

1 Q. Please state your names and positions.

- A. My name is Ming Peng. I am employed by the Public Utility Commission of
- 3 Oregon ("PUC" or "Commission") as a Senior Economist in the Energy Division and am
- 4 appearing here on behalf of the Staff of the PUC ("Staff"). My witness qualification statement is
- 5 set forth in an attachment to this testimony.
- My name is Karen Schuh. I am employed by Avista Corporation ("Company" or "Avista")
- as Senior Regulatory Analyst in the Regulatory Affairs Department. My witness qualification
- 8 statement is set forth in an attachment to this testimony.
- 9 My name is Bradley Mullins. I am testifying on behalf of the Alliance of Western Energy
- 10 Consumers ("AWEC"). My witness qualification statement is set forth in an attachment to this
- 11 testimony.
- My name is William Gehrke. I am employed by the Citizens' Utility Board ("CUB") as
- an Economist. My witness qualification statement is set forth in an attachment to this testimony.
- Hereafter, Staff, the Company, AWEC, and CUB will collectively be referred to as the
- 15 "Stipulating Parties."
- O. Are there any intervening parties in this docket that did not sign the
- 17 **Stipulation?**
- A. No, there are not. As such, the Stipulating Parties represent all parties in this
- 19 proceeding as of the date of the Stipulation.
- Q. What is the purpose of your joint testimony?
- A. The purpose of our joint testimony is to describe and support the Stipulation
- between the Parties and the Company in Docket UM 1933 (Docket). The Stipulation, which is

- concurrently filed (with attachments) alongside this supporting testimony, resolves all issues in 1
- 2 this case surrounding depreciation rates on common and Oregon directly assigned plant.
 - Q. Please summarize Avista's depreciation study proposal.

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- A. Avista's depreciation study recommended revisions in depreciation lives, curves, and net salvage rates for all plant accounts, and a revision to life span from average remaining life methodology for natural gas plant assets. 6
 - On February 22, 2018, pursuant to 757.140 and 757.259 of the Oregon Revised Statutes (ORS) and OAR 860-001-0400 and 860-027-0300(4), the Company filed a petition requesting authority to revise its book depreciation rates using the results of a study recently undertaken by the Company. That study, according to the Company, shows that the Oregon annual depreciation expense on the Company's books should be increased by approximately \$596,722, based on the average service life rates of gas plant in service as of December 31, 2016. Accordingly, the Company requested authorization to revise its depreciation rates to reflect this \$596,722 increase in book depreciation expense. The Company requested authorization for the proposed depreciation rates to commence with the Company's Washington and Idaho jurisdictions' implementation on January 1, 2019.
 - Please summarize the procedural history of this case. Q.
 - A. On March 26, 2018, a prehearing conference was held that established the procedural schedule for this docket. Staff convened a case workshop in Salem on April 12, 2018, conducted site visits at the Company's Spokane headquarters and the Jackson Prairie Natural Gas Storage Facility, and prepared an independent analysis of the Company's depreciation rates. The

¹ Avista hired Gannett Fleming, Inc. to undertake a depreciation study of its depreciable electric, gas and common plant that was completed in 2017. The objective of this assignment was to recommend depreciation rates to be utilized by Avista for accounting and ratemaking purposes.

- Parties convened at the Commission in Salem for a settlement conference on July 10, 2018, and
- 2 reached an agreement as to all issues in this case. The Parties in this Docket recognized the need
- 3 for sufficient time for Staff and interested Parties to complete their review of the Company's
- 4 depreciation study, and for the Commission to consider the terms of a proposed Stipulation.
- Accordingly, the Parties entered into a Stipulation on July 10, 2018, that proposes to implement
- 6 new depreciation rates for accounting purposes on Oregon direct plant effective January 1, 2019
- and common plant effective April 1, 2019. A copy of that Settlement Stipulation is filed
- 8 concurrently with this supporting testimony, including an attachment that shows a complete list of
- 9 all Avista depreciation parameters for all utility plant accounts by location FERC account.

Q. Did Staff and other parties independently review the depreciation study?

A. Yes. Staff's review was independent and comprehensive. Staff developed a set of proposed Iowa Curves, average service lives, and net salvage rates for each of the plant accounts, based on Staff's independent analysis of information provided by Avista and information otherwise available to Staff. Staff convened a case workshop in Salem on April 12, 2018. In order to get a better collective understanding of the characteristics of the plants, Staff visited the Company's facilities in Spokane Washington to investigate issues relating to gas mains; distribution lines; pipeline cost of removal; and gas and electrical meters. Staff also visited Jackson Prairie Natural Gas Storage Facility in Lewis County, Washington to investigate issues relating to storage. These visits included engineer-guided tours and facilitated discussions regarding projected life and salvage. AWEC also performed an independent and comprehensive review of the study and Avista's filing.

Q. How did Avista and Staff analyze Iowa Curves and Average Service Lives?

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A. Both Avista and Staff utilized the actuarial plant balances methodology to analyze historical retirement data to help determine Iowa curves and average service lives for each depreciation group.

Q. Please discuss Staff's analysis of Iowa Curves and Average Service Lives.

A. Depreciation rates are derived from two depreciation parameters: (1) the combination of Survival Curve² and Projection Life (Curve-Life), and (2) Net Salvage Rates.³ The Curve-Life parameter is the combination of Survivor Curve Type with Dispersion Indicator and Projection Life. Staff utilized the actuarial retirement rate methodology to analyze historical retirement data to help determine Iowa curves and average service lives for each depreciation group by FERC Account.

Q. Please discuss Staff's analysis of net salvage rates.

A. Staff analyzed the net salvage rates submitted by Avista, and examined the asset retirement activities by comparing year-by-year, three-year and five-year moving averages, as well as the most recent five and ten-year averages. Staff also used information gained during visits to plant facilities to evaluate asset retirement patterns and estimate net salvage rates.

For FERC 300 level accounts, both Staff and Avista utilized the statistical methods of overall averages, and rolling and shrinking band analyses to study historical data to help estimate net salvage characteristics.

Q. Did independent staff analysis suggest adjustments to Avista's proposal?

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^{2 &}quot;Survivor curves" means a curve that shows the number of units or cost of a given group which is surviving in service at given ages. The survivor curves were developed by the Engineering Research Institute of Iowa State University. These curves are frequently referred to as "Iowa Curves." 3 Net salvage is the difference between gross salvage and cost of removal. Net salvage is positive when gross salvage exceeds the cost of removal and reduces the revenue requirement. Conversely, net salvage is negative when cost of removal exceeds gross salvage and increases the revenue requirement.

A. Yes. Staff proposed two types of adjustments. The first type of adjustment
concerned Iowa curves and projected average service lives. The second type of adjustment
concerned net salvage rates. Based on Staff's independent review of Avista's depreciation
statistics, Staff recommended depreciation parameters for numerous depreciation groups.

Q. Were Staff and Avista able to resolve the study differences for the plant accounts?

A. Yes, the differences were resolved in a settlement meeting held on July 10, 2018, which also included CUB and AWEC. The Stipulating Parties recommend that the Commission adopt the concurrently filed Stipulation in its entirety. The Stipulation and its attachments explain the terms agreed to by the Stipulating Parties and also provide a table that details the straight line, remaining life, average service life group depreciation rates derived for each depreciation group.

Q. Please discuss AWEC's review of Avista's Depreciation Study?

A. AWEC's review was primarily focused on the accounts that make up the largest portion of Avista's rate base and depreciation expense. Those accounts include Account 376 Mains, Account 380 Services, and Account 381 Meters.

Q. What issue did AWEC identify with respect to Avista's Depreciation Study?

A. AWEC was concerned with the 55 year average life assumption for Account 376 Mains. AWEC's analysis suggested a longer life. The Stipulation extends the life for Account 376 Mains for an additional 5 years, relative to Avista's study.

AWEC's primary concern, however, was that the Account 376 Mains and Account 380 Services have an increasing theoretical reserve imbalance, indicating that depreciation expenses have been over-incurred, relative to the historical rates of retirement. For Account 376 Mains, the theoretical reserve imbalance amounts can be identified on page IX-243 of the depreciation study

- as the difference between the \$51,634,537 and the allocated book accrual of \$57,163,618, equating
- to a reserve imbalance of \$5,529,081. Similar calculations may be performed for Accounts 380
- 3 Services and Account 381 Meters, indicating reserve imbalances of \$9,195,491 and \$3,983,007,
- 4 respectively. AWEC will address its concerns related to depreciation expenses in Avista's next
- 5 general rate case, as appropriate, and recommends that the Commission adopt the Stipulation in
- 6 its entirety.

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- Q. What is the final impact on estimated depreciation expense due to settlement
- 8 discussions?
- A. The net annual difference in Oregon depreciation expense when comparing the
- Stipulation to the depreciation study as-filed is a reduction of approximately \$710,743.
 - Q. Could you please describe the terms of the Stipulation?
- 12 A. Yes. The Stipulating Parties have agreed to an overall Oregon decrease of \$114,021
- in the annual depreciation expense based on the plant balances at December 31, 2016. This
- represents a reduction of \$710,743 in Oregon depreciation expense on plant beyond what the
- 15 Company had originally filed.
- The agreed-upon Oregon Direct depreciation rates set forth in this Stipulation shall be
- effective for accounting purposes on January 1, 2019, as proposed in the Company's direct filing.
- The agreed-upon common depreciation rates shall be effective April 1, 2019, in order to coincide
- with the Company's other Washington and Idaho jurisdictions implementation of common
- 20 depreciation rates. Avista has also agreed to withdraw its request to defer the difference in
- 21 depreciation expense resulting from the implementation of depreciation rates effective January 1,
- 22 2019 and April 1, 2019 from Docket No. 1933. The Stipulation does not provide for the adjustment
- of customer rates. Avista agrees to use the depreciation rates agreed to in this Stipulation, if

- approved, as the basis for its depreciation rates in the Company's next general rate case proceeding
 in Oregon.
- The Stipulating Parties also agreed that the Company will file a new depreciation study within five years from the filing date of this Docket. The attachment to the Stipulation provides detail of the affected plant accounts and specified depreciation rates reflecting the \$114,021 reduction to depreciation expense.

Q. What other terms are included in the Stipulation?

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- A. The Stipulation in this docket represent negotiated compromises among the Parties. Thus, the Parties have agreed that no particular party shall be deemed to have approved the facts, principles, methods, or theories employed by any other in arriving at the Stipulation, and that the terms incorporated in the Stipulation should not be viewed as precedent setting in subsequent proceedings. In addition, the Parties have the right to withdraw from the Stipulation if any material part is rejected or modified by the Commission.
 - Q. Does the Stipulation represent a complete resolution of all issues in this docket?
 - A. Yes, the Stipulation represents a complete resolution of all issues.
- Q. Why does the PUC Staff support the revisions to the depreciation rates proposed?
 - A. The final adjustment decisions were made based on the combination of the considerations of Avista's plant retirement patterns and in-house engineering opinion, the industry average level, and Staff analyst's experience. The stipulated position on plant asset survivor curves-projection life, net salvage rates reflected in the depreciation rates is consistent with the results of Staff's thorough review and valuation of plant asset by depreciation groups.

Stipulating Parties/100 Peng-Schuh-Mullins-Gehrke/8

- Accordingly, consistent with the view of all Stipulating Parties, it is Staff's position that the
- 2 stipulated adjustment represents a fair and reasonable level of depreciation expenses to be included
- 3 in the depreciation rates.
- **Q.** What do the Parties recommend regarding the Stipulation?
- 5 A. The Parties recommend that the Commission adopt the Stipulation in its entirety.
- Q. Does that complete your joint testimony in this proceeding?
- 7 A. Yes, it does.

Docket No. UM Staff/101 Peng/1

WITNESS QUALIFICATIONS STATEMENT

NAME: Ming Peng (Ms.)

EMPLOYER: Public Utility Commission of Oregon

TITLE: Senior Economist

Energy Rates, Finance and Audit Division

ADDRESS: 201 High Street SE. Suite 100

Salem, OR. 97301

EDUCATION & TRAINING:

M.S. Applied Economics University of Idaho, Moscow

B.S. Statistics

People's University of China, Beijing

C.R.R.A. Certified Rate of Return Analyst

Society of Utility and Regulatory Financial Analysts

Depreciation studies – the Society of

Depreciation Professionals

NARUC Annual Regulatory Studies Program Michigan State University, East Lansing

350+ credit hours on 30+ topics trainings in public utility industry

EXPERIENCE: 1/11/1999 – Present, Public Utility Commission of Oregon

I have been employed by the Public Utility Commission of Oregon (Commission) for 19 years since January 1999. My roles include:

Expert Witness, Case Manager, Economist, Policy Analyst,

Econometrician, and Principal Analyst

I have testified in various formal state hearings and performed numerous analyses including economic, financial, statistical, mathematical, marketing, and policy analyses in public utility industry.

<u>Principal Analyst & Case Manager, Settlement Lead / Negotiator for Depreciation and Ratemaking:</u>

I have served as a Principal Analyst and Case Manager for the determination of Energy Property Depreciation Rates (Oregon Revised Statute 757.140) for past 10 years. This had a strong focus on Depreciation Rate Determination (fixed cost allocation, and capital recovery), I was also a Principal Analyst and Case

Docket No. UM Staff/101 Peng/2

Manager for the determination of Energy Property Depreciation Rates (Oregon Revised Statute 757.140) in this time period.

In this position, I investigate, analyze and calculate "Energy Asset Retirement Cost & Impact" and "Power Plant Decommissioning Cost & Impact" on Customer Rates. I review, calculate, analyze fixed asset depreciation and propose depreciation parameters for each of FERC accounts on Generation, Transmission, Distribution, General, and Coal Mining Plants. The energy sources I have worked on are Steam/Coal, Hydraulic, Natural Gas, Wind, Solar and Geothermal.

My analyses of "Power-Plant-Shutdown" activities include the following cases:

- 1. PGE closes <u>Boardman Coal</u>-fired plant (UM 1679 & UE 215),
- 2. PacifiCorp closes Carbon Coal Plant in Utah (UE 246)
- 3. Multi-state PacifiCorp Klamath Hydro Dam Removal Cost recovery for (1) J. C. Boyle Dam, (2) Copco 1 Dam, (3) Copco 2 Dam, and (4) Iron Gate Dam removal under the ORS 757.734 Recovery of investment in Klamath River dams in OPUC UE 219.
- 4. Idaho Power Valmy Coal-fired power plant Shutdown (UE 316)
- 5. PGE Colstrip Coal-fired power plant Shutdown (UM 1809)

I conduct case investigation and analysis on Utility's filings, make rate adjustments, lead settlement negotiation, prepare testimony, and appear on behalf of the Commission. The energy companies I work with are: (1) PacifiCorp (serves 6 states), (2) PGE, (3) Northwest Natural Gas (NWN), (4) Idaho Power, (5) Avista Corp (Washington), and (6) Cascade Gas (CNG, Montana).

Lead Analyst and Case Manager on Financial Dockets:

Prior to my present position, I was a lead analyst and case manager for cost of capital for nine years. I reviewed market risks, derivatives and hedging, debt issuance and stock flotation. My analysis directly informed utility and energy policy.

I advised the Commission on over 60 financial dockets. In most cases the Commission incorporated my recommendations into final orders.

I was certified by the "Society of Utility and Regulatory Financial Analysts", as a "Certified Rate of Return Analyst" in 2002.

Public Utility & Policy Analyst:

Rulemaking: I have formulated energy regulation rules for utility performance incentives and cost-of-service regulation.

Energy Utility Merger & Acquisition: I have testified in formal state hearings involving utility mergers & acquisitions. I conducted Acquisition Premiums & Credit Risk Analysis and testified on behalf of the

Docket No. UM Staff/101 Peng/3

Commission in MidAmerican Energy Company's application to purchase PacifiCorp. I also reviewed Scottish Power's earlier purchase of PacifiCorp, and PGE's emergence from Enron, after the Enron bankruptcy.

Integrated Resource Planning (IRP, Least Cost Planning): I provided comments on "Boardman to Hemingway Transmission Line Project (B2H, a 500-kV power line from NE Oregon to SW Idaho)" to the Commission for the decision-making that including cost and benefit list, pros and cons list, alternatives, and the legal risks.

<u>Clean Energy – Dollar Impact on Customer Rates</u>: I have analyzed and calculated the rate impact and comparative advantage of clean energy.

<u>General Ratemaking:</u> I have forecasted electric generation fuel prices, determined costs and benefits of property sales, and forecasted loads. My weather normalizations have been used in both rate cases and in integrated resource planning.

<u>Survey Sampling Design:</u> Results of my statistical sampling and procurement design are incorporated into my revenue requirement testimony in Commission Docket No. UM 1288.

<u>Auditing</u>: I audited energy utility cost of capital and finance component in operation audits. My "Interest Rate and Late Payment Charge" Survey and Analysis are published annually for the State of Oregon (UM 779).

<u>Survey for Market Competition & Economic Policy</u>: I conducted and wrote the report on Telecommunications "Market Competition and Economic Policy Survey Analysis" for House Bill 2577. This report has been published on the OPUC web annually for 15 years.

Mentor in the ICER - International Confederation of Energy Regulators

I was selected to act as a mentor in the ICER (International Confederation of Energy Regulators) Women in Energy (ICER WIE) pilot mentoring program. My "Mentoring Topics" focus on Incentive Regulation; Rate and Economic Impacts of "Cost-of-Service" regulation in the U.S. and "Price-Cap Performance Based Regulation" in Europe; Cost of Capital, Energy Demand and Price Forecasting Modeling; Least Cost Planning; and Regulatory Policy, and Renewable Energy issues within regulated rate structures.

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 1933

In the Matter of			
AVISTA CORPORATION, dba AVISTA UTILITIES,)		
Petition Requesting Authority to Revise Its Book Depreciation Rates and Deferred Accounting)		

EXHIBIT AVISTA/101 QUALIFICATIONS OF KAREN K. SCHUH

SEPTEMBER 7, 2018

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS

- **A.** Karen K. Schuh. My business address is 1411 E. Mission Avenue, Spokane, WA 99202.
- O. PLEASE STATE YOUR OCCUPATION.
- **A.** I am employed by Avista Corporation as Senior Regulatory Analyst in the Regulatory Affairs Department.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I am a 1999 graduate of Eastern Washington University with a Bachelor of Arts Degree in Business Administration, majoring in Accounting. I worked for Moss Adams LLP from 1999 to 2006, before joining the Company in January 2006. I served in various positions within the sections of the Finance Department, including Supply Chain Accounting Analyst and Resource Accounting Analyst until 2008. In 2008, I was hired into the Regulatory Affairs Department as a Regulatory Analyst. I have also attended several utility accounting, ratemaking and leadership courses.

Q. HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

A. Yes. I have sponsored testimony on capital additions and revenue requirements in Oregon, Washington and Idaho as a part of the Company's general rate case proceedings.

1 **QUALIFICATION STATEMENT** 2 Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE. 3 A. I have a Master of Accounting degree from the University of Utah. After obtaining my 4 master's degree, I worked at Deloitte in San Jose, California, where I specialized in performing research and development tax credit studies. I later worked at PacifiCorp as 5 6 an analyst involved in power cost forecasting. I began performing independent energy 7 and utility consulting in 2013 and currently provide services to utility customers on 8 matters such as revenue requirements, power cost forecasting, and rate design. I have 9 sponsored testimony in several regulatory jurisdictions around the United States, 10 including before the Oregon Public Utilities Commission. 11 O. PLEASE PROVIDE A LIST OF YOUR REGULATORY APPEARANCES. 12 A. I have sponsored testimony in the following regulatory proceedings: In re PacifiCorp, dba Pacific Power, 2019 Transition Adjustment Mechanism, Or.PUC 13 Docket No. UE 323 14 15 In re Portland General Electric Company Request for a General Rate Revision, Or.PUC Docket No UE 335 16 17 • In re Northwest Natural Gas Company, dba NW Natural, Request for a General Rate Revision, Or.PUC Docket No. UG 344. 18 19 In re Cascade Natural Gas Corporation Request for a General Rate Revision, Wa.UTC, Docket No. UE-170929. 20 21 In the Matter of Hydro One Limited, Application for Authorization to Exercise Substantial Influence over the Policies and Actions of Avista Corporation, Or.PUC, 22 23 Docket No. UM 1897. 24 In re Pacific Power & Light Company 2016 Power Cost Adjustment

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Mechanism, Wa.UTC, Docket No. 170717.

26	•	In re the Application of Rocky Mountain Power for Approval of a Significant Energy
27		Resource Decision and Request to Construct Wind Resource and Transmission Facilities,
28		Ut.PSC, Docket No. 17-035-040.

- In re The Application of PacifiCorp dba Rocky Mountain) Power For A Certificate Of
 Public Convenience and Necessity and Binding Ratemaking Treatment For New Wind
 And Transmission Facilities, Id.PUC Case No. PAC-E-17-07.
- <u>In re Avista Corporation Request for a General Rate Revision,</u> Wa.UTC, Docket No. UE-170485 (Cons.).
- Application of Nevada Power Company d/b/a NV Energy for Authority to Adjust its
 Annual Revenue Requirement for General Rates Charged to All Classes of Electric
 Customers and For Relief Properly Related Thereto, Nv.PUC, Docket No. 17-06003
 (Cons.).
- In the Matter of PacifiCorp, dba Pacific Power, 2016 Power Cost Adjustment
 Mechanism, Or.PUC, Docket No. UE-327.
- <u>In re the 2018 General Rate Case of Puget Sound Energy</u>, Wa.UTC, Docket No. 170033 (Cons.).
- <u>In re PacifiCorp, dba Pacific Power, 2018 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 323.</u>
- <u>In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC, Docket No. UE 319.</u>
- <u>In re Portland General Electric Company, Application for Transportation Electrification</u>
 47 <u>Programs, Or.PUC, UM 1811.</u>
- In re Pacific Power & Light Company, Application for Transportation Electrification
 Programs, Or.PUC, Docket No. UM 1810.
- <u>In re the Public Utility Commission of Oregon, Investigation to Examine PacifiCorp, dba</u>
 Pacific Power's Non-Standard Avoided Cost Pricing, Or.PUC, Docket No. UM 1802.
- In re Pacific Power & Light Co., Revisions to Tariff WN U-75, Advice No. 16-05, to
 modify the Company's existing tariffs governing permanent disconnection and removal
 procedures, Wa.UTC, Docket No. UE-161204.
- In re Puget Sound Energy's Revisions to Tariff WN U-60, Adding Schedule 451,
 Implementing a New Retail Wheeling Service, Wa.UTC, Docket No. UE-161123.

- <u>2018 Joint Power and Transmission Rate Proceeding,</u> Bonneville Power Administration, Case No. BP-18.
- <u>In re Portland General Electric Company Application for Approval of Sale of Harborton</u> 60 <u>Restoration Project Property, Or.PUC, Docket No. UP 334 (Cons.).</u>
- In re An Investigation of Policies Related to Renewable Distributed Electric Generation,
 Ar.PSC, Matter No. 16-028-U.
- <u>In re Net Metering and the Implementation of Act 827 of 2015,</u> Ar.PSC, Matter No. 16-027-R.
- In re the Application of Rocky Mountain Power for Approval of the 2016 Energy
 Balancing Account, Ut.PSC, Docket No. 16-035-01
- <u>In re Avista Corporation Request for a General Rate Revision,</u> Wa.UTC, Docket No. UE-160228 (Cons.).
- In re the Application of Rocky Mountain Power to Decrease Current Rates by \$2.7
 Million to Recover Deferred Net Power Costs Pursuant to Tariff Schedule 95 and to
 Increase Rates by \$50 Thousand Pursuant to Tariff Schedule 93, Wy.PSC, Docket No.
 20000-292-EA-16.
- In re PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism, Or.PUC,
 Docket No. UE 307.
- In re Portland General Electric Company, 2017 Annual Power Cost Update Tariff
 (Schedule 125), Or.PUC, Docket No. UE 308.
- In re PacifiCorp, Request to Initiate an Investigation of Multi-Jurisdictional Issues and
 Approve an Inter-Jurisdictional Cost Allocation Protocol, Or.PUC, UM 1050.
- In re Pacific Power & Light Company, General rate increase for electric services,
 Wa.UTC, Docket No. UE-152253.
- In The Matter of the Application of Rocky Mountain Power for Authority of a General
 Rate Increase in Its Retail Electric Utility Service Rates in Wyoming of \$32.4 Million Per
 Year or 4.5 Percent, Wy.PSC, Docket No. 20000-469-ER-15.
- <u>In re Avista Corporation, General Rate Increase for Electric Services,</u> Wa.UTC, Docket No. UE-150204.
- In re the Application of Rocky Mountain Power to Decrease Rates by \$17.6 Million to
 Recover Deferred Net Power Costs Pursuant to Tariff Schedule 95 to Decrease Rates by
 \$4.7 Million Pursuant to Tariff Schedule 93, Wy.PSC, Docket No. 20000-472-EA-15.

89	•	Formal complaint of The Walla Walla Country Club against Pacific Power & Light
90		Company for refusal to provide disconnection under Commission-approved terms and
91		fees, as mandated under Company tariff rules, Wa.UTC, Docket No. UE-143932.

- In re PacifiCorp, dba Pacific Power, 2016 Transition Adjustment Mechanism, Or.PUC,
 Docket No. UE 296.
- In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC,
 Docket No. UE 294.
- In re Portland General Electric Company and PacifiCorp dba Pacific Power, Request for
 Generic Power Cost Adjustment Mechanism Investigation, Or.PUC, Docket No. UM
 1662.
- <u>In re PacifiCorp, dba Pacific Power, Application for Approval of Deer Creek Mine Transaction, Or.PUC, Docket No. UM 1712.</u>
- <u>In re Public Utility Commission of Oregon, Investigation to Explore Issues Related to a</u> Renewable Generator's Contribution to Capacity, Or.PUC, Docket No. UM 1719.
- In re Portland General Electric Company, Application for Deferral Accounting of Excess
 Pension Costs and Carrying Costs on Cash Contributions, Or.PUC, Docket No. UM
 1623.
- <u>2016 Joint Power and Transmission Rate Proceeding,</u> Bonneville Power Administration, Case No. BP-16.
- In re Puget Sound Energy, Petition to Update Methodologies Used to Allocate Electric
 Cost of Service and for Electric Rate Design Purposes, Wa.UTC, Docket No. UE 141368.
- In re Pacific Power & Light Company, Request for a General Rate Revision Resulting in an Overall Price Change of 8.5 Percent, or \$27.2 Million, Wa.UTC, Docket No. UE-113
 140762.
- In re Puget Sound Energy, Revises the Power Cost Rate in WN U-60, Tariff G, Schedule
 95, to reflect a decrease of \$9,554,847 in the Company's overall normalized power
 supply costs, Wa.UTC, Docket No. UE-141141.
- In re the Application of Rocky Mountain Power for Authority to Increase Its Retail
 Electric Utility Service Rates in Wyoming Approximately \$36.1 Million Per Year or 5.3
 Percent, Wy.PSC, Docket No. 20000-446-ER-14.

120	•	In re Avista Corporation, General Rate Increase for Electric Services, RE, Tariff WN U-
121		28, Which Proposes an Overall Net Electric Billed Increase of 5.5 Percent Effective
122		January 1, 2015, Wa.UTC, Docket No. UE-140188.
123	•	In re PacifiCorp, dba Pacific Power, Application for Deferred Accounting and Prudence
124		Determination Associated with the Energy Imbalance Market, Or.PUC, Docket No. UM
125		1689.
126	•	In re PacifiCorp, dba Pacific Power, 2015 Transition Adjustment Mechanism, Or.PUC,
127		Docket No. UE 287.
128	•	In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC
129		Docket No. UE 283.
130	•	In re Portland General Electric Company's Net Variable Power Costs (NVPC) and
131		Annual Power Cost Update (APCU), Or.PUC, Docket No. UE 286.
122		In an Doubland Common Electric Common 2014 Schodule 145 Decadamon Dovice Plant
132 133	•	In re Portland General Electric Company 2014 Schedule 145 Boardman Power Plant Operating Adjustment, Or PLIC Docket No. LIE 281
133		Operating Adjustment, Or.PUC, Docket No. UE 281.
134	•	In re PacifiCorp, dba Pacific Power, Transition Adjustment, Five-Year Cost of Service
135		Ont-Out (adopting testimony of Donald W. Schoenbeck), Or PUC, Docket No. IJE 267

WITNESS QUALIFICATION STATEMENT

NAME: William Gehrke

EMPLOYER: Oregon Citizens' Utility Board

TITLE: Economist

ADDRESS: 610 SW Broadway, Suite 400

Portland, OR 97205

EDUCATION: MS, Applied Economics

Florida State University, Tallahassee, FL

BS, Economics

Florida State University, Tallahassee, FL

EXPERIENCE: Provided testimony or comments in LC 68. Worked as an Economist for

the Florida Department of Revenue. Worked as Utility Analyst at the Florida Public Service Commission, providing advice on rate cases and

load forecasting.