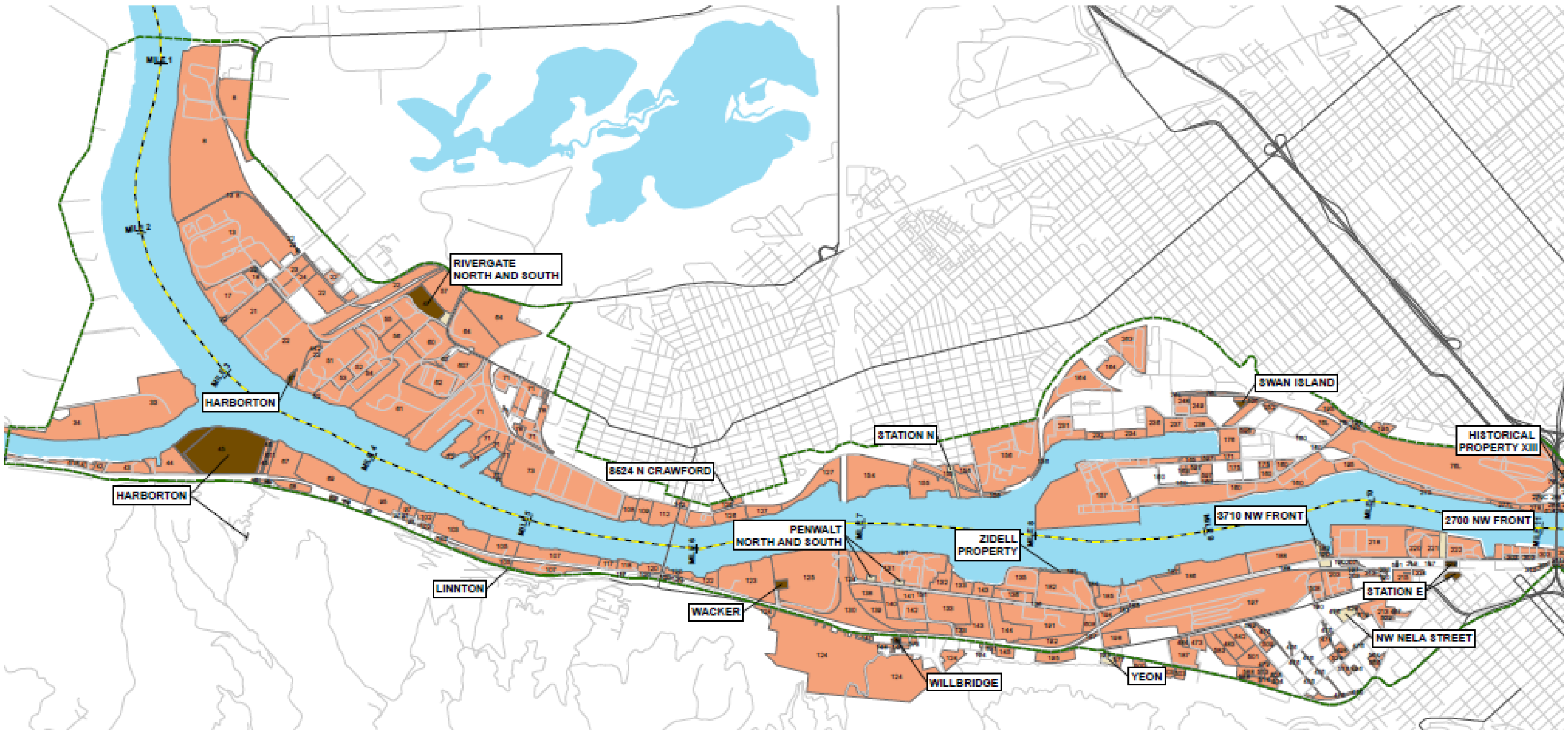
PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 406

Exhibits in Support
Of Reply Testimony

September 30, 2016

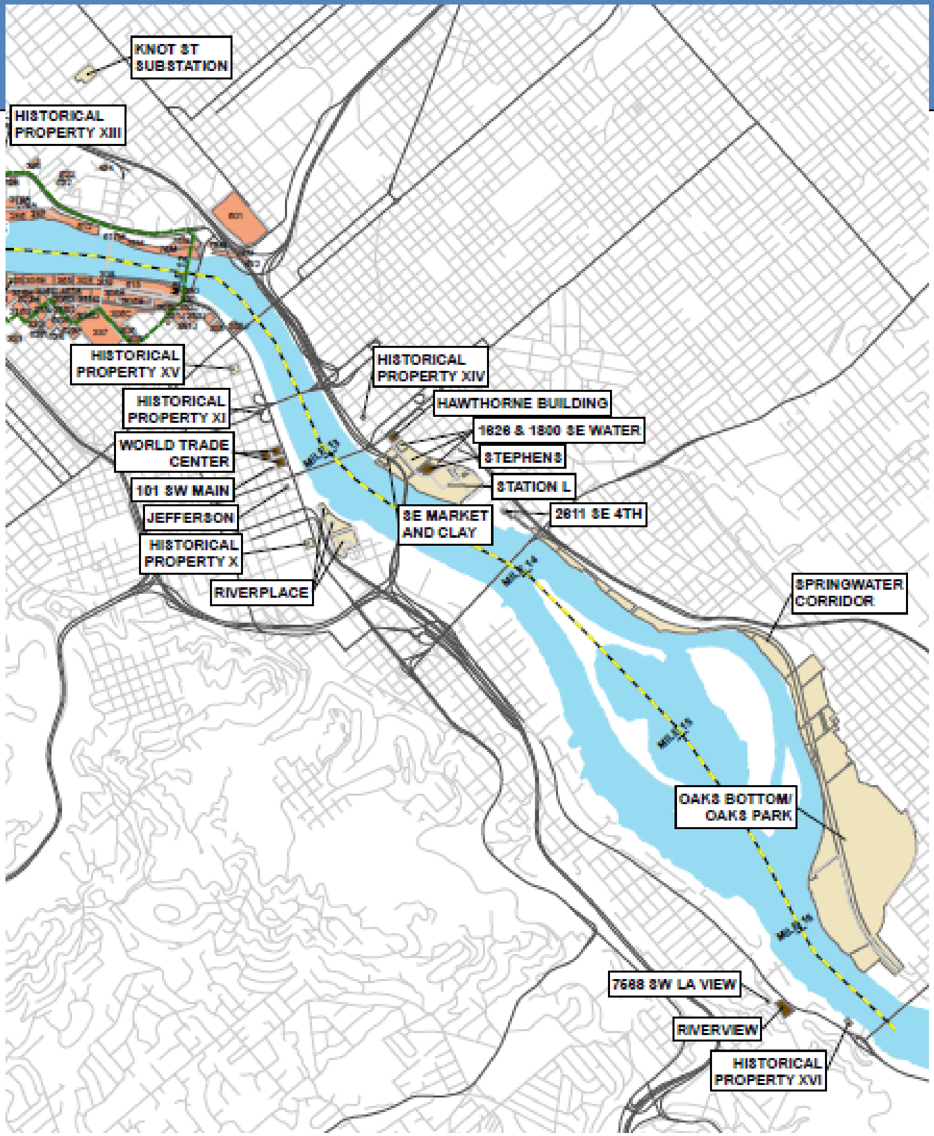
PGE Properties in Portland Harbor



- Power plants – 3 former
- Substations - 8 current (includes Station E), 3 former
- Non-utility properties – 7 former

PGE Properties in Downtown Reach

- Power plants – 2 former
- Substations - 2 current, 3 former
- Non-utility properties – 1 current, 7 former
- Maintenance & repair shop – 1 former
- Distribution corridors – 1 current, 2 former



Power Plants

Facility	RM	Timeframe
Station N	7.6	1910-1922
Station E East	*10.5*	*Power plant 1901-1953* *Substation 1912-present*
1362-1462 NW Natio Pkwy	11.3	1886-1901
SE Main and SE Water St	12.9	1889-1909
Station L, SE Market Street	13.5	1905-2005

Yellow indicates PGE currently owns property

Portland General Electric

Substations

Facility	RM	Timeframe
Harborton	*3.2*	*1975-present*
Rivergate North & South	*3.7*	*Two Substations, 1967-present*
Linnton Substation	5	1908-1978
Wacker Substation	*6.5*	*1978-present*
Pennwalt North & South	7.1	Two substations 1972-1982 and 1979-1982
Willbridge Substation	*7.2*	*1973-present*
Swan Island Substation	*9.3*	*1960-present*
Station E West	*10.5*	*1955-present*
Knott Substation (outside of investigation boundary)	11.5	1906-1972
Jefferson Substation, SW Jefferson St	13.1	1908-1978
Substation at SW Montgomery St and SW Water Ave	13.2	1892 until sometime between 1905 &1909
Stephens Substation, 1830 SE Water Ave	*13.4*	*Car painting shop and repair (1909-1924), condenser station (1924-1945), substation (1945-present)*
Riverview Substation, 600 SW Taylors Ferry Rd	*16.2*	*1962-present*
8240 SW Macadam	16.5	Housed a transformer 1921-1922

Yellow indicates PGE currently owns property

Portland General Electric

Non-Utility Properties

Facility	RM	Timeframe
8524 N Crawford St.	6.3	No operations or facilities (1914 to 1944).
Waterfront parcel adjacent to 6400 NW Front Ave	8.2	No operations or facilities; PGE purchased and sold the property on September 1, 1978.
Yeon	8.3	No operations or facilities (1952 to 2004).
3710 NW Front Ave.	9.7	No operations or facilities (1905 to prior to 1940).
2737 NW Nela St.	9.7	No operations or facilities; road easement for access to the property (1929 to 1945)
N Loring and N Randolph	11.2	Electric light works followed by storage (1892-1909)
SW 1st Avenue and Ash St	12.3	Purchased for a future heating plant but never developed (~1907)
SW 1st and Alder St	12.7	Office building & company HQ (1907-1910)
World Trade Center, 26 SW Salmon Street	*12.9*	*Office and headquarters (1969 to present).*
101 SW Main Street	12.9	No operations; PGE owned building (1976-1977)
SE Market and Clay Waterfront	13.2	Railway and shipping operations (1905-1930)
Riverplace Properties, SW Harbor Way	13.2	No operations or facilities (1986 to 1993)
1626 and 1800 SE Water Ave	13.3	Railway operations and activities associated with Station L (1905/1909-1946)
7568 SW La View Dr.	16.2	No operations or facilities (1907 until sometime prior to 1947).

Yellow indicates PGE currently owns property

Portland General Electric

Other

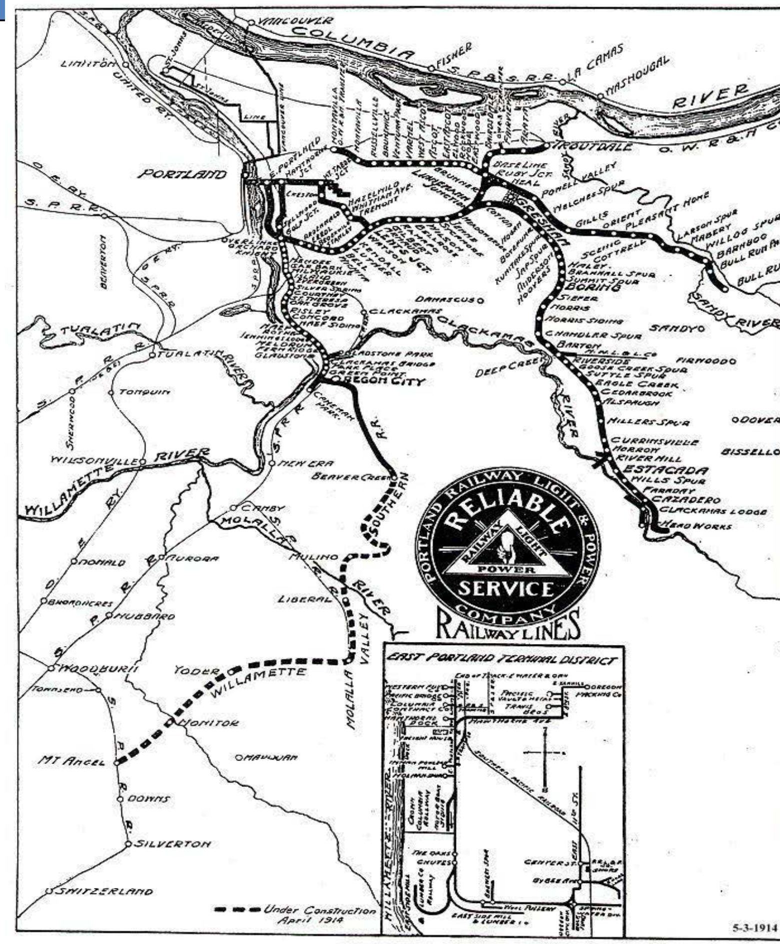
Facility	RM	Timeframe
2700 NW Front	10.5	Sawdust conveyor, fuel oil pipelines, river water pipelines (1905 to 1953).
Hawthorne Building, 1510 SE Water Ave	13.1	Railway depot, equipment repair, office space (1905 to 2013).
2611 SE Fourth Ave	13.8	Transmission lines on portion of property (1940 to 1944).
Oaks Bottom, SE Sellwood Blvd	15.5	Trolley operations (1915 to 1946), electrical transmission and transformers (1915 to 1998)
Springwater Corridor	*15.5*	*Trolley operations (1915 to 1946), electrical transmission and transformers (1915 to present).*
Distribution Network Transformers	*1 - 16.5*	*Vault-, pole-, and pad-mounted transformers and cables*

Yellow indicates PGE currently owns property

Portland General Electric

Historical Rail Lines

- From 1915 to 1948, PGE predecessor and PGE sister entity owned trolley lines
- In 1948, that entity was sold, ultimately to Union Pacific
- No known releases
- Railroad properties (largely up-river):
  - Oaks Bottom/SE Sellwood Blvd
  - Springwater Corridor



Portland General Electric

CASE: UM 1789
WITNESS: ROSE ANDERSON

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 407

Exhibits in Support
Of Reply Testimony

September 30, 2016

September 8, 2016

TO: Kay Barnes
Oregon Public Utility Commission

FROM: Stefan Brown
Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC
UM 1789
PGE Response to OPUC Data Request No. 067
Dated September 2, 2016

Request:

Regarding the Company's response to Staff Data Request No. 13, Attachment 013-A, p 1, 2, 5, where eight properties are identified as "non-utility" property: Please clarify whether each of the non-utility properties identified will be included or excluded from the recovery mechanism. If any are to be included, explain the basis for inclusion and provide documentation supporting your answer. If any properties are to be excluded from the mechanism, explain and document what portion of the Company's overall liability they represent. (e.g. what percentage of the total)

Response:

The term "non-utility" was from a presentation that focused on specific historical site activities. In that presentation to the Trustees to provide an overview of historical and current PGE properties within the Harbor, "non-utility" was used to make it clear to the Trustees that the utility activities that took place at the site were not likely to have resulted in environmental damage. With one exception, all properties were identified as utility properties at one time in PGE's books.

Within Portland Harbor (river miles 1.9 to 11.8), there are six historical properties. The N. Loring and N. Randolph property served as a power plant from 1892 to 1909. Yeon provided access to transmission lines. Three other properties were sold in the 1940s and their exact use is unknown. The last property was owned for one day in 1978.

In the Downtown Reach portion of the river (river miles 12-16), there are three properties listed as "non-utility" that served as office space including PGE's former and current company headquarters. One property was purchased for a power plant in 1907 and another for a substation around the same timeframe, but neither was developed. Two other properties were associated with former railway operations and distribution and transmission lines.

Only one property could be considered non-utility: the Riverplace Properties at SW Harbor Way. This property was owned by joint ventures of PGE's development company from 1986 to 1993. Riverplace should have no or minimal liability as there were no industrial operations or other operations associated with electrical generation or distribution that could have impacted the river. To the extent that any liability is assessed for the Riverplace site, it would be excluded from the Schedule 149 mechanism.