

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

**IN RE: PETITION FOR INCREASE IN) DOCKET NO. 160186-EI
RATES BY GULF POWER COMPANY)**

**DIRECT TESTIMONY AND EXHIBITS OF
STEVE W. CHRISS
ON BEHALF OF
WAL-MART STORES EAST, LP AND SAM'S EAST, INC.**

JANUARY 13, 2016

Contents

Introduction.....	1
Purpose of Testimony and Summary of Recommendations.....	3
Return on Equity.....	6
<i>Customer Impact</i>	8
<i>Future Test Year and Regulatory Lag</i>	8
<i>National Utility Industry ROE Trends</i>	9
Figure 1. Gulf Proposed ROE Versus Authorized ROEs for Vertically Integrated Utilities, 2014 through 2016.....	11
<i>Conclusion</i>	12
Cost of Service	13
Economic Development and New Service Offerings.....	14

Exhibits

Exhibit SWC-1: Witness Qualifications Statement

Exhibit SWC-2: Estimated Impact of Gulf's Proposed Increase in ROE from 10.25 Percent to 11.0 Percent

Exhibit SWC-3: Calculation of Proposed Test Year Jurisdictional Revenues Collected Through Base Rates

Exhibit SWC-4: Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to 2016

Exhibit SWC-5: Estimated Revenue Requirement Impact of Difference in ROE Between 9.81 Percent and 11.0 Percent

1 **Introduction**

2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.**

3 A. My name is Steve W. Chriss. My business address is 2001 SE 10th St.,
4 Bentonville, AR 72716-0550. I am employed by Wal-Mart Stores, Inc.
5 ("Walmart") as Director, Energy and Strategy Analysis.

6 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?**

7 A. I am testifying on behalf of Wal-Mart Stores East, LP and Sam's East, Inc.
8 (collectively, "Walmart").

9 **Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.**

10 A. In 2001, I completed a Master of Science in Agricultural Economics at Louisiana State
11 University. From 2001 to 2003, I was an Analyst and later a Senior Analyst at the
12 Houston office of Econ One Research, Inc., a Los Angeles-based consulting firm. My
13 duties included research and analysis on domestic and international energy and
14 regulatory issues. From 2003 to 2007, I was an Economist and later a Senior Utility
15 Analyst at the Public Utility Commission of Oregon in Salem, Oregon. My duties
16 included appearing as a witness for PUC Staff in electric, natural gas, and
17 telecommunications dockets. I joined the energy department at Walmart in July
18 2007 as Manager, State Rate Proceedings. I was promoted to Senior Manager,
19 Energy Regulatory Analysis, in June 2011. I was promoted to my current position in
20 October, 2016. My Witness Qualifications Statement is attached as Exhibit SWC-1.

1 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE FLORIDA PUBLIC**
2 **SERVICE COMMISSION (“COMMISSION”)?**

3 A. Yes. I submitted testimony in Docket Nos. 160021-EI, 140002-EG, 130140-EI,
4 130040-EI, 120015-EI, and 110138-EI.

5 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE OTHER STATE**
6 **REGULATORY COMMISSIONS?**

7 A. Yes. I have submitted testimony in over 150 proceedings before 37 other utility
8 regulatory commissions. I have also submitted testimony before the Missouri House
9 Committee on Utilities, the Missouri House Energy and Environment Committee, the
10 Missouri Senate Veterans' Affairs, Emerging Issues, Pensions, and Urban Affairs
11 Committee, and the Kansas House Standing Committee on Utilities and
12 Telecommunications. My testimony has addressed topics including, but not limited
13 to, cost of service and rate design, return on equity (“ROE”), revenue requirements,
14 ratemaking policy, large customer renewable programs, qualifying facility rates,
15 telecommunications deregulation, resource certification, energy efficiency/demand
16 side management, fuel cost adjustment mechanisms, decoupling, and the collection
17 of cash earnings on construction work in progress (“CWIP”).

18 **Q. ARE YOU SPONSORING EXHIBITS IN YOUR TESTIMONY?**

19 A. Yes. I am sponsoring the exhibits listed in the Table of Contents.

1 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS IN FLORIDA.**

2 A. Walmart operates 367 retail units and eight distribution centers and employs
3 109,849 associates in Florida. In fiscal year ending 2016, Walmart purchased \$5.7
4 billion worth of goods and services from Florida-based suppliers, supporting 89,773
5 supplier jobs.¹

6 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN THE COMPANY'S**
7 **SERVICE TERRITORY.**

8 A. Walmart has 26 stores and related facilities that take electric service from Gulf
9 Power Company ("Gulf" or "Company") on several service schedules but primarily on
10 the Company's Real Time Pricing ("RTP") schedule.

11

12 **Purpose of Testimony and Summary of Recommendations**

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. The purpose of my testimony is to address aspects of Gulf's rate case filing and to
15 provide recommendations to assist the Commission in thoroughly and carefully
16 considering the customer impact of the Company's proposed rate increase.

17 **Q. PLEASE SUMMARIZE WALMART'S RECOMMENDATIONS TO THE COMMISSION.**

18 A. Walmart's recommendations to the Commission are as follows:

19 1) The Commission should thoroughly and carefully consider the impact on
20 customers in examining Gulf's requested revenue requirement and ROE, in

¹ <http://corporate.walmart.com/our-story/locations/united-states#/united-states/florida>

1 addition to all other facets of this case, to ensure that any increase in the
2 Company's rates is only the minimum amount necessary to provide safe,
3 adequate, and reliable service, while also providing Gulf the opportunity to
4 recover its reasonable and prudent costs and to earn a reasonable return on
5 its investment.

6 2) The Commission should closely examine the Company's proposed revenue
7 requirement increase and the associated ROE, especially when viewed in
8 light of:

9 a) The customer impact of the resulting rate increases;

10 b) The use of a future test year, which reduces regulatory lag by allowing
11 the utility to include the most current information in its rates at the time
12 they will be in effect;

13 c) The percentage of the Company's total jurisdictional revenues recovered
14 through base rates that are at risk due to regulatory lag versus the
15 amount of revenues collected through cost recovery clause charges; and

16 d) Recent rate case ROEs approved by other commissions nationwide.

17 3) Walmart does not expressly support the use of the 12 CP and 1/13th
18 methodology for the allocation of production costs due to the arbitrary
19 designation of a portion of production capacity cost as energy-related.
20 However, Walmart recognizes that this methodology has traditionally been
21 preferred by the Commission. As such, for the purposes of this docket

1 Walmart does not oppose the Company's proposed production cost
2 allocation methodology.

3 4) Walmart does not take a position at this time on the other facets of the
4 Company's proposed cost of service study. However, to the extent that
5 alternative cost of service models or modifications to the Company's model
6 are proposed by other parties, Walmart reserves the right to address any
7 such proposals in accord with the Commission's procedures established for
8 this docket.

9 5) The Commission should require the Company to initiate a stakeholder
10 process within 60 days of the final order in this docket for the collaborative
11 development of additional energy supply options, with a particular focus on
12 renewables, to be proposed for Commission approval within six months of
13 the final order in this docket. This programming will broaden the scope of
14 Gulf's tariffed products and services offered to existing and potential
15 business customers in its service territory and help Gulf promote economic
16 development as well as meet the needs of existing customers.

17 **Q. DOES THE FACT THAT YOU MAY NOT ADDRESS AN ISSUE OR POSITION**
18 **ADVOCATED BY THE COMPANY INDICATE WALMART'S SUPPORT?**

19 A. No. The fact that an issue is not addressed herein or in related filings should not be
20 construed as an endorsement of, agreement with, or consent to any filed position.

1 **Return on Equity**

2 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED ELECTRIC**
3 **REVENUE REQUIREMENT INCREASES?**

4 A. My understanding is that the Company proposes a revenue requirement increase of
5 approximately \$106.7 million for the projected test year ending December 31, 2017.
6 See MFR A-1, page 1. This represents a base rate increase of approximately 19.21
7 percent and a total company revenue increase of approximately 8.69 percent. See
8 MFR E-8, page 1.

9 **Q. IN SETTING THE REVENUE REQUIREMENT CHANGES AND ROE FOR THE COMPANY,**
10 **SHOULD THE COMMISSION CONSIDER THE IMPACT OF THE PROPOSED RATE**
11 **INCREASE ON CUSTOMERS?**

12 A. Yes. Electricity is a significant operating cost for retailers such as Walmart. When
13 electric rates increase, that increased cost to retailers can put pressure on consumer
14 prices and on the other expenses required by a business to operate. The
15 Commission should thoroughly and carefully consider the impact on customers in
16 examining the requested revenue requirement and ROE, in addition to all other
17 facets of this case, to ensure that any increase in the Company's rates is only the
18 minimum amount necessary to provide safe, adequate, and reliable service, while
19 also providing Gulf the opportunity to recover its reasonable and prudent costs and
20 to earn a reasonable return on its investment.

1 **Q. WHAT IS THE COMPANY'S PROPOSED ROE IN THIS DOCKET?**

2 A. The Company has calculated a "fair rate of return" of 10.4 percent based on a range
3 of cost of equity model results of 9.7 percent to 10.9 percent. However, the
4 Company proposes an adjustment of 60 basis points due to the relationship of its
5 proposed capital structure to the capital structures of the companies included in its
6 proposed proxy group. With the proposed adjustments to its model results, the
7 Company proposes an ROE of 11 percent. See Direct Testimony of James H. Vander
8 Weide, page 51, line 1 to page 53, line 13. The Company's overall proposed rate of
9 return is 6.04 percent. See MFR D1-a, page 1.

10 **Q. IS THE COMPANY'S PROPOSED ROE HIGHER THAN THE ROE CURRENTLY APPROVED**
11 **FOR ITS BUSINESS?**

12 A. Yes. The proposed ROE represents an increase of 75 basis points from the
13 Company's current approved ROE of 10.25 percent. See Docket No. 130140-EI,
14 Stipulation and Settlement Agreement, ¶18(b), and Order PSC-13-0670-S-EI.

15 **Q. ARE YOU CONCERNED ABOUT THE REASONABLENESS OF THE COMPANY'S**
16 **PROPOSED ROE?**

17 A. Yes. I am concerned about the reasonableness of the Company's proposed ROE,
18 especially when viewed in light of:

19 1) The customer impact of the resulting revenue requirement increases as I
20 discuss below;

- 1 2) The use of a future test year, which reduces regulatory lag by allowing the
2 utility to include the most current information in its rates at the time they
3 will be in effect;
- 4 3) The percentage of the Company's total jurisdictional revenues recovered
5 through base rates that are at risk due to regulatory lag versus the amount of
6 revenues collected through cost recovery clause charges; and
- 7 4) Recent rate case ROEs approved by other utility commissions nationwide.

8

9 ***Customer Impact***

10 **Q. WHAT IS THE IMPACT ON GULF'S CUSTOMERS OF THE PROPOSED 75 BASIS POINT**
11 **INCREASE IN ROE?**

12 A. The revenue requirement impact on the Company's customers of the proposed
13 increase in ROE is approximately \$12.8 million. The requested increase related to
14 ROE constitutes about 12 percent of the Company's increase request. See Exhibit
15 SWC-2.

16

17 ***Future Test Year and Regulatory Lag***

18 **Q. FOR THE COMPANY'S PROPOSED TEST YEAR, WHAT PERCENT OF JURISDICTIONAL**
19 **REVENUES ARE PROPOSED TO BE COLLECTED THROUGH BASE RATES?**

20 A. Approximately 39 percent of jurisdictional revenues for the proposed test year
21 would be collected through base rates and would be essentially at risk due to

1 regulatory lag. See Exhibit SWC-3. This is significant because it indicates that Gulf
2 recovers more than 60 percent of its total costs through cost recovery, or "pass-
3 through" charges, and the greater the percentage of a utility's revenues that are
4 collected through pass-through charges, the lower the utility's risk due to regulatory
5 lag.

6 **Q. HAS THE COMMISSION RECOGNIZED THAT THE USE OF A FUTURE OR PROJECTED**
7 **TEST YEAR REDUCES GULF'S EXPOSURE TO REGULATORY LAG?**

8 A. Yes. The use of a projected test year reduces the risk due to regulatory lag because,
9 as the Commission has previously stated, "the main advantage of a projected test
10 year is that it includes all information related to rate base, NOI, and capital structure
11 for the time new rates will be in effect." See Order No. PSC-02-0787-FOF-EI, page 9.
12 As such, the Commission should carefully consider the level of ROE in relation to the
13 Company's relatively low exposure to regulatory lag.

14

15 ***National Utility Industry ROE Trends***

16 **Q. HOW DOES THE COMPANY'S PROPOSED ROE COMPARE WITH ROES APPROVED BY**
17 **OTHER UTILITY REGULATORY COMMISSIONS?**

18 A. The ROE proposed by the Company is significantly higher than the average ROE
19 approved by other utility regulatory commissions in 2014, 2015, and 2016.²
20 Additionally, the gap between the national average ROEs and the Company's

² At the time of writing this testimony, no Commissions had authorized an ROE for an electric utility in 2017.

1 proposed ROE widens even more when 2015 and 2016 data are examined. *See*
2 Exhibit SWC-4.

3 **Q. WHAT IS YOUR UNDERSTANDING OF THE ROES APPROVED FOR ELECTRIC UTILITIES**
4 **BY COMMISSIONS NATIONWIDE DURING THIS TIME PERIOD?**

5 A. According to data from SNL Financial³, a financial news and reporting company,
6 there have been 88 reported electric utility rate case ROEs authorized by state
7 regulatory commissions for investor-owned electric utilities in 2014, 2015, and 2016.
8 The average of these reported ROEs is 9.65 percent. The range of reported
9 authorized ROEs for the period is 8.64 percent to 10.55 percent, and the median
10 authorized ROE is 9.70 percent. *Id.*

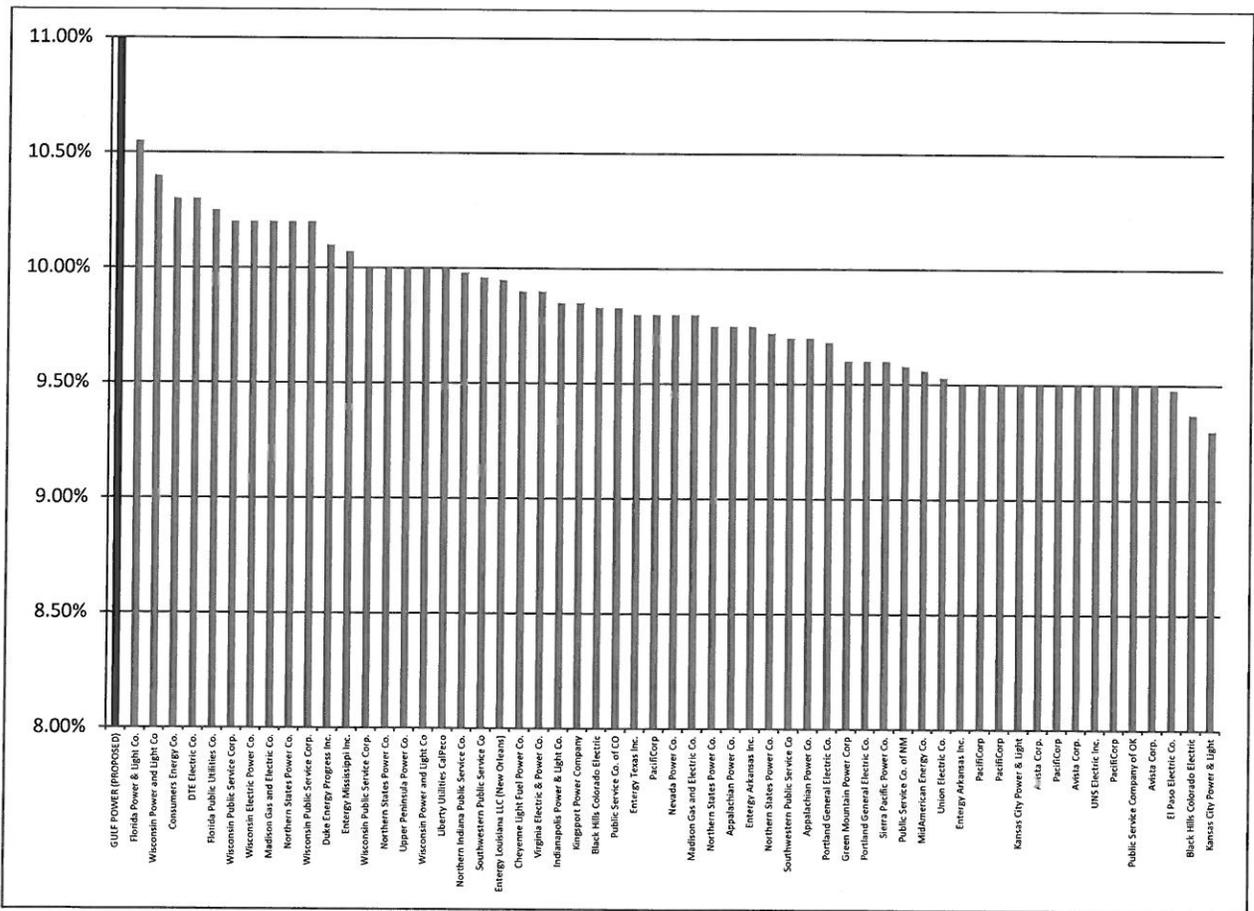
11 **Q. SEVERAL OF THE REPORTED AUTHORIZED ROES ARE FOR DISTRIBUTION-ONLY**
12 **UTILITIES, OR ARE ONLY FOR A UTILITY'S DISTRIBUTION SERVICE RATES. WHAT IS**
13 **THE AVERAGE AUTHORIZED ROE IN THE REPORTED GROUP FOR PARTIALLY OR**
14 **FULLY VERTICALLY INTEGRATED UTILITIES LIKE THE COMPANY?**

15 A. In the group reported by SNL Financial, the average authorized ROE for vertically
16 integrated utilities from 2014 to present is 9.81 percent. *Id.* When the average ROE
17 is broken down by year, the data show that recently awarded ROEs are lower than
18 those awarded in 2014.

³ Regulatory Research Associates is part of SNL Financial.

1 Q. PLEASE EXPLAIN.

2 A. The average authorized ROE for vertically integrated utilities in 2014 was 9.92
 3 percent, in 2015 it was 9.75 percent, and in 2016 it was 9.77 percent. As such, the
 4 Company's proposed 11 percent ROE is counter to broader electric industry trends
 5 and, if authorized, would be higher than any ROE authorized in the United States in
 6 at least the last three years. See Figure 1.



7 Figure 1. Gulf Proposed ROE Versus Authorized ROEs for Vertically Integrated Utilities, 2014 through 2016.

8
9

1 It should also be noted that even the Company's currently authorized ROE of 10.25
2 percent significantly exceeds the average of ROEs authorized for vertically integrated
3 utilities from 2014 to 2016.

4 **Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF THE DIFFERENCE BETWEEN THE**
5 **COMPANY'S PROPOSED 11 PERCENT ROE AND 9.81 PERCENT, THE AVERAGE**
6 **AUTHORIZED ROE FOR VERTICALLY INTEGRATED UTILITIES FROM 2014 TO 2016?**

7 A. The revenue requirement impact on the Company's rates of this difference in ROE is
8 approximately \$19.8 million. See Exhibit SWC-5.

9

10 **Conclusion**

11 **Q. GENERALLY, WHAT IS YOUR RECOMMENDATION TO THE COMMISSION ON THE**
12 **COMPANY'S PROPOSED INCREASE IN ROE?**

13 A. The Commission should closely examine the Company's proposed revenue
14 requirement increase and the associated ROE, especially when viewed in light of:

15 1) The customer impact of the resulting revenue requirement increases as I
16 discuss above;

17 2) The use of a future test year, which reduces regulatory lag by allowing
18 the utility to include the most current information in its rates at the time
19 they will be in effect;

- 1 3) The percentage of the Company's total jurisdictional revenues recovered
2 through base rates that are at risk due to regulatory lag versus the
3 amount of revenues collected through cost recovery clause charges; and
4 4) Recent rate case ROEs approved by other utility commissions nationwide.

5

6 **Cost of Service**

7 **Q. GENERALLY, WHAT IS WALMART'S POSITION ON SETTING RATES BASED ON THE**
8 **UTILITY'S COST OF SERVICE?**

9 A. Walmart advocates that rates be set based on the utility's cost of service for each
10 rate class. This produces equitable rates that reflect cost causation, send proper
11 price signals, and minimize price distortions.

12 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED PRODUCTION**
13 **CAPACITY COST ALLOCATION METHODOLOGY?**

14 A. My understanding is that the Company proposes to allocate production capacity
15 cost using a 12 coincident peak and 1/13th methodology, in which 12/13 of the
16 production capacity cost is allocated using the rate classes' contributions to the
17 Company's 12 monthly coincident peaks and the remaining 1/13 is allocated using
18 the Company's energy allocator. See Direct Testimony and Exhibits of Michael T.
19 O'Sheasy, page 16, line 10 to line 11.

1 **Q. DOES WALMART HAVE CONCERNS WITH THE COMPANY'S PROPOSAL?**

2 A. Walmart does not expressly support the use of the 12 CP and 1/13th methodology
3 due to the arbitrary designation of a portion of production capacity cost as energy-
4 related.⁴ However, Walmart recognizes that this methodology has traditionally been
5 preferred by the Commission. As such, for the purposes of this docket Walmart
6 does not oppose the Company's proposed production cost allocation methodology.

7 **Q. DOES WALMART TAKE A POSITION ON THE OTHER FACETS OF THE COMPANY'S**
8 **PROPOSED COST OF SERVICE MODEL AT THIS TIME?**

9 A. No. However, to the extent that alternative cost of service models or modifications
10 to the Company's model are proposed by other parties, Walmart reserves the right
11 to address any such changes in accord with the Commission's procedures in this
12 docket.

13

14 **Economic Development and New Service Offerings**

15 **Q. DOES GULF INDICATE ITS DESIRE TO BRING NEW BUSINESS TO NORTHWEST**
16 **FLORIDA AND TO PROMOTE THE EXPANSION OF EXISTING BUSINESSES?**

17 A. Yes. See Direct Testimony and Exhibits of Bentina C. Terry, page 26, 6 to line 15.

⁴ The National Association of Regulatory Utility Commissioners "Electric Utility Cost Allocation Manual" ("NARUC Manual") categorizes the 12 CP and 1/13th methodology in its "Judgmental Energy Weightings" section. See NARUC Manual, page 57 to page 59.

1 Q. WHAT IS YOUR UNDERSTANDING OF GULF'S PROPOSED ECONOMIC
2 DEVELOPMENT INITIATIVES IN THIS DOCKET?

3 A. My understanding is that Gulf proposes to modify its existing economic
4 development riders and introduce a new rider for businesses with a load of 5 MW or
5 greater. *Id.*, line 13 to line 15.

6 Q. DOES WALMART OPPOSE THE COMPANY'S PROPOSED MODIFICATIONS AND
7 ADDITIONAL RIDER?

8 A. No.

9 Q. DOES WALMART BELIEVE THAT OFFERING A BROADER RANGE OF SERVICES AND
10 RATE OPTIONS FOR BUSINESS CUSTOMERS IN THE COMPANY'S SERVICE
11 TERRITORY CAN FURTHER ENCOURAGE ECONOMIC DEVELOPMENT AND MEET THE
12 NEEDS OF EXISTING BUSINESS CUSTOMERS, WHILE AT THE SAME TIME
13 PROMOTING THE BEST INTERESTS OF THE COMPANY AND ALL OF ITS CUSTOMERS?

14 A. Yes. In particular, many business customers have renewable energy and
15 sustainability goals, which can require a supply mix different from that offered by
16 the utility. To meet the requirements of existing and potential customers, a
17 framework should be in place in which the customer can work with the utility to
18 ensure delivery of that supply mix on a cost-effective basis.

1 **Q. HAS WALMART ESTABLISHED CORPORATE RENEWABLE ENERGY GOALS?**

2 A. Yes. Walmart has established aggressive and significant renewable energy goals,
3 including: (1) to be supplied 100 percent by renewable energy⁵ and (2) by 2025, to
4 be supplied by 50 percent renewable energy. Additionally, Walmart has set a
5 science-based target to reduce emissions in our operations, through the deployment
6 of energy efficiency and consumption of renewable energy, by 18 percent by 2025.⁶
7 Walmart recognizes that Florida has significant renewable energy potential, and
8 strongly encourages the Commission to consider ways for customers like Walmart to
9 take advantage of that potential.

10 **Q. HAS WALMART WORKED CONSTRUCTIVELY WITH GULF'S SISTER COMPANIES ON**
11 **THE DEVELOPMENT AND IMPLEMENTATION OF LARGE SCALE RENEWABLE**
12 **PROGRAMS FOR BUSINESS CUSTOMERS?**

13 A. Yes. In Alabama, Walmart has contracted with Alabama Power for the offtake of 72
14 MW of solar power.⁷ This contract and its significant benefits are being realized
15 through the approval by the Alabama Public Service Commission of Alabama
16 Power's proposal to construct or otherwise acquire renewable generation resources
17 which are then paid for through agreements with specific customers, with no costs
18 shifted to non-participating ratepayers. See Order, Alabama Public Service
19 Commission Docket No. 32382, September 16, 2015.

⁵ <http://corporate.walmart.com/global-responsibility/environmental-sustainability>

⁶ <http://news.walmart.com/2016/11/04/walmart-offers-new-vision-for-the-companys-role-in-society>

⁷ <https://vimeo.com/170038083>

1 In Georgia, Walmart participated through the Commercial Group in
2 Georgia Power's 2016 integrated resource plan docket and advocated for a large
3 commercial and industrial renewable energy program. The Commercial Group was
4 party to a stipulation adopted by the Georgia Commission that creates a 200 MW
5 tranche of renewable resources to be allocated to programming for large
6 commercial and industrial customers and will be required to deliver value to all
7 Georgia Power customers. See Order Adopting Stipulation, Georgia Public Service
8 Commission Docket No. 40161 and Docket No. 40162, August 2, 2016.

9 **Q. WHAT IS WALMART'S RECOMMENDATION TO THE COMMISSION ON THIS ISSUE?**

10 A. Walmart proposes that the Commission should require the Company to initiate a
11 stakeholder process within 60 days of the final order in this docket for the
12 collaborative development of additional energy supply options, with a particular
13 focus on renewables, to be proposed for Commission approval within six months of
14 the final order in this docket. This programming will broaden the scope of Gulf's
15 tariffed products and services offered to existing and potential business customers
16 in its service territory and help Gulf promote economic development as well as meet
17 the needs of existing customers.

18 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

19 A. Yes.

20

Steve W. Chriss

Senior Manager, Energy Regulatory Analysis

Wal-Mart Stores, Inc.

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

Business Phone: (479) 204-1594

EXPERIENCE

July 2007 – Present

Wal-Mart Stores, 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

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.

**Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI**

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.

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.

**Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI**

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.

**Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI**

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.

Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI

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

Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit _____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI

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-EI: 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.

**Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI**

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.

Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI

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

Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI

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.

Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI

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,

**Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI**

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.

Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI

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.

Public Utilities Commission of Nevada Docket No. 07-12001: In the Matter of the Application of Sierra Pacific Power Company for authority to increase its general rates charged to all classes of electric customers to reflect an increase in annual revenue requirement and for relief properly related thereto.

**Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI**

Louisiana Public Service Commission Docket No. U-30192 *Phase II*: 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.

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.

2007

Louisiana Public Service Commission Docket No. U-30192: 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.

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.

2006

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.

Public Utility Commission of Oregon Docket No. UE 179: In the Matter of PACIFICORP, dba PACIFIC POWER AND LIGHT COMPANY Request for a general rate increase in the company's Oregon annual revenues.

Public Utility Commission of Oregon Docket No. UM 1129 *Phase II*: Investigation Related to Electric Utility Purchases From Qualifying Facilities.

2005

Public Utility Commission of Oregon Docket No. UM 1129 *Phase I Compliance*: Investigation Related to Electric Utility Purchases From Qualifying Facilities.

Public Utility Commission of Oregon Docket No. UX 29: In the Matter of QWEST CORPORATION Petition to Exempt from Regulation Qwest's Switched Business Services.

2004

Public Utility Commission of Oregon Docket No. UM 1129 *Phase I*: Investigation Related to Electric Utility Purchases From Qualifying Facilities.

TESTIMONY BEFORE LEGISLATIVE BODIES

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

2015

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

Colorado Public Utilities Commission Docket No. 11M-951E: In the Matter of the Petition of Public Service Company of Colorado Pursuant to C.R.S. § 40-6-111(1)(d) for Interim Rate Relief Effective on or before January 21, 2012.

ENERGY INDUSTRY PUBLICATIONS AND PRESENTATIONS

Panelist, The Business Case for Clean Energy, Minnesota Conservative Energy Forum, 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.

Chriss, S. and M. Radler (2003). "Report from Houston: Conference on Energy Deregulation and Restructuring." USAEE Dialogue, Vol. 11, No. 1, March, 2003.

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.

**Wal-Mart Stores East, LP and Sam's East, Inc.
Exhibit ____ SWC-1, Witness Qualifications Statement
Florida Public Service Commission Docket No. 160186-EI**

Contributed to chapter on power marketing: "Power System Operations and Electricity Markets," Fred I. Denny and David E. Dismukes, authors. Published by CRC Press, June 2002.

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.

Estimated Impact of Gulf's Proposed Increase in ROE from 10.25 Percent to 11.0 Percent

Line No.	Description	Amount
1	Proposed Jurisdictional Adjusted Rate Base, 2017 TY (\$000)	\$ 2,418,917
2	Return on Rate Base at 10.25 Percent ROE	5.72%
3	1 x 2 Jurisdictional Net Operating Income	\$ 138,250
4	Jurisdictional Adjusted Net Income	\$ 80,723
5	3 - 4 Net Operating Income Deficiency	\$ 57,527
6	Net Operating Income Multiplier	1.63
7	5 x 6 Revenue Requirement	\$ 93,956
8	Gulf Proposed	\$ 106,782
9	8 - 7 Increase Due to Proposed Increase in ROE (\$000)	\$ 12,826
10	9 / 8 Increase Due to Proposed Increase in ROE (%)	12.0%

Sources:
 MFR A-1, 2017 Test Year
 Exhibit SWC-2, page 2

Line No.		Jurisdictional Capital Structure (\$000)	Ratio	Cost Rate	Weighted Cost Rate
1	Long Term Debt	\$ 732,273	30.27%	4.40%	1.33%
2	Short Term Debt	\$ 28,504	1.18%	3.02%	0.04%
3	Preferred Stock	\$ 94,609	3.91%	6.15%	0.24%
4	Common Equity	\$ 969,275	40.07%	10.25%	4.11%
5	Customer Deposits	\$ 24,536	1.01%	2.30%	0.02%
6	Deferred Income Taxes	\$ 603,001	24.93%	0.00%	0.00%
7	ASC 740 Deferred Taxes	\$ (34,002)	-1.41%	0.00%	0.00%
8	Investment Credit	\$ 721	0.03%	8.05%	0.00%
9	Sum 1 to 7 Total	\$ 2,418,917	100%		5.72%

Source:
 MFR D-1A, 2017 Test Year

Calculation of Proposed Test Year Jurisdictional Revenues Collected through Base Rates

Line No.	Description	Amount (\$000)
1	Total Operating Revenues, Electric Utility	\$ 1,503,134
2	Total Operating Revenues, Net of Adjustments	\$ 586,666
3	2 / 1 Percent of Jurisdictional Revenues in Base Rates	39.0%

Source:
MFR C-1, page 1

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to 2016

State	Utility	Docket	Decision Date	Vertically Integrated (V)/Distribution (D)	Return on Equity (%)
New York	Consolidated Edison Co. of NY	13-E-0030	2/20/2014	D	9.20%
North Dakota	Northern States Power Co.	PU-12-813	2/26/2014	V	9.75%
New Hampshire	Liberty Utilities Granite St	DE-13-063	3/17/2014	D	9.55%
District of Columbia	Potomac Electric Power Co.	1103-2013-E	3/26/2014	D	9.40%
New Mexico	Southwestern Public Service Co	12-00350-UT	3/26/2014	V	9.96%
Delaware	Delmarva Power & Light Co.	13-115	4/2/2014	D	9.70%
Texas	Entergy Texas Inc.	41791	5/16/2014	V	9.80%
Massachusetts	Fitchburg Gas & Electric Light	13-90	5/30/2014	D	9.70%
Wisconsin	Wisconsin Power and Light Co	6680-UR-119	6/6/2014	V	10.40%
Maine	Emera Maine	2013-00443	6/30/2014	D	9.55%
Maryland	Potomac Electric Power Co.	9336	7/2/2014	D	9.62%
Louisiana	Entergy Louisiana LLC (New Orleans)	UD-13-01	7/10/2014	V	9.95%
New Jersey	Rockland Electric Company	ER-13111135	7/23/2014	D	9.75%
Maine	Central Maine Power Co.	2013-00168	7/29/2014	D	9.45%
Wyoming	Cheyenne Light Fuel Power Co.	20003-132-ER-13	7/31/2014	V	9.90%
Arkansas	Entergy Arkansas Inc.	13-028-U ¹	8/15/2014	V	9.50%
New Jersey	Atlantic City Electric Co.	ER-14030245	8/20/2014	D	9.75%
Vermont	Green Mountain Power Corp	8190, 8191	8/25/2014	V	9.60%
Utah	PacifiCorp	13-035-184	8/29/2014	V	9.80%
Florida	Florida Public Utilities Co.	140025-EI	9/15/2014	V	10.25%
Nevada	Nevada Power Co.	14-05004	10/9/2014	V	9.80%
Illinois	MidAmerican Energy Co.	14-0066	11/6/2014	V	9.56%
Wisconsin	Wisconsin Public Service Corp.	6690-UR-123	11/6/2014	V	10.20%
Wisconsin	Wisconsin Electric Power Co.	05-UR-107	11/14/2014	V	10.20%
Virginia	Appalachian Power Co.	PUE-2014-00026	11/26/2014	V	9.70%
Wisconsin	Madison Gas and Electric Co.	3270-UR-120	11/26/2014	V	10.20%
Oregon	Portland General Electric Co.	UE-283	12/4/2014	V	9.68%
Illinois	Commonwealth Edison Co.	14-0312	12/10/2014	D	9.25%
Illinois	Ameren Illinois	14-0317	12/10/2014	D	9.25%
Mississippi	Entergy Mississippi Inc.	2014-UN-0132	12/11/2014	V	10.07%
Wisconsin	Northern States Power Co.	4220-UR-120	12/12/2014	V	10.20%
Connecticut	Connecticut Light & Power Co.	14-05-06	12/17/2014	D	9.17%
Colorado	Black Hills Colorado Electric	14AL-0393E	12/18/2014	V	9.83%
Wyoming	PacifiCorp	20000-446-ER-14	1/23/2015	V	9.50%
Colorado	Public Service Co. of CO	14AL-0660E	2/24/2015	V	9.83%
New Jersey	Jersey Central Power & Light Co.	ER-12111052	3/18/2015	D	9.75%
Washington	PacifiCorp	UE-140762	3/25/2015	V	9.50%
Minnesota	Northern States Power Co.	E-002/GR-13-868	3/26/2015	V	9.72%
Michigan	Wisconsin Public Service Corp.	U-17669	4/23/2015	V	10.20%
Missouri	Union Electric Co.	ER-2014-0258	4/29/2015	V	9.53%
West Virginia	Appalachian Power Co.	14-1152-E-42-T	5/26/2015	V	9.75%
New York	Central Hudson Gas & Electric	14-E-0318	6/17/2015	D	9.00%
New York	Consolidated Edison Co. of NY	15-E-0050	6/17/2015	D	9.00%
Missouri	Kansas City Power & Light	ER-2014-0370	9/2/2015	V	9.50%
Kansas	Kansas City Power & Light	15-KCPE-116-RTS	9/10/2015	V	9.30%
New York	Orange & Rockland Utlts Inc.	14-E-0493	10/15/2015	D	9.00%
Michigan	Consumers Energy Co.	U-17735	11/19/2015	V	10.30%
Wisconsin	Wisconsin Public Service Corp.	6690-UR-124	11/19/2015	V	10.00%
Wisconsin	Northern States Power Co.	4220-UR-121	12/3/2015	V	10.00%
Illinois	Ameren Illinois	15-0305	12/9/2015	D	9.14%
Illinois	Commonwealth Edison Co.	15-0287	12/9/2015	D	9.14%
Michigan	DTE Electric Co.	U-17767	12/11/2015	V	10.30%
Oregon	Portland General Electric Co.	UE 294	12/15/2015	V	9.60%
Texas	Southwestern Public Service Co	43695	12/17/2015	V	9.70%
Idaho	Avista Corp.	AVU-E-15-05	12/18/2015	V	9.50%
Wyoming	PacifiCorp	20000-469-ER-15	12/30/2015	V	9.50%
Washington	Avista Corp.	UE-150204	1/6/2016	V	9.50%
Arkansas	Entergy Arkansas Inc.	15-015-U	2/13/2016	V	9.75%

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to 2016

State	Utility	Docket	Decision Date	Vertically Integrated (V)/Distribution (D)	Return on Equity (%)
Indiana	Indianapolis Power & Light Co.	44576	3/16/2016	V	9.85%
Massachusetts	Fitchburg Gas & Electric Light	15-80	4/29/2016	D	9.80%
Maryland	Baltimore Gas and Electric Co.	9406	6/3/2016	D	9.75%
New Mexico	El Paso Electric Co.	15-00127-UT	6/8/2016	V	9.48%
New York	NY State Electric & Gas Corp.	15-E-0283	6/15/2016	D	9.00%
New York	Rochester Gas & Electric Corp.	15-E-0285	6/15/2016	D	9.00%
Indiana	Northern Indiana Public Service Co.	44688	7/18/2016	V	9.98%
Tennessee	Kingsport Power Company	16-00001	8/9/2016	V	9.85%
Arizona	UNS Electric Inc.	E-04204A-15-0142	8/18/2016	V	9.50%
New Jersey	Atlantic City Electric Co.	ER-16030252	8/24/2016	D	9.75%
Washington	PacifiCorp	UE-152253	9/1/2016	V	9.50%
Michigan	Upper Peninsula Power Co.	U-17895	9/8/2016	V	10.00%
New Mexico	Public Service Co. of NM	15-00127-UT	9/28/2016	V	9.58%
Massachusetts	Massachusetts Electric Co.	15-155	9/30/2016	D	9.90%
Wisconsin	Madison Gas and Electric Co.	3270-UR-121	11/9/2016	V	9.80%
Oklahoma	Public Service Company of OK	PUD 201500208	11/10/2016	V	9.50%
Maryland	Potomac Electric Power Co.	9418	11/15/2016	D	9.55%
Wisconsin	Wisconsin Power and Light Co	6680-UR-120	11/18/2016	V	10.00%
Florida	Florida Power & Light Co.	160021-EI	11/29/2016	V	10.55%
California	Liberty Utilities CalPeco	A15-05-008	12/1/2016	V	10.00%
Illinois	Ameren Illinois	16-0262	12/6/2016	D	8.64%
Illinois	Commonwealth Edison Co.	16-0259	12/6/2016	D	8.64%
South Carolina	Duke Energy Progress Inc.	2016-227-E	12/7/2016	V	10.10%
New Jersey	Jersey Central Power & Light Co.	ER-16040383	12/12/2016	D	9.60%
Connecticut	United Illuminating Co.	16-06-04	12/14/2016	D	9.10%
Colorado	Black Hills Colorado Electric	16AL-0326E	12/19/2016	V	9.37%
Maine	Emera Maine	2015-00360	12/19/2016	D	9.00%
North Carolina	Virginia Electric & Power Co.	E-22 Sub 532	12/22/2016	V	9.90%
Nevada	Sierra Pacific Power Co.	16-06006	12/22/2016	V	9.60%
Idaho	Avista Corp.	AVU-E-16-03	12/28/2016	V	9.50%

¹ The Arkansas Public Service Commission originally approved a 9.3% ROE, but increased it to 9.5% or rehearing. See Order No. 35, Arkansas Docket 13-028-U.

Entire Period

# of Decisions	88	
Average (All Utilities)		9.65%
Average (Distribution Only)		9.36%
Average (Vertically Integrated Only)		9.81%
Median		9.70%
Minimum		8.64%
Maximum		10.55%

2014

# of Decisions	33	
Average (All Utilities)		9.75%
Average (Distribution Only)		9.49%
Average (Distribution Only, exc. IL FRP)		9.53%
Average (Vertically Integrated Only)		9.92%

2015

# of Decisions	23	
Average (All Utilities)		9.60%
Average (Distribution Only)		9.17%
Average (Distribution Only, exc. IL FRP)		9.19%
Average (Vertically Integrated Only)		9.75%

Estimated Revenue Requirement Impact of Difference in ROE Between 9.81 Percent and 11.0 Percent

Line No.	Description	Amount
1	Proposed Jurisdictional Adjusted Rate Base, 2017 TY (\$000)	\$ 2,418,917
2	Return on Rate Base at 10.25 Percent ROE	5.54%
3	1 x 2 Jurisdictional Net Operating Income	\$ 133,985
4	Jurisdictional Adjusted Net Income	\$ 80,723
5	3 - 4 Net Operating Income Deficiency	\$ 53,262
6	Net Operating Income Multiplier	1.63
7	5 x 6 Revenue Requirement	\$ 86,991
8	Gulf Proposed	\$ 106,782
9	8 - 7 Increase Due to Proposed Increase in ROE (\$000)	\$ 19,791
10	9 / 8 Increase Due to Proposed Increase in ROE (%)	18.5%

Sources:
 MFR A-1, 2017 Test Year
 Exhibit SWC-5, page 2

Line No.	Jurisdictional Capital		Ratio	Cost Rate	Weighted Cost Rate
	Structure (\$000)				
1	Long Term Debt	\$ 732,273	30.27%	4.40%	1.33%
2	Short Term Debt	\$ 28,504	1.18%	3.02%	0.04%
3	Preferred Stock	\$ 94,609	3.91%	6.15%	0.24%
4	Common Equity	\$ 969,275	40.07%	9.81%	3.93%
5	Customer Deposits	\$ 24,536	1.01%	2.30%	0.02%
6	Deferred Income Taxes	\$ 603,001	24.93%	0.00%	0.00%
7	ASC 740 Deferred Taxes	\$ (34,002)	-1.41%	0.00%	0.00%
8	Investment Credit	\$ 721	0.03%	8.05%	0.00%
9	Sum 1 to 7 Total	\$ 2,418,917	100%		5.54%

Source:
 MFR D-1A, 2017 Test Year

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Electronic Mail this 13th day of January, 2017 to the following:

Theresa Lee Eng Tan, Esq.
Kelley Corbari, Esq.
Florida Public Service Commission
Division of Legal Services
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399
ltan@psc.state.fl.us
kcorbari@psc.state.fl.us
blheriss@psc.state.fl.us
scuello@psc.state.fl.us
kyound@psc.state.fl.us

Mr. Robert L. McGee, Jr.
One Energy Place
Pensacola, FL 32520-0780
Email: rlmcgee@southernco.com

Federal Executive Agencies
ATTN: Thomas A. Jernigan, Esq.
139 Barnes Drive, Suite 1
AFLOA/JACE - ULFSC
Tyndall AFB, FL 32403-5319
Email: Thomas.Jernigan.3@us.af.mil

Southern Alliance for Clean Energy
Bradley Marshall, Esq.
bmarshall@earthjustice.org
Aliso Coe, Esq.
acoe@earthjustice.org
Earthjustice
111 S. Martin Luther King Jr. Blvd.
Tallahassee, Florida 32301

Jeffrey A. Stone, Esq.
Russell Badders, Esq.
Steven R. Griffin, Esq.
Beggs & Lane
Post Office Box 12950
Pensacola, FL 32591

J.R. Kelly, Esq.
Charles Rehwinkel, Esq.
Stephanie Morse, Esq.
Office of the Public Counsel
111 West Madison Street
Room 812
Tallahassee, Florida 32399
Kelly.JR@leg.state.fl.us
Rehwinkel.Charles@leg.state.fl.us
Morse.Stephanie@leg.state.fl.us


Attorney