PGE
Portland General Electric Company
121 SW Salmon Street • Portland, Oregon 97204
PortlandGeneral.com

November 18, 2016

Public Utility Commission of Oregon
Attn: Filing Center
201 High St SE, Suite 100
P.O. Box 1088
Salem, OR 97308-1088

RE: Stipulation, attachments and supporting testimony resolving all issues in consolidated dockets UM 1789, UE 311 and UP 344, and Advice No. 16-11 Revised Schedule 149 Environmental Remediation Cost Recovery Adjustment

Portland General Electric Company ("PGE") submits a Stipulation with the Staff of the Public Utility Commission of Oregon, the Citizens' Utility Board and the Industrial Customers of the Northwest Utilities, as well as Attachments and Supporting Testimony that resolves all issues in consolidated Dockets UM 1789, UE 311 and UP 344.

Pursuant to that Stipulation, PGE submits this **revised** Advice No. 16-11 filing pursuant to Oregon Revised Statutes (ORS) 757.210 and Oregon Administrative Rule (OAR) 860-022-0025 for filing proposed tariff sheets associated with Tariff P.U.C. No. 18, effective upon Commission Order:

Sheet Nos. 149-1 through sheet Nos. 149-7

Should you have any questions or comments regarding this filing, please contact Stefan Brown at (503) 464-8937.

Please direct all formal correspondence and requests to the following email address pge.opuc.filings@pgn.com

Sincerely,

Jay Tinker

Jay Tinker
Director, Regulatory Policy & Affairs

Enclosures
cc: UE 294 Service List

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1789, UE 311, UP 344

In the Matter of PORTLAND GENERAL ELECTRIC COMPANY, Application to Defer Revenues and Costs Related to the Environmental Remediation Costs Recovery Adjustment, Schedule 149 (UM 1789); Schedule 149, Environmental Remediation Costs Recovery Adjustment (UE 311); and Application for Approval of Sale of Harborton Restoration Project Property (UP 344).	**STIPULATION**

This Stipulation ("Stipulation") is among Portland General Electric Company ("PGE"), Staff of the Public Utility Commission of Oregon ("Staff"), the Citizens' Utility Board of Oregon, ("CUB") and the Industrial Customers of Northwest Utilities ("ICNU") (collectively, the "Parties"). There are no other parties in this docket.

I. BACKGROUND

On July 15, 2016, PGE made three filings:

(1) Advice No. 16-11, Schedule 149, (docketed as UE 311), seeking adoption of PGE's proposed Portland Harbor Environmental Remediation Account ("PHERA");

(2) Application for Deferral of Revenues and Costs eligible for inclusion in the PHERA (docketed as UM 1789), seeking deferral of costs and revenues under the PHERA; and

(3) Application for Sale of Harborton Restoration Project Property (docketed as UP 344), seeking authorization to place a deed restriction on the Harborton property for the purpose of restoring and enhancing approximately 62 acres of the overall property (the "Harborton Restoration Project"), and approval for PGE to sell Discount Service Acre Year ("DSAY") credits that will be created by the Harborton Restoration Project. PGE's applications in Docket Nos. UE 311, UM 1789, and UP 344 are collectively referred to herein as the "Applications" and individually as an "Application."

PGE's UE 311 Application included testimony and work papers in support of its filing. On July 18, 2016, the Commission consolidated these three dockets. Staff and intervening parties subsequently served a significant number of data requests on PGE, and PGE provided responses. Several workshops were held with the parties prior to PGE's Applications, and more workshops were held after the Applications were filed. Staff, CUB, and ICNU each filed testimony in these consolidated dockets on September 30, 2016. On October 10, 2016, a workshop was held with the Commissioners, during which PGE responded to questions from the Commissioners. The other Parties also discussed their testimony regarding these Applications.

The Parties held a Settlement Conference on October 11, 2016. As a result of the Applications, testimony, discovery responses, and workshops, the Parties have reached agreement settling all issues in these consolidated dockets. The Parties agree that PGE's Applications in each of the consolidated dockets should be granted, subject to the changes and terms set forth below. Based on the information and estimates regarding expected DSAY revenues and Harborton Restoration Project costs provided by PGE, the Parties request that the Commission issue an order adopting this Stipulation. The Parties note that Commission adoption of this Stipulation does not create any controlling precedent to be applied in any docket or issue before the Commission in the future. The Parties reserve the right to explain the rationale behind individual support of this Stipulation in the supporting testimony.

II. TERMS OF STIPULATION

1. This Stipulation settles all issues in these consolidated dockets.

2. Should a dispute regarding the terms and special conditions of the PHERA and recovery of applicable environmental remediation costs arise, the "II. Terms of Stipulation" and subsequent Commission Order shall control over the revised Schedule 149 submitted herewith as Appendix B.

3. The PHERA would be effective upon approval by the Commission; however, the effective date for the eligible deferred environmental remediation costs and revenues would be July 15, 2016, the date of the filing of PGE's deferral Application. Such deferred costs and revenues will flow into the PHERA.

4. The PHERA shall hold Environmental Remediation Costs ("ERC"), Environmental Remediation Revenues ("ERR"), and costs incurred to develop the Harborton Restoration Project. Harborton Restoration Project development costs include all costs associated with the Harborton Restoration Project development, including but not limited to, deferred costs incurred as of the filing date of the Deferral Application, development and construction costs, permitting costs, costs paid to Trustees for participation in the NRD restoration project, and future termination-related costs if applicable. Harborton Restoration Project development costs do not include Harborton Restoration Project O&M costs or potential Harborton Restoration Project endowment costs.

5. ERC is defined to include all costs PGE incurs, exclusive of Harborton Restoration Project development costs, for natural resource damages and environmental

remediation activities in connection with the specific Portland Harbor Superfund Sites ("Portland Harbor") and Downtown Reach sites listed in Appendix A, should they be assessed NRD and/or EPA damages, as well as Harborton Restoration Project O&M costs and endowment costs.

6. ERR is defined as: (1) DSAY revenues net of prudent Harborton Restoration Project development costs; (2) insurance proceeds; (3) the amount included in base rates for environmental remediation activities at Portland Harbor or Downtown Reach; (4) the Schedule 149 tariff revenue; and (5) interest.

7. The PHERA will consist of an annual account (the "PHERA Annual Account") and a balancing account (the "PHERA Balancing Account"). The PHERA Annual Account shall hold only incurred and paid ERC and Harborton Restoration Project development costs, and received ERR, until completion of the prudence review identified in Paragraph 9. Following completion of the prudence review, the ERC, ERR, and remaining Harborton Restoration Project development costs found prudent by the Commission will be transferred to the PHERA Balancing Account, subject to the applicable terms below.

8. The Parties agree that $3.56 million per year was included in base rates for environmental remediation-related activities in the Portland Harbor and Downtown Reach in PGE's last general rate case. That annual amount will be credited to the PHERA Annual Account on a monthly basis, in the amount of $0.2967 million, until PGE's next general rate case when the appropriate amount to be included in rates, if any, will be re-examined. The monthly credits and costs will begin July 15, 2016, the date of PGE's deferral Application.[1] Correspondingly, ERC, Harborton Restoration Project development costs, and other ERR will also be included in the PHERA Annual Account as expended or received as the case may be.

[1] For the month of July 2016, a prorated amount of $0.1627 million shall be credited to the PHERA.

9. Harborton Restoration Project development costs, ERC and ERR included in the PHERA Annual Account are subject to a prudence review.

a. By March 15, 2017, and each year thereafter, PGE will request that Staff review and determine prudence of Harborton Restoration Project development costs, ERC, and ERR for the prior calendar year. Any other Party to this Stipulation may perform its own prudence review and request information from PGE related to Harborton Restoration Project development costs, ERC, and ERR pertinent to such review.

b. PGE's filing to request prudence review will include a report of all activity associated with Harborton Restoration Project development costs, ERC, and ERR recorded in the PHERA Annual Account. Only cash expenditures will be included in the PHERA Annual Account for recovery under the PHERA mechanism. PGE shall defer, separately track, and capitalize as a regulatory asset, contingent environmental liability accruals. This regulatory asset shall not be included in rate base and PGE shall not earn a return on the balance.

c. Staff and other Parties shall complete the prudence review and Staff shall submit its report and recommendation to the Commission within 120 days of its submittal. However, a Commission order as to prudence does not need to be issued within the 120 days. For the costs and revenues that Staff recommends be deemed prudent in its report, Staff will request that a Commission order be issued as expeditiously as possible; however, costs and revenues that Staff and/or other Parties disagree as to prudency will be resolved pursuant to a separate procedural schedule.

10. Costs included in the PHERA Annual Account that have been determined to be prudent in accordance with the terms of Paragraph 9 shall be subject to an earnings test. The earnings test is specified as follows:

a. A fixed $6.0 million each year in ERC is not subject to the earnings test.

b. Harborton Restoration Project development costs, currently estimated at $10-$12 million, are not subject to the earnings test.

c. If ERC in any year exceeds $6.0 million, then the balance in excess of $6 million will first be reduced by any earnings above PGE's Return on Equity authorized by the Commission in PGE's most recent general rate case.

d. The earnings test will be applied after the Power Cost Adjustment Mechanism earnings test.

11. Interest will be calculated as follows:

a. The pre-tax balances in the PHERA Annual Account that have not been deemed prudent by Commission order shall accrue interest at the authorized rate of return approved in PGE's most recent general rate case. This balance includes the annual $3.56 million credited on a monthly basis ($0.2967 per month) to the Annual Account from base rates until otherwise adjusted by the Commission. In other words, the $3.56 million will accrue interest at PGE's authorized rate of return until that corresponding year's Harborton Restoration Project development costs, ERC, and ERR are deemed prudent by Commission order.

b. ERC, ERR, and Harborton Restoration Project development costs in the PHERA Annual Account that have subsequently been reviewed for prudency and deemed prudent by the Commission, will be transferred, consistent with Commission order, to the PHERA Balancing Account and will accrue interest at the average of the five-year U.S. Treasury rate plus 100 basis points (the "PURE Rate"). The PURE Rate will be updated annually and included in Staff's report to the Commission on the prudence of Harborton Restoration Project development costs, ERC, and ERR.

c. Interest will be transferred to the PHERA Balancing Account following prudence review and the earnings test, and not allocated across the remaining life of the project.

d. Interest will not be accrued on contingent environmental liability accruals.

e. Interest shall be calculated on the incurred and paid pre-tax regulatory asset and regulatory liability balances.

12. Transfer, allocation, and carry over of prudent costs and revenues from the PHERA Annual Account to the PHERA Balancing Account.

a. Harborton Restoration Project development costs are netted against total DSAY revenues received for that year. Then any remaining DSAY revenue for that year is equally allocated across the remaining expected project life, inclusive of the year in which they are received. Harborton Restoration Project development costs incurred before PGE has received its first year of DSAY revenues may be netted against those first year of DSAY revenues, with any excess Harborton Restoration development costs carried forward in accordance with the terms of the PHERA mechanism.

b. Insurance proceeds are equally allocated across the remaining expected project life, inclusive of the year in which they are received, and are not netted against Harborton Restoration Project development costs.

c. Current expected project life is through 2028.

d. The Parties support that the Commission, in the review process discussed in Paragraph 17, may revise the expected project life, as appropriate, on a going-forward basis. However, ERRs that have already been allocated based on a previously assumed project life will not then be re-allocated based on an updated expected project life.

e. The remaining ERR components, which include the amount included in base rates for environmental remediation activities at Portland Harbor and Downtown Reach, the Schedule149 tariff revenue, and interest, are allocated in full to the year in which they are received (in other words, are not spread across the remaining expected project life).

f. Annual Allocated Revenue ("AAR") is the sum of: (1) insurance proceeds associated with Portland Harbor and Downtown Reach that are equally allocated across the remaining expected project life, inclusive of the year in which they are received; (2) $3.56 million currently in base rates, subject to adjustment by the Commission; (3) AAR balances carried forward; (4) accumulated interest; and (5) DSAY revenues net of Harborton Restoration Project development costs that are then equally allocated across the remaining expected project life, inclusive of the year in which they are received.

g. After reducing the annual ERC balance in the PHERA Annual Account by any overearnings, as provided in Paragraph 10, any remaining ERC and Harborton Restoration Project development costs are offset by that year's AAR.

    i. If ERC and Harborton Restoration Project costs remain, they are equally allocated across the following five years in the Balancing Account, and are not subject to an additional earnings test.

    ii. However, if ERC (after being reduced by any overearnings if ERC is above $6 million) and Harborton Restoration Project development costs in the PHERA Annual Account are less than that year's ARR, then the positive remaining ERR balance will offset accumulated ERC and Harborton Restoration Project development costs in the PHERA Balancing Account that were allocated to that year. Any remaining balance is carried forward as an addition to the next year's AAR in the PHERA Balancing Account.

13. The Parties support initial prices for Schedule 149 be set at zero.

14. The Parties support approval of PGE's Application in UP 344 subject to the following condition: If Harborton Restoration Project development costs, currently estimated at $10-$12 million, exceed DSAY revenues, PGE will not recover development costs from customers in excess of DSAY revenues retained by PGE. As noted in Paragraph 4, Harborton Restoration Project development costs include all costs associated with Harborton Restoration Project development, including but not limited to, costs incurred as of the date of this

Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable.[2]

15. Attached to this Stipulation as Appendix A is a list of each individual property or "site" that PGE has identified as potentially subject to EPA-assessed Portland Harbor cleanup damages and NRD damages that the Parties have agreed are the only sites eligible for inclusion in the PHERA should damages be assessed. PGE has an ongoing duty to update Appendix A if current listed sites are removed from consideration. Once PGE is notified of its share of the Portland Harbor environmental costs by site (either NRD or EPA liability), PGE will evaluate each of the identified sites as to whether the site was prudently used in utility operations and will provide the information to the Parties. Upon receiving from PGE the sites with conclusive NRD and/or EPA damage assessments, Staff and the other Parties will commence their own review as to whether each individual site provided utility service to customers and PGE's actions with regard to the property were prudent and is therefore eligible for recovery of prudently-incurred ERC. The amount of time required for Staff's review of each individual site could vary depending on the number of sites submitted and the availability of historical information, and therefore is not limited to 120 days. The Parties agree to propose to the Commission that a "Phase II" of docket UE 311 be opened for continued review of the sites listed in Appendix A and for the annual prudence

[2] In the event PGE terminates the Harborton Restoration Project, PGE, not customers, will be responsible for Harborton Restoration Project development and termination costs; termination costs include, but are not limited to, returning to the Trustee Council all DSAY credits previously released to PGE and reimbursing the Trustee Council for all costs the Trustee Council has incurred with respect to the review and approval of the Harborton Restoration Project. See Exhibit Staff/100, Moore/16; Exhibit Staff/102, Moore/1 (PGE's Response to Staff DR No. 1).

review of costs and revenues eligible for inclusion in the PHERA. Further, PGE will record, to the extent possible, environmental remediation assessments separately by site so that prudent costs can be functionalized to generation, transmission, and distribution for recovery in rates based on the historical function of the site.

16. Pursuant to Schedule 149 Special Condition 5, functionalized costs recoverable through Schedule 149 will be allocated to each rate schedule according to relative use of generation, distribution, and transmission service.

17. The PHERA is subject to review no less frequently than every two years, when significant new information becomes available, or during a general rate case. All aspects of the mechanism are subject to review and revision, including but not limited to, the earnings test, the exempt ERC amount, and incentives for cost management such as sharing.

18. PGE's Results of Operations (ROO) will not include the interest or accumulated deferred income taxes (ADIT) included in the PHERA. Similarly, PGE will remove all other costs and revenues included in the PHERA from the ROO. An earnings test based on the ROO, exclusive of impacts of the PHERA, will then be used to determine the amount, if any, to defer for that year.

19. Appendices B and C provide a revised Schedule 149 tariff and special conditions consistent with this Stipulation, in both clean (Appendix B) and red-line/strikeout (Appendix C) format showing changes from PGE's Application and the terms agreed to by the Parties in this Stipulation.

20. Agreeing to this Stipulation does not mean that a Party agrees that environmental

remediation should be assumed to be a customer responsibility.

21. The Parties agree that the Commission should approve the revised tariff Schedule 149, the associated deferral, and the property sale subject to the terms and conditions specified herein.

22. The Parties recommend and request that the Commission approve this Stipulation as an appropriate and reasonable resolution of the issues in this docket.

23. The Parties agree that this Stipulation is in the public interest and will result in rates that are fair, just and reasonable and will meet the standard in ORS 756.040.

24. The Parties agree that this Stipulation represents a compromise in the positions of the Parties. Without the written consent of all Parties, evidence of conduct or statements, including but not limited to term sheets or other documents created solely for use in settlement conferences in this docket, are confidential and not admissible in the instant or any subsequent proceeding, unless independently discoverable or offered for other purposes allowed under ORS 40.190.

25. The Parties have negotiated this Stipulation as an integrated document. If the Commission rejects all or any material part of this Stipulation, or adds any material condition to any final order that is not consistent with this Stipulation, each Party reserves its right: (i) to withdraw from the Stipulation, upon written notice to the Commission and the other Parties within five (5) business days of service of the final order that rejects this Stipulation, in whole or material part, or adds such material condition; (ii) pursuant to OAR 860-001-0350(9), to present evidence and argument on the record in support of the Stipulation, including the right to cross-examine witnesses, introduce evidence as deemed appropriate to

respond fully to issues presented, and raise issues that are incorporated in the settlements embodied in this Stipulation; and (iii) pursuant to ORS 756.561 and OAR 860-001-0720, to seek rehearing or reconsideration, or pursuant to ORS 756.610 to appeal the Commission order. Nothing in this paragraph provides any Party the right to withdraw from this Stipulation as a result of the Commission's resolution of issues that this Stipulation does not resolve.

26. This Stipulation will be offered into the record in this proceeding as evidence pursuant to OAR 860-001-0350(7). The Parties agree to support this Stipulation throughout this proceeding and in any appeal, provide witnesses to support this Stipulation (if specifically required by the Commission), and recommend that the Commission issue an order adopting the settlements contained herein. By entering into this Stipulation, no Party shall be deemed to have approved, admitted or consented to the facts, principles, methods or theories employed by any other Party in arriving at the terms of this Stipulation. Except as provided in this Stipulation, no Party shall be deemed to have agreed that any provision of this Stipulation is appropriate for resolving issues in any other proceeding.

27. This Stipulation may be signed in any number of counterparts, each of which will be an original for all purposes, but all of which taken together will constitute one and the same.

DATED this 18th day of November, 2016.

DOUG TINGEY
PORTLAND GENERAL ELECTRIC COMPANY

KAYLIE KLEIN
STAFF OF THE PUBLIC UTILITY COMMISSION OF OREGON

MIKE GOETZ
CITIZENS' UTILITY BOARD OF OREGON

TYLER C. PEPPLE
INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

DATED this 18th day of November, 2016.

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DOUG TINGEY
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COMPANY

Kaylie Klein

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PGE Facility Name	Portland Harbor or Down Town Reach	River Mile	Current/Former PGE Property	Facility Type
Harborton	Harbor	3.2	Current	Substation
Rivergate North & South	Harbor	3.7	Current	Substation
Linnton Substation	Harbor	5	Former	Substation
Historical Property (v), 8524 N Crawford St.	Harbor	6.3	Former	General Operations
Wacker Substation	Harbor	6.5	Current	Substation
Pennwalt North & South	Harbor	7.1	Former	Substation
Willbridge Substation	Harbor	7.2	Current	Substation
Station N	Harbor	7.6	Former	Power Plant
Historical Property (ix), Waterfront parcel adjacent to 6400 NW Front Avenue	Harbor	8.2	Former	General Operations
Yeon	Harbor	8.3	Former	Distribution
Swan Island Substation	Harbor	9.3	Current	Substation
Historical Property (vii), 3710 NW Front Ave.	Harbor	9.7	Former	General Operations
Historical Property (vi), 2737 NW Nela St.	Harbor	9.7	Former	General Operations
2700 NW Front	Harbor	10.5	Former	Pipeline
Station E East	Harbor	10.5	Current	Power Plant
Station E West	Harbor	10.5	Current	Substation
Historical Property (xiii), N Loring and N Randolph	Harbor	11.2	Former	Power Plant
Historical Property (xii), 1362-1462 NW Natio Pkwy	Harbor	11.3	Former	Power Plant
Knott Substation	Harbor	11.5	Former	Substation
Historical Property (xv), SW 1st Avenue and Ash St	DTR	12.3	Former	Plant held for future use
Historical Property (xi), SW 1st and Alder St	DTR	12.7	Former	General Operations
World Trade Center, 26 SW Salmon Street	DTR	12.9	Current	General Operations
Historical Property (xiv), SE Main and SE Water St	DTR	12.9	Former	Power Plant
Historical Property (iii), 101 SW Main Street	DTR	12.9	Former	General Operations
Hawthorne Building, 1510 SE Water Avenue	DTR	13.1	Former	Maintenance and Repair Shop
Jefferson Substation, SW Jefferson Street	DTR	13.1	Former	Substation
Historical Property (i), SE Market and Clay Waterfront	DTR	13.2	Former	Railway
Historical Property (x), Substation at SW Montgomery Street and SW Water Avenue	DTR	13.2	Former	Substation
Riverplace Properties, SW Harbor Way	DTR	13.2	Former	Non-Utility Property
Historical Property (iv), 1626 and 1800 SE Water Avenue	DTR	13.3	Former	Power Plant
Stephens Substation, 1830 SE Water Avenue	DTR	13.4	Current	Substation
Station L, SE Market Street	DTR	13.5	Former	Power Plant
Historical Property (ii), 2611 SE Fourth Avenue	DTR	13.8	Former	Distribution
Oaks Bottom, SE Sellwood Boulevard	DTR	15.5	Former	Distribution
Springwater Corridor	DTR	15.5	Current	Distribution
Riverview Substation, 600 SW Taylors Ferry Road	DTR	16.2	Current	Substation
Historical Property (viii), 7568 SW La View Drive	DTR	16.2	Former	Plant held for future use
Historical Property (xvi), 8240 SW Macadam	DTR	16.5	Former	Substation
Distribution Network Transformers	Harbor and DTR	1 - 16.5	Current	Distribution
Spills	Harbor and DTR	1 - 16.5	Current	Spills

SCHEDULE 149
ENVIRONMENTAL REMEDIATION COST RECOVERY ADJUSTMENT
AUTOMATIC ADJUSTMENT CLAUSE

PURPOSE

This Schedule recovers the costs and revenues associated with the Portland Harbor Superfund site ("Portland Harbor"), the Natural Resource Damage obligation, the Downtown Reach portions of the Willamette River, and the Harborton Restoration Project. This adjustment schedule is implemented as an automatic adjustment clause as provided under ORS 757.210.

AVAILABLE

In all territory served by Portland General Electric Company ("PGE").

APPLICABLE

To all Schedules.

ANNUAL ACCOUNT & BALANCING ACCOUNT

By Order No. XX-XXX, the Commission approved a deferral of environmental-related costs and revenues, effective July 15, 2016, that flow into the Portland Harbor Environmental Remediation Account ("PHERA"). The PHERA Annual Account records Environmental Remediation Costs ("ERC"), the costs of developing the Harborton Restoration Project, and Environmental Remediation Revenues ("ERR"). The balance in the Annual Account that has not been reviewed by the Commission for prudence shall accrue interest at the authorized rate of return approved in PGE's most recent general rate case. Costs and revenues in the Annual Account that have been reviewed for prudency and remain following the earnings test will be transferred to the PHERA Balancing Account and will accrue interest at the average of the five-year U.S. Treasury rate plus 100 basis points (the "PURE Rate").

EARNINGS TEST

Subject to the conditions stated below, the recovery from customers of certain ERC is subject to an earnings review and test for the year that the costs were paid. Following a prudence review, PGE will be allowed to place prudent expenses and proceeds into the Balancing Account to the extent that PGE's Actual Regulated Return on Equity ("ROE") does not exceed its ROE authorized by the Commission in PGE's most recent general rate case. A fixed $6.0 million each year in ERC and Harborton Restoration Project development costs, currently estimated at $10-$12 million, are not subject to the earnings test. Proceeds from insurance companies and DSAY ("Discount Service Acre Year") sales will not be subject to an earnings review, but will be subject to a prudency review.

SCHEDULE 149 (Continued)

DEFINITIONS

Annual Allocated Revenue ("AAR")

The Annual Allocated Revenue is the sum of annual revenue from this Tariff plus DSAY revenues (net of prudent Harborton Restoration Project development costs), insurance proceeds, \$3.56 million currently in base rates (subject to revision by the Commission), AAR balances carried forward, and accumulated interest. The \$3.56 million per year currently in base rates will be credited to the PHERA Annual Account on a monthly basis, in the amount of \$0.2967 million, until PGE's next general rate case when the appropriate amount to be included in rates, if any, will be re-examined. For the month of July 2016, a prorated amount of \$0.1627 million shall be credited to the PHERA Annual Account. The amount of insurance proceeds and net DSAY revenues to be included in the AAR is calculated as total proceeds divided by the expected remaining life of the projects, inclusive of the year in which they are received (so that such proceeds are equally allocated). The initial assumption is that the remaining life is through 2028, and may be revised by the Commission (on a going-forward basis) in any subsequent Commission review process.

Downtown Reach

The segment of the Willamette River between River Miles 12 and 16 is known as the "Downtown Reach."

DSAY

Discount Service Acre Year ("DSAY") obligations or credits measure damage or mitigation to natural resources.

SCHEDULE 149 (Continued)

DEFINITIONS (Continued)

Environmental Remediation Costs ("ERC")

Environmental Remediation Costs are costs related to remediation of the Portland Harbor and Downtown Reach sites that include, but are not limited to, the design, permitting, construction, on-going monitoring, and trustee financial requirements necessary for habitat restoration development, investigation, testing, sampling, monitoring, removal, disposal, storage, remediation, or other treatment of residues, litigation costs/expenses or other liabilities, disposal sites, sites that otherwise contain contamination that requires remediation for which PGE is responsible, or sites to which material may have migrated; the Natural Resource Damage obligation; Harborton Restoration Project O&M and endowment costs; and costs related to pursuing insurance recoveries. ERC do not include Harborton Restoration Project development costs, which include, but are not limited to, costs incurred as of the date of the UM 1789 Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable. Further, the remediation sites eligible for inclusion as ERCs are limited to those sites identified in Appendix A to the UM 1789 Stipulation.

Environmental Remediation Revenues

Environmental Remediation Revenues include: (1) DSAY revenues net of prudent Harborton Restoration Project development costs; (2) insurance proceeds; (3) the amount included in base rates for environmental remediation activities at Portland Harbor or Downtown Reach; (4) the Schedule 149 tariff revenue; and (5) interest.

Harborton Restoration Project

PGE intends to design, construct, monitor and maintain the Harborton Restoration Project at 12500 NW Marina Way, Portland, Multnomah County, Oregon. PGE will restore and enhance approximately 62 acres of the 78.51 acres of the overall property.

Natural Resource Damage

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "Superfund") and Oil Pollution Act ("OPA") Programs require the cleanup for contaminants that are released and pose a threat to human health and the environment. In addition to the requirements for cleanup under these cleanup programs, the Superfund and OPA cleanup programs also require that natural resources be restored to the state that they were at before injury from environmental contaminants. If natural resources are not restored, then Trustees will seek compensation for the injury, quantified as Natural Resource Damages ("NRD") from parties responsible for the release of the contaminants. NRD in this tariff refers to NRD obligations assessed against PGE.

SCHEDULE 149 (Continued)

DEFINITIONS (Continued)

Portland Harbor Superfund

The Superfund designation is pursuant to CERCLA. 42 U.S.C Section 9601 et seq. The CERCLA and OPA programs require the cleanup for contaminants that are released and pose a threat to human health and the environment.

PURE

The Prudence-Reviewed Unamortized Environmental Remediation Expense ("PURE") rate that is established early each year by Staff and represents the average of the 5-year US Treasury rate plus 100 basis points.

SCHEDULE 149 (Continued)

ADJUSTMENT RATES

Schedule	Adjustment Rate
7	0.000 ¢ per kWh
15/515	0.000 ¢ per kWh
32/532	0.000 ¢ per kWh
38/538	0.000 ¢ per kWh
47	0.000 ¢ per kWh
49/549	0.000 ¢ per kWh
75/575	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
76R/576R	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
83/583	0.000 ¢ per kWh
85/485/585	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
89/489/589	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
90/490/590	0.000 ¢ per kWh
91/491/591	0.000 ¢ per kWh
92/492/592	0.000 ¢ per kWh
95/495/595	0.000 ¢ per kWh

SCHEDULE 149 (Continued)

SPECIAL CONDITIONS

1. By March 15 of each year, PGE will submit a prudence review filing that includes a report of all activity associated with Harborton Restoration Project development costs, ERC, ERR, and other related third-party proceeds recorded in the PHERA Annual Account. Staff and other Parties will complete the prudence review, and Staff will submit its report and recommendation to the Commission within 120 days of submittal. Only cash expenditures will be included in the PHERA Annual Account for recovery under the PHERA mechanism. PGE shall defer, separately track, and capitalize as a regulatory asset, contingent environmental liability accruals. This regulatory asset shall not be included in rate base and PGE shall not earn a return on the balance.

2. The amount of costs and revenues that is transferred to the Balancing Account is determined on an annual basis and subject to an earnings test. The amount transferred is calculated as the current year's ERC and any remaining Harborton Restoration Project development costs not offset by that year's DSAY revenues, less the AAR. Harborton Restoration Project development costs incurred prior to the first year with DSAY revenues may be netted against those revenues.

3. The earnings test in this schedule will be applied after the Power Cost Adjustment Mechanism ("PCAM") earnings test. The amount subject to the earnings test is prudently incurred ERC that exceed $6.0 million. In addition, Harborton Restoration Project development costs are not subject to an earnings test.

4. The amount of annual ERC recoverable post-application of the earnings test is reduced by the AAR and then the remaining balance, if any, is transferred to the Balancing Account for recovery across the following five years.

5. If ERC in any year are less than the AAR, then the remaining ARR balance will be used to offset accumulated costs in the Balancing Account that were allocated to that year. Any remaining positive balances (more AAR revenues than current and accumulated costs) will roll forward as an addition to the next year's AAR.

6. Functionalized costs recoverable through Schedule 149 will be allocated to each rate schedule according to relative use of generation, distribution, and transmission service. Long-Term Direct Access customers will be priced at Cost-of-Service for purposes of allocating costs.

SCHEDULE 149 (Concluded)

SPECIAL CONDITIONS (Continued)

7. In the event that the amount in the PHERA Balancing Account results in a potential refund to customers, subject to approval by the Commission, PGE will determine if the refund should be applied to Customer bills, or if the credit balance should carry to a future period. A credit balance may be carried to a future period if it is determined by the Commission that the credit balance is best used to offset future expected ERC not yet recorded in the deferral account, or for such other reasons as the Commission may determine.

8. Adjustments under this Schedule shall continue for a period of five years following the date that the last remediation expenses are incurred and paid, or such other date that the Commission may decide.

9. Development costs associated with the creation of DSAYs from the Harborton Restoration Project shall be deferred as regulatory assets.

10. PGE shall defer and capitalize, as a regulatory asset, incurred costs associated with environmental liabilities accrued according to Accounting Standards Codification ("ASC") 410, *Environmental Obligations* and pursuant to Generally Accepted Accounting Principles ("GAAP"). Any GAAP accounting accruals recorded would not be subject to interest computation or earnings test as no cash amounts have been paid or received.

11. The PHERA is subject to review no less frequently than every two years, when significant new information becomes available, or during a general rate case. All aspects of the mechanism are subject to review and revision, including but not limited to, the earnings test, the exempt ERC amount, and incentives for cost management such as sharing.

12. If Harborton Restoration Project development costs, currently estimated at $10-$12 million, exceed DSAY revenues, PGE will not recover development costs from customers in excess of DSAY revenues retained by PGE. Harborton Restoration Project development costs include all costs associated with the Harborton Restoration Project development, including but not limited to, costs incurred as of the date of the UM 1789 Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable.

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Portland General Electric Company
P.U.C. Oregon No. E-18 **Original Sheet No. 149-1**

SCHEDULE 149
ENVIRONMENTAL REMEDIATION COST RECOVERY ADJUSTMENT
AUTOMATIC ADJUSTMENT CLAUSE

PURPOSE

This Schedule recovers the costs and revenues associated with ~~Environmental Remediation Costs related to~~ the Portland Harbor Superfund site ~~(~~("Portland Harbor~~),~~"), the Natural Resource Damage obligation, the Downtown Reach portions of the Willamette River, and the Harborton Restoration Project~~ (Harborton), hereinafter referred to as "projects."~~. This adjustment schedule is implemented as an automatic adjustment clause as provided under ORS 757.210.

AVAILABLE

In all territory served by ~~the~~Portland General Electric Company~~.~~ ("PGE").

APPLICABLE

To all Schedules~~ except Schedules 76R and 576R~~.

ANNUAL ACCOUNT & BALANCING ~~ACCOUNTS~~ACCOUNT

~~Effective August 3~~By Order No. XX-XXX, the Commission approved a deferral of environmental-related costs and revenues, effective July 15, 2016~~ PGE will establish a~~, that flow into the Portland Harbor Environmental Remediation Account ~~(~~("PHERA~~) annual account to record~~"). The PHERA Annual Account records Environmental Remediation Costs~~, proceeds from insurance companies related to Portland Harbor, the Downtown Reach, and proceeds of sales~~ ("ERC"), the costs of ~~Discount Service Acre Year credits (DSAYs) from~~ developing the Harborton~~.~~ Restoration Project, and Environmental Remediation Revenues ("ERR"). The balance in the ~~balancing account~~Annual Account that has not been reviewed by the ~~OPUC~~Commission for prudence shall accrue interest at the authorized rate of return approved in ~~the Company's~~PGE's most recent general rate case. ~~Proceeds~~Costs and revenues in the ~~account~~Annual Account that have been reviewed for prudency and remain following the earnings test will be transferred to the PHERA ~~balancing account that~~Balancing Account and will accrue interest at the ~~"PURE"~~average of the five-year U.S. Treasury rate ~~developed in the UM 1635 docket.~~plus 100 basis points (the "PURE Rate").

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EARNINGS TEST

Subject to the conditions stated below, the recovery from ~~Customers~~customers of certain ~~Environmental Remediation Costs~~ERC is subject to an earnings review and test for the year that the costs were ~~incurred. The Company~~paid. Following a prudence review, PGE will be allowed to place prudent expenses ~~(net of~~and proceeds~~)~~ into the ~~balancing account for subsequent prudence review~~Balancing Account to the extent that ~~the Company's~~PGE's Actual Regulated Return on Equity ~~(~~("ROE~~)~~") does not exceed its ~~Authorized~~ ROE~~.~~ authorized by the Commission in PGE's most recent general rate case. A fixed $6.0 million each year in ERC and Harborton Restoration Project development costs, currently estimated at $10-$12 million, are not subject to the earnings test. Proceeds from insurance companies and DSAY ("Discount

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Service Acre Year") sales will not be subject to an earnings review, but will be subject to a prudency review.

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Portland General Electric Company
P.U.C. Oregon No. E-18 **Original Sheet No. 149-2**

SCHEDULE 149 (Continued)

DEFINITIONS

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Annual Allocated ~~Revenues~~Revenue ("AAR")

The Annual Allocated ~~Revenues~~Revenue is the sum of annual revenue from this Tariff plus ~~the annual allocation of insurance proceeds and~~ DSAY revenues (net of prudent Harborton Restoration Project development costs~~).~~), insurance proceeds, $3.56 million currently in base rates (subject to revision by the Commission), AAR balances carried forward, and accumulated interest. The $3.56 million per year currently in base rates will be credited to the PHERA Annual Account on a monthly basis, in the amount of $0.2967 million, until PGE's next general rate case when the appropriate amount to be included in rates, if any, will be re-examined. For the month of July 2016, a prorated amount of $0.1627 million shall be credited to the PHERA Annual Account. The amount of insurance proceeds and net DSAY revenues to be included in ~~Annual Allocated Revenues~~the AAR is calculated as ~~the greater of $6.5 million or~~ total proceeds divided by the expected remaining life of the projects, inclusive of the year in which they are received (so that such proceeds are equally allocated). The initial assumption is that the remaining life is through 2028, and may be ~~updated, as approved~~revised by the Commission (on a going-forward basis) in any subsequent Commission review process.

Downtown Reach

The segment of the Willamette River between River Miles 12 and 16 is known as the "Downtown Reach~~".~~."

DSAY

Discount Service Acre Year ("DSAY") obligations or credits measure damage or mitigation to natural resources.

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James F. Lobdell, Senior Vice President upon Commission Order

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Portland General Electric Company
P.U.C. Oregon No. E-18 Original Sheet No. 149-3

SCHEDULE 149 (Continued)

DEFINITIONS (Continued)

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Environmental Remediation Costs ("ERC")

Environmental Remediation Costs ~~includes~~are costs related to remediation of the Portland Harbor and Downtown Reach sites that include, but ~~is~~are not limited to, the design, permitting, construction, on-going monitoring, and trustee financial requirements necessary for habitat restoration development, investigation, testing, sampling, monitoring, removal, disposal, storage, remediation, or other treatment of residues, litigation costs/expenses or other liabilities, disposal sites, sites that otherwise contain contamination that requires remediation for which ~~the Company is responsible, or sites to which material may have migrated~~PGE is responsible, or sites to which material may have migrated; the Natural Resource Damage obligation; Harborton Restoration Project O&M and endowment costs; and costs related to pursuing insurance recoveries. ERC do not include Harborton Restoration Project development costs, which include, but are not limited to, costs incurred as of the date of the UM 1789 Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable. Further, the remediation sites eligible for inclusion as ERCs are limited to those sites identified in Appendix A to the UM 1789 Stipulation.

Environmental Remediation Revenues

Environmental Remediation Revenues include: (1) DSAY revenues net of prudent Harborton Restoration Project development costs; (2) insurance proceeds; (3) the amount included in base rates for environmental remediation activities at Portland Harbor or Downtown Reach; (4) the Schedule 149 tariff revenue; and (5) interest.

Harborton Restoration Project

PGE intends to design, construct, monitor and maintain the Harborton Restoration Project at 12500 NW Marina Way, Portland, Multnomah County, Oregon. PGE will restore and enhance approximately 62 acres of the 78.51 acres of the overall property.

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Natural Resource Damage

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ~~(~~("CERCLA" or "Superfund~~)~~") and Oil Pollution Act ~~(~~("OPA~~)~~") Programs require the cleanup for contaminants that are released and pose a threat to human health and the environment. In addition to the requirements for cleanup under these cleanup programs, the Superfund and OPA cleanup programs also require that natural resources be restored to the state that they were at before injury from environmental contaminants. If natural resources are not restored, then Trustees will seek compensation for the injury, quantified as Natural Resource Damages ~~(~~("NRD~~)~~") from parties responsible for the release of the contaminants. NRD in this tariff refers to NRD obligations ~~assigned to~~assessed against PGE.

Advice No. 16-11
Issued July 15, 2016 — Effective for service
James F. Lobdell, Senior Vice President — upon Commission Order
Portland General Electric Company
P.U.C. Oregon No. E-18 — Original Sheet No. 149-4

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SCHEDULE 149 (Continued)

DEFINITIONS (Continued)

~~Advice No. 16-11~~
~~Issued July 15, 2016~~ — ~~Effective for service~~
~~James F. Lobdell, Senior Vice President~~ — ~~on and after August 17, 2016~~

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~~**SCHEDULE 149 (Continued)**~~

~~**DEFINITIONS (Continued)**~~

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Portland Harbor Superfund

The Superfund designation is pursuant to ~~the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (~~CERCLA~~)~~. 42 U.S.C Section 9601 et seq. The ~~Comprehensive Environmental Response, compensation, and Liability Act of 1980 (~~CERCLA ~~or Superfund) and Oil Pollution Act (~~and OPA~~) Programs~~ programs require the cleanup for contaminants that are released and pose a threat to human health and the environment. ~~The Superfund and OPA cleanup programs also require that natural resources be restored to the state that they were at before injury from environmental contaminants. If natural resources are not restored, then compensation for the injury, quantified as Natural Resource Damages (NRD) will be sought from parties responsible for the release of the contaminants.~~

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PURE

The Prudence-Reviewed Unamortized Environmental Remediation Expense ~~(~~("PURE~~)~~") rate that is established early each year by ~~OPUC~~ Staff and represents the average of the 5-year US Treasury rate plus 100 basis points.

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SCHEDULE 149 (Continued)

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~~SCHEDULE 149 (Continued)~~

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ADJUSTMENT RATES

Schedule	Adjustment Rate
7	0.000 ¢ per kWh
15/515	0.000 ¢ per kWh
32/532	0.000 ¢ per kWh
38/538	0.000 ¢ per kWh
47	0.000 ¢ per kWh
49/549	0.000 ¢ per kWh
75/575	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
76R/576R	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
83/583	0.000 ¢ per kWh
85/485/585	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
89/489/589	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
90/490/590	0.000 ¢ per kWh
91/491/591	0.000 ¢ per kWh
92/492/592	0.000 ¢ per kWh
95/495/595	0.000 ¢ per kWh

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James F. Lobdell, Senior Vice President upon Commission Order

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Portland General Electric Company
P.U.C. Oregon No. E-18 Original Sheet No. 149-6

SCHEDULE 149 (Continued)

SPECIAL CONDITIONS

1. By March 15 of each year, PGE will submit a prudence review filing that includes a report of all activity associated with Harborton Restoration Project development costs, ERC, ERR, and other related third-party proceeds recorded in the PHERA Annual Account. Staff and other Parties will complete the prudence review, and Staff will submit its report and recommendation to the Commission within 120 days of submittal. Only cash expenditures will be included in the PHERA Annual Account for recovery under the PHERA mechanism. PGE shall defer, separately track, and capitalize as a regulatory asset, contingent environmental liability accruals. This regulatory asset shall not be included in rate base and PGE shall not earn a return on the balance.

2. The amount of costs and revenues that is transferred to the Balancing Account is determined on an annual basis and subject to an earnings test. The amount transferred is calculated as the current year's ERC and any remaining Harborton Restoration Project development costs not offset by that year's DSAY revenues, less the AAR. Harborton Restoration Project development costs incurred prior to the first year with DSAY revenues may be netted against those revenues.

3. The earnings test in this schedule will be applied after the Power Cost Adjustment Mechanism ("PCAM") earnings test. The amount subject to the earnings test is prudently incurred ERC that exceed $6.0 million. In addition, Harborton Restoration Project development costs are not subject to an earnings test.

4. The amount of annual ERC recoverable post-application of the earnings test is reduced by the AAR and then the remaining balance, if any, is transferred to the Balancing Account for recovery across the following five years.

5. If ERC in any year are less than the AAR, then the remaining ARR balance will be used to offset accumulated costs in the Balancing Account that were allocated to that year. Any remaining positive balances (more AAR revenues than current and accumulated costs) will roll forward as an addition to the next year's AAR.

6. Functionalized costs recoverable through Schedule 149 will be allocated to each rate schedule according to relative use of generation, distribution, and transmission service. Long-Term Direct Access customers will be priced at Cost-of-Service for purposes of allocating costs.

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SCHEDULE 149 (Concluded)

SPECIAL CONDITIONS (Continued)

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~~Portland General Electric Company~~
~~P.U.C. Oregon No. E-18~~ ~~Original Sheet No. 149-5~~

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~~SCHEDULE 149 (Continued)~~

~~SPECIAL CONDITIONS~~

~~1. The amount of costs and revenues that is transferred to the balancing account is determined on an annual basis and subject to an earnings test. The amount transferred is calculated as the current year's Environmental Remediation Costs less Annual Allocated Revenues.~~

~~2. The earnings test in this schedule will be applied after the Power Cost Adjustment Mechanism earnings test. The first $6.5 million of environmental remediation costs each year are not subject to an earnings test. In addition, development costs for the Harborton Restoration Project are not subject to an earnings test.~~

~~3. If Environmental Remediation Costs in any year exceed the greater of $6.5 million or the Annual Allocated Revenues plus interest, then the balance is subject to an earnings test. The balance would be reduced by any over earnings and transferred to the balancing account for recovery across the following five years.~~

~~4. If Environmental Remediation Costs in any year are less than the Annual Allocated Revenues, plus interest, then the balance will be used to offset accumulated costs. Any remaining positive balances will roll forward to as an addition to the next year's Annual Allocated Revenues.~~

~~5.~~1. ~~Applicable costs will be functionalized to distribution, generation and transmission based on the preponderance of the provided historical function. Costs recovered through this schedule will be allocated to each rate schedule as functionalized. Long-Term Direct Access customers will be priced at Cost-of-Service for purposes of allocating costs.~~

~~6.~~7. In the event that the amount in the PHERA ~~balancing account~~Balancing Account results in a potential refund to customers, ~~the Company,~~ subject to approval by the Commission, PGE will determine if the refund should be applied to Customer bills, or if the credit balance should carry to a future period. A credit balance may be carried to a future period if it is determined by the Commission that the credit balance is best used to offset future expected ~~Environmental Remediation Costs~~ERC not yet recorded in the deferral account, or for such other reasons as the Commission may determine.

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~~7. By March 15, 2017 and each year thereafter, the Company will request Commission review and determination of prudence of Environmental Remediation Costs for the prior calendar year. The request for prudence review will include a report of all activity associated with Environmental Remediation Costs, including insurance or other third-party proceeds related to remediation activities recorded in the deferral account. The Commission shall complete the prudence review within 120 days of its submittal, after which time all costs and proceeds not deemed imprudent will be transferred to the PHERA.~~

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~~Advice No. 16-11~~
~~Issued July 15, 2016~~ ~~Effective for service~~
~~James F. Lobdell, Senior Vice President~~ ~~on and after August 17, 2016~~

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~~Portland General Electric Company~~
~~P.U.C. Oregon No. E-18~~ ~~Original Sheet No. 149-6~~

~~SCHEDULE 149 (Concluded)~~

~~SPECIAL CONDITIONS (Continued)~~

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8. Adjustments under this Schedule shall continue for a period of five years following the date that the last remediation expenses are incurred and paid, or such other date that the Commission may decide.

9. Development costs associated with the creation of DSAYs from the Harborton ~~project~~Restoration Project shall be deferred as regulatory assets~~ in association with the PHERA balancing account~~.

10. ~~The Company~~PGE shall defer and capitalize, as a regulatory asset, incurred costs associated with environmental liabilities accrued according to Accounting Standards Codification ~~(~~("ASC~~)~~") 410, *Environmental Obligations* and pursuant to Generally Accepted Accounting Principles ~~(~~("GAAP~~).~~"). Any GAAP accounting accruals recorded would not be subject to interest computation or earnings test as no cash amounts have been paid or received.

11. The PHERA is subject to review no less frequently than every two years, when significant new information becomes available, or during a general rate case. All aspects of the mechanism are subject to review and revision, including but not limited to, the earnings test, the exempt ERC amount, and incentives for cost management such as sharing.

12. If Harborton Restoration Project development costs, currently estimated at $10-$12 million, exceed DSAY revenues, PGE will not recover development costs from customers in excess of DSAY revenues retained by PGE. Harborton Restoration Project development costs include all costs associated with the Harborton Restoration Project development, including but not limited to, costs incurred as of the date of the UM 1789 Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable.

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**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

UM 1789 / UE 311 / UP 344

Joint Testimony in Support of Stipulation

PORTLAND GENERAL ELECTRIC COMPANY

Direct Testimony of

Mitchell Moore, OPUC
Bradley R. Mullins, ICNU
Stefan Brown, PGE

November 18, 2016

Table of Contents

I. Introduction

Q. Please state your names and positions.

A. My name is Mitchell Moore. I am a Senior Utility Analyst at the Public Utility Commission of Oregon ("Commission"). My qualifications appear in Staff Exhibit 101.

My name is Bradley R. Mullins. I am an independent consultant representing large energy and utility customers throughout the western United States. I am appearing on behalf of the Industrial Customers of Northwest Utilities ("ICNU") in this proceeding. My qualifications appear in ICNU Exhibit 101.

My name is Stefan Brown. I am Manager, Regulatory Affairs for Portland General Electric Company ("PGE"). My qualifications appear in PGE Exhibit 101.

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to describe the Stipulation ("Stipulation") reached among Commission Staff ("Staff"), Citizens' Utility Board of Oregon ("CUB"), ICNU, and PGE (collectively the "Parties") regarding issues raised in consolidated dockets UM 1789, UE 311 and UP 344 (collectively, "Applications"). This Stipulation represents a compromise between the parties to resolve all issues in the Applications, including issues related to the Portland Harbor Environmental Remediation Account ("Schedule 149" or "PHERA") (UE 311), the Property Sale Application (UP 344), and the Deferral Application (UM 1789). CUB will be submitting separate joint testimony in support of the Stipulation.

Q. Please summarize the activity in this proceeding leading up to this Stipulation.

A. Prior to its filing, PGE met with parties to discuss the proposed Portland Harbor filing several times between April and July 2016. After these discussions, PGE filed the Applications on July 15, 2016, and requested that the dockets be consolidated. The motion to consolidate was granted on July 18, 2016. During the following months, PGE responded to 83 data requests from Staff. On September 30, 2016, Staff, CUB, and ICNU each filed reply testimony, providing analysis and suggestions on a number of issues. On October 10, 2016, the Commission held a Commission Workshop on the consolidated dockets during which PGE made a presentation and responded to questions from the Commissioners. Staff, CUB, and ICNU representatives also discussed their respective positions with the Commissioners. The Parties participated in a settlement conference on October 11, 2016.[1] As a result of the settlement conference, the Parties reached an agreement settling all issues raised in the consolidated dockets.

Q. Please summarize the terms of the Stipulation.

A. The Stipulation represents the settlement of all issues raised by Parties regarding the Applications. A copy of the Stipulation is provided as Exhibit 101. Table 1, below, summarizes the settled issues along with a short description of the outcome.

Table 1
Overview of Stipulation Terms

Issue No.	Category	Summary Description
S-1	PHERA Effective Date	The effective date of the deferral should be July 15, 2016. Deferred costs and revenues will be tracked in the PHERA.
S-2	Portland Harbor and Downtown Reach environmental remediation costs	$3.56 million per year currently in base rates will be credited on a monthly basis as revenue in the PHERA Annual Account until PGE's next general rate case when the appropriate amount to be included in rates, if any, will be re-examined..
S-3	Prudence Review	All costs and revenues deferred into the PHERA, including Environmental Remediation Costs ("ERC") and Environmental Remediation Revenues ("ERR") associated with Portland Harbor, Natural Resource Damages ("NRD"), Downtown Reach, and costs associated with the Harborton Restoration Project are subject to a prudence review.
S-4	Earning Test	A fixed amount of $6.0 million of prudently-incurred ERC in each year is not subject to the earnings test. Harborton Restoration Project development costs are also exempt from the earnings test.
S-5	Environmental Liability Accruals	Defer, separately track, and capitalize as regulatory assets. Not included in rate base for ratemaking purposes.

[1] No other parties intervened in this docket.

Issue No.	Category	Summary Description
S-6	Property Sale (UP 344)	Support approval subject to the condition that if Harborton Restoration Project development costs exceed Discounted Service Acre Year ("DSAY") revenues, PGE will not recover any development costs from customers in excess of DSAY revenues retained by PGE.
S-7	List of Properties	See Appendix A of Stipulation.
S-8	Schedule 149 Tariff	Initial prices will be zero.
S-9	Interest	Authorized Rate of Return ("ROR") before the Prudence Review and at the average of the five-year U.S. Treasury rate plus 100 basis points ("PURE Rate") after deemed prudent by Commission order.
S-10	Allocation and Carry Over of Costs and Revenues	Each year's allocated ERR is defined as Annual Allocated Revenue ("AAR") and is the sum of insurance proceeds and DSAY revenue net of Harborton Restoration Project development costs equally allocated across remaining expected project life, $3.56 million, AAR balances carried forward, and accumulated interest. If ERC and Harborton Restoration Project development costs remain following the Earnings Test and application of any annual over-earnings, they are offset by that year's AAR and any remaining balance is allocated equally across the following five years. If AAR exceeds ERC and Harborton Restoration Project costs, the remaining balance is carried forward to the next year's ARR.
S-11	Cost Functionalization	According to relative use of generation, distribution, and transmission services.
S-12	Schedule 149 Mechanism Review	Subject to review at least every two years.
S-13	PGE's Results of Operations ("ROO")	PGE's ROO will not include any environmental costs or revenues associated with the PHERA, including the interest or accumulated deferred income taxes associated with the PHERA.
S-14	Revised Schedule 149	See Appendices B and C of the Stipulation.

II. Background

Q. What is the background of the UM 1789 consolidated docket?

A. UM 1789 is a consolidated docket that also includes dockets UP 344 and UE 311. The three filings are interrelated because they involve: (1) PGE's recovery of environmental restoration and remediation costs related to the Portland Harbor Superfund Site ("Portland Harbor") and Downtown Reach site; (2) costs and revenues associated with the creation and sale of environmental credits (DSAYs); and, (3) proceeds from historical insurers that issued coverage for PGE's environmental obligations. PGE anticipates incurring environmental damages in two forms: (1) Natural Resource Damages ("NRD")[2] assessed by the Natural Resource Trustees ("Trustees"), which PGE expects in the second quarter of 2017; and (2) environmental remediation damages assessed by the U.S. Environmental Protection Agency ("EPA"), which PGE expects in 2020.

Q. What is the purpose of the PHERA mechanism proposed in UE 311?

A. As discussed in PGE's UE 311/Exhibit 100, the PHERA mechanism is an automatic adjustment clause mechanism under ORS 757.210(1)(b) that will begin tracking expenditures and DSAY revenues associated with Portland Harbor, NRD obligation, the Downtown Reach portion of Willamette River, the Harborton Restoration Project, and insurance proceeds.[3]

Q. Please summarize PGE's UP 344 application (Property Sale).

A. In UP 344 PGE requests approval to place a deed restriction on utility property located within Portland Harbor to develop the Harborton Restoration Project that will generate DSAYs. PGE also requests approval to sell the DSAY credits that result from development of the project. Parties anticipate that the Harborton Restoration Project will generate a

[2] The amounts of NRD damages or mitigation to natural resources are measured in DSAYs.
[3] See UE 311 / PGE / 100 for information about Portland Harbor, Downtown Reach and Harborton.

significant amount of DSAY credits that may be used to offset a major portion of NRD and environmental remediation damages caused in the Portland Harbor Superfund area by the Potentially Responsible Parties ("PRPs") as determined by the Trustees. These credits can be used by the PRPs to offset their liability for Natural Resource Damages.

Q. Please provide a summary of PGE's UM 1789 application (Portland Harbor Deferral).

A. In UM 1789, PGE requests approval of a deferral to separately account for the costs and revenues generated by the Harborton Restoration Project, costs related to the environmental remediation of Portland Harbor including NRD, and costs related to the environmental remediation of Downtown Reach, costs related to pursuing insurance recoveries, and insurance proceeds received. The deferral was filed specifically to support the PHERA mechanism originally proposed in UE 311 (and has since been modified thereby being supported by all Parties) and the deferred amounts would be amortized in accordance with the process described herein.

III. Resolution of Issues

Q. Please describe the PHERA under the Stipulation (Schedule 149 / UE 311) (S-1).

A. Under the Stipulation, the PHERA is a balancing account that tracks costs and revenues related to NRD and environmental remediation in Portland Harbor and Downtown Reach. Costs include "Harborton Restoration Project development costs," which consist of all costs associated with development of the Harborton Restoration Project, including development and construction costs, permitting costs, and costs paid to Trustees in connection with the Harborton Restoration Project, and future termination-related costs if applicable. Harborton Restoration Project development costs do not, however, include O&M costs and potential endowment costs related to the site. Costs also include "Environmental Remediation Costs" ("ERC"), which consist of all costs, other than Harborton Restoration Project development costs, that PGE incurs for NRD and environmental remediation activities in Portland Harbor and Downtown Reach at the sites specifically listed in Appendix A of the Stipulation. The PHERA also will hold "Environmental Remediation Revenues" ("ERR"), which include DSAY revenues net of prudent Harborton Restoration Project development costs, insurance proceeds, any amount included in base rates for environmental remediation activities in Portland Harbor and Downtown Reach, revenue recovered through Schedule 149, and interest.

The PHERA consists of two accounts, an annual account ("PHERA Annual Account") and a balancing account ("PHERA Balancing Account"). The PHERA Annual Account holds all Harborton Restoration Project development costs, ERC, and ERR incurred or received in a year until those costs and revenues are determined to be prudent by Commission Order. At that point, they are transferred to the PHERA Balancing Account.

The Parties describe the details of how costs and revenues are transferred and allocated between these accounts below.

The Parties agree that the effective date of the deferral should be July 15, 2016; the date PGE filed its deferral request. The deferred costs and revenues will be recorded in the PHERA Annual Account (prior to prudence review). Other than Harborton Restoration Project development costs that have been capitalized and deferred, only costs incurred and revenues received since this date are eligible for inclusion in the PHERA.

Q. Please describe the Stipulation regarding the treatment of the environmental remediation costs already included in base rates associated with the Portland Harbor and Downtown Reach projects (S-2).

A. The Parties agree that \$3.56 million per year was included in PGE's base rates[4] for environmental remediation-related activities in Portland Harbor and Downtown Reach in PGE's last general rate case (Docket No. UE 294). PGE agrees that beginning July 15, 2016, PGE will credit to the PHERA Annual Account on a monthly basis, in the amount of \$0.2976 million, until PGE's next general rate case when the appropriate amount to be included in rates, if any, will be re-examined. Correspondingly, the associated costs as allowed for in this mechanism for Portland Harbor and Downtown Reach will also be included in the PHERA Annual Account as expended.

Q. Please describe the Stipulation regarding the Prudence Review (S-3).

A. The Parties agree that all ERC, ERR, and Harborton Restoration Project development costs are subject to a prudence review. By March 15, 2017, and each year thereafter, PGE will request that Staff review and determine the prudence of ERC, ERR, and Harborton Restoration Project costs for the prior calendar year. Any other Party to this Stipulation may

[4] See Exhibit Staff/102, Moore/27 (PGE's Response to Staff DR No. 81).

perform its own prudence review and request information from PGE related to Harborton Restoration Project costs, ERC, and ERR pertinent to such review.

PGE's filing requesting a prudence review will include a report of all activity associated with ERC, ERR, and the Harborton Restoration Project recorded in the PHERA Annual Account. Only cash expenditures will be included in the PHERA Annual Account for recovery under the PHERA mechanism. Staff and other Parties shall complete the prudence review and Staff will submit its report and recommendation to the Commission within 120 days of its submittal, after which time all ERC and ERR deemed prudent by Commission order will be transferred to the PHERA Balancing Account. For the costs and revenues that Staff recommends be deemed prudent in its report, Staff will request that a Commission order be issued as expeditiously as possible; however, costs and revenues that Staff and/or other Parties disagree as to prudency will be resolved pursuant to a separate procedural schedule.

Q. Please describe the Stipulation regarding the earnings test mechanism (S-4), (S-13).

A. PGE's initial filing included a request that the greater of $6.5 million in ERC or the Annual Allocated Revenue (DSAY revenues net of Harborton Restoration Project development costs, and insurance proceeds) each year would not be subject to the earnings test. The Parties agree that a fixed amount of $6.0 million each year in prudently incurred ERC is not subject to the earnings test. However, the Parties agree that the $6.0 million exempt amount each year is subject to review and revision no less frequently than every two years when the PHERA mechanism is subject to review in its entirety, and the exempt amount may be revised up or down at that time depending on new information and updated cost and revenue estimates. In addition, development costs for the Harborton Restoration Project, currently estimated at $10-$12 million, are not subject to an earnings test.

If the prudently-incurred ERC in any year exceeds $6.0 million (note that ERC does not include the development costs of the Harborton Restoration Project), then the balance is subject to an earnings test. The balance will be reduced by any earnings above PGE's Return on Equity authorized by the Commission in PGE's most recent general rate case, as identified in PGE's Results of Operations ("ROO"). The Parties agree that PGE's ROO will not include the interest or accumulated deferred income taxes ("ADIT") included in the PHERA. Similarly, PGE's ROO will include an adjustment to remove all other costs and revenues included in the PHERA. An earnings test based on the ROO, exclusive of impacts on PHERA, will then be used to determine the amount, if any, of deferred costs to be transferred to the Balancing Account for that year. The Parties agreed to this approach in order to keep the costs and revenues associated with environmental remediation self-contained within the PHERA mechanism and to increase the transparency of PGE's regulatory filings. The earnings test will be applied after the Power Cost Adjustment Mechanism ("PCAM").

Q. Please explain why a fixed amount of $6.0 million each year in ERC should be exempt from the PHERA earnings test.

A. Staff rejected PGE's floating, no less than $6.5 million exempt proposal on the grounds that PGE should not have a year-to-year floating amount of costs exempt from the earnings test, and proposed in Staff's Reply Testimony a fixed exempt amount of $5.5 million. As a compromise, the Parties agree that a fixed amount of $6.0 million each year in ERC should be exempt from the earnings test at this time.

Q. Please explain why the PCAM earnings test should be applied before the PHERA earnings test.

A. 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 PHERA earnings test 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.

Finally, timing the PCAM earnings test before the PHERA earnings test mechanism is to the benefit of customers 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 PGE's authorized Return on Equity (ROE) +/- 100 basis points, while the PHERA earnings threshold is PGE's authorized ROE. If PGE's regulated adjusted ROE is above the PCAM deadband, triggering a refund to customers, there is still an opportunity for PGE's earnings to absorb PHERA costs. Alternatively, if the earnings tests are applied in the opposite order, and the PHERA absorbs earnings first, it is less likely that the PCAM will trigger and result in a refund to customers.

Q. Please explain why development costs associated with the Harborton Restoration Project are not subject to the earnings test.

A. Parties had varying reasons for agreeing to a provision providing that the Harborton Restoration Project are not subject to the earnings test. Some parties were of the position that the Harborton Restoration Project is a voluntary project PGE proposed that, based on PGE's estimates of costs and revenues (see forecasts provided in PGE's filings, testimony, and Staff testimony), should provide significant benefits to customers in the form of reducing environmental remediation damages assessed against PGE. Other parties believed PGE has an obligation to take proactive actions to maximize the value of the Harborton property for the benefit of ratepayers and that all costs incurred with respect to the Harborton Restoration Project should be subject to an earnings test. Finally, other parties felt that, because revenue from DSAY credits is not subject to the earnings test, it was reasonable to exempt Harborton Restoration Development costs that are necessary to generate the DSAY credits based on the principle of matching costs and benefits. Ultimately, PGE agreed in the Stipulation that it would not recover Harborton Restoration Project development costs from customers to the extent these costs exceed DSAY revenues retained by PGE. Accordingly, under no circumstance will customers be responsible for development costs associated with the Harborton Restoration Project. As a compromise of positions, parties were able to agree that Harborton Restoration Project development costs would not be subject to the earnings test, as a part of a package that each party believes is reasonable considering the unique facts and circumstances of this proceeding.

Q. Please describe the Stipulation regarding the contingent environmental liability accruals (S-5).

A. Parties agree that PGE shall defer, separately track, and capitalize as a regulatory asset, contingent environmental liability accruals. This regulatory asset shall not be included in rate base and PGE shall not earn a return on the balance.

Q. Please describe the Stipulation regarding the approval of UP 344 (Property Sale) (S-6).

A. The Parties support approval of UP 344 subject to the condition that if Harborton Restoration Project development costs, currently estimated at \$10-\$12 million, exceed DSAY revenues, PGE will not recover any development costs from customers in excess of DSAY revenues retained by PGE.[5] Harborton Restoration Project development costs

[5] In the event PGE terminates the Harborton Restoration Project, PGE, not customers, will be responsible for Harborton Restoration Project development and termination costs; termination costs include, but are not limited to, returning to the Trustee Council all DSAY credits previously released to PGE and reimbursing the Trustee Council

includes all costs associated with the Harborton Restoration Project development, including but not limited to, costs incurred as of the date of this Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable.

Q. Please describe the Stipulation regarding the list of PGE properties identified as potentially subject to EPA-assessed Portland Harbor cleanup damages and NRD damages (S-7).

A. PGE attaches as Appendix A to the Stipulation, the list of PGE properties eligible for this mechanism. These sites may be subject to EPA-assessed Portland Harbor cleanup damages and NRD damages. PGE has an ongoing duty to update Appendix A solely for the purpose of removing sites from consideration as appropriate. Once notified of its share of Portland Harbor environmental costs by site (either NRD or EPA liability), PGE will evaluate each of the identified sites and will provide the information to Parties. Upon receiving the conclusive NRD and/or EPA damage assessment information from PGE, Staff and other parties to this docket will commence their own prudence review. Such review may include but not be limited to such issues as whether each site was appropriately categorized as utility property, prudently managed, and eligible for recovery of prudently-incurred environmental remediation costs. The amount of time required for Staff's review of each individual site could vary depending on the number of sites submitted and the availability of historical information, and therefore is not limited to 120 days.

The Parties agree to propose to the Commission that a "Phase II" of docket UE 311 be opened for continued review of the sites listed in Appendix A and for an annual prudence

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for all costs the Trustee Council has incurred with respect to the review and approval of the Harborton Restoration Project. See Exhibit Staff/100, Moore/16; Exhibit Staff/102, Moore/1 (PGE's Response to Staff DR No. 1).

review of the costs and revenues. Further, PGE will to the extent possible record environmental remediation assessments separately by site.

Q. Please describe the Stipulation regarding the initial prices for Schedule 149 (S-8).

A. The Parties agree that the initial prices for Schedule 149 will be set at zero.

Q. Please explain why Schedule 149 rates will initially be set at zero.

A. As noted above, the parties agree that there is currently $3.56 million included in base rates for environmental remediation costs that will be credited to the PHERA on a monthly basis, in the amount of $0.2976 million, until PGE's next general rate case, when the appropriate amount to be included in rates, if any, will be re-examined. The Commission may determine whether an adjustment to Schedule 149, i.e., increase rates from zero, should be made at that time or when the mechanism is subject to review.

Q. Please describe the Stipulation regarding the interest to be applied on environmental remediation costs incurred and environmental remediation revenues received (S-9).

A. The Parties agree that the pre-tax balance in the PHERA Annual Account that has not been deemed prudent by Commission order shall accrue interest at the authorized rate of return approved in PGE's most recent general rate case. This includes the $3.56 million credited on a monthly basis ($0.2967 million per month) to the PHERA Annual Account from base rates until the conclusion of PGE's next general rate case. In other words, the $3.56 million will accrue interest at PGE's authorized rate of return until that corresponding year's ERC, ERR, and Harborton Restoration Project development costs are deemed prudent. ERC, ERR, and Harborton Restoration Project development costs in the PHERA Annual Account that have subsequently been reviewed for prudency, deemed prudent and passed through the earnings test will be transferred consistent with the Commission order to the PHERA Balancing Account and will accrue interest at the PURE Rate. The PURE Rate will be updated annually and included in Staff's Report to the Commission on the prudence of ERC, ERR, and Harborton Restoration Project development costs. Upon Commission order as to prudence, interest will be transferred to the PHERA Balancing Account and is not allocated across the remaining life of the project. The Parties also agree that interest will not be accrued on contingent environmental liability accruals. Interest shall be calculated on the pre-tax regulatory asset and regulatory liability balances.

Q. Please explain the treatment and the interest to be applied on development costs and revenues associated with the Harborton Restoration Project.

A. Like other costs, Harborton Restoration Project development costs and revenue will accrue interest at PGE's authorized ROR prior to completion of the prudence review and at the PURE Rate following the prudence review. Harborton Restoration Project development costs in one year are offset by revenues from DSAY sales in the same year and the net remaining excess DSAY revenues for that year are transferred to the PHERA Balancing Account and are equally allocated across the remaining expected life of the project to 2028 or as defined by the Commission. Harborton Restoration Project development costs incurred before PGE has received its first year of DSAY revenues may be netted against those first year of DSAY revenues, with any excess Harborton Restoration development costs carried forward in accordance with the terms of the PHERA mechanism.

Q. Please describe the Stipulation regarding the allocation and carry over of costs and revenues (S-10).

A. Costs and revenues are allocated differently in the PHERA Balancing Account. After they are found to be prudent, that year's ERR are transferred from the PHERA Annual Account to the PHERA Balancing Account. DSAY revenues that remain after being netted against Harborton Restoration Project development costs, as well as any insurance proceeds (insurance proceeds are not netted against Harborton Restoration Project development costs), are allocated equally across the remaining expected life of the project, currently estimated to be 2028. The other ERR components – amounts collected in base rates, Schedule 149 tariff revenue, and interest – are allocated entirely to the year in which they are received.

Each year's allocated amount of ERR plus any prior rollover revenue is defined in the Stipulation and Schedule 149 tariff as Annual Allocated Revenue ("AAR"). Meanwhile, remaining Harborton Restoration Project development costs and ERC that are found to be prudent are first subject to the earnings test discussed above, then are netted against that year's AAR in the PHERA. AAR is the sum of: (1) insurance proceeds associated with Portland Harbor and Downtown Reach that are equally allocated across the remaining expected project life, inclusive of the year in which they are received; (2) $3.56 million currently in base rates, subject to adjustment by Commission; (3) the Schedule 149 tariff revenue; (4) AAR balances carried forward; (5) accumulated interest; and (6) DSAY revenues net of Harborton Restoration Project development costs that are equally allocated across the remaining expected project life, inclusive of the year in which they are received. The current expected project life is through 2028. Parties acknowledge that the Commission may revise expected project life (on a going-forward basis) in the biennial review process discussed in S-12 below. After reducing the annual ERC balance in the PHERA Annual Account by any overearnings noted in S-4 above, the AAR is applied against the remaining annual ERC balance. Any remaining annual ERC balance is transferred to the PHERA Balancing Account and equally allocated across the following five years, and is not subject to an additional earnings test. If ERC (after being reduced by any overearnings if ERC is above $6 million) is less than the AAR, then the positive balance will be transferred to the

PHERA Balancing Account to offset any accumulated costs in the PHERA Balancing Account that were allocated to that year. Any remaining positive balance is carried forward as an addition to the next year's AAR.

Q. Can you give an example to illustrate how the allocations in the PHERA work?

A. Yes. Assume in 2019 that PGE received $10 million combined in DSAY revenues net of Harborton Restoration Project development costs and insurance proceeds, and received $5 million from customers in base rates, Schedule 149 tariff revenue, and interest. Once those revenues are found to be prudently incurred, the $10 million in DSAY revenue and insurance proceeds are transferred to the PHERA Balancing Account and allocated across the expected life of the project – in this case $1 million for each of the ten years inclusive of 2019 through 2028. The $5 million from rates, Schedule 149 tariff revenue, and interest is allocated entirely to 2019, such that AAR in 2019 is $6 million.

Now assume that PGE incurs $22 million in ERC in 2019. Once those costs are found to be prudent, the amount above $6 million is subject to the earnings test. Assume PGE over-earned in this year such that it can absorb $1 million in ERC. The remaining $21 million then is first offset by the $6 million in AAR in the PHERA to 2019, leaving $15 million to be allocated over the next five years, or $3 million per year.

Then, in 2020, assume PGE receives no DSAY revenue or insurance proceeds, but again collects $5 million in rates, Schedule 149 revenue, and interest. It also incurs $1 million in ERC. All costs and revenues are found to be prudent and the earnings test does not apply because $1 million is within the $6 million "safe harbor" from the earnings test. Under this scenario, AAR for 2020 is $6 million (the $1 million allocated from DSAY revenue and insurance proceeds received in 2019 plus the $5 million collected from rates and interest in 2020), and annual allocated ERC is $4 million (the $3 million allocated from

ERC incurred in 2019 plus the $1 million incurred in 2020). All ERC allocated to 2020, therefore, is netted against 2020 AAR (first paying for costs incurred in 2020 and then offsetting any amortized amounts) and the remaining $2 million in AAR flows forward to offset the $3 million in ERC allocated to 2021, leaving $1 million in allocated ERC for 2021. The process continues in this manner each subsequent year.

Q. Please describe the Stipulation regarding cost functionalization (S-11).

A. The Parties agree to allocate the functionalized costs recoverable through Schedule 149 to each rate schedule according to the relative use of generation, distribution, and transmission service. The Parties agree that this is a reasonable approach because each customer class has rates unbundled into distribution, transmission and generation components with each class using a different relative portion of those functions. It seems reasonable that if environmental costs arise from the provision of a certain electric service function (e.g., generation), then those environmental costs should be allocated consistent with the method of allocating that function across the classes of customers. Further, PGE noted that historical functionalization is the same approach approved by the Commission in the Trojan plant cost recovery mechanism.

Q. Please describe the Stipulation regarding the PHERA mechanism review (S-12).

A. Consistent with the requirements of ORS 757.210(b), the Parties agree that the PHERA mechanism is subject to review no less frequently than every two years, or when significant information becomes available, or during a general rate case. All aspects of the mechanism are subject to review and revision, including but not limited to, the earnings test, the exempt ERC amount, and incentives for cost management such as sharing. The Parties agreed to regular review of the PHERA mechanism given that environmental remediation damages will not be assessed until the second quarter of 2017 (NRD damages) and year 2020-22

(EPA damages), with the understanding that adjustments may be required as actual costs and revenues become known that may differ from PGE's forecasts.

Q. Please describe the Stipulation regarding the revised Schedule 149 (S-14).

A. Appendices B and C to the Stipulation provide a revised Schedule 149 tariff and special conditions consistent with this settlement agreement, in both clean (Appendix B) and red-line/strikeout (Appendix C) format.

Q. Does the Stipulation resolve all issues in these dockets?

A. Yes, the stipulation resolves all issues in these dockets. Under Paragraph 17, however, parties are not meant to be restricted from raising issues that were resolved through the Stipulation when the PHERA is subject to periodic review. Exhibit 101 is a copy of the Stipulation.

Q. Mr. Mullins, please provide a brief summary of why you support the Stipulation on behalf of ICNU.

A. Given the unique facts and circumstances presented in this proceeding, as well as recent Commission precedent in Docket No. UM 1635 (cons.), ICNU viewed the Stipulation to be a reasonable compromise. Accordingly, ICNU does not necessarily support any particular provision of the stipulation if viewed in isolation. For example, ICNU is generally of the position that, given the concerns of single issue ratemaking, all costs subject to deferred accounting ought to be subject to an earnings test. Yet, ICNU was willing to accept stipulation provisions allowing certain costs not to be subject to an earnings test as a part of an integrated package.

ICNU was able to support this stipulation on the basis that it aligned with the Commission decision in Docket No. UM 1635 (cons.). In addition, the Stipulation contained a number of provisions, such as the $3.56 million annual amount credited to

PHERA, that provide sufficient value to ratepayers relative to the initial filings of PGE. Finally, the Stipulation is flexible, in that it is subject to periodic review as additional information, such as NRD assessments, becomes available. Thus, parties retain an ability to respond to changing and unforeseen circumstances, an important consideration for ICNU given the large amount of uncertainty surrounding the PGE's expected liabilities.

IV. Recommendation and Conclusion

Q. What is your recommendation to the Commission regarding this Stipulation?

A. The Parties recommend and request that the Commission approve the consolidated UM 1789 Stipulation. Based on careful review of PGE's filing and thorough analysis of the issues during workshops and a settlement conference, we believe these adjustments represent appropriate and reasonable resolutions of the respective issues in this docket.

Q. Does this complete your testimony?

A. Yes.

List of Exhibits

Exhibit	Description
101	UM 1789 / UE 311 / UP 344 Stipulation

SCHEDULE 149
ENVIRONMENTAL REMEDIATION COST RECOVERY ADJUSTMENT
AUTOMATIC ADJUSTMENT CLAUSE

PURPOSE

This Schedule recovers the costs and revenues associated with the Portland Harbor Superfund site ("Portland Harbor"), the Natural Resource Damage obligation, the Downtown Reach portions of the Willamette River, and the Harborton Restoration Project. This adjustment schedule is implemented as an automatic adjustment clause as provided under ORS 757.210.

AVAILABLE

In all territory served by Portland General Electric Company ("PGE").

APPLICABLE

To all Schedules.

ANNUAL ACCOUNT & BALANCING ACCOUNT

By Order No. XX-XXX, the Commission approved a deferral of environmental-related costs and revenues, effective July 15, 2016, that flow into the Portland Harbor Environmental Remediation Account ("PHERA"). The PHERA Annual Account records Environmental Remediation Costs ("ERC"), the costs of developing the Harborton Restoration Project, and Environmental Remediation Revenues ("ERR"). The balance in the Annual Account that has not been reviewed by the Commission for prudence shall accrue interest at the authorized rate of return approved in PGE's most recent general rate case. Costs and revenues in the Annual Account that have been reviewed for prudency and remain following the earnings test will be transferred to the PHERA Balancing Account and will accrue interest at the average of the five-year U.S. Treasury rate plus 100 basis points (the "PURE Rate").

EARNINGS TEST

Subject to the conditions stated below, the recovery from customers of certain ERC is subject to an earnings review and test for the year that the costs were paid. Following a prudence review, PGE will be allowed to place prudent expenses and proceeds into the Balancing Account to the extent that PGE's Actual Regulated Return on Equity ("ROE") does not exceed its ROE authorized by the Commission in PGE's most recent general rate case. A fixed $6.0 million each year in ERC and Harborton Restoration Project development costs, currently estimated at $10-$12 million, are not subject to the earnings test. Proceeds from insurance companies and DSAY ("Discount Service Acre Year") sales will not be subject to an earnings review, but will be subject to a prudency review.

SCHEDULE 149 (Continued)

DEFINITIONS

Annual Allocated Revenue ("AAR")

The Annual Allocated Revenue is the sum of annual revenue from this Tariff plus DSAY revenues (net of prudent Harborton Restoration Project development costs), insurance proceeds, $3.56 million currently in base rates (subject to revision by the Commission), AAR balances carried forward, and accumulated interest. The $3.56 million per year currently in base rates will be credited to the PHERA Annual Account on a monthly basis, in the amount of $0.2967 million, until PGE's next general rate case when the appropriate amount to be included in rates, if any, will be re-examined. For the month of July 2016, a prorated amount of $0.1627 million shall be credited to the PHERA Annual Account. The amount of insurance proceeds and net DSAY revenues to be included in the AAR is calculated as total proceeds divided by the expected remaining life of the projects, inclusive of the year in which they are received (so that such proceeds are equally allocated). The initial assumption is that the remaining life is through 2028, and may be revised by the Commission (on a going-forward basis) in any subsequent Commission review process.

Downtown Reach

The segment of the Willamette River between River Miles 12 and 16 is known as the "Downtown Reach."

DSAY

Discount Service Acre Year ("DSAY") obligations or credits measure damage or mitigation to natural resources.

SCHEDULE 149 (Continued)

DEFINITIONS (Continued)

Environmental Remediation Costs ("ERC")

Environmental Remediation Costs are costs related to remediation of the Portland Harbor and Downtown Reach sites that include, but are not limited to, the design, permitting, construction, on-going monitoring, and trustee financial requirements necessary for habitat restoration development, investigation, testing, sampling, monitoring, removal, disposal, storage, remediation, or other treatment of residues, litigation costs/expenses or other liabilities, disposal sites, sites that otherwise contain contamination that requires remediation for which PGE is responsible, or sites to which material may have migrated; the Natural Resource Damage obligation; Harborton Restoration Project O&M and endowment costs; and costs related to pursuing insurance recoveries. ERC do not include Harborton Restoration Project development costs, which include, but are not limited to, costs incurred as of the date of the UM 1789 Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable. Further, the remediation sites eligible for inclusion as ERCs are limited to those sites identified in Appendix A to the UM 1789 Stipulation.

Environmental Remediation Revenues

Environmental Remediation Revenues include: (1) DSAY revenues net of prudent Harborton Restoration Project development costs; (2) insurance proceeds; (3) the amount included in base rates for environmental remediation activities at Portland Harbor or Downtown Reach; (4) the Schedule 149 tariff revenue; and (5) interest.

Harborton Restoration Project

PGE intends to design, construct, monitor and maintain the Harborton Restoration Project at 12500 NW Marina Way, Portland, Multnomah County, Oregon. PGE will restore and enhance approximately 62 acres of the 78.51 acres of the overall property.

Natural Resource Damage

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "Superfund") and Oil Pollution Act ("OPA") Programs require the cleanup for contaminants that are released and pose a threat to human health and the environment. In addition to the requirements for cleanup under these cleanup programs, the Superfund and OPA cleanup programs also require that natural resources be restored to the state that they were at before injury from environmental contaminants. If natural resources are not restored, then Trustees will seek compensation for the injury, quantified as Natural Resource Damages ("NRD") from parties responsible for the release of the contaminants. NRD in this tariff refers to NRD obligations assessed against PGE.

SCHEDULE 149 (Continued)

DEFINITIONS (Continued)

Portland Harbor Superfund

The Superfund designation is pursuant to CERCLA. 42 U.S.C Section 9601 et seq. The CERCLA and OPA programs require the cleanup for contaminants that are released and pose a threat to human health and the environment.

PURE

The Prudence-Reviewed Unamortized Environmental Remediation Expense ("PURE") rate that is established early each year by Staff and represents the average of the 5-year US Treasury rate plus 100 basis points.

SCHEDULE 149 (Continued)

ADJUSTMENT RATES

Schedule	Adjustment Rate
7	0.000 ¢ per kWh
15/515	0.000 ¢ per kWh
32/532	0.000 ¢ per kWh
38/538	0.000 ¢ per kWh
47	0.000 ¢ per kWh
49/549	0.000 ¢ per kWh
75/575	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
76R/576R	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
83/583	0.000 ¢ per kWh
85/485/585	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
89/489/589	
Secondary	0.000 ¢ per kWh
Primary	0.000 ¢ per kWh
Subtransmission	0.000 ¢ per kWh
90/490/590	0.000 ¢ per kWh
91/491/591	0.000 ¢ per kWh
92/492/592	0.000 ¢ per kWh
95/495/595	0.000 ¢ per kWh

SCHEDULE 149 (Continued)

SPECIAL CONDITIONS

1. By March 15 of each year, PGE will submit a prudence review filing that includes a report of all activity associated with Harborton Restoration Project development costs, ERC, ERR, and other related third-party proceeds recorded in the PHERA Annual Account. Staff and other Parties will complete the prudence review, and Staff will submit its report and recommendation to the Commission within 120 days of submittal. Only cash expenditures will be included in the PHERA Annual Account for recovery under the PHERA mechanism. PGE shall defer, separately track, and capitalize as a regulatory asset, contingent environmental liability accruals. This regulatory asset shall not be included in rate base and PGE shall not earn a return on the balance.

2. The amount of costs and revenues that is transferred to the Balancing Account is determined on an annual basis and subject to an earnings test. The amount transferred is calculated as the current year's ERC and any remaining Harborton Restoration Project development costs not offset by that year's DSAY revenues, less the AAR. Harborton Restoration Project development costs incurred prior to the first year with DSAY revenues may be netted against those revenues.

3. The earnings test in this schedule will be applied after the Power Cost Adjustment Mechanism ("PCAM") earnings test. The amount subject to the earnings test is prudently incurred ERC that exceed $6.0 million. In addition, Harborton Restoration Project development costs are not subject to an earnings test.

4. The amount of annual ERC recoverable post-application of the earnings test is reduced by the AAR and then the remaining balance, if any, is transferred to the Balancing Account for recovery across the following five years.

5. If ERC in any year are less than the AAR, then the remaining ARR balance will be used to offset accumulated costs in the Balancing Account that were allocated to that year. Any remaining positive balances (more AAR revenues than current and accumulated costs) will roll forward as an addition to the next year's AAR.

6. Functionalized costs recoverable through Schedule 149 will be allocated to each rate schedule according to relative use of generation, distribution, and transmission service. Long-Term Direct Access customers will be priced at Cost-of-Service for purposes of allocating costs.

SCHEDULE 149 (Concluded)

SPECIAL CONDITIONS (Continued)

7. In the event that the amount in the PHERA Balancing Account results in a potential refund to customers, subject to approval by the Commission, PGE will determine if the refund should be applied to Customer bills, or if the credit balance should carry to a future period. A credit balance may be carried to a future period if it is determined by the Commission that the credit balance is best used to offset future expected ERC not yet recorded in the deferral account, or for such other reasons as the Commission may determine.

8. Adjustments under this Schedule shall continue for a period of five years following the date that the last remediation expenses are incurred and paid, or such other date that the Commission may decide.

9. Development costs associated with the creation of DSAYs from the Harborton Restoration Project shall be deferred as regulatory assets.

10. PGE shall defer and capitalize, as a regulatory asset, incurred costs associated with environmental liabilities accrued according to Accounting Standards Codification ("ASC") 410, *Environmental Obligations* and pursuant to Generally Accepted Accounting Principles ("GAAP"). Any GAAP accounting accruals recorded would not be subject to interest computation or earnings test as no cash amounts have been paid or received.

11. The PHERA is subject to review no less frequently than every two years, when significant new information becomes available, or during a general rate case. All aspects of the mechanism are subject to review and revision, including but not limited to, the earnings test, the exempt ERC amount, and incentives for cost management such as sharing.

12. If Harborton Restoration Project development costs, currently estimated at $10-$12 million, exceed DSAY revenues, PGE will not recover development costs from customers in excess of DSAY revenues retained by PGE. Harborton Restoration Project development costs include all costs associated with the Harborton Restoration Project development, including but not limited to, costs incurred as of the date of the UM 1789 Stipulation, development and construction costs, permitting costs, costs paid to the Trustees for participation in the NRD restoration project, and future termination-related costs if applicable.