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RECEIVED

APR 07 2010

PUBLIC SERVICE

COMMISSION

April 6, 2010

VIA FEDERAL EXPRESS Mr. Jeff Derouen, Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, KY 40602

RE: Case No. 2009-00459

Dear Mr. Derouen:

Enclosed for filing, please find the original and twelve (12) copies of (1) DIRECT TESTIMONY OF STEVE W. CHRISS ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC. By copy of this letter, all parties listed on the Certificate of Service have been served.

Also, enclosed is an extra copy of the filing. Please stamp the extra copy as "received" and return it in the postage prepaid envelope.

Please do not hesitate to contact me should you have questions.

Sincerely,

folly RX

Holly Rachel Smith

cc: Certificate of Service

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of The Application for General Adjustment of Electric Rates Of Kentucky Power Company

Case No. 2009-00459

RECEIVED

APR 07 2010

PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF STEVE W. CHRISS

ON BEHALF OF

WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

Dated: April 7, 2010

		Wal-Mart Stores East, LP and Sam's East, Inc. Direct Testimony of Steve W. Chriss Kentucky Case 2009-00459	
1	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND	
2		OCCUPATION.	
3	A.	My name is Steve W. Chriss. My business address is 2001 SE 10th St.,	
4		Bentonville, AR 72716-0550. I am Manager, State Rate Proceedings, for	
5		Wal-Mart Stores, Inc.	
6	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CAUSE?	
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	Α.	In 2001, I completed a Masters of Science in Agricultural Economics at	
11		Louisiana State University. From 2001 to 2003, I was an Analyst and later	
12		a Senior Analyst at the Houston office of Econ One Research, Inc., a Los	
13		Angeles-based consulting firm. My duties included research and analysis	
14		on domestic and international energy and regulatory issues. From 2003	
15		to 2007, I was an Economist and later a Senior Utility Analyst at the Public	
16		Utility Commission of Oregon in Salem, Oregon. My duties included	
17		appearing as a witness for PUC Staff in electric, natural gas, and	
18		telecommunications dockets. I joined the energy department at Walmart	
19		in July 2007. My Witness Qualifications Statement is found on Exhibit	
20		SWC-1.	
		1	

 1
 Q.
 HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE

 2
 KENTUCKY PUBLIC SERVICE COMMISSION ("PSC" OR

 3
 "COMMISSION")?

A. No.

4

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

7 Α. Yes. I have submitted testimony before utility regulatory commissions in 8 Arkansas, Colorado, Connecticut, Delaware, Indiana, Louisiana, Missouri, 9 Nevada, New Mexico, Oklahoma, Oregon, South Carolina, Utah, and 10 Virginia on dockets regarding cost of service and rate design, gualifying 11 facility rates, telecommunications deregulation, resource certification, 12 energy efficiency/demand side management, fuel cost adjustment 13 mechanisms, and the collection of cash earnings on construction work in 14 progress.

Q. HAVE YOU PREPARED EXHIBITS?

A. Yes. I have prepared Exhibit SWC-1, consisting of four pages, Exhibit
SWC-2 consisting of two pages, and Exhibit SWC-3, consisting of five
pages.

19

15

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address issues related to revenue
allocation and rate design in Kentucky Power Company's ("KPC")
application in this docket. I will respond to the testimony of David M.

		Kentucky Case 2009-0045
1		Roush. The fact that an issue is not addressed directly should not be
2		construed as an endorsement of KPC's position or the position of any
3		other party.
4	Q.	PLEASE SUMMARIZE YOUR RECOMMENDATIONS.
5	A.	My recommendations are as follows:
6	1)	For the purposes of this docket, Walmart does not object to the
7		Company's proposed revenue allocation;
8	2)	If the Commission determines that the appropriate level of revenue
9		requirement is lower than the level proposed by the Company, the
10		Commission should determine the extent to which rates can be moved
11		closer to the cost of service for each rate class; and
12	3)	Walmart recommends that the Commission reject the proposed
13		modifications to the QP rate design. However, due to the disparate
14		changes in demand and energy charges as a result of moving to a full
15		cost demand charge, for the purposes of this docket, QP rates should
16		continue to be designed in a "nearly full cost" manner.

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1 Revenue Allocation

	11	
2	Q.	GENERALLY, WHAT IS WALMART'S POSITION ON SETTING RATES
3		BASED ON THE UTILITY'S COST OF SERVICE?
4	A.	Walmart advocates that rates be set based on the utility's cost of service.
5		This produces equitable rates that reflect cost causation, send proper
6		price signals, and minimize price distortions.
7	Q.	WHAT IS THE COMPANY'S STATED OBJECTIVE FOR THEIR
8		RATEMAKING PROPOSAL?
9	A.	KPC's objective for the ratemaking process, as stated by Mr. Roush, is to
10		design rates that reflect "as nearly as possible" the actual costs of serving
11		the customer. See Direct Testimony of David M. Roush, page 9, line 7 to
12		line 8.
13	Q.	DOES THE COMPANY'S PROPOSED REVENUE ALLOCATION
14		REFLECT THE COMPANY'S RATEMAKING OBJECTIVE?
15	А.	Yes, to a limited degree. The Company's proposed revenue allocation
16		reflects movement towards cost of service. KPC is proposing to use the
17		"equal percentage subsidy reduction" methodology and reduce the cross-
18		subsidies currently in rates by 10 percent. <i>Id.</i> page 10, line 1 to page 11,
19		line 6.

		Kentucky Case 2009-00459
1	Q.	DOES THE COMPANY PROVIDE A REASON FOR NOT MOVING EACH
2		CLASS TO THEIR RESPECTIVE CLASS COST OF SERVICE?
3	A.	Yes. The Company states that in the context of this docket, in which
4		movement all the way to cost based rates would produce large rate
5		changes for customers, it is appropriate to temper movement towards cost
6		of service to recognize those rate impacts. <i>Id.</i> page 10, lines 13 to 23.
7	Q.	FOR THE PURPOSES OF THIS DOCKET, DO YOU OBJECT TO THE
8		COMPANY'S PROPOSED REVENUE ALLOCATION?
9	A.	No. Given the level of the Company's proposed revenue requirement
10		increase and the associated increase to customer bills during the current
11		economic downturn, for the purposes of this docket I do not object to the
12		Company's revenue allocation.
13	Q.	WHAT IS YOUR RECOMMENDATION TO THE COMMISSION IF IT
14		DETERMINES THAT A LOWER LEVEL OF REVENUE REQUIREMENT
15		IS APPROPRIATE?
16	A.	If the Commission determines that the appropriate level of revenue
17		requirement is lower than the level proposed by the Company, the
18		Commission should determine the extent to which rates can be moved
19		closer to the cost of service for each rate class.

Rate Design

1

2	Q.	WHAT IS YOUR UNDERSTANDING OF THE STRUCTURE OF THE
3		CURRENT QP RATE DESIGN?
4	A.	My understanding is that the current QP rate design is that revenues are
5		recovered through a monthly service charge, an on-peak demand charge,
6		an off-peak excess per kW demand charge, a reactive demand charge,
7		and a volumetric per kWh energy charge. According to the Company, the
8		rate is "nearly full cost," as some fixed demand costs are collected
9		through the energy charge. See Direct Testimony of David M. Roush,
10		page 14, lines 11 to 20.
11	Q.	HAS KPC PROPOSED MODIFICATIONS TO THE QP RATE DESIGN?
12	А.	Yes.
13	Q.	WHAT IS YOUR UNDERSTANDING OF THE PROPOSED
14		MODIFICATIONS TO THE QP RATE DESIGN?
15	А.	My understanding of the proposed modifications for the QP rate design is
16		that generally the Company intends to move away from the current "nearly
17		full cost" rate charges and move to a structure under which significantly
18		more of the fixed demand costs are collected through the energy charges.
19	Q.	WHAT PERCENT OF THE PROPOSED NON-FUEL BASE REVENUES
20		FOR QP ARE DEMAND-RELATED?
21	A.	The Company's rate design indicates that the proposed non-fuel base
22		revenues for QP are approximately \$62 million. See Exhibit SWC-2, page

	Wal-Mart Stores East, LP and Sam's East, Inc. Direct Testimony of Steve W. Chriss Kentucky Case 2009-00459	
1	1, line 1. Demand-related costs, at the full cost level, constitute	
2	approximately \$47 million, or 76 percent, of the proposed non-fuel base	
3	revenues. Id. line 8.	
4	Q. WHAT PERCENT OF DEMAND-RELATED COSTS WILL BE	
5	COLLECTED ON THE DEMAND OR FIXED CHARGES IN THE	
6	PROPOSED QP TARIFF?	
7	A. Of the approximately \$47 million in demand-related costs, approximately	
8	\$9.8 million, or 21 percent, is proposed to be collected through demand or	
9	fixed charges. Id. line 9. That means that approximately 79 percent of	
10	the demand-related costs will be collected through energy charges.	
11	Q. WHY SHOULD THE PROPOSED QP MODIFICATIONS BE REJECTED	
12	BY THE COMMISSION?	
13	A. The proposed QP modifications should be rejected for the following	
14	reasons:	
15	1) The shift of demand costs from per kW demand charges to per kWh	
16	energy charges results in a shift in demand cost responsibility from lower	
17	load factor customers to higher load factor customers. This results in	
18	misallocation of cost responsibility as higher load factor customers	
19	overpay for the demand-related costs incurred by the Company to serve	
20	them;	
	7	

		Kentucky Case 2009-00459
1	2)	Collecting demand-related costs through an energy charge does not
2		accurately reflect the classification and allocation of demand-related costs
3		in the Company's cost of service study; and
4	3)	For QP customers, the shift results in a disparity between the increases in
5		the energy and demand charges. Under the Company's proposal, for
6		primary and sub-transmission customers, respectively, the on-peak
7		demand charge would decrease by 64 and 54 percent, the energy charge
8		for the first block would increase by 127 and 78 percent, and the energy
9		charge for the second block would increase by 18 and 16 percent. See
10		Exhibit SWC-2, page 2.
11	Q.	WHY IS THIS SHIFT A CONCERN FOR HIGH LOAD FACTOR
12		CUSTOMERS?
13	A.	The shift of demand costs from per kW demand charges to per kWh
14		energy charges results in a shift in demand cost responsibility from lower
15		load factor customers to higher load factor customers. This results in
16		misallocation of cost responsibility as higher load factor customers
17		overpay for the demand-related costs incurred by the Company to serve
18		them.
19	Q.	CAN YOU PROVIDE AN ILLUSTRATION OF THIS SHIFT IN DEMAND
20		COST RESPONSIBILITY?
21	A.	Yes. Assume the following:
	1	

		Wal-Mart Stores East, LP and Sam's East, Inc. Direct Testimony of Steve W. Chriss Kentucky Case 2009-00459
1		a) A utility has only two customers (Customer 1 and Customer 2), with
2		individual monthly peak demands of 20 kW for a total monthly
3		system load of 40 kW.
4		b) The annual cost to the utility to build and maintain the 40 kW
5		infrastructure is \$2,000, and the entire cost will be collected each
6		year, so each customer has caused the utility to incur \$1,000 of
7		demand-related costs.
8		c) Customer 1 has a monthly demand of 20 kW and a load factor of
9		0.6 and thus consumes 105,120 kWh/year (20 kW * 0.6 * 8760).
10		d) Customer 2 has a monthly demand of 20 kW and load factor of 0.3
11		and thus consumes 52,560 kWh/year (20kW * 0.3 * 8760).
12	Q.	IF THE DEMAND-RELATED COSTS WERE CHARGED ON A PER KW
13		BASIS, WHAT WOULD THE PER KW CHARGE BE?
14	Α.	The charge would be 4.17 per kW, calculated by $2,000 / 40$ kW / 12
15		months. Each customer would then pay \$1,000 for the demand-related
16		cost they impose on the system, calculated by 20 kW * \$4.17/kW * 12.
17	Q.	IF THE DEMAND-RELATED COSTS WERE CHARGED ON A PER KWH
18		BASIS, WHAT WOULD THE PER KWH CHARGE BE?
19	A.	If the utility were to charge the demand-related costs on a per kWh basis,
20		the energy charge would be 1.27 cents/kWh (or \$0.0127/kWh), calculated
21		by \$2,000 / 157,680 kWh, using total company sales (i.e., the sum of the
22		two customers' annual kWh usage) as the denominator.

		Wal-Mart Stores East, LP and Sam's East, Inc.
		Direct Testimony of Steve W. Chriss Kentucky Case 2009-00459
1	Q.	WHAT WOULD EACH CUSTOMER PAY UNDER THE PER KWH
2		CHARGE?
3	A.	Customer 1, who caused the utility to incur \$1,000 in demand-related
4		costs, with a load factor of 0.6 and an annual usage of 105,120 kWh,
5		would pay \$1,333 (\$0.0127/kWh * 105,120 kWh). Customer 2, who also
6		caused the utility to incur \$1,000 in demand-related costs, with a load
7		factor of 0.3 and an annual usage of 52,560 kWh, would pay \$667
8		(\$0.0127/kWh * 52,560).
9	Q.	IS THIS AN EQUITABLE RESULT?
10	A.	No. Even though each customer caused the utility to incur \$1,000 in fixed
11		costs, the utility will be over-recovering from one customer and under-
12		recovering from the other. Under the per kWh scenario, the utility would
13		over-recover from Customer 1, the higher load factor customer, by \$333
14		(i.e. \$1,333 in revenues minus \$1,000 in costs), and under-recover from
15		Customer 2, the lower load factor customer, by \$333 (i.e. \$667 in
16		revenues minus \$1,000 in costs).
17	Q.	HOW DOES THE COMPANY CLASSIFY AND ALLOCATE THE
18		DEMAND-RELATED COSTS TO THE VARIOUS RATE CLASSES?
19	A.	For class allocation purposes, the Company classifies the demand-related
20		costs as demand and/or customer related. The costs were then allocated
21		to the Company's retail customer classes using allocation factors based

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		Wal-Mart Stores East, LP and Sam's East, Inc. Direct Testimony of Steve W. Chriss Kentucky Case 2009-00459
1		on customer demand and number of customers. See Direct Testimony of
2		Daniel E. High, page 9, line 14 through page 11, line 14.
3	Q.	IS THE COLLECTION OF DEMAND-RELATED COSTS THROUGH AN
4		ENERGY CHARGE CONSISTENT WITH THE COMPANY'S
5		CLASSIFICATION AND ALLOCATION OF DEMAND-RELATED
6		COSTS?
7	A.	No. The Company does not classify or allocate any of the demand-
8		related costs on an energy basis. Those costs are incurred based on
9		customer demand or number of customers. Costs should be collected in
10		a manner which reflects how they are incurred, and collecting demand-
11		related costs through an energy charge violates cost causation principles.
12	Q.	ARE YOU CONCERNED THAT THERE IS POTENTIAL FOR THE
13		COMPANY TO EXPERIENCE INCREASED REVENUE INSTABILITY AS
14		A RESULT OF THE PROPOSED QP RATE?
15	A.	Yes. A benefit of collecting demand-related costs through demand
16		charges is that those revenues are in theory more stable than revenues
17		collected through energy charges. The Company seems to have
18		overlooked the potential risk of increased revenue instability, especially as
19		customers become more energy efficient, that could result from collecting
20		more demand-related costs through an energy charge.

		Kentucky Case 2009-00459
1	Q.	PLEASE DESCRIBE THE DEMAND CHARGE AND ENERGY CHARGE
2		CHANGES UNDER THE COMPANY'S PROPOSAL.
3	A.	Under the Company's proposal, for primary and sub-transmission
4		customers, respectively, the on-peak demand charge would decrease by
5		64 and 54 percent, the energy charge for the first block would increase by
6		127 and 78 percent, and the energy charge for the second block would
7		increase by 18 and 16 percent. See Exhibit SWC-2, page 2.
8	Q.	IS THIS AN EQUITABLE RESULT?
9	A.	No. The increases in energy charges disproportionately affect high load
10		factor customers that use more energy relative to their demand.
11	Q.	IF THE PROPOSED DEMAND-RELATED COSTS ARE COLLECTED
12		THROUGH THE FULL COST DEMAND CHARGE, WHAT ARE THE
13		RESULTING DEMAND CHARGE AND ENERGY CHARGE CHANGES?
14	A.	If the proposed demand-related costs are collected through only the full
15		cost demand charge, for primary and sub-transmission customers,
16		respectively, the resulting demand charge increases are 63 and 53
17		percent and the energy charge decreases are 7 and 8 percent. Id.

HAVE YOU ALSO CALCULATED THE DEMAND AND ENERGY 1 Q. CHARGE CHANGES THAT WOULD RESULT FROM A "NEARLY FULL 2 **COST" RATE DESIGN?** 3 4 Α. Yes. The resulting demand charge increases, for primary and subtransmission customers, respectively, would be 35 and 16 percent and the 5 energy charge increases would be 18 and 16 percent. Id. 6 WHAT IS YOUR RECOMMENDATION TO THE COMMISSION ON THIS 7 Q. 8 **ISSUE?** 9 Α. Walmart recommends that the Commission reject the proposed modifications to QP rates. While Walmart would prefer moving to the full 10 cost demand charge, due to the disparate changes in demand and energy 11 charges as a result of moving to a full cost demand charge, for the 12 purposes of this docket, QP rates should continue to be designed in a 13 14 "nearly full cost" manner. DOES THIS CONCLUDE YOUR TESTIMONY? 15 Q. 16 Α. Yes.

Steve W. Chriss

Manager, State Rate Proceedings 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 Manager, State Rate Proceedings

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 1997-1998	Louisiana State University University of Florida	M.S., Agricultural Economics Graduate Coursework, Agricultural Education
	-	and Communication
1997	Texas A&M University	B.S., Agricultural Development
		B.S., Horticulture

TESTIMONY

2010

Virginia State Corporation Commission Case 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 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: 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.

Corporation Commission of the State of Oklahoma 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.

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.

ENERGY INDUSTRY PUBLICATIONS AND PRESENTATIONS

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.

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.

QP

(1)		Base Revenues Less Fuel	\$ 62,054,702
(2)	,	Demand Revenues	\$ 47,028,893
(3)		Customer	\$ 492,696
(4)		Excess KVAR	\$ 389,422
(5)		Off-Peak Excess Demand	\$ 42,140
(6)		On-Peak Demand	\$ 8,914,875
(7)	(3) + (4) + (5) + (6)	Total	\$ 9,839,133
(8)	(2) / (1)	% Demand Revenues	76%
(9)	(7) / (2)	% Demand Revenues Collected on Demand or Fixed Charges	21%

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Sources:

(1) Exhibit SWC-3, page 1, section I.
 (2) Exhibit SWC-3, page 3, section VII.
 (3) Exhibit SWC-3, page 1, section III.
 (4) Exhibit SWC-3, page 1, section IV.
 (5) Exhibit SWC-3, page 2, section V.
 (6) Exhibit SWC-3, page 4, section VIII.

Curr	ent Charge		P			
Description	Service Voltage	Rate	Description	Service Voltage	Rate	Change
(1)	(2)	(3)	(4)	(5)	(6)	(7) (6) / (3) - 1
Proposed QP Rates	Primary	\$ 11.53	On-Peak Demand (\$/kW)	Primary	\$ 4.15	-64%
On-Peak Demand (\$/kW)	Sub-Transmission	\$ 8.81		Sub-Transmission	\$ 4.06	-54%
Energy Charge (\$/kWh)	Primary	\$0.03233	Energy - Block 1	Primary	\$0.07324	127%
- all kWh	Sub-Transmission	\$0.03201		Sub-Transmission	\$0.05700	78%
Energy Charge (\$/kWh)	Primary	\$0.03233	Energy - Block 2	Primary	\$0.03800	18%
- all kWh	Sub-Transmission	\$0.03201		Sub-Transmission	\$0.03729	16%
Full Cost Demand	Primary	\$ 11.53	On-Peak Demand (\$/kW)	Primary	\$ 18.80	63%
On-Peak Demand (\$/kW)	Sub-Transmission	\$ 8.81		Sub-Transmission	\$ 13.45	53%
Energy Charge (\$/kWh)	Primary	\$0.03233	Energy Charge (\$/kWh)	Primary	\$0.03005	-7%
- all kWh	Sub-Transmission	\$0.03201	- ail kWh	Sub-Transmission	\$0.02949	-8%
"Nearly Full Cost"	Primary	\$ 11.53	On-Peak Demand (\$/kW)	Primary	\$ 15.52	35%
On-Peak Demand (\$/kW)	Sub-Transmission	\$ 8.81		Sub-Transmission	\$ 10.23	16%
Energy Charge (\$/kWh)	Primary	\$0.03233	Energy Charge (\$/kWh)	Primary	\$0.03799	18%
- all kWh	Sub-Transmission	\$0.03201	- all kWh	Sub-Transmission	\$0.03728	16%

Sources:

(3) Tariff Q.P. (Quantity Power), 2nd Revised Sheet No. 10-1
(6) (Proposed QP Rates) Exhibit SWC-3, page 5
(6) (Full Cost Demand) Exhibit SWC-2 Workpaper
(6) ("Nearly Full Cost") Exhibit SWC-3, page 3, Section VII, and Exhibit SWC-3, page 2, Section VI

Calculation of Full Cost Demand Energy Charge

Energy Revenue (Exhibit SWC-3, page 2, Section VI) Loss Adjusted Billing Energy				26,710,410 855,084,980			
			\$	0.03124			
Loss Factor Adjustment	Primary	* 0.962	\$	0.03005			
Sub-Transmission * 0.944				0.02949			
Calculation of Full Cost Demand On-Peak Demand Charge							
Full Cost Demand Charge (Exh	ction VII)	\$	22.64				
Loss Factor Adjustment	Primary	* 0.967	\$	21.89			
	Sub-Transmission	* 0.946	\$	21.42			
Equipment Credit	Primary	\$ (3.09)) \$	18.80			
	Sub-Transmission	\$ (7.97)	\$ (13.45			

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Proposed Revenue

1.

I.	Proposed Revenue		Accrued Revenue	Fuel <u>Revenue</u>	Base Revenue
	Demand Energy Customer		\$35,056,095 28,794,488 288,197	\$0 2,084,078 0	\$35,056,095 26,710,410 288,197
	Total		\$64,138,780	\$2,084,078	\$62,054,702
8.	Billing Determinant Summary	Secondary	Primary	Subtransmission	Transmission
	On-Peak Billing Demand Off-Peak Excess Billing Demand Billing Reactive First 350 KWh per Billing kW All Over 350 kWh per Billing kW Total Billing kWh Billis	8,718 0 13 3,051,300 2,154,023 5,205,323 12	955,233 5,340 162,132 308,081,259 106,505,182 414,588,441 588	1,091,478 6,885 319,607 341,592,092 97,017,036 436,609,128 398	119,865 322 30,446 37,267,958 2,304,752 39,572,710 48

KENTUCKY POWER COMPANY OP Rate Design Twelve Months Ended September 30, 2009

Billed and

ill. Proposed Customer Charges & Revenue

Proposed Customer Charge	Customer		Full Cost	Use: Current
	Revenue	<u>Bills</u>	<u>Rate</u>	Rate
Secondary	202	12	\$16.83	\$276
Primary	89,592	588	\$152.37	\$276
Subfransmission	167,885	396	\$398.70	\$682
Transmission	40,517	48	\$844.10	\$1,353
Total	\$268,195	1,044		
Proposed Customer Revenue		Proposed <u>Rate</u>	Bills	Customer <u>Revenue</u>
Secondary		\$276.00	12	3,312
Primary		\$276.00	588	162,288
Subtransmission		\$662.00	396	262,152
Transmiasion		\$1,353.00	48	<u>64,944</u>
Total			1,044	\$492,698

IV. Proposed Excess KVAR Charges & Revenue

Proposed KVAR Revenue	Use: CIP-TOD Proposed Rate	Excess <u>KVAR</u>	Revenue
Secondary	\$0.76	13	10
Primary	\$0.76	162,132	123,220 243,053
Subiransmission	\$0.76 \$0.76	319,807 30,448	23,139
Transmission	\$0.10		
Total		512,398	\$389,422

	9 QP Rate Design.XLS e 2 of 5	c	KY POWER COMPAN NP Rate Design s Ended September 30		Commission Sta Order Da
V.	Proposed Off-Peak Excess Demand	Charges and Revenue	Ð		
		- 07			
		Off-peak Excess	Proposed		
		Demand	Rate	Revenue	
	•	_			
	Secondary	0	\$9.39	0	
	Primary Sublransmission	5,340	\$6.09	32,521	
	Transmission	6,885	\$1.34	9,226	
	Hansinission	322	\$1.22	393	
	Total	12,547		\$42,140	
VI.	Proposed Energy Charges and Reve	enne			
	_	Billing	Loss	Loss Adj	
	Loss Adjusted Energy	Energy	Factor	Energy	
	Secondary	5,205,323	1.000	5,205,323	
	Primary	414,586,441	0.962	398,832,156	
	Subtransmission	438,609,128	0.944	414,047,017	
	Transmission	39,572,710	D 935	37,000,484	
	Toial	897,973,602		855,084,980	
	Energy Revenue	26,710,410			
	Shortfall due to < Full Cost Demand	7,054,334			
	Energy Revenue	\$33,764,744			
	Loss Adjusted Billing Energy	855,084,980			
	Secondary Energy Charge	\$0.03949			
		Secondary	Loss	Proposed	
		Rate	Factor	Rate	
	Secondary	0.03949	1.000	0.03949	
	Primary	0 03949	0.962	0.03799	
	Subtransmission	0.03949	0.944	0.03728	
	Transmission	0.03949	0.835	0.03692	
	Proposed Energy Revenue				
	· · · · · · · · · · · · · · · · · · ·	Billing	Proposed		
		Energy	Rate	Revenue	
	Secondary	5,205,323	\$0.03949	205,558	
	Primary	414,586,441	\$0.03799	15,750,139	
	Subtransmission	438,609,128	\$0.03728	16,351,348	
	noiseimansıT	39,572,710	\$0.03692	1,461,024	
	Total	897,973,602		\$33,768,069	

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VII. Proposed Minimum Demand Cha	njes				
Calculation of Loss Adj Demand	Billing Demand	Loss Factor	Loss Adj Demand		
Secondary Primary Subtransmission Transmission	, 8,718 955,233 1,091,478 119,865	1.000 0.987 0.946 0.936	8,718 923,710 1,032,538 112,194		÷
Total	2,175,294		2,077,160		
Equipment Credit Revenue	8Wing Demand	Equipment <u>Credit</u>	Credit Revenue		,
Secondary Primary Subtransmission Transmission	8,718 955,233 1,091,478 119,865	0.00 (3.09) (7.97) (8.19)	\$0 -\$2,951,670 -\$8,699,080 _\$1,101,559		
Total	2,175,294		(\$12,752,309)		
Total Required Base Revenue Less: Customer Revenue Excess KVAR Revenue Off-peak Excess Revenue Alternate Feed Revenue Energy Revenue Equipment Credit Reven Demand Revenue	143,450 26,710,410				
Loss Adjusted Billing Demand Full Cost Demand Charge	2,077,160				
	5% \$19.24				
Demand Charges	Secondary Rate	Loss <u>Factor</u>	Demand <u>Rale</u>	Equipment <u>Credit</u>	Proposed Rate
Secondary Primary Subtransmission Transmission	\$19.24 \$19.24 \$18.24 \$19.24	1.000 0.967 0.946 0.936	\$19.24 \$18.61 \$18.20 \$18.01	0.00 (3.09) (7.97) (9.19)	\$19.24 \$15.52 \$10.23 \$8.82

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VIII. Proposed On-Peak Demand Charges & First Block Energy Charges

Proposed On-Peak Damand Revenue		Proposed LGS			
On-Peak Demand Revenue	On-Peak Demand	Rate	Revenue		
Secondary	8,718	\$4.29	\$37,400		
Primary	955,233	\$4.15	\$3,964,217		
Subtransmission	1,091,478	\$4.08	\$4,431,401		
Transmission	119,865	\$4 02	\$481,857		
Total	2,175,294		\$8,914,87 5		
Incremental First Block Energy Charge	3	Minimum Rate		First	
	On-Peak	Less		Block	Incremental -
On-Peak Demand Revenue	Demand	Proposed Rate	Revenue	Energy	Rate
Secondary	8,718	\$14.95	\$130,334	3,051,300	\$D.04271
Primary	955,233	\$11.37	\$10,860,999	308,081,259	\$0.03525
Subtransmission	1,091,478	\$6.17	\$6,734,419	341,592,092	\$0.01971
Transmission _	119,865	\$4.80	\$575,362	37,267,958	\$D.01644
Total	2,175,294		\$18,301,104		
Proposed Energy Charges					
	(All-Hour)		Proposed		
*	Second Block	Incremental	First Block		
	Rate	Rate	Rate		
Secondary	\$0.03949	\$0.04271	\$0.08220		
Primary	\$0.03799	\$0.03525	\$0.07324		
Subtransmission	\$0.03728	\$0.01971	\$0.05699		
Transmission	\$0.03692	\$0.01544	\$0.05238		

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KENTUCKY POWER COMPANY QP Rate Design Twelve Months Ended September 30, 2009

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IX.	Revenue Verifi	cation	Units	Rate	Revenue	Target	Difference
	Secondary	On-Peak Demand	8.718 kW	\$4.29 /kW	\$37,400		
		Off-peak Excess	0 kW	9.39 /kW	0		
		Excess KVAR	13 KVAR	D.76 /KVAR	10		
		Energy - Block 1	3,051,300 kWh	0.08220 /kWh	250,817		
		Energy - Block 2	2,154,023 kWh	0.03949 /kWh	85.062		
		Customer	12 Bills	276.00 /Mo	3,312		
		Total Billed			\$376,601		
	Primary	On-Peak Demand	955,233 kW	\$4.15 /kW	\$3,964,217		
		Off-peak Excess	5,340 kW	6.09 /kW	32,521		
		Alternate Feed	30,392 kW	4.72 /kW	143,450		
		Excess KVAR	162,132 KVAR	0.76 /KVAR	123,220		
		Energy - Block 1	308,081,259 kWh	0.07324 <i>I</i> kWh	22,563,871		
		Energy - Block 2	106,505,182 kWh	0.038D0 /kWh *	4,047,197		
		Customer	588 Bills	276.00 /Mo	162,288		
		Total Billed			\$31,036,764		
	Subtran	On-Peak Demand	1,091,478 kW	\$4.06 /kW	\$4,431,401		
		Off-peak Excess	6.885 kW	1.34 /kW	9,22B		
		Excess KVAR	319,807 KVAR	0.76 /KVAR	243,053		
		Energy - Block 1	341,592,092 kWh	0.05700 /kWh *	19,470,749		
		Energy - Block 2	97.017.036 kWh	0.03729 /kWh*	3,617,765		
		Customer	396 Bills	662.00 /Mo	262,152		
		Total Billed			\$28,034,346		
	Tran	On-Peak Demand	119,865 kW	\$4.02 <i>l</i> kW	\$481,857		
		Off-peak Excess	322 kW	1.22 /kW	393		
		Excess KVAR	30,446 KVAR	0.76 /KVAR	23,139		
		Елегду - Block 1	37,267,958 kWh	0.05236 /kWh	1,951,350		
		Energy - Block 2	2,304,752 kWh	0.03692 /kWh	85,091		
		Customer	48 Bills	1,353.00 /Mn _	64,944		
		Total Billed			\$2,606,774		
	Total Tariff QP				\$82,054,485	\$62,054,702	(\$217)
						,	

KENTUCKY POWER COMPANY OP Rate Design Twelve Months Ended September 30, 2009

* Revised after revenue verification

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the Direct Testimony of Steve W. Chriss was served by mailing a true and correct copy via electronic mail (when available) and by first-class postage prepaid mail, to all parties on his 6^{th} day of April, 2010.

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