DEFORE THE PUBLIC UTILITY COMMISSION OF OREGON UM 1953

| IN THE MATTER OF |) |
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| |) |
| PORTLAND GENERAL ELECTRIC |) |
| COMPANY, |) |
| |) |
| INVESTIGATION INTO PROPOSED GREEN |) |
| TARIFF |) |

DIRECT TESTIMONY AND EXHIBITS OF

STEVE W. CHRISS

ON BEHALF OF

WALMART INC. AND SAM'S WEST, INC.

JULY 18, 2018

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Exhibits

Walmart/101: Witness Qualifications Statement

Walmart/102: PGE Response to Calpine Data Request No. 001

Walmart/103: PGE Response to OPUC Data Request No. 011

Walmart/104: PGE Response to OPUC Data Request No. 019

1 Introduction

- 2 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.
- A. My name is Steve W. Chriss. My business address is 2001 SE 10th St.,
- 4 Bentonville, AR 72716-0550. I am employed by Walmart Inc. as Director, Energy
- 5 and Strategy Analysis.
- 6 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?
- 7 A. I am testifying on behalf of Walmart Inc. and Sam's West, Inc. (collectively,
- 8 "Walmart").
- 9 Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.
- 10 Α. In 2001, I completed a Master of Science in Agricultural Economics at Louisiana State University. From 2001 to 2003, I was an Analyst and later a Senior Analyst at the 11 Houston office of Econ One Research, Inc., a Los Angeles-based consulting firm. My 12 duties included research and analysis on domestic and international energy and 13 regulatory issues. From 2003 to 2007, I was an Economist and later a Senior Utility 14 Analyst at the Public Utility Commission of Oregon in Salem, Oregon. My duties 15 included appearing as a witness for PUC Staff in electric, natural gas, and 16 telecommunications dockets. I joined the energy department at Walmart in July 17 2007 as Manager, State Rate Proceedings. I was promoted to Senior Manager, 18 Energy Regulatory Analysis, in June 2011. I was promoted to my current position in 19

¹ Effective February 1, 2018, Wal-Mart Stores, Inc. changed its corporate legal name to Walmart Inc.

- October, 2016. My Witness Qualifications Statement is attached as Exhibit
 Walmart/101.
- Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE PUBLIC UTILITY

 COMMISSION OF OREGON ("COMMISSION")?
- A. Yes. I submitted testimony on behalf of Walmart in Docket Nos. UE 335, UE 319, UE 217, UE 262, UE 263, UE 264, and UE 267 and on behalf of Staff in Docket Nos. UE 179, UE 180, UG 173, UM 1129, and UX 29.
- 8 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE OTHER STATE
 9 REGULATORY COMMISSIONS?
- A. Yes. I have submitted testimony in over 180 proceedings before 38 other utility 10 11 regulatory commissions. I have also submitted testimony before several Missouri House and Senate Committees and the Kansas House Standing Committee on 12 Utilities and Telecommunications. My testimony has addressed topics including, but 13 not limited to, cost of service and rate design, return on equity ("ROE"), revenue 14 requirements, ratemaking policy, large customer renewable programs, qualifying 15 facility rates, telecommunications deregulation, resource certification, energy 16 efficiency/demand side management, fuel cost adjustment mechanisms, decoupling, 17 and the collection of cash earnings on construction work in progress ("CWIP"). 18
- 19 Q. ARE YOU SPONSORING EXHIBITS IN YOUR TESTIMONY?
- 20 A. Yes. I am sponsoring the exhibit listed in the Table of Contents.
- 21 Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS IN OREGON.

- A. As shown on Walmart's website, Walmart operates 43 retail units and employs over 11,000 associates in Oregon. In fiscal year ending 2017, Walmart purchased \$665 million worth of goods and services from Oregon-based suppliers, supporting over 17,000 supplier jobs.²
- 5 Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN THE COMPANY'S
 6 SERVICE TERRITORY.
- A. Walmart has 19 stores that take electric service from Portland General Electric Company ("PGE" or "Company").

Q. HAS WALMART ESTABLISHED CORPORATE RENEWABLE ENERGY GOALS?

A. Yes. Walmart has established aggressive and significant company-wide renewable energy goals, including: (1) to be supplied 50 percent by renewable energy by 2025, and, ultimately (2) to be supplied 100 percent by renewable energy.³ Additionally, Walmart has set a science-based target to reduce emissions in our operations by 18 percent by 2025 through the deployment of energy efficiency measures and the consumption of renewable energy.⁴ To date, Walmart has contracted for or currently takes electricity from one or more renewable resources in 22 states and Puerto Rico.

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² http://corporate.walmart.com/our-story/locations/united-states#/united-states/oregon

³ http://corporate.walmart.com/global-responsibility/environmental-sustainability

⁴ http://news.walmart.com/2016/11/04/walmart-offers-new-vision-for-the-companys-role-in-society

| 1 | Q. | AS A CORPORATE | CUSTO | OMER | WHO ACTIV | VELY ENGA | AGES | IN RENEWABL | E ENERGY |
|---|----|----------------|-------|-------|-----------|-----------|------|-------------|----------|
| 2 | | OPPORTUNITIES, | CAN | YOU | PROVIDE | INSIGHT | то | WALMART'S | GENERAL |
| 3 | | FRAMEWORK FOR | RENEV | VABLE | OPPORTU | NITIES? | | | |

Yes. Walmart's desire for renewable energy resources must be balanced against its business needs. As a general rule, Walmart does not enter into premium structures or programs that only result in additional costs to our facilities. Rather, Walmart seeks renewable energy resources that deliver industry leading cost, including renewable and project specific attributes such as renewable energy credits ("REC"), within structures where the value proposition allows the customer to receive any potential benefits brought about by taking on the risk of being served by that resource instead of, or in addition to, the otherwise applicable resource portfolio. Additionally, Walmart does not typically enter into programs with terms in excess of 15 years.

Q. WHAT CHANNELS DOES WALMART UTILIZE TO SECURE RENEWABLE ENERGY RESOURCES?

- A. To meet our renewable energy goals, Walmart utilizes three primary channels to secure renewable energy resources:
 - Contracting for off-site resources: These products are typically structured to replace other energy, both physically and on the bill. This mechanism allows Walmart to leverage its scale to drive the best project economics while simultaneously minimizing transaction time and costs. To date, we have

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primarily contracted for these resources in deregulated markets through Texas Retail Energy, a competitive electric supplier wholly owned by Walmart that serves as our electric supplier in most deregulated retail markets, to directly serve our load.

- Contracting for on-site resources: Walmart contracts for on-site, behind the meter resources through power purchase agreements ("PPA") and leases that allow performance guarantees. These resources replace grid energy and are priced with the expectation that the operating costs for the site are reduced.
- Utility partnerships: Walmart works with its utility partners to develop useable commercial and industrial programs and economic structures targeted to function within the confines of the regulatory compact and with minimal impact to non-participating customers. When this option is pursued, Walmart works to ensure that programs it assists to develop can be used by the broader group of large commercial and industrial customers, not merely Walmart. Walmart is unique in the large commercial space because we have significant in-house rate and regulatory expertise that we are willing to leverage to create opportunities to move the entire industry forward. The largest of these partnerships to date includes the development and participation in Georgia Power's 177 MW Commercial & Industrial Renewable Energy Development Initiative program⁵ and

 $^{5}\ https://www.greenbiz.com/article/how-google-and-walmart-work-utilities-procure-clean-power$

| 1 | | Alabama Power's 72 MW solar farm in Alabama. ⁶ While Walmart assisted in |
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| 2 | | developing both opportunities, the opportunities are open to other interested |
| 3 | | large customers, not just Walmart. |
| 4 | Q. | DID WALMART DIRECTLY ENGAGE WITH PGE DURING THE DEVELOPMENT OF THE |
| 5 | | STRUCTURE OF THE PROPOSAL IN THIS DOCKET? |
| 6 | A. | Yes. However, Walmart does not have any agreements in place with the Company |
| 7 | | in regards to the positions taken in this docket or for program participation. |
| 8 | | |
| 9 | Purpose | of Testimony and Summary of Recommendations |
| 10 | Q. | WHAT IS THE PURPOSE OF YOUR TESTIMONY? |
| 11 | A. | The purpose of my testimony is to respond to the Companies' proposed Green |
| 12 | | Energy Rider ("GER"). |
| 13 | Q. | PLEASE SUMMARIZE WALMART'S RECOMMENDATION TO THE COMMISSION. |
| 14 | A. | Walmart's recommendations to the Commission are as follows: |
| 15 | | 1) The proposed GER has several features that Walmart believes are important |
| 16 | | for a utility green tariff; however, the treatment of program resources as |
| 17 | | system resources and the prospect that participating customers will not have |
| 18 | | an opportunity to save money is a concern, and several aspects of the |
| 19 | | program require clarification and refinement in order to ensure that the |

 $^{^6}$ http://www.alabamanewscenter.com/2018/01/02/chambers-county-solar-project-now-serving-alabama-power-customers/

program is attractive to potential subscribers and results in equitable and 1 just and reasonable rates. 2 3 2) To the extent that the Commission approves a program in this docket, the following proposed program aspects should be included: 4 a. The ability to participate up to 100 percent of annual energy usage; 5 b. The choice of 5, 10, 15 and 20 year contract terms; and 6 7 c. The Company's proposed REC treatment. 3) The Commission should require PGE to develop an option for customers to 8 choose a floating energy credit structure that would allow the customer to 9 10 take on the risk of resource performance for the opportunity (not the 11 guarantee) to save money on their bills. The Commission should require that the Company develop and propose for 12 4) examination in this docket an administrative charge for the recovery of non-13 project specific administrative costs. 14 Without a discussion of the level and probability of risks or a proposed 5) 15 16 methodology for how the proposed risk adjustment would be calculated, the Commission should reject the proposed risk adjustment at this time as it is 17 arbitrary and it cannot be determined that the resulting charge would be just 18 19 and reasonable.

1 Green Energy Rider

| 2 Progra | m Descri | ption |
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- 3 Q. WHAT IS YOUR UNDERSTANDING OF THE STRUCTURE OF THE COMPANY'S
- 4 **PROPOSED GER?**
 - A. My understanding is that the Company proposes a new voluntary program for interested non-residential customers to meet four goals: (1) promote the development of new renewable generation to drive the addition of renewable resources to the grid, (2) provide a product that is consistent with customer preferences, (3) encourage partnerships, and (4) avoid cost-shifting to non-participants. See PGE/200/Sims-Tinker/7/2-5.
- 11 Q. WHAT IS YOUR UNDERSTANDING OF THE MINIMUM QUALIFICATION FOR GER
 12 SERVICE?
- A. My understanding is that the Company proposes that a participating customer must have aggregate demand across all retail schedules in excess of 30 kW, and customers may aggregate accounts below 30 kW to reach this threshold. *See* PGE/201/Sims-Tinker/2.
 - Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED PROGRAM SIZE?
- A. My understanding is that the Company proposes a program limit of 300 aMW in order to comply with the Commission's condition 4 from Orders 15-405 and 16-251.

 See PGE/200/Sims-Tinker/20/1-3.

| T | ų. | WHAT IS TOOK UNDERSTANDING OF THE AMOUNT OF RENEWABLE ENERGY ABLE |
|----|----|---|
| 2 | | TO BE SUBSCRIBED BY A PARTICIPATING CUSTOMER? |
| 3 | A. | My understanding is that the Company proposes to allow a participating customer |
| 4 | | to subscribe up to 100 percent of their annual energy usage. See PGE/201/Sims- |
| 5 | | Tinker/1. |
| 6 | Q. | WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED VALUE |
| 7 | | PROPOSITION? |
| 8 | A. | My understanding is that, for each MWh of service under the program, the Company |
| 9 | | proposes to charge the following to the customer: |
| LO | | PPA cost or revenue requirement for the contracted resource; |
| l1 | | An administrative charge to recover program costs, integration, shaping, firming, |
| L2 | | and other "relevant" program expenses; and |
| L3 | | A "risk adjustment." |
| L4 | | Additionally, for each MWh of service under the program, the Company proposes a |
| L5 | | \$/MWh credit. See PGE/201/Sims-Tinker/3. |
| L6 | Q. | DOES THE COMPANY PROPOSE A SPECIFIC AMOUNT FOR THE ADMINISTRATIVE |
| L7 | | CHARGE OR A SPECIFIC METHODOLOGY FOR CALCULATING THE CHARGE? |
| L8 | A. | No. |
| L9 | Q. | DOES THE COMPANY PROPOSE A SPECIFIC AMOUNT FOR THE RISK ADJUSTMENT |
| 20 | | OR A SPECIFIC METHODOLOGY FOR CALCULATING THE CHARGE? |
| 21 | A. | No. |

| 7 | Ų. | WHAT IS YOUR UNDERSTAINDING OF THE COMPANY 3 PROPOSED BASIS FOR THE |
|----|----|---|
| 2 | | CREDIT? |
| 3 | A. | The Company proposes that the basis for the credit be the value of the program |
| 4 | | resource's energy and capacity as determined by a calculation by the AURORA |
| 5 | | model in the Annual Update Tariff process. If PGE is in a period of resource |
| 6 | | deficiency, as defined by their most recently acknowledged integrated resource |
| 7 | | plan, the resource will receive a capacity credit. If PGE is resource sufficient, the |
| 8 | | resource would receive no capacity credit. See PGE/200/Sims-Tinker/12/4-23. |
| 9 | Q. | WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED STRUCTURE OF |
| LO | | THE CREDIT? |
| 11 | A. | My understanding is that the Company proposes to create a single levelized credit |
| 12 | | for each resource based on the above analysis, which would be applied to all MWh |
| 13 | | over the term of the subscription. <i>Id.</i> |
| L4 | Q. | IS IT YOUR UNDERSTANDING THAT THIS VALUE PROPOSITION IS IN ADDITION TO |
| 15 | | BILLING PER THE COMPANY'S STANDARD SERVICE TARIFFS? |
| 16 | A. | Yes. Customers taking service under the Company's proposed GER will remain full |
| 17 | | requirements customers of the Company and continue to receive bills reflecting the |
| 18 | | Company's standard service tariffs. See PGE/200/Sims-Tinker/8/13-18. |
| 19 | Q. | WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED PROGRAM |
| | | |

SUBSCRIPTION TERM LENGTHS?

| 1 | A. | My understanding is that the Company has proposed subscription terms of 5, 10, 15, |
|----|-----------|--|
| 2 | | and 20 years. <i>See</i> PGE/200/Sims-Tinker/7/17-20. |
| 3 | Q. | IS IT YOUR UNDERSTANDING THAT THE PARTICIPATING CUSTOMER CAN CHOOSE |
| 4 | | TO RECEIVE THE RENEWABLE ENERGY CREDITS OR HAVE THE COMPANY RETIRE |
| 5 | | THE CREDITS ON THEIR BEHALF? |
| 6 | A. | Yes. See PGE/201/Sims-Tinker/2. |
| 7 | Q. | WHAT IS YOUR UNDERSTANDING OF THE TRANSFER AND TERMINATION |
| 8 | | PROVISIONS? |
| 9 | A. | My understanding is that the Company proposes generally that termination and |
| LO | | transfer be determined in the contract between the participating customer and PGE. |
| l1 | | See PGE/201/Sims-Tinker/4. |
| L2 | Q, | DOES THE COMPANY PROPOSE TREATMENT OF UNSUBSCRIBED ENERGY? |
| L3 | A. | Yes. The Company proposes that PGE shareholders will bear the difference between |
| L4 | | the PPA price and the energy and capacity credit values. See PGE/200/Sims- |
| L5 | | Tinker/16/21-22. |
| L6 | | |
| L7 | Walmart's | S Comments and Recommendations |
| L8 | Q. | WHAT IS WALMART'S OVERALL IMPRESSION OF THE COMPANY'S PROPOSED GER |
| L9 | | AND RECOMMENDATION TO THE COMMISSION? |
| 20 | A. | The proposed GER has several features that Walmart believes are important for a |
| 21 | | utility green tariff; however, the treatment of program resources as system |
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| 1 | | resources and the prospect that participating customers will not have an |
|----------------------------------|-----------------|--|
| 2 | | opportunity to save money is a concern, and several aspects of the program require |
| 3 | | clarification and refinement in order to ensure that the program is attractive to |
| 4 | | potential subscribers and results in equitable and just and reasonable rates. |
| 5 | Q. | DOES WALMART BELIEVE THAT THE PROPOSED GER COULD BE DETRIMENTAL TO |
| 6 | | OTHER CUSTOMERS? |
| 7 | A. | Generally, no. Program subscriptions are in addition to the otherwise applicable |
| 8 | | tariffed service taken by participating customers, which maintains the current |
| 9 | | relationship of the Company's rates to recovery of the Company's cost of service. |
| 10 | | Additionally, the Company proposes to bear the burden of unsubscribed energy. |
| | | |
| 11 | Q. | ARE THERE POSITIVE ASPECTS OF THE COMPANY'S PROPOSAL THAT SHOULD BE |
| 11 12 | Q. | ARE THERE POSITIVE ASPECTS OF THE COMPANY'S PROPOSAL THAT SHOULD BE INCLUDED IN ANY APPROVED PROGRAM? |
| | Q. A. | |
| 12 | | INCLUDED IN ANY APPROVED PROGRAM? |
| 12 13 | | INCLUDED IN ANY APPROVED PROGRAM? Yes. To the extent that the Commission approves a program in this docket, the |
| 12 13 14 | | INCLUDED IN ANY APPROVED PROGRAM? Yes. To the extent that the Commission approves a program in this docket, the following proposed program aspects should be included: |
| 12 13 14 15 | | INCLUDED IN ANY APPROVED PROGRAM? Yes. To the extent that the Commission approves a program in this docket, the following proposed program aspects should be included: 1) The ability to participate up to 100 percent of annual energy usage; |
| 12 13 14 15 16 | | INCLUDED IN ANY APPROVED PROGRAM? Yes. To the extent that the Commission approves a program in this docket, the following proposed program aspects should be included: 1) The ability to participate up to 100 percent of annual energy usage; 2) The choice of 5, 10, 15 and 20 year contract terms; and |
| 12 13 14 15 16 17 | A. | INCLUDED IN ANY APPROVED PROGRAM? Yes. To the extent that the Commission approves a program in this docket, the following proposed program aspects should be included: 1) The ability to participate up to 100 percent of annual energy usage; 2) The choice of 5, 10, 15 and 20 year contract terms; and 3) The Company's proposed REC treatment. |

A. Yes. It appears from the Company's filing and discovery responses that the program 1 resources will essentially be system resources to serve all customers, with 2 participants receiving the REC and essentially any economic responsibility for the 3 incremental cost of the resource above the Company's avoided cost. While in 4 concept this is not necessarily problematic, in practice, in combination with the 5 development of the levelized energy credit, it creates a structure that, in the 6 7 Company's own estimation, will not allow for participating customers to have the opportunity to save money on their bills through acquisition of resources that can 8 9 compete with the otherwise applicable marginal resource.

Q. PLEASE EXPLAIN.

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- A. In discovery, the Company provides more detail around the process for setting the energy credit. In particular, the Company states:
 - "As designed, PGE cannot see a scenario in which subscribers would receive an incremental credit. Energy forecasts are based on the lowest marginal unit of energy cost, and in a world in which the proposed PPA is lower than the wholesale marginal unit, the PPA would become the marginal unit, meaning that forecast prices would lower to meet the PPA price." *See* Walmart/102.
 - Additionally, the Company states:
 - "PGE has not specifically crafted a policy within the tariff that would prevent a subscriber from receiving an incremental credit, should such a scenario arise. PGE is investigating the appropriateness of such a tariff policy, and may introduce corresponding language in the future." See Walmart/103.
- Q. IS THE LEVELIZATION OF THE ENERGY CREDIT A COMMON FEATURE IN THE GREEN
 TARIFF PROGRAMS IN WHICH WALMART PARTICIPATES OR HAS LOOKED TO
 PARTICIPATE?

- A. No. Typically the energy credit floats and usually does not stay the same for more than a period of one year. For example, the Georgia Power program in which we participate liquidates the renewable energy hourly and the energy credit portion of the net charge is the product of the energy produced in the hourly times the utility's system lambda (marginal price) in that hour. The Alabama Power program in which we participate credits the renewable energy at their fuel rate, which can change over time. While Walmart takes on the risk of the floating energy credit, the structure gives us the opportunity to save money on our bills if the resources perform well. PGE's proposed GER does not have this opportunity which will likely limit its attractiveness for participation for customers who look to renewable resources for cost containment and control. It is important to note that this is not about guaranteeing savings this is about the opportunity to save subject to resource performance outcomes.
- Q. WHAT IS WALMART'S RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?
- A. The Commission should require PGE to develop an option for customers to choose a floating energy credit structure that would allow the customer to take on the risk of resource performance for the opportunity (not the guarantee) to save money on their bills.
- Q. DOES THE TREATMENT OF THE PROGRAM RESOURCES AS SYSTEM RESOURCES

 HAVE ANY ADDITIONAL POTENTIAL RAMIFICATIONS?

- A. Yes. In discovery, PGE states that if they are capacity deficient and the RFP process produces a cost-effective PPA, the PPA would be procured for cost-of-service customers first before offering it as a program resource. *See* Walmart/104.
- 4 Q. DOES WALMART HAVE A CONCERN ABOUT THE LACK OF SPECIFICITY AROUND
 5 SETTING THE ADMINISTRATION CHARGE?
 - A. Yes. Walmart recognizes that some costs, such as integration and shaping, are project-specific and can differ from tranche to tranche of the program. However, some costs, such as the incremental costs of accounting and billing, should be able to be estimated at this time and that portion of the administrative charge should be included in the tariff. This is important because participants should pay no more than the cost to administer the program, and it also ensures that different generations of participants are treated equitably. Including the administrative charge in the tariff is a relatively standard practice in the deployment of green tariffs and a customer expectation in the examination of participation opportunities.
 - Q. WHAT IS WALMART'S RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?
 - A. The Commission should require that the Company develop and propose for examination in this docket an administrative charge for the recovery of non-project specific administrative costs.
- 19 Q. DOES WALMART HAVE A CONCERN ABOUT THE LACK OF SPECIFICITY AROUND THE
 20 "RISK ADJUSTMENT"?

A. Yes. Without a discussion of the level and probability of risks or a proposed methodology for how the proposed risk adjustment would be calculated, the Commission should reject the proposed risk adjustment at this time as it is arbitrary and it cannot be determined that the resulting charge would be just and reasonable.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

6 A. Yes.

Steve W. Chriss

Walmart Inc.

Business Address: 2001 SE 10th Street, Bentonville, AR, 72716-0550

EXPERIENCE

July 2007 – Present Walmart Inc., Bentonville, AR

Director, Energy and Strategy Analysis (October 2016 – Present)

Senior Manager, Energy Regulatory Analysis (June 2011 – October 2016)

Manager, State Rate Proceedings (July 2007 – June 2011)

June 2003 – July 2007

Public Utility Commission of Oregon, Salem, OR Senior Utility Analyst (February 2006 – July 2007) Economist (June 2003 – February 2006)

January 2003 - May 2003

North Harris College, Houston, TX

Adjunct Instructor, Microeconomics

June 2001 - March 2003

Econ One Research, Inc., Houston, TX

Senior Analyst (October 2002 – March 2003)

Analyst (June 2001 – October 2002)

EDUCATION

2001 **Louisiana State University** M.S., Agricultural Economics

1997-1998 **University of Florida** Graduate Coursework, Agricultural Education

and Communication

1997 **Texas A&M University** B.S., Agricultural Development

B.S., Horticulture

TESTIMONY BEFORE REGULATORY COMMISSIONS

2018

Missouri Docket No. ER-2018-0145: In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service.

Missouri Docket No. ER-2018-0146: In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service.

Kansas Docket No. 18-WSEE-328-RTS: In the Matter of the Joint Application of Westar Energy, Inc. and Kansas Gas and Electric Company for Approval to Make Certain Changes in their Charges for Electric Service.

Oregon Docket No. UE 335: In the Matter of Portland General Electric Company, Request for a General Rate Revision.

North Dakota Case No. PU-17-398: In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Utility Service in North Dakota.

Virginia Case No. PUR-2017-00179: Application of Appalachian Power Company for Approval of an 100 Percent Renewable Energy Rider Pursuant to § 56-577 A 5 of the Code of Virginia.

Missouri Case No. ET-2018-0063: In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of 2017 Green Tariff.

New Mexico Case No. 17-00255-UT: In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Rates Under Advice No. 272.

Virginia Case No. PUR-2017-00157: Application of Virginia Electric and Power Company for Approval of 100 Percent Renewable Energy Tariffs for Residential and Non-Residential Customers.

Kansas Docket No. 18-KCPE-095-MER: In the Matter of the Application of Great Plains Energy Incorporated, Kansas City Power & Light Company, and Westar Energy, Inc. for Approval of the Merger of Westar Energy, Inc. and Great Plains Energy Incorporated.

North Carolina Docket No. E-7, Sub 1146: In the Matter of the Application of Duke Energy Carolinas, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

Louisiana Docket No. U-34619: In Re: Application for Expedited Certification and Approval of the Acquisition of Certain Renewable Resources and the Construction of a Generation Tie Pursuant to the 1983 and/or/1994 General Orders.

Missouri Case No. EM-2018-0012: In the Matter of the Application of Great Plains Energy Incorporated for Approval of its Merger with Westar Energy, Inc.

2017

Arkansas Docket No. 17-038-U: In the Matter of the Application of Southwestern Electric Power Company for Approval to Acquire a Wind Generating Facility and to Construct a Dedicated Generation Tie Line.

Texas Docket No. 47461: Application of Southwestern Electric Power Company for Certificate of Convenience and Necessity Authorization and Related Relief for the Wind Catcher Energy Connection Project.

Oklahoma Cause No. PUD 201700267: Application of Public Service Company of Oklahoma for Approval of the Cost Recovery of the Wind Catcher Energy Connection Project; A Determination There is Need for the Project; Approval for Future Inclusion in Base Rates Cost Recovery of Prudent Costs Incurred by PSO for the Project; Approval of a Temporary Cost Recovery Rider; Approval of Certain Accounting Procedures Regarding Federal Production Tax Credits; Waiver of OAC 165:35-38-5(E); And Such Other Relief the Commission Deems PSO is Entitled.

Nevada Docket No. 17-06003: In the Matter of the Application of Nevada Power Company, d/b/a NV Energy, Filed Pursuant to NRS 704.110(3) and (4), Addressing Its Annual Revenue Requirement for General Rates Charged to All Classes of Customers.

North Carolina Docket No. E-2, Sub 1142: In the Matter of the Application of Duke Energy Progress, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

Oklahoma Cause No. PUD 201700151: Application of Public Service Company of Oklahoma, an Oklahoma Corporation, for an Adjustment in its Rates and Charges and the Electric Service Rules, Regulations and Conditions of Service for Electric Service in the State of Oklahoma.

Kentucky Case No. 2017-00179: Electronic Application of Kentucky Power Company for (1) a General Adjustment of its Rates for Electric Service; (2) an Order Approving its 2017 Environmental Compliance Plan; (3) an Order Approving its Tariffs and Riders; (4) an Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities; and (5) an Order Granting All Other Requested Relief.

New York Case No. 17-E-0238: Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of Niagara Mohawk Power Corporation for Electric and Gas Service.

Virginia Case No. PUR-2017-00060: Application of Virginia Electric and Power Company for Approval of 100 Percent Renewable Energy Tariffs Pursuant to §§ 56-577 A 5 and 56-234 of the Code of Virginia.

New Jersey Docket No. ER17030308: In the Matter of the Petition of Atlantic City Electric Company for Approval of Amendments to its Tariff to Provide for an Increase in Rates and Charges for Electric Service Pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1, for Approval of a Grid Resiliency Initiative and Cost Recovery Related Thereto, and for Other Appropriate Relief.

Texas Docket No. 46831: Application of El Paso Electric Company to Change Rates.

Oregon Docket No. UE 319: In the Matter of Portland General Electric Company, Request for a General Rate Revision.

New Mexico Case No. 16-00276-UT: In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates Pursuant to Advice No. 533.

Minnesota Docket No. E015/GR-16-664: In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Service in Minnesota.

Ohio Case No. 16-1852-EL-SSO: In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to §4928.143, Ohio Rev. Code, In the Form of an Electric Security Plan.

Texas Docket No. 46449: Application of Southwestern Electric Power Company for Authority to Change Rates.

Arkansas Docket No. 16-052-U: In the Matter of the Application of Oklahoma Gas and Electric Company for Approval of a General Change in Rates, Charges, and Tariffs.

Missouri Case No. EA-2016-0358: In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Own, Operate, Control, Manage and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood-Montgomery 345 kV Transmission Line.

Florida Docket No. 160186-Ei: In Re: Petition for Increase in Rates by Gulf Power Company.

2016

Missouri Case No. ER-2016-0179: In the Matter of Union Electric Company d/b/a Ameren Missouri Tariffs to Increase its Revenues for Electric Service.

Kansas Docket No. 16-KCPE-593-ACQ: In the Matter of the Joint Application of Great Plains Energy Incorporated, Kansas City Power & Light Company, and Westar Energy, Inc. for Approval of the Acquisition of Westar Energy, Inc. by Great Plains Energy Incorporated.

Missouri Case No. EA-2016-0208: In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and a Certificate of Public Convenience and Necessity Authorizing it to Offer a Pilot Distributed Solar Program and File Associated Tariff.

Utah Docket No. 16-035-T09: In the Matter of Rocky Mountain Power's Proposed Electric Service Schedule No. 34, Renewable Energy Tariff.

Pennsylvania Public Utility Commission Docket No. R-2016-2537359: Pennsylvania Public Utility Commission v. West Penn Power Company.

Pennsylvania Public Utility Commission Docket No. R-2016-2537352: Pennsylvania Public Utility Commission v. Pennsylvania Electric Company.

Pennsylvania Public Utility Commission Docket No. R-2016-2537355: Pennsylvania Public Utility Commission v. Pennsylvania Power Company.

Pennsylvania Public Utility Commission Docket No. R-2016-2537349: Pennsylvania Public Utility Commission v. Metropolitan Edison Company.

Michigan Case No. U-17990: In the Matter of the Application of Consumers Energy Company for Authority to Increase its Rates for the Generation and Distribution of Electricity and for Other Relief.

Florida Docket No. 160021-EI: In Re: Petition for Rate Increase by Florida Power & Light Company.

Minnesota Docket No. E-002/GR-15-816: In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota.

Colorado Public Utilities Commission Docket No. 16AL-0048E: Re: In the Matter of Advice Letter No. 1712-Electric Filed by Public Service Company of Colorado to Replace Colorado PUC No.7-Electric Tariff with Colorado PUC No. 8-Electric Tariff.

Colorado Public Utilities Commission Docket No. 16A-0055E: Re: In the Matter of the Application of Public Service Company of Colorado for Approval of its Solar*Connect Program.

Missouri Public Service Commission Case No. ER-2016-0023: In the Matter of the Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company.

Georgia Public Service Commission Docket No. 40161: In Re: Georgia Power Company's 2016 Integrated Resource Plan and Application for Decertification of Plant Mitchell Units 3, 4A and 4B, Plant Kraft Unit 1 CT, and Intercession City CT.

Oklahoma Corporation Commission Cause No. PUD 201500273: In the Matter of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma.

New Mexico Case No. 15-00261-UT: In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 513.

2015

Indiana Utility Regulatory Commission Cause No. 44688: Petition of Northern Indiana Public Service Company for Authority to Modify its Rates and Charges for Electric Utility Service and for Approval of: (1)

Changes to its Electric Service Tariff Including a New Schedule of Rates and Charges and Changes to the General Rules and Regulations and Certain Riders; (2) Revised Depreciation Accrual Rates; (3) Inclusion in its Basic Rates and Charges of the Costs Associated with Certain Previously Approved Qualified Pollution Control Property, Clean Coal Technology, Clean Energy Projects and Federally Mandated Compliance Projects; and (4) Accounting Relief to Allow NIPSCO to Defer, as a Regulatory Asset or Liability, Certain Costs for Recovery in a Future Proceeding.

Public Utility Commission of Texas Docket No. 44941: Application of El Paso Electric Company to Change Rates.

Arizona Corporation Commission Docket No. E-04204A-15-0142: In the matter of the Application of UNS Electric, Inc. for the Establishment of Just and Reasonable Rates and Charges Designed to Realized a Reasonable Rate of Return on the Fair Value of the Properties of UNS Electric, Inc. Devoted to its Operations Throughout the State of Arizona, and for Related Approvals.

Rhode Island Public Utilities Commission Docket No. 4568: In Re: National Grid's Rate Design Plan.

Oklahoma Corporation Commission Cause No. PUD 201500208: Application of Public Service Company of Oklahoma, an Oklahoma Corporation, for an Adjustment in its Rates and Charges and the Electric Service Rules, Regulations and Conditions of Service for Electric Service in the State of Oklahoma.

Public Service Commission of Wisconsin Docket No. 4220-UR-121: Application of Northern States Power Company, A Wisconsin Corporation, for Authority to Adjust Electric and Natural Gas Rates.

Arkansas Public Service Commission Docket No. 15-015-U: In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service.

New York Public Service Commission Case No. 15-E-0283: Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of New York State Electric & Gas Corporation for Electric Service.

New York Public Service Commission Case No. 15-G-0284: Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of New York State Electric & Gas Corporation for Gas Service.

New York Public Service Commission Case No. 15-E-0285: Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of Rochester Gas & Electric Corporation for Electric Service.

New York Public Service Commission Case No. 15-G-0286: Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of Rochester Gas & Electric Corporation for Gas Service.

Public Utilities Commission of Ohio Case No. 14-1693-EL-RDR: In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter Into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider.

Public Service Commission of Wisconsin Docket No. 6690-UR-124: Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates.

Arkansas Public Service Commission Docket No. 15-034-U: In the Matter of an Interim Rate Schedule of Oklahoma Gas and Electric Company Imposing a Surcharge to Recover All Investments and Expenses Incurred Through Compliance with Legislative or Administrative Rules, Regulations, or Requirements Relating to the Public Health, Safety or the Environment Under the Federal Clean Air Act for Certain of its Existing Generation Facilities.

Kansas Corporation Commission Docket No. 15-WSEE-115-RTS: In the Matter of the Application of Westar Energy, Inc. and Kansas Gas and Electric Company to Make Certain Changes in their Charges for Electric Service.

Michigan Public Service Commission Case No. U-17767: In the Matter of the Application of DTE Electric Company for Authority to Increase its Rates, Amend its Rate Schedules and Rules Governing the Distribution and Supply of Electric Energy, and for Miscellaneous Accounting Authority.

Public Utility Commission of Texas Docket No. 43695: Application of Southwestern Public Service Company for Authority to Change Rates.

Kansas Corporation Commission Docket No. 15-KCPE-116-RTS: In the Matter of the Application of Kansas City Power & Light Company to Make Certain Changes in its Charges for Electric Service.

Michigan Case No. U-17735: In the Matter of the Application of the Consumers Energy Company for Authority to Increase its Rates for the Generation and Distribution of Electricity and for Other Relief.

Kentucky Public Service Commission Case No. 2014-00396: Application of Kentucky Power Company for a General Adjustment of its Rates for Electric Service; (2) an Order Approving its 2014 Environmental Compliance Plan; (3) an Order Approving its Tariffs and Riders; and (4) an Order Granting All Other Required Approvals and Relief.

Kentucky Public Service Commission Case No. 2014-00371: In the Matter of the Application of Kentucky Utilities Company for an Adjustment of its Electric Rates.

Kentucky Public Service Commission Case No. 2014-00372: In the Matter of the Application of Louisville Gas and Electric Company for an Adjustment of its Electric and Gas Rates.

2014

Ohio Public Utilities Commission Case No. 14-1297-EL-SSO: In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and the Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan.

West Virginia Case No. 14-1152-E-42T: Appalachian Power Company and Wheeling Power Company, Both d/b/a American Electric Power, Joint Application for Rate Increases and Changes in Tariff Provisions.

Oklahoma Corporation Commission Cause No. PUD 201400229: In the Matter of the Application of Oklahoma Gas and Electric Company for Commission Authorization of a Plan to Comply with the Federal Clean Air Act and Cost Recovery; and for Approval of the Mustang Modernization Plan.

Missouri Public Service Commission Case No. ER-2014-0258: In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase its Revenues for Electric Service.

Pennsylvania Public Utility Commission Docket No. R-2014-2428742: Pennsylvania Public Utility Commission v. West Penn Power Company.

Pennsylvania Public Utility Commission Docket No. R-2014-2428743: Pennsylvania Public Utility Commission v. Pennsylvania Electric Company.

Pennsylvania Public Utility Commission Docket No. R-2014-2428744: Pennsylvania Public Utility Commission v. Pennsylvania Power Company.

Pennsylvania Public Utility Commission Docket No. R-2014-2428745: Pennsylvania Public Utility Commission v. Metropolitan Edison Company.

Washington Utilities and Transportation Commission Docket No. UE-141368: In the Matter of the Petition of Puget Sound Energy to Update Methodologies Used to Allocate Electric Cost of Service and For Electric Rate Design Purposes.

Washington Utilities and Transportation Commission Docket No. UE-140762: 2014 Pacific Power & Light Company General Rate Case.

West Virginia Public Service Commission Case No. 14-0702-E-42T: Monongahela Power Company and the Potomac Edison Company Rule 42T Tariff Filing to Increase Rates and Charges.

Ohio Public Utilities Commission Case No. 14-841-EL-SSO: In the Matter of the Application of Duke Energy Ohio for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of Case No. 14-841-EL-SSO an Electric Security Plan, Accounting Modifications and Tariffs for Generation Service.

Colorado Public Utilities Commission Docket No. 14AL-0660E: Re: In the Matter of the Advice Letter No. 1672-Electric Filed by Public Service Company of Colorado to Revise its Colorado PUC No. 7-Electric Tariff to Implement a General Rate Schedule Adjustment and Other Rate Changes Effective July 18, 2014.

Maryland Case No. 9355: In the Matter of the Application of Baltimore Gas and Electric Company for Authority to Increase Existing Rates and Charges for Electric and Gas Service.

Mississippi Public Service Commission Docket No. 2014-UN-132: In Re: Notice of Intent of Entergy Mississippi, Inc. to Modernize Rates to Support Economic Development, Power Procurement, and Continued Investment.

Nevada Public Utilities Commission Docket No. 14-05004: Application of Nevada Power Company d/b/a NV Energy for Authority to Increase its Annual Revenue Requirement for General Rates Charged to All Classes of Electric Customers and for Relief Properly Related Thereto.

Utah Public Service Commission Docket No. 14-035-T02: In the Matter of Rocky Mountain Power's Proposed Electric Service Schedule No. 32, Service From Renewable Energy Facilities.

Florida Public Service Commission Docket No. 140002-EG: In Re: Energy Conservation Cost Recovery Clause.

Public Service Commission of Wisconsin Docket No. 6690-UR-123: Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates.

Connecticut Docket No. 14-05-06: Application of the Connecticut Light and Power Company to Amend its Rate Schedules.

Virginia Corporation Commission Case No. PUE-2014-00026: Application of Appalachian Power Company for a 2014 Biennial Review for the Provision of Generation, Distribution and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Virginia Corporation Commission Case No. PUE-2014-00033: Application of Virginia Electric and Power Company to Revise its Fuel Factor Pursuant to Va. Code § 56-249.6.

Arizona Corporation Commission Docket No. E-01345A-11-0224 (Four Corners Phase): In the Matter of Arizona Public Service Company for a Hearing to Determine the Fair Value of Utility Property of the Company for Ratemaking Purposes, to Fix and Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return.

Minnesota Public Utilities Commission Docket No. E-002/GR-13-868: In the Matter of the Application of Northern States Power Company, for Authority to Increase Rates for Electric Service in Minnesota.

Utah Public Service Commission Docket No. 13-035-184: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations.

Missouri Public Service Commission Case No. EC-2014-0224: In the Matter of Noranda Aluminum, Inc.'s Request for Revisions to Union Electric Company d/b/a Ameren Missouri's Large Transmission Service Tariff to Decrease its Rate for Electric Service.

Oklahoma Corporation Commission Cause No. PUD 201300217: Application of Public Service Company of Oklahoma to be in Compliance with Order No. 591185 Issued in Cause No. PUD 201100106 Which Requires a Base Rate Case to be Filed by PSO and the Resulting Adjustment in its Rates and Charges and Terms and Conditions of Service for Electric Service in the State of Oklahoma.

Public Utilities Commission of Ohio Case No. 13-2386-EL-SSO: In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to §4928.143, Ohio Rev. Code, in the Form of an Electric Security Plan.

2013

Oklahoma Corporation Commission Cause No. PUD 201300201: Application of Public Service Company of Oklahoma for Commission Authorization of a Standby and Supplemental Service Rate Schedule.

Georgia Public Service Commission Docket No. 36989: Georgia Power's 2013 Rate Case.

Florida Public Service Commission Docket No. 130140-El: Petition for Rate Increase by Gulf Power Company.

Public Utility Commission of Oregon Docket No. UE 267: In the Matter of PACIFICORP, dba PACIFIC POWER, Transition Adjustment, Five-Year Cost of Service Opt-Out.

Illinois Commerce Commission Docket No. 13-0387: Commonwealth Edison Company Tariff Filing to Present the Illinois Commerce Commission with an Opportunity to Consider Revenue Neutral Tariff Changes Related to Rate Design Authorized by Subsection 16-108.5 of the Public Utilities Act.

Iowa Utilities Board Docket No. RPU-2013-0004: In Re: MidAmerican Energy Company.

South Dakota Public Utilities Commission Docket No. EL12-061: In the Matter of the Application of Black Hills Power, Inc. for Authority to Increase its Electric Rates. (filed with confidential stipulation)

Kansas Corporation Commission Docket No. 13-WSEE-629-RTS: In the Matter of the Applications of Westar Energy, Inc. and Kansas Gas and Electric Company for Approval to Make Certain Changes in their Charges for Electric Service.

Public Utility Commission of Oregon Docket No. UE 263: In the Matter of PACIFICORP, dba PACIFIC POWER, Request for a General Rate Revision.

Arkansas Public Service Commission Docket No. 13-028-U: In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service.

Virginia State Corporation Commission Docket No. PUE-2013-00020: Application of Virginia Electric and Power Company for a 2013 Biennial Review of the Rates, Terms, and Conditions for the Provision of Generation, Distribution, and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Florida Public Service Commission Docket No. 130040-EI: Petition for Rate Increase by Tampa Electric Company.

South Carolina Public Service Commission Docket No. 2013-59-E: Application of Duke Energy Carolinas, LLC, for Authority to Adjust and Increase Its Electric Rates and Charges.

Public Utility Commission of Oregon Docket No. UE 262: In the Matter of PORTLAND GENERAL ELECTRIC COMPANY, Request for a General Rate Revision.

New Jersey Board of Public Utilities Docket No. ER12111052: In the Matter of the Verified Petition of Jersey Central Power & Light Company For Review and Approval of Increases in and Other Adjustments to Its Rates and Charges For Electric Service, and For Approval of Other Proposed Tariff Revisions in Connection Therewith; and for Approval of an Accelerated Reliability Enhancement Program ("2012 Base Rate Filing")

North Carolina Utilities Commission Docket No. E-7, Sub 1026: In the Matter of the Application of Duke Energy Carolinas, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

Public Utility Commission of Oregon Docket No. UE 264: PACIFICORP, dba PACIFIC POWER, 2014 Transition Adjustment Mechanism.

Public Utilities Commission of California Docket No. 12-12-002: Application of Pacific Gas and Electric Company for 2013 Rate Design Window Proceeding.

Public Utilities Commission of Ohio Docket Nos. 12-426-EL-SSO, 12-427-EL-ATA, 12-428-EL-AAM, 12-429-EL-WVR, and 12-672-EL-RDR: In the Matter of the Application of the Dayton Power and Light Company Approval of its Market Offer.

Minnesota Public Utilities Commission Docket No. E-002/GR-12-961: In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota.

North Carolina Utilities Commission Docket E-2, Sub 1023: In the Matter of Application of Progress Energy Carolinas, Inc. For Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

2012

Public Utility Commission of Texas Docket No. 40443: Application of Southwestern Electric Power Company for Authority to Change Rates and Reconcile Fuel Costs.

South Carolina Public Service Commission Docket No. 2012-218-E: Application of South Carolina Electric & Gas Company for Increases and Adjustments in Electric Rate Schedules and Tariffs and Request for Mid-Period Reduction in Base Rates for Fuel.

Kansas Corporation Commission Docket No. 12-KCPE-764-RTS: In the Matter of the Application of Kansas City Power & Light Company to Make Certain Changes in its Charges for Electric Service.

Kansas Corporation Commission Docket No. 12-GIMX-337-GIV: In the Matter of a General Investigation of Energy-Efficiency Policies for Utility Sponsored Energy Efficiency Programs.

Florida Public Service Commission Docket No. 120015-EI: In Re: Petition for Rate Increase by Florida Power & Light Company.

California Public Utilities Commission Docket No. A.11-10-002: Application of San Diego Gas & Electric Company (U 902 E) for Authority to Update Marginal Costs, Cost Allocation, and Electric Rate Design.

Utah Public Service Commission Docket No. 11-035-200: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations.

Virginia State Corporation Commission Case No. PUE-2012-00051: Application of Appalachian Power Company to Revise its Fuel Factor Pursuant to § 56-249.6 of the Code of Virginia.

Public Utilities Commission of Ohio Case Nos. 11-346-EL-SSO, 11-348-EL-SSO, 11-349-EL-AAM, and 11-350-EL-AAM: In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form on an Electric Security Plan and In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Approval of Certain Accounting Authority.

New Jersey Board of Public Utilities Docket No. ER11080469: In the Matter of the Petition of Atlantic City Electric for Approval of Amendments to Its Tariff to Provide for an Increase in Rates and Charges for Electric Service Pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1 and For Other Appropriate Relief.

Public Utility Commission of Texas Docket No. 39896: Application of Entergy Texas, Inc. for Authority to Change Rates and Reconcile Fuel Costs.

Missouri Public Service Commission Case No. EO-2012-0009:In the Matter of KCP&L Greater Missouri Operations Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism.

Colorado Public Utilities Commission Docket No. 11AL-947E: In the Matter of Advice Letter No. 1597-Electric Filed by Public Service Company of Colorado to Revise its Colorado PUC No. 7-Electric Tariff to Implement a General Rate Schedule Adjustment and Other Changes Effective December 23, 2011.

Illinois Commerce Commission Docket No. 11-0721: Commonwealth Edison Company Tariffs and Charges Submitted Pursuant to Section 16-108.5 of the Public Utilities Act.

Public Utility Commission of Texas Docket No. 38951: Application of Entergy Texas, Inc. for Approval of Competitive Generation Service tariff (Issues Severed from Docket No. 37744).

California Public Utilities Commission Docket No. A.11-06-007: Southern California Edison's General Rate Case, Phase 2.

2011

Arizona Corporation Commission Docket No. E-01345A-11-0224: In the Matter of Arizona Public Service Company for a Hearing to Determine the Fair Value of Utility Property of the Company for Ratemaking Purposes, to Fix and Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return.

Oklahoma Corporation Commission Cause No. PUD 201100087: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma.

South Carolina Public Service Commission Docket No. 2011-271-E: Application of Duke Energy Carolinas, LLC for Authority to Adjust and Increase its Electric Rates and Charges.

Pennsylvania Public Utility Commission Docket No. P-2011-2256365: Petition of PPL Electric Utilities Corporation for Approval to Implement Reconciliation Rider for Default Supply Service.

North Carolina Utilities Commission Docket No. E-7, Sub 989: In the Matter of Application of Duke Energy Carolinas, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina.

Florida Public Service Commission Docket No. 110138: In Re: Petition for Increase in Rates by Gulf Power Company.

Public Utilities Commission of Nevada Docket No. 11-06006: In the Matter of the Application of Nevada Power Company, filed pursuant to NRS 704.110(3) for authority to increase its annual revenue requirement for general rates charged to all classes of customers to recover the costs of constructing the Harry Allen Combined Cycle plant and other generating, transmission, and distribution plant additions, to reflect changes in the cost of capital, depreciation rates and cost of service, and for relief properly related thereto.

North Carolina Utilities Commission Docket Nos. E-2, Sub 998 and E-7, Sub 986: In the Matter of the Application of Duke Energy Corporation and Progress Energy, Inc., to Engage in a Business Combination Transaction and to Address Regulatory Conditions and Codes of Conduct.

Public Utilities Commission of Ohio Case Nos. 11-346-EL-SSO, 11-348-EL-SSO, 11-349-EL-AAM, and 11-350-EL-AAM: In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form on an Electric Security Plan and In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Approval of Certain Accounting Authority.

Virginia State Corporation Commission Case No. PUE-2011-00037: In the Matter of Appalachian Power Company for a 2011 Biennial Review of the Rates, Terms, and Conditions for the Provision of Generation, Distribution, and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Illinois Commerce Commission Docket No. 11-0279 and 11-0282 (cons.): Ameren Illinois Company Proposed General Increase in Electric Delivery Service and Ameren Illinois Company Proposed General Increase in Gas Delivery Service.

Virginia State Corporation Commission Case No. PUE-2011-00045: Application of Virginia Electric and Power Company to Revise its Fuel Factor Pursuant to § 56-249.6 of the Code of Virginia.

Utah Public Service Commission Docket No. 10-035-124: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations.

Maryland Public Utilities Commission Case No. 9249: In the Matter of the Application of Delmarva Power & Light for an Increase in its Retail Rates for the Distribution of Electric Energy.

Minnesota Public Utilities Commission Docket No. E002/GR-10-971: In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy for Authority to Increase Rates for Electric Service in Minnesota.

Michigan Public Service Commission Case No. U-16472: In the Matter of the Detroit Edison Company for Authority to Increase its Rates, Amend its Rate Schedules and Rules Governing the Distribution and Supply of Electric Energy, and for Miscellaneous Accounting Authority.

2010

Public Utilities Commission of Ohio Docket No. 10-2586-EL-SSO: In the Matter of the Application of Duke Energy Ohio for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications, and Tariffs for Generation Service.

Colorado Public Utilities Commission Docket No. 10A-554EG: In the Matter of the Application of Public Service Company of Colorado for Approval of a Number of Strategic Issues Relating to its DSM Plan, Including Long-Term Electric Energy Savings Goals, and Incentives.

Public Service Commission of West Virginia Case No. 10-0699-E-42T: Appalachian Power Company and Wheeling Power Company Rule 42T Application to Increase Electric Rates.

Oklahoma Corporation Commission Cause No. PUD 201000050: Application of Public Service Company of Oklahoma, an Oklahoma Corporation, for an Adjustment in its Rates and Charges and Terms and Conditions of Service for Electric Service in the State of Oklahoma.

Georgia Public Service Commission Docket No. 31958-U: In Re: Georgia Power Company's 2010 Rate Case.

Washington Utilities and Transportation Commission Docket No. UE-100749: 2010 Pacific Power & Light Company General Rate Case.

Colorado Public Utilities Commission Docket No. 10M-254E: In the Matter of Commission Consideration of Black Hills Energy's Plan in Compliance with House Bill 10-1365, "Clean Air-Clean Jobs Act."

Colorado Public Utilities Commission Docket No. 10M-245E: In the Matter of Commission Consideration of Public Service Company of Colorado Plan in Compliance with House Bill 10-1365, "Clean Air-Clean Jobs Act."

Public Service Commission of Utah Docket No. 09-035-15 *Phase II*: In the Matter of the Application of Rocky Mountain Power for Approval of its Proposed Energy Cost Adjustment Mechanism.

Public Utility Commission of Oregon Docket No. UE 217: In the Matter of PACIFICORP, dba PACIFIC POWER Request for a General Rate Revision.

Mississippi Public Service Commission Docket No. 2010-AD-57: In Re: Proposal of the Mississippi Public Service Commission to Possibly Amend Certain Rules of Practice and Procedure.

Indiana Utility Regulatory Commission Cause No. 43374: Verified Petition of Duke Energy Indiana, Inc. Requesting the Indiana Utility Regulatory Commission to Approve an Alternative Regulatory Plan Pursuant to Ind. Code § 8-1-2.5-1, ET SEQ., for the Offering of Energy Efficiency Conservation, Demand Response, and Demand-Side Management Programs and Associated Rate Treatment Including Incentives Pursuant to a Revised Standard Contract Rider No. 66 in Accordance with Ind. Code §§ 8-1-2.5-1 ET SEQ. and 8-1-2-42 (a); Authority to Defer Program Costs Associated with its Energy Efficiency Portfolio of Programs; Authority to Implement New and Enhanced Energy Efficiency Programs, Including the Powershare®

Program in its Energy Efficiency Portfolio of Programs; and Approval of a Modification of the Fuel Adjustment Clause Earnings and Expense Tests.

Public Utility Commission of Texas Docket No. 37744: Application of Entergy Texas, Inc. for Authority to Change Rates and to Reconcile Fuel Costs.

South Carolina Public Service Commission Docket No. 2009-489-E: Application of South Carolina Electric & Gas Company for Adjustments and Increases in Electric Rate Schedules and Tariffs.

Kentucky Public Service Commission Case No. 2009-00459: In the Matter of General Adjustments in Electric Rates of Kentucky Power Company.

Virginia State Corporation Commission Case No. PUE-2009-00125: For acquisition of natural gas facilities Pursuant to § 56-265.4:5 B of the Virginia Code.

Arkansas Public Service Commission Docket No. 10-010-U: In the Matter of a Notice of Inquiry Into Energy Efficiency.

Connecticut Department of Public Utility Control Docket No. 09-12-05: Application of the Connecticut Light and Power Company to Amend its Rate Schedules.

Arkansas Public Service Commission Docket No. 09-084-U: In the Matter of the Application of Entergy Arkansas, Inc. For Approval of Changes in Rates for Retail Electric Service.

Missouri Public Service Commission Docket No. ER-2010-0036: In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.

Public Service Commission of Delaware Docket No. 09-414: In the Matter of the Application of Delmarva Power & Light Company for an Increase in Electric Base Rates and Miscellaneous Tariff Charges.

2009

Virginia State Corporation Commission Case No. PUE-2009-00030: In the Matter of Appalachian Power Company for a Statutory Review of the Rates, Terms, and Conditions for the Provision of Generation, Distribution, and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Public Service Commission of Utah Docket No. 09-035-15 *Phase I*: In the Matter of the Application of Rocky Mountain Power for Approval of its Proposed Energy Cost Adjustment Mechanism.

Public Service Commission of Utah Docket No. 09-035-23: In the Matter of the Application of Rocky Mountain Power for Authority To Increase its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations.

Colorado Public Utilities Commission Docket No. 09AL-299E: Re: The Tariff Sheets Filed by Public Service Company of Colorado with Advice Letter No. 1535 – Electric.

Arkansas Public Service Commission Docket No. 09-008-U: In the Matter of the Application of Southwestern Electric Power Company for Approval of a General Change in Rates and Tariffs.

Oklahoma Corporation Commission Docket No. PUD 200800398: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma.

Public Utilities Commission of Nevada Docket No. 08-12002: In the Matter of the Application by Nevada Power Company d/b/a NV Energy, filed pursuant to NRS §704.110(3) and NRS §704.110(4) for authority to increase its annual revenue requirement for general rates charged to all classes of customers, begin to recover the costs of acquiring the Bighorn Power Plant, constructing the Clark Peakers, Environmental Retrofits and other generating, transmission and distribution plant additions, to reflect changes in cost of service and for relief properly related thereto.

New Mexico Public Regulation Commission Case No. 08-00024-UT: In the Matter of a Rulemaking to Revise NMPRC Rule 17.7.2 NMAC to Implement the Efficient Use of Energy Act.

Indiana Utility Regulatory Commission Cause No. 43580: Investigation by the Indiana Utility Regulatory Commission, of Smart Grid Investments and Smart Grid Information Issues Contained in 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. § 2621(d)), as Amended by the Energy Independence and Security Act of 2007.

Louisiana Public Service Commission Docket No. U-30192 *Phase II (February 2009)*: Ex Parte, Application of Entergy Louisiana, LLC for Approval to Repower Little Gypsy Unit 3 Electric Generating Facility and for Authority to Commence Construction and for Certain Cost Protection and Cost Recovery.

South Carolina Public Service Commission Docket No. 2008-251-E: In the Matter of Progress Energy Carolinas, Inc.'s Application For the Establishment of Procedures to Encourage Investment in Energy Efficient Technologies; Energy Conservation Programs; And Incentives and Cost Recovery for Such Programs.

2008

Colorado Public Utilities Commission Docket No. 08A-366EG: In the Matter of the Application of Public Service Company of Colorado for approval of its electric and natural gas demand-side management (DSM) plan for calendar years 2009 and 2010 and to change its electric and gas DSM cost adjustment rates effective January 1, 2009, and for related waivers and authorizations.

Public Service Commission of Utah Docket No. 07-035-93: In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations, Consisting of a General Rate Increase of Approximately \$161.2 Million Per Year, and for Approval of a New Large Load Surcharge.

Indiana Utility Regulatory Commission Cause No. 43374: Petition of Duke Energy Indiana, Inc. Requesting the Indiana Utility Regulatory Commission Approve an Alternative Regulatory Plan for the Offering of Energy Efficiency, Conservation, Demand Response, and Demand-Side Management.

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Colorado Public Utilities Commission Docket No. 07A-420E: In the Matter of the Application of Public Service Company of Colorado For Authority to Implement and Enhanced Demand Side Management Cost Adjustment Mechanism to Include Current Cost Recovery and Incentives.

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Public Utility Commission of Oregon Docket No. UG 173: In the Matter of PUBLIC UTILITY COMMISSION OF OREGON Staff Request to Open an Investigation into the Earnings of Cascade Natural Gas.

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Public Utility Commission of Oregon Docket No. UE 180/UE 181/UE 184: In the Matter of PORTLAND GENERAL ELECTRIC COMPANY Request for a General Rate Revision.

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2004

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TESTIMONY BEFORE LEGISLATIVE BODIES

2018

Regarding Missouri Senate Bill 564: Testimony before the Missouri Senate Committee on Commerce, Consumer Protection, Energy and the Environment, January 10, 2018.

2017

Regarding Missouri Senate Bill 190: Testimony before the Missouri Senate Committee on Commerce, Consumer Protection, Energy and the Environment, January 25, 2017.

2016

Regarding Missouri House Bill 1726: Testimony before the Missouri House Energy and Environment Committee, April 26, 2016.

2014

Regarding Kansas House Bill 2460: Testimony Before the Kansas House Standing Committee on Utilities and Telecommunications, February 12, 2014.

2012

Regarding Missouri House Bill 1488: Testimony Before the Missouri House Committee on Utilities, February 7, 2012.

2011

Regarding Missouri Senate Bills 50, 321, 359, and 406: Testimony Before the Missouri Senate Veterans' Affairs, Emerging Issues, Pensions, and Urban Affairs Committee, March 9, 2011.

AFFIDAVITS

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Supreme Court of Illinois, Docket No. 118129, Commonwealth Edison Company et al., respondents, v. Illinois Commerce Commission et al. (Illinois Competitive Energy Association et al., petitioners). Leave to appeal, Appellate Court, First District.

2011

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ENERGY INDUSTRY PUBLICATIONS AND PRESENTATIONS

Panelist, Customizing Energy Solutions, Edison Electric Institute Annual Convention, San Diego, California, June 7, 2018.

Powering Ohio Report Release, Columbus, Ohio, May 29, 2018.

Panelist, The Past, Present, and Future of Renewable Energy: What Role Will PURPA, Mandates, and Collaboration Play as Renewables Become a Larger Part of Our Energy Mix?, 36th National Regulatory Conference, Williamsburg, Virginia, May 17, 2018.

Panelist, Sustainability Milestone Deep Dive Session, Walmart Global Sustainability Leaders Summit, Bentonville, Arkansas, April 18, 2018.

Panelist, The Customer's Voice, Tennessee Valley Authority Distribution Marketplace Forum, Murfreesboro, Tennessee, April 3, 2018.

Panelist, Getting to Yes with Large Customers to Meet Sustainability Goals, The Edison Foundation Institute for Electric Innovation Powering the People, March 7, 2018.

Panelist, The Corporate Quest for Renewables, 2018 NARUC Winter Policy Summit, Washington, D.C., February 13, 2018.

Panelist, Solar and Renewables, Touchstone Energy Cooperatives NET Conference 2018, St. Petersburg, Florida, February 6, 2018.

Panelist, Missouri Public Service Commission November 20, 2017 Workshop in File No. EW-2017-0245.

Panelist, Energy and Climate Change, 2017-18 Arkansas Law Review Symposium: Environmental Sustainability and Private Governance, Fayetteville, Arkansas, October 27, 2017.

Panelist, Customer – Electric Company – Regulator Panel, Edison Electric Institute Fall National Key Accounts Workshop, National Harbor, Maryland, October 12, 2017.

Panelist, What Do C&I Buyers Want, Solar Power International, Las Vegas, Nevada, September 12, 2017.

Panelist, Partnerships for a Sustainable Future, American Public Power Association National Conference, Orlando, Florida, June 20, 2017.

Panelist, Corporate Renewable Energy Buyers in the Southeast, SEARUC 2017, Greensboro, Georgia, June 12, 2017.

Panelist, Transitioning Away from Traditional Utilities, Utah Association of Energy Users Annual Conference, Salt Lake City, Utah, May 18, 2017.

Panelist, Regulatory Approaches for Integrating and Facilitating DERs, New Mexico State University Center for Public Utilities Advisory Council Current Issues 2017, Santa Fe, New Mexico, April 25, 2017.

Presenter, Advancing Renewables in the Midwest, Columbia, Missouri, April 24, 2017.

Panelist, Leveraging New Energy Technologies to Improve Service and Reliability, Edison Electric Institute Spring National Key Accounts Workshop, Phoenix, Arizona, April 11, 2017.

Panelist, Private Sector Demand for Renewable Power, Vanderbilt Law School, Nashville, Tennessee, April 4, 2017.

Panelist, Expanding Solar Market Opportunities, 2017 Solar Power Colorado, Denver, Colorado, March 15, 2017.

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Panelist, The Business Case for Clean Energy, Minnesota Conservative Energy Forum, St. Paul, Minnesota, October 26, 2016.

Panelist, M-RETS Stakeholder Summit, Minneapolis, Minnesota, October 5, 2016.

Panelist, 40th Governor's Conference on Energy & the Environment, Kentucky Energy and Environment Cabinet, Lexington, Kentucky, September 21, 2016.

Panelist, Trends in Customer Expectations, Wisconsin Public Utility Institute, Madison, Wisconsin, September 6, 2016.

Panelist, The Governor's Utah Energy Development Summit 2015, May 21, 2015.

Mock Trial Expert Witness, The Energy Bar Association State Commission Practice and Regulation Committee and Young Lawyers Committee and Environment, Energy and Natural Resources Section of the D.C. Bar, Mastering Your First (or Next) State Public Utility Commission Hearing, February 13, 2014.

Panelist, Customer Panel, Virginia State Bar 29th National Regulatory Conference, Williamsburg, Virginia, May 19, 2011.

Chriss, S. (2006). "Regulatory Incentives and Natural Gas Purchasing – Lessons from the Oregon Natural Gas Procurement Study." Presented at the 19th Annual Western Conference, Center for Research in Regulated Industries Advanced Workshop in Regulation and Competition, Monterey, California, June 29, 2006.

Chriss, S. (2005). "Public Utility Commission of Oregon Natural Gas Procurement Study." Public Utility Commission of Oregon, Salem, OR. Report published in June, 2005. Presented to the Public Utility Commission of Oregon at a special public meeting on August 1, 2005.

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Chriss, S., M. Dwyer, and B. Pulliam (2002). "Impacts of Lifting the Ban on ANS Exports on West Coast Crude Oil Prices: A Reconsideration of the Evidence." Presented at the 22nd USAEE/IAEE North American Conference, Vancouver, BC, Canada, October 6-8, 2002.

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Contributed to "Moving to the Front Lines: The Economic Impact of the Independent Power Plant Development in Louisiana," David E. Dismukes, author. Published by the Louisiana State University Center for Energy Studies, October 2001.

Dismukes, D.E., D.V. Mesyanzhinov, E.A. Downer, S. Chriss, and J.M. Burke (2001). "Alaska Natural Gas In-State Demand Study." Anchorage: Alaska Department of Natural Resources.

July 6, 2018

TO: Gregory M. Adams

Richardson Adams, PLLC

FROM: Stefan Brown

Manager, Regulatory Affairs

PORTLAND GENERAL ELECTRIC UM 1953 E Response to Calpine Data Request No. (

PGE Response to Calpine Data Request No. 001 Dated June 022, 2018

Request:

Reference PGE Exhibit 200, pp. 10-11. In the example illustrating the proposed pricing and crediting mechanism, the sum of the assumed PPA price and administrative costs (collectively, \$48/MWh) exceeds the sum of the assumed energy credit through AUT and capacity credit through AUT (collectively, \$38/MWh), resulting in a \$10/MWh incremental cost to subscribers.

- a. What would be the incremental cost to subscribers if the sum of the PPA price and administrative costs turned out to be less than the sum of the energy credit through AUT and capacity credit through AUT (in this example, say, \$36/MWh)? Would it result in an incremental credit to subscribers?
- b. If it turned out to be an incremental credit to subscribers, would it result in a discounted rate? If not, please explain why not.

Response:

a. The proposed crediting mechanism suggested by PGE will levelize credits over the life of the Green Tariff resource, and the credits will reflect the assumptions in place at the time of contract execution. Further, the PPA cost, administrative cost, energy credit, and capacity credit will be known to the Staff of the Public Utility Commission of Oregon (OPUC), as PGE will file any proposed pricing as a compliance filing.

As designed, PGE cannot see a scenario in which subscribers would receive an incremental credit. Energy forecasts are based on the lowest marginal unit of energy cost, and in a world in which the proposed PPA is lower than the wholesale marginal unit, the PPA would become the marginal unit, meaning that forecast prices would lower to meet the PPA price.

Regarding the hypothetical scenario presented by Calpine: PGE does not anticipate crafting a policy that would actively prevent a subscriber from receiving an incremental credit, should such a scenario arise.

b. No. Subscribers will continue to pay all cost of service and supplemental portions of their current rate schedule, and the Green Tariff will not serve as a "discounted rate." Any proposed Green Tariff pricing will be presented to Staff of the OPUC to ensure – in part – that there is no "rate discount" or cost shift to non-participating customers.

July 6, 2018

TO: Kay Barnes

Public Utility Commission of Oregon

FROM: Karla Wenzel

Manager, Pricing & Tariffs

PORTLAND GENERAL ELECTRIC UM 1953 PGE Response to OPUC Data Request No. 011 Dated June 22, 2018

Request:

Please refer to PGE/200, Sims – Tinker/11 figure 2. Under PGE's proposal, is it possible for the incremental cost to the subscriber to be negative? If no, please identify the tariff language or mechanism that prevents the net charge from being negative.

Response:

As designed, PGE cannot see a scenario in which subscribers would receive an incremental credit. Energy forecasts are based on the lowest marginal unit of energy cost, and in a world in which the proposed PPA is lower than the wholesale marginal unit, the PPA would become the marginal unit, meaning that forecast prices would lower to meet the PPA price.

PGE has not specifically crafted a policy within the tariff that would prevent a subscriber from receiving an incremental credit, should such a scenario arise. PGE is investigating the appropriateness of such a tariff policy, and may introduce corresponding language in the future.

July 6, 2018

TO: Kay Barnes

Public Utility Commission of Oregon

FROM: Karla Wenzel

Manager, Pricing & Tariffs

PORTLAND GENERAL ELECTRIC UM 1953 PGE Response to OPUC Data Request No. 019 Dated June 22, 2018

Request:

If PGE is capacity deficient and PGE can secure a cost-effective green PPA, please explain how PGE will decide between using the PPA for the green tariff and using the PPA to meet the needs of COS customers.

Response:

When PGE is capacity deficient – as determined through an acknowledged IRP process – cost-effective green PPAs (as determined through an RFP process) will be procured for the benefit of cost-of-service customers first. PGE notes that the crediting mechanism (compensating for capacity and energy) is in place because a green tariff PPA is a de facto benefit to all customers.

In circumstances other than acknowledged capacity deficiency and the subsequent identification of a least-cost, least-risk green PPA as determined through an RFP process, PGE will make this decision on a case-by-case basis.