Davison Van Cleve PC

Attorneys at Law

TEL (503) 241-7242 •

FAX (503) 241-8160 • mail@dvclaw.com Suite 400 333 SW Taylor Portland, OR 97204

June 21, 2010

Via Electronic and US Mail

Public Utility Commission Attn: Filing Center 550 Capitol St. NE #215 P.O. Box 2148 Salem OR 97308-2148

Re: In the Matter of PORTLAND GENERAL ELECTRIC

Request for a General Rate Revision.

Docket No. UE 215

Dear Filing Center:

Enclosed please find an original and five copies and five redacted copies of the Opening Testimony of Randall J. Falkenberg (ICNU/100) with Exhibits (ICNU/101- ICNU/103) regarding net power costs on behalf of the Industrial Customers of Northwest Utilities in the above-referenced docket. Confidential Exhibits ICNU/102 and ICNU/103, along with confidential testimony are being submitted in separate envelopes. Thank you for your attention to this matter.

Sincerely,

<u>/s/ Kelli R. Madden</u> Kelli R. Madden Paralegal

Enclosures

cc: Service List

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the foregoing Opening

Testimony on behalf of the of the Industrial Customers of Northwest Utilities upon the parties,
on the official service list shown below for UE 215, by causing the same to be deposited in the

U.S. Mail, postage-prepaid, and via electronic mail where paper service has been waived.

Dated at Portland, Oregon, this 21st day of June, 2010.

Sincerely,

/s/ Kelli R. Madden
Kelli R. Madden

DEPARTMENT OF JUSTICE

STEPHANIE S ANDRUS (C) 1162 COURT ST NE SALEM OR 97301-4096 stephanie.andrus@state.or.us

(W) CITIZENS' UTILITY BOARD OF OREGON GORDON FEIGHNER $\,$ (C)

ROBERT JENKS (C)
G. CATRIONA MCCRACKEN (C)
RAYMOND MYERS (C)
KEVIN ELLIOTT PARKS
610 SW BROADWAY, SUITE 308
PORTLAND OR 97205
gordon@oregoncub.org
bob@oregoncub.org
catriona@oregoncub.org
ray@oregoncub.org
kevin@oregoncub.org

PUBLIC UTILITY COMMISSION

JUDY JOHNSON (C) PO BOX 2148 SALEM OR 97308-2148 judy.johnson@state.or.us PORTLAND GENERAL ELECTRIC

RANDALL DAHLGREN DOUGLAS C TINGEY (C) 121 SW SALMON ST - 1WTC0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com doug.tingey@pgn.com

HEATHER RODE

21465 NW COFFEY LANE HILLSBORO, OR 97124 heatherrode@gmail.com (W) BOEHM KURTZ & LOWRY

KURT J BOEHM 36 E SEVENTH ST - STE 1510 CINCINNATI OH 45202 kboehm@bkllawfirm.com

(W) ENERGY STRATEGIES LLC

KEVIN HIGGINS (C) 215 STATE ST - STE 200 SALT LAKE UT 84111-2322 khiggins@energystrat.comi (W) FRED MEYER STORES/KROGER

NONA SOLTERO DEPT #23C3800 SE 22ND AVE PORTLAND OR 97202 nona.soltero@fredmeyer.com

(W) PACIFIC POWER & LIGHT

JORDAN A WHITE 1407 W. NORTH TEMPLE, STE 320 SALT LAKE CITY UT 84116 jordan.white@pacificorp.com

(W) THE INTERNATIONAL DARK SKY ASSOCIATION

JAMES BENYA 3491 CASCADE TERRRACE WEST LINN OR 97068 jbenya@benyalighting.com LEO SMITH 1060 MAPLETON AVE SUFFIELD CT 06078 leo@smith.net

(W) CITY OF PORTLAND-CITY ATTORNEY'S OFFICE

BENJAMIN WALTERS (C) 1221 SW 4TH AVE. –RM 430 PORTLAND, OR 97204 ben.walters@portlandoregon.gov

IBEW LOCAL 125

Marcy Putman 17200 NE SACRAMENTO ST. PORTLAND, OR 97230 marcy@ibew125.com

(W) RICHARDSON & O'LEARY PLLC

GREGORY M. ADAMS PO BOX 7218 BOISE, ID 83707 peter@richardsonandoleary.com greg@richardsonandoleary.com

PETER J. RICHARDSON (C)

(W) PACIFICORP

OREGON DOCKETS
825 NE MULTNOMAH ST, STE 2000
PORTLAND OR 97232
oregondockets@pacificorp.com

JOSEPH MACDONALD

15273 SE LA BONITA WAY OAK GROVE, OR 97267

(W) CITY OF PORTLAND –PLANNING & SUSTAINABILITY

DAVID TOOZE 1900 SW 4TH STE. 7100 PORTLAND, OR 97201 david.tooze@portlandoregon.gov

(W) NORTHWEST ECONOMIC RESEARCH, INC.

LON L. PETERS (C) 607 SE MANCHESTER PLACE PORTLAND, OR 97202 lon@nw.econ.com

(W) SEMPRA ENERGY SOLUTIONS LLC

GREG BASS 401 WEST A STREET SUITE 500 SAN DIEGO, CA 92101 gbass@semprasolutions.com

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UE 215

In the Matter of)
PORTLAND GENERAL ELECTRIC COMPANY	/ \ / \ / \ / \ / \ / \ / \ / \ / \ / \
Request for a General Rate Revision.))))

OPENING TESTIMONY OF

RANDALL J. FALKENBERG

ON BEHALF OF

THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

Net Power Costs

REDACTED VERSION

SUBJECT TO GENERAL PROTECTIVE ORDER

(Redacted Information Removed)

- 2 A. Randall J. Falkenberg, PMB 362, 8343 Roswell Road, Sandy Springs, Georgia
- 3 30350.
- 4 Q. WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?
- 6 A. I am a utility rate and planning consultant holding the position of President and
- 7 Principal with the firm of RFI Consulting, Inc. ("RFI"). I am appearing in this
- 8 proceeding as a witness for the Industrial Customers of Northwest Utilities
- 9 ("ICNU").
- 10 Q. PLEASE BRIEFLY DESCRIBE THE NATURE OF THE CONSULTING SERVICES PROVIDED BY RFI.
- 12 **A.** RFI provides consulting services in the electric utility industry. The firm provides
- expertise in electric restructuring, system planning, load forecasting, financial
- analysis, cost of service, revenue requirements, rate design, and fuel cost recovery
- issues.
- 16 Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND APPEARANCES.
- 18 A. My qualifications and appearances are provided in Exhibit ICNU/101. I have
- 19 participated in and filed testimony in numerous cases involving Portland General
- 20 Electric Company ("PGE" or the "Company") and PacifiCorp net power cost
- issues over the past ten years.

1 I. INTRODUCTION AND SUMMARY 2 Q. WHAT IS THE PURPOSE OF THIS TESTIMONY? 3 A. ICNU has asked me to examine PGE's proposed net power cost study for the 4 2010 Annual Update Tariff ("AUT"). I have identified certain issues related to 5 the PGE MONET study that should be addressed in the final order in this case. 6 PLEASE SUMMARIZE YOUR TESTIMONY. 0. 7 A. I have concluded as follows: 8 1. I recommend the Commission reject PGE's proposal to increase the scope 9 of cost categories recovered via the AUT. I recommend that collateral 10 costs, lime, ammonia, mercury control costs and broker fees be excluded 11 from the AUT. These costs are more properly considered as part of the general rate revision application and should not be included on an on-12 13 going basis in the AUT. 14 2. The Company has assumed that BPA will increase wind integration costs 15 in 2011, based on a tariff provision. I recommend the Commission reject this proposal as there is no evidence BPA will do so. This adjustment is 16 17 not a known and measurable change. 18 3. The Company assumes it will incur imbalance charges from BPA, based 19 on analysis of 1998 wind data. The Company's analysis overstates the 20 amount of any potential imbalances because it assumes an overly 21 simplistic forecast model and outdated data will be used. I recommend the 22 imbalance forecast be reduced by 14% to reflect the use of actual 23 imbalance data for 2008-2009. 24 4. The Company has assumed BPA will increase transmission rates in 25 October 2011. This is not a known and measurable change, and should be 26 removed from the test year. 27 5. The Company's forecast of rail car maintenance costs for Boardman 28 appears excessive and should be reduced. I recommend use of a four-year average to normalize these costs. 29 30 6. The Company should implement actions to reverse the Boardman capacity 31 downgrade. The annual cost savings of the repair procedures are far more than the cost of the repair. 32 33 7. The Company's forecast of outage rates for Port Westward is too high

based on actual experience and reasonable performance expectations for a

34

mature combined cycle plant. I recommend a lower Equivalent Forced
Outage Rate ("EFOR") based on actual data for the Coyote combined
cycle plant.

8. I recommend the Commission implement the UM 1355 collar adjustments
in this proceeding to provide improved outage rate forecasts for Boardman
and Colstrip. Adjustments 9-11 in Table 1 are placeholders for the
ultimate collar adjustment, and provide a guide as to the impact of the

Table 1 summarizes the impact of each of these adjustments.

Commission's preferred collar mechanism.

8

9

Table 1 NPC Adjustments (\$1,000)

PGE Requested NPC					
Adjustments					
No.	Description				
1	Interest and Collateral Costs	(2 <i>,</i> 557)			
2	Other Cost Reclassifications*	(3,957)			
3	BPA Wind Integration Charges	(1,618)			
4	BPA Imbalance Fees	(204)			
5	BPA Transmission Rate Increase	(683)			
6	Boardman Rail Car Maintenance	(158)			
7	Baordman Capacity Derate	(1,371)			
8	Port Westward EFOR	(535)			
9	UM 1355 - Boardman Collar	(1,873)			
10	UM 1355 - Colstrip 3 Collar	(568)			
11	UM 1355 - Colstrip 4 Collar	530			
	*(Mercury control, Lime, Amonia, Broker fees)				
	Total	(12,994)			
Final Allowed N	PC	727,196			

Adjustment 1 and 2: Increasing the Scope of AUT Costs

2 Q. HAS PGE REQUESTED INCLUSION OF ANY NEW TYPES OF COSTS IN THE AUT?

1

4 Yes. The Company now requests inclusion of several new categories of costs that A. 5 have not previously been recovered via the AUT. These include: 1) Inclusion of 6 mercury control chemical costs at the Boardman plant; 2) Reclassification of 7 certain operating costs to net variable power cost, including the cost of broker 8 fees related to PGE's activities in the gas and electric markets; 3) Credit facilities 9 and margin interest associated with collateral deposits; 4) Ammonia for NOx 10 control at Coyote and Port Westward; and 5) Lime at Colstrip 3 and 4 for SO₂ control. 1/11

12 Q. WHAT WAS THE ORIGINAL PURPOSE OF THE AUT?

In UE 180, the AUT was characterized by the Company as a more narrow mechanism than the Resource Valuation Mechanism that would update "certain defined inputs" related to power costs. Re PGE, Docket No. UE 180, PGE Pre-Trial Brief page 6-7. PGE's proposal clearly moves in the opposite direction by broadening the scope of the AUT, and increasing the number of "defined" inputs.

- 18 Q. IS IT IMPORTANT THAT THE SCOPE OF COSTS INCLUDED IN A
 19 RATE ADJUSTMENT CLAUSE, SUCH AS THE AUT, BE NARROWLY
 20 DEFINED?
- 21 **A.** Yes. PGE's own witness, Mr. Stephen Fetter made the following comments in relation to Fuel Adjustment Clauses:

¹/ PGE/400, Niman – Peschka – Hager/8.

"O. IS THERE A DOWNSIDE TO USE OF A FAC? $^{2/2}$

A. I alluded to it earlier. The expedited (and even sometimes near-automatic) operation of an FAC should not allow imprudent actions by a regulated utility to avoid regulatory scrutiny. If costs for fuel and power supply are not prudently incurred, there should be a process to allow challenge of such improper actions, followed by the ability of the regulatory body to order disallowances and prevent inappropriate recovery. Only in this way can a fair balance be struck between customer and shareholder interests."

Re Aquila Networks, Case No. ER-2007-0004, Missouri Public Service Commission, Rebuttal Testimony of Steven Fetter, page 21.

While Mr. Fetter was addressing a fuel adjustment clause, an AUT and a fuel adjustment clause are not fundamentally different in terms of the way they operate. In years where there is not a general rate case filing, the AUT provides a limited amount of time for parties to review. This is particularly true for updates, which operate in a "near-automatic" fashion. The proposal by PGE to broaden the scope of costs recovered via the AUT would add to the complexity of the AUT process, while not providing any additional time to address the new costs being included. To the extent the new costs are allowed to be updated along the way, the problem is even more difficult to address.

- Q. ARE THERE ANY OTHER COMPLICATIONS IN THE AUT THAT WOULD NOT BE PRESENT IN OTHER KINDS OF AUTOMATIC ADJUSTMENT CLAUSES?
- **A.** Yes. The scope of the Annual Variance Tariff ("AVT") would also be broadened 26 to provide for recovery of actual costs that were projected in the AUT. There is

In this case, Mr. Fetter is discussing a Fuel Adjustment Clause, which is a close analog to a PCAM.

even less time available for review of the AVT filings than the AUT filings.

Consequently, Mr. Fetter's comments are "on-point."

Further, the AUT deals with projections and forecasts, not necessarily actual costs. Thus, in addition to being reviewed for prudence, the *reasonableness* of the projection needs to be evaluated as well. Finally, increasing the scope of costs to include interest-related expenses would potentially require parties to obtain experts who are versed in areas far outside of the normal power cost arena. All of this would further complicate the AUT process, and move away from PGE's original "sales pitch" that it was a narrow proceeding designed to recover certain defined inputs.

Q. WHAT IS YOUR RECOMMENDATION?

I recommend the Commission reject the proposal to increase the scope of the
AUT to include the new cost categories identified above. This results in a
reduction to test year NPC in the amount shown on Table 1. To the extent they
are reasonable and prudent, these costs could be recovered as part of base rates.

Adjustments 3 and 4: Wind Integration Costs

Q. DOES PGE INCLUDE WIND INTEGRATION COSTS IN THE AUT?

A. Yes. The Company includes charges incurred for the Biglow Canyon project pursuant to the BPA wind integration tariff for intra-hour wind integration. PGE also includes projected charges related to imbalance penalties that could be invoked by BPA as part of the hour-ahead integration costs. In addition, the

1		Company includes day-ahead integration costs of \$.50/MWH, the same figure
2		agreed to in the settlement in the 2009 GRC. ^{3/}
3 4	Q.	DO YOU AGREE WITH PGE'S CALCULATION OF CHARGES PURSUANT TO THE BPA WIND INTEGRATION TARIFF?
5	A.	No. The Company assumes that BPA will invoke a tariff clause allowing an
6		automatic increase in the charge (from \$1.29/KW-Month to \$1.58/KW-Month) in
7		2011. The Company also assumes that charge will be increased again in October
8		2011 as part of a general rate increase. I disagree with both of these assumptions.
9	Q.	PLEASE EXPLAIN.
10	A.	Section III.E.4. "Rate Adjustment" of BPA's ACS-10 Control Area Services
11		Rates: Wind Balancing Service BPA states:
12 13 14		(i) On 30 days' written notice posted on BPA-TS's OASIS, BPA may increase the rate as set forth in section III.E.4.ii, with a commensurate increase in the amount of balancing reserves set aside for Wind Balancing Service, if
15 16 17 18 19		a. one or more participants in the Pacific Northwest utility industry, including regional organizations, asks the Administrator to increase the amount of balancing reserves set aside for Wind Balancing Service in order to reduce the frequency or magnitude of BPA's implementation of Dispatcher Standing Order (DSO) 216; or
20 21 22 23		b. because of a legal challenge to DSO 216, BPA is prevented from implementing DSO 216 or is required to amend it materially.
24		(ii) The new total rate shall not exceed \$1.58 per kilowatt per month.
25		The Company assumes that such a request will be made and that BPA will
26		invoke the clause quoted above. However, ICNU monitors BPA developments
27		and at present ICNU is not aware of any request to increase balancing reserves.
28		There is no indication that BPA has decided to increase the tariff. In addition, the

UE 198, Stipulation Regarding Power Cost Issues, page 3.

rate may be increased up to \$1.58 per kilowatt month. Thus, even if a rate increase were to occur, there is no evidence of what the rate would be. Because the assumed increase is speculative, I recommend it be removed from computation of NPC for the test year. However, should BPA issue a decision that the increase will take place before the final update, I would not object to including it at that time.

7 Q. DO YOU AGREE WITH THE ASSUMPTION THAT BPA WILL HAVE A GENERAL RATE INCREASE IN OCTOBER 2011?

9 A. I understand BPA files rate cases on a two-year cycle and that the next increase 10 will likely occur in October 2011. However, the amount of the increase is 11 certainly not known at this time, and PGE's adjustment to the wind integration 12 charges (and other transmission rates) is clearly speculative. In transmission rate 13 cases, BPA has at times decided not to increase its transmission rates. If BPA's 14 rates increased, however, the PCAM would allow the Company recovery of those 15 costs subject to the deadbands and earnings tests, if such an increase were 16 necessary for it to earn a reasonable return.

Q. DO YOU AGREE WITH THE ASSUMPTIONS UNDERLYING THE HOUR-AHEAD WIND INTEGRATION COSTS?

17

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No. The Company uses data from a 1998 study of potential wind generation from Biglow Canyon to determine the imbalances that *might* occur. The modeling performed by the Company is based on a very simplistic forecasting model. The Company assumes a *two-hour persistence* technique would be used to develop an hour-ahead forecast. For example, the forecast for the hour ended 4 p.m. would be based solely on actual data for the hour ended 2 p.m. If the wind energy from

Biglow was 50 MW for the hour ended 2 p.m., PGE assumes that it would

2 generate 50 MW for the hour ended 4 p.m.

3 Q. IS THIS A REALISTIC ASSUMPTION?

4 Α. No. It assumes the Company can do no better in forecasting wind generation than 5 the simplistic "persistence" model forecast. This would ignore actual weather forecasts, the trend in wind generation as well as the structure of the BPA 6 7 Imbalance charges. It would also ignore readings from stations upwind of the 8 Biglow site, and pressure gradients between eastern and western Oregon, which 9 drive winds in the Columbia River Gorge. According to the Company, a detailed 10 forecasting model is used, which is supplied by a consulting firm with substantial 11 expertise in wind forecasting.

12 Q. IS THERE ACTUAL DATA AVAILABLE TO DEMONSTRATE HOW MUCH IMBALANCE HAS ACTUALLY OCCURRED?

14 Α. Yes. Based on the data provided in the response to ICNU Data Request No. 167, 15 for 2008-2009, about of the actual wind generation has been out of balance 16 enough to incur imbalance penalties under the BPA tariff. The Company 17 assumed that of the wind energy would incur BPA imbalance penalties. 18 Given that during the first few years of operating PGE has been gaining 19 experience both with its wind generation and with forecasts of wind energy, it 20 seems to me that in the future PGE could do better than it has done so far.

21 Q. WHAT IS YOUR RECOMMENDATION?

I recommend the PGE imbalance charges be reduced for the test year in computing the hour-ahead imbalance costs to reflect the actual experience discussed above. In future cases, I would recommend using additional data as it

1		becomes available, and eventually the use of a four-year average would seem
2		appropriate. This is shown on Table 1 as Adjustment 4.
		Adjustment 5: BPA Transmission Rate Increase
3 4	Q.	DID PGE ASSUME THAT BPA WOULD INCREASE TRANSMISSION RATES IN OCTOBER 2011?
5	A.	Yes. As discussed above, this is a speculative adjustment that cannot be
6		considered to be a known and measurable change to the test year. I recommend
7		this increase be removed from the test year.
8		Adjustment 6: Boardman Rail Car Maintenance
9	Q.	PLEASE EXPLAIN ADJUSTMENT 6.
10	A.	PGE's forecast for rail car maintenance is substantially higher than actual costs
11		for recent years, and substantially higher than 2009 actual costs. I recommend
12		use of a four-year average to compute the test year costs. Adjustment 6 shows the
13		impact of this change.
14		Adjustment 7: Boardman Capacity Derate
15 16	Q.	WHY HAS PGE ASSUMED THERE IS A DECREASE TO BOARDMAN'S CAPACITY?
17	A.	Confidential Exhibit ICNU/102 is copy of an email explaining this issue.
18		
19		
20		
21		Given
22		that the cost of the repair is far less than the cost of the capacity deration, it is not

1 reasonable for PGE to delay the repair. As a result, I recommend this capacity 2 reduction be reversed in the test year. 3 **Adjustment 8: Port Westward EFOR** 4 Q. WHAT IS THE BASIS FOR THIS ADJUSTMENT? 5 A. annual EFOR for Port Westward for 2011. This was PGE assumes a 6 developed by computing the blended average of the immature Port Westward 7 EFOR of 8 9 Now that Port Westward has had a 10 successful full year of reliable operation, there is no longer any need to assume 11 the use of an immature forced outage rate for the plant. IS THIS ADJUSTMENT CONSISTENT WITH THE STIPULATION IN 12 Q. 13 **UM 1355?** 14 A. Yes. The stipulation did not address the issue of Port Westward's outage rate. 15 However, the stipulation testimony indicated that parties agreed it was better to address the issue on a case-by-case basis. 4/ The Company, however, agreed to 16 make its filings on the basis of a blended average figure. $\frac{5}{2}$ Were the Company to 17 18 have used a blended average of actual and mature forced outage rates, I would not 19 object to its approach. However, in this case, the Company used EFOR's 20 appropriate only for initial (immature) operation of the plant. Confidential 21 Exhibit ICNU/103 is a copy of internal PGE documentation that indicates the 22 Company is using a similar assumption for its 2011 budget forecasts.

Re OPUC, Docket No. UM 1355, Staff-ICNU-CUB-PGE 100, Brown-Falkenberg-Jenks-Hager/8. Id. at 7.

Adjustments 9-11: UM 1355 Collar

2 Q. WHAT IS THE PURPOSE OF THE UM 1355 COLLAR ADJUSTMENTS SHOWN ON TABLE 1?

4 A. In the UM 1355 Stipulation, parties agreed to a specific collar mechanism for 5 PGE. The Company implemented this mechanism in the filing. However, the 6 Commission has indicated preference for a different collar mechanism, and the 7 final collar remains to be decided. These adjustments are a placeholder for the 8 ultimate mechanism decided by the Commission, but are based on the 9 Commission's preferred collar. The figures presented are only a guide as to the 10 ultimate level of the adjustment, as the final form of the mechanism is not now 11 known. Further, the data necessary (life of plant outage rates) was not fully 12 available, and PGE has argued it does not have the necessary data. ICNU 13 recommends the Commission require PGE to implement the final collar 14 mechanism before the rates from this case go into effect.

15 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

16 **A.** Yes.

1

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

	UE 215
In the Matter of)
PORTLAND GENERAL ELECTRIC COMPANY))
Request for a General Rate Revision.)

ICNU/101

QUALIFICATIONS OF RANDALL J. FALKENBERG

June 21, 2010

QUALIFICATIONS OF RANDALL J. FALKENBERG, PRESIDENT

EDUCATIONAL BACKGROUND

I received my Bachelor of Science degree with Honors in Physics and a minor in mathematics from Indiana University. I received a Master of Science degree in Physics from the University of Minnesota. My thesis research was in nuclear theory. At Minnesota I also did graduate work in engineering economics and econometrics. I have completed advanced study in power system reliability analysis.

PROFESSIONAL EXPERIENCE

After graduating from the University of Minnesota in 1977, I was employed by Minnesota Power as a Rate Engineer. I designed and coordinated the Company's first load research program. I also performed load studies used in cost-of-service studies and assisted in rate design activities.

In 1978, I accepted the position of Research Analyst in the Marketing and Rates department of Puget Sound Power and Light Company. In that position, I prepared the two-year sales and revenue forecasts used in the Company's budgeting activities and developed methods to perform both near- and long-term load forecasting studies.

In 1979, I accepted the position of Consultant in the Utility Rate Department of Ebasco Service Inc. In 1980, I was promoted to Senior Consultant in the Energy Management Services Department. At Ebasco I performed and assisted in numerous studies in the areas of cost of service, load research, and utility planning. In particular, I was involved in studies concerning analysis of excess capacity, evaluation of the planning activities of a major utility on behalf of its public service commission, development of a methodology for computing avoided costs and cogeneration rates, long-term electricity price forecasts, and cost allocation studies.

At Ebasco, I specialized in the development of computer models used to simulate utility production costs, system reliability, and load patterns. I was the principal author of production costing software used by eighteen utility clients and public service commissions for evaluation of marginal costs, avoided costs and production costing analysis. I assisted over a dozen utilities in the performance of marginal and avoided cost studies related to the PURPA of 1978. In this capacity, I worked with utility planners and rate specialists in quantifying the rate and cost impact of generation expansion alternatives. This activity included estimating carrying costs, O&M expenses, and capital cost estimates for future generation.

In 1982 I accepted the position of Senior Consultant with Energy Management Associates, Inc. and was promoted to Lead Consultant in June 1983. At EMA I trained and consulted with planners and financial analysts at several utilities in applications of the PROMOD and PROSCREEN planning models. I assisted planners in applications of these models to the preparation of studies evaluating the revenue requirements and

QUALIFICATIONS OF RANDALL J. FALKENBERG, PRESIDENT

financial impact of generation expansion alternatives, alternate load growth patterns and alternate regulatory treatments of new baseload generation. I also assisted in EMA's educational seminars where utility personnel were trained in aspects of production cost modeling and other modern techniques of generation planning.

I became a Principal in Kennedy and Associates in 1984. Since then I have performed numerous economic studies and analyses of the expansion plans of several utilities. I have testified on several occasions regarding plant cancellation, power system reliability, phase-in of new generating plants, and the proper rate treatment of new generating capacity. In addition, I have been involved in many projects over the past several years concerning the modeling of market prices in various regional power markets.

In January 2000, I founded RFI Consulting, Inc. whose practice is comparable to that of my former firm, J. Kennedy and Associates, Inc.

The testimony that I present is based on widely accepted industry standard techniques and methodologies, and unless otherwise noted relies upon information obtained in discovery or other publicly available information sources of the type frequently cited and relied upon by electric utility industry experts. All of the analyses that I perform are consistent with my education, training and experience in the utility industry. Should the source of any information presented in my testimony be unclear to the reader, it will be provided it upon request by calling me at 770-379-0505.

PAPERS AND PRESENTATIONS

Mid-America Regulatory Commissioners Conference - June 1984: "Nuclear Plant Rate Shock - Is Phase-In the Answer"

Electric Consumers Resource Council - Annual Seminar, September 1986: "Rate Shock, Excess Capacity and Phase-in"

The Metallurgical Society - Annual Convention, February 1987: "The Impact of Electric Pricing Trends on the Aluminum Industry"

Public Utilities Fortnightly - "Future Electricity Supply Adequacy: The Sky Is Not Falling" What Others Think, January 5, 1989 Issue

Public Utilities Fortnightly - "PoolCo and Market Dominance", December 1995 Issue

${\bf QUALIFICATIONS\ OF\ RANDALL\ J.\ FALKENBERG, PRESIDENT}$

APPEARANCES

3/84	8924	KY	Ai rco Carbi de	Loui svi l l e	CWIP in rate base.
3/04	0024	K1	Aireo carbi de	Gas & Electric	cmi in race base.
5/84	830470- EI	FL	Florida Industrial Power Users Group	Fla. Power Corp.	Phase-in of coal unit, fuel savings basis, cost allocation.
10/84	89-07-R	CT	Connecticut Ind. Energy Consumers	Connecticut Light & Power	Excess capacity.
11/84	R- 84265	1 PA	Lehigh Valley	Pennsyl vani a Power Committee	Phase-in of nuclear unit. Power & Light Co.
	I-84038 lation o		Phila. Area Ind. Energy Users' Group	Electric Co.	Philadelphia Economics of nuclear generating units.
3/85	Case No. 9243	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Economics of cancelling fossil generating units.
3/85	R- 842632	2 PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Economics of pumped storage generating units, optimal res. margin, excess capacity.
3/85	3498- U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Nuclear unit cancellation, load and energy forecasting, generation economics.
5/85	84-768- E-42T	WV	West Virginia Multiple Intervenors	Monongahela Power Co.	Economics - pumped storage generating units, reserve margin, excess capacity.
7/85	E- 7, SUB 391	NC	Carolina Industrial Group for Fair Utility Rates	Duke Power Co.	Nuclear economics, fuel cost projections.
7/85	9299	KY	Kentucky Industrial Utility Consumers	Union Light, Heat & Power Co.	Interruptible rate design.
8/85	84-249-1	U AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Prudence review.
1/86	85-09-12	2 CT	Connecticut Ind. Energy Consumers	Connecticut Light & Power Co.	Excess capacity, financial impact of phase-in nuclear plant.
1/86	R- 850152	2 PA	Philadelphia Area Industrial Energy Users' Group	Philadelphia Electric Co.	Phase-in and economics of nuclear plant.
2/86	R- 850220	O PA	West Penn Power Industrial Intervenors	West Penn Power	Optimal reserve margins, prudence, off-system sales guarantee plan.
5/86	86- 081- E- GI	W	West Virginia Energy Users' Group	Monongahela Power Co.	Generation planning study, economics prudence of a pumped storage hydroelectric unit.

Date	Case	Jurisdict.	Party	Utility	Subject
5/86	3554- U	GA	Attorney General & Georgia Public Service Commission Staff	Georgia Power Co.	Cancellation of nuclear plant.
9/86	29327/28	NY	Occidental Chemical Corp.	Ni agara Mohawk Power Co.	Avoided cost, production cost models.
9/86	E7- Sub 408	NC	NC Industrial Energy Committee	Duke Power Co.	Incentive fuel adjustment clause.
12/86 613	9437/	KY	Attorney General of Kentucky	Big Rivers Elect. Corp.	Power system reliability analysis, rate treatment of excess capacity.
5/87	86- 524- E- SC	W	West Virginia Energy Users' Group	Monongahela Power	Economics and rate treatment of Bath County pumped storage County Pumped Storage Plant.
6/87	U- 17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Prudence of River Bend Nuclear Plant.
6/87	PUC- 87- 013- RD E002/E- 01- - PA- 86- 72		Eveleth Mines & USX Corp.	Minnesota Power/ Northern States	Sale of generating unit and reliability Power requirements.
7/87	Docket 9885	KY	Attorney General of Kentucky	Big Rivers Elec. Corp.	Financial workout plan for Big Rivers.
8/87	3673- U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Nuclear plant prudence audit, Vogtle buyback expenses.
10/87	R-850220	PA	WPP Industrial Intervenors	West Penn Power	Need for power and economics, County Pumped Storage Plant
10/87	870220- EI	FL	Occidental Chemical	Fla. Power Corp.	Cost allocation methods and interruptible rate design.
10/87	870220- EI	FL	Occidental Chemical	Fla. Power Corp.	Nuclear plant performance.
1/88	Case No. 9934	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Review of the current status of Trimble County Unit 1.
3/88	870189- EI	FL	Occidental Chemical Corp.	Fla. Power Corp.	Methodology for evaluating interruptible load.
5/88	Case No. 10217	KY	National Southwire Aluminum Co., ALCAN Alum Co.	Big Rivers Elec. Corp.	Debt restructuring agreement.
7/88	Case No. 325224	LA Div. I 19th Judicial District	Louisiana Public Service Commission Staff	Gulf States Utilities	Prudence of River Bend Nuclear Plant.
10/88	3780- U	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Co.	Weather normalization gas sales and revenues.
10/88	3799- U	GA	Georgia Public Service Commission Staff	United Cities Gas Co.	Weather normalization of gas sales and revenues.

Date	Case	Jurisdict.	Party	Utility	Subject
12/88	88- 171- EL- AI R 88- 170- EL- AI R	ОН	Ohio Industrial Energy Consumers	Toledo Edison Co., Cleveland Electric Illuminating Co.	Power system reliability reserve margin.
1/89	I - 880052	PA	Philadelphia Area Industrial Energy Users' Group	Phi l adel phi a El ectri c Co.	Nuclear plant outage, replacement fuel cost recovery.
2/89	10300	KY	Green River Steel K	Kentucky Util.	Contract termination clause and interruptible rates.
3/89	P-870216 283/284/2		Armco Advanced Materials Corp., Allegheny Ludlum Cor	West Penn Power p.	Reserve margin, avoided costs.
5/89	3741-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Prudence of fuel procurement.
8/89	3840- U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Need and economics coal & nuclear capacity, power system planning.
10/89	2087	NM	Attorney General of New Mexico	Public Service Co. of New Mexico	Power system planning, economic and reliability analysis, nuclear planning, prudence.
10/89	89- 128- U	AR	Arkansas Electric Energy Consumers	Arkansas Power Light Co.	Economic impact of asset transfer and stipulation and settlement agreement.
11/89	R-891364	PA	Philadelphia Area Industrial Energy Users' Group	Philadelphia Electric Co.	Sale/leaseback nuclear plant, excess capacity, phase-in delay imprudence.
1/90	U- 17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Sale/lease backnuclearpowerplant.
4/90	89- 1001- (EL- AI R	OH	Industrial Energy Consumers	Ohi o Edi son Co.	Power supply reliability, excess capacity adjustment.
4/90	N/A	N. O.	New Orleans Business Counsel	New Orleans Public Service Co.	Municipalization of investor- owned utility, generation planning & reliability
7/90	3723-U	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Co.	Weather normalization adjustment rider.
9/90	8278	MID	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirements gas & electric, CWIP in rate base.
9/90	90- 158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Power system planning study.
12/90	U- 9346	MI	Association of Businesses Advocatin Tariff Equity (ABATE		DSM Policy Issues.
5/91	3979- U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	DSM, load forecasting and IRP.

Date	Case	Jurisdict.	Party	Utility	Subject
7/91	9945	TX	Office of Public Utility Counsel	El Paso Electric Co.	Power system planning, quantification of damages of imprudence, environmental cost of electricity
8/91	4007-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Integrated resource planning, regulatory risk assessment.
11/91	10200	TX	Office of Public	Texas-New Mexico Utility Counsel	Imprudence disallowance. Power Co.
12/91	U- 17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Year-end sales and customer adjustment, jurisdictional allocation.
1/92	89- 783- E- C	WA	West Virginia Energy Users Group	Monongahela Power Co.	Avoided cost, reserve margin, power plant economics.
3/92	91-370	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Interruptible rates, design, cost allocation.
5/92	91890	FL	Occidental Chemical Corp.	Fla. Power Corp.	Incentive regulation, jurisdictional separation, interruptible rate design.
6/92	4131-U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co.	Integrated resource planning, DSM
9/92	920324	FL	Florida Industrial Power Users Group	Tampa Electric Co.	Cost allocation, interruptible rates decoupling and DSM
10/92	4132- U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co.	Residential conservation program certification.
10/92	11000	TX	Office of Public Utility Counsel	Houston Lighting and Power Co.	Certification of utility cogeneration project.
11/92	U- 19904	LA	Louisiana Public Service Commission Staff	Entergy/Gulf States Utilities (Direct)	Production cost savings from merger.
11/92	8469	MD	Westvaco Corp.	Potomac Edison Co.	Cost allocation, revenue distribution.
11/92	920606	FL	Florida Industrial Power Users Group	Statewi de Rul emaki ng	Decoupling, demand-side management, conservation, Performance incentives.
12/92	R- 009 22378	PA	Armco Advanced Materials	West Penn Power	Energy allocation of production costs.
1/93	8179	MD	Eastalco Aluminum/ Westvaco Corp.	Potomac Edison Co.	Economics of QF vs. combined cycle power plant.
2/93	92- E- 081 88- E- 081		Occi dental Chemi cal Corp.	Ni agara Mohawk Power Corp.	Special rates, wheeling.
3/93	U- 19904	LA	Louisiana Public Service Commission Staff	Entergy/Gulf States Utilities (Surrebuttal)	Production cost savings from merger.
4/93	EC92 21000 ER92-806	FERC - 000	Louisiana Public Service Commission Staff	Gulf States Utilities/Entergy	GSU Merger prodcution cost savings

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Date	Case	Jurisdict.	Party	Utility	Subject
6/93	930055- EU	FL	Florida Industrial Power Users' Group	Statewi de Rul emaki ng	Stockholder incentives for off-system sales.
9/93	92-490, 92-490A, 90-360-C	KY	Kentucky Industrial Utility Customers & Attorney General	Big Rivers Elec. Corp.	Prudence of fuel procurement decisions.
9/93	4152-U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co.	Cost allocation of pollution control equipment.
4/94	E- 015/ GR- 94- 001	MN	Large Power Intervenors	Minn. Power Co.	Analysis of revenue req. and cost allocation issues.
4/94	93-465	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Review and critique proposed environmental surcharge.
4/94	4895- U	GA	Georgia Textile Manufacturers Assn.	Georgia Power Co	Purchased power agreement and fuel adjustment clause.
4/94	E- 015/ GR- 94- 001	MN	Large Power Intervenors	Minnesota Power Light Co.	Rev. requirements, incentive compensation.
	94- 0035- E- 42T	W	West Virginia Energy Users' Group	Monongahela Power Co.	Revenue annualization, ROE performance bonus, and cost allocation.
8/94	8652	MD	Westvaco Corp.	Potomac Edison Co.	Revenue requirements, ROE performance bonus, and revenue distribution.
1/95	94-332	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Company	Environmental surcharge.
1/95	94-996- EL-AI R	ОН	Industrial Energy Users of Ohio	Ohio Power Company	Cost-of-service, rate design, demand allocation of power
3/95	E999- CI	MN	Large Power Intervenor	Minnesota Public Utilities Comm.	Environmental Costs Of electricity
4/95	95-060	KY	Kentucky Industrial Utility Customers	Kentucky Utilities Company	Six month review of CAAA surcharge.
11/95	I - 940032	PA	The Industrial Energy Consumers of Pennsylvania	Statewide - all utilities	Direct Access vs. Poolco, market power.
11/95	95-455	KY	Kentucky Industrial	Kentucky Utilities	Clean Air Act Surcharge,
12/95	95-455	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Company	Clean Air Act Compliance Surcharge.
6/96	960409- EI	FL	Florida Industrial Power Users Group	Tampa Electric Co.	Polk County Power Plant Rate Treatment Issues.
3/97	R-973877	PA	PAI EUG.	PECO Energy	Stranded Costs & Market Prices.
3/97	970096- EQ	FL	FI PUG	Fla. Power Corp.	Buyout of QF Contract
6/97	R- 973593	PA	PAI EUG	PECO Energy	Market Prices, Stranded Cost
7/97	R- 973594	PA	PPLI CA	PP&L	Market Prices, Stranded Cost

Date	Case	Jurisdict.	Party	Utility	Subject
8/97	96- 360- U	AR	AEEC	Entergy Ark. Inc.	Market Prices and Stranded Costs, Cost Allocatio n, Rate Design
10/97	6739-U	GA	GPSC Staff	Georgia Power	Planning Prudence of Pumped Storage Power Plant
10/97	R- 974008 R- 974009	PA	MI EUG PI CA	Metropolitan Ed. PENELEC	Market Prices, Stranded Costs
11/97	R-973981	PA	WPII	West Penn Power	Market Prices, Stranded Costs
11/97	R-974104	PA	DII	Duquesne Light Co.	Market Prices, Stranded Costs
2/98	APSC 97451 97452 97454	AR	AEEC	Generic Docket	Regulated vs. Market Rates, Rate Unbundling, Timetable for Competition
7/98	APSC 87-166	6 AR	AEEC	Entergy Ark. Inc.	Nuclear decommissioning cost estimates & rate treatment.
9/98	97-035-01	UT	DPS and CCS	Paci fi Corp	Net Power Cost Stipulation, Production Cost Model Audit
12/98	19270	TX	OPC	HL&P	Reliability, Load Forecasting
4/99	19512	TX	OPC	SPS	Fuel Reconciliation
4/99	99-02-05	CT	CIEC	CL&P	Stranded Costs, Market Prices
4/99	99-03-04	CT	CIEC	UI	Stranded Costs, Market Prices
6/99	20290	TX	OPC	CP&L	Fuel Reconciliation
7/99	99-03-36	CT	CIEC	CL&P	Interim Nuclear Recovery
7/99	98-0453	w	WEUG	AEP & APS	Stranded Costs, Market Prices
12/99	21111	TX	OPC	EGSI	Fuel Reconciliation
2/00	99-035-01	UT	CCS	Paci fi Corp	Net Power Costs, Production Cost Modeling Issues
5/00	99-1658	ОН	AK Steel	CG&E	Stranded Costs, Market Prices
6/00	UE- 111	OR	I CNU	Paci fi Corp	Net Power Costs, Production Cost Modeling Issues
9/00	22355	TX	OPC	Reliant Energy	Stranded cost
10/00	22350	TX	OPC	TXU Electric	Stranded cost
10/00	99-263-U	AR	Tyson Foods	SW Elec. Coop	Cost of Service
12/00	99-250-U	AR	Tyson Foods	Ozarks Elec. Coop	Cost of Service
01/01	00-099-U	AR	Tyson Foods	SWEPC0	Rate Unbundling
02/01	99-255-U	AR	Tyson Foods	Ark. Valley Coop	Rate Unbundling
03/01	UE- 116	OR	I CNU	Paci fi Corp	Net Power Costs

Date	Case	Jurisdict.	Party	Utility	Subject
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6/01	01-035-01	UT	DPS and CCS	Paci fi Corp	Net Power Costs
7/01	A. 01-03-026	CA	Roseburg FP	Paci fi Corp	Net Power Costs
7/01	23550	TX	OPC	EGSI	Fuel Reconciliation
7/01	23950	TX	OPC	Reliant Energy	Price to beat fuel factor
8/01	24195	TX	OPC	CP&L	Price to beat fuel factor
8/01	24335	TX	OPC	WTU	Price to beat fuel factor
9/01	24449	TX	OPC	SWEPCO	Price to beat fuel factor
10/01	20000- EP 01- 167	WY	WI EC	Paci fi Corp	Power Cost Adjustment Excess Power Costs
2/02	UM- 995	OR	I CNU	Paci fi Corp	Cost of Hydro Deficit
2/02	00-01-37	UT Pl ant	CCS	Paci fi Corp	Certification of Peaking
4/02	00-035-23	UT	CCS	Paci fi Corp	Cost of Plant Outage, Excess Power Cost Stipulation.
4/02	01-084/296	AR	AEEC	Entergy Arkansas	Recovery of Ice Storm Costs
5/02	25802	TX	OPC	TXU Energy	Escalation of Fuel Factor
5/02	25840	TX	OPC	Reliant Energy	Escalation of Fuel Factor
5/02	25873	TX	OPC	Mutual Energy CPL	Escalation of Fuel Factor
5/02	25874	TX	OPC	Mutual Energy WTU	Escalation of Fuel Factor
5/02	25885	TX	OPC	First Choice	Escalation of Fuel Factor
7/02	UE- 139	OR	I CNU	Portland General	Power Cost Modeling
8/02	UE- 137	OP	I CNU	Portland General	Power Cost Adjustment Clause
10/02	RPU- 02- 03	IA	Maytag, et al	Interstate P&L	Hourly Cost of Service Model
11/02	20000-Er 02-184	WY	WI EC	Paci fi Corp	Net Power Costs, Deferred Excess Power Cost
12/02	26933	TX	OPC	Reliant Energy	Escalation of Fuel Factor
12/02	26195	TX	OPC	Centerpoint Energy	Fuel Reconciliation
1/03	27167	TX	OPC	First Choice	Escalation of Fuel Factor
1/03	UE- 134	OR	I CNU	Paci fi Corp	West Valley CT Lease payment
1/03	27167	TX	OPC	First Choice	Escalation of Fuel Factor
1/03	26186	TX	OPC	SPS	Fuel Reconciliation
2/03	UE- 02417	WA	I CNU	Paci fi Corp	Rate Plan Stipulation, Deferred Power Costs
2/03	27320	TX	OPC	Reliant Energy	Escalation of Fuel Factor
2/03	27281	TX	OPC	TXU Energy	Escalation of Fuel Factor
2/03	27376	TX	OPC	CPL Retail Energy	Escalation of Fuel Factor
2/03	27377	TX	OPC	WTU Retail Energy	Escalation of Fuel Factor

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Date	Case	Jurisdict.	Party	Utility	Subject
3/03	27390	TX	ОРС	First Choice	Escalation of Fuel Factor
4/03	27511	TX	OPC	First Choice	Escalation of Fuel Factor
4/03	27035	TX	OPC	AEP Texas Central	Fuel Reconciliation
05/03	03- 028- U	AR	AEEC	Entergy Ark., Inc.	Power Sales Transaction
7/03	UE- 149	OR	I CNU	Portland General	Power Cost Modeling
8/03 11/03	28191 20000- ER - 03- 198	TX WY	OPC WI EC	TXU Energy PacifiCorp	Escalation of Fuel Factor Net Power Costs
2/04	03-035-29	UT	ccs	Paci fi Corp	Certification of CCCT Power Plant, RFP and Bid Evaluation
6/04	29526	TX	OPC	Centerpoi nt	Stranded cost true-up.
6/04	UE- 161	OR	I CNU	Portland General	Power Cost Modeling
7/04	UM- 1050	OR	I CNU	Paci fi Corp	Jurisdictional Allocation
10/04	15392- U 15392- U	GA	Cal pi ne	Georgia Power/ SEPCO	Fair Market Value of Combined Cycle Power Plant
12/04	04-035-42	UT	CCS		PacifiCorp Net power costs
02/05	UE- 165	OP	I CNU	Portland General	Hydro Adjustment Clause
05/05	UE- 170	OR	I CNU	Paci fi Corp	Power Cost Modeling
7/05	UE- 172	OR	I CNU	Portland General	Power Cost Modeling
08/05	UE- 173	OR	I CNU	Paci fi Corp	Power Cost Adjustment
8/05	UE- 050482	WA	I CNU	Avi sta	Power Cost modeling,
8/05	31056	TX	OPC	AEP Texas Central	Energy Recovery Mechanism Stranded cost true-up.
11/05	UE- 05684	WA	I CNU	Paci fi Corp	Power Cost modeling,
2/06	05-116-U	AR	AEEC	Entergy Arkansas	Jurisdictional Allocation, PČA Fuel Cost Recovery
4/06	UE-060181	WA	I CNU	Avi sta	Energy Cost Recovery Mechanism
5/06	22403-U	GA	GPSC Staff	Georgia Power	Fuel Cost Recovery Audit
6/06	UM 1234	OR	I CNU	Portland General	Deferral of outage costs
6/06	UE 179	OR	I CNU	Paci fi Corp	Power Costs, PCAM
7/06	UE 180	OR	I CNU	Portland General	Power Cost Modeling, PCAM
12/06	32766	TX	OPC	SPS	Fuel Reconciliation
1/07	23540- U	GA	GPSC Staff	Georgia Power	Fuel Cost Recovery Audit
2/07	06- 101- U	AR	AEEC	Entergy Arkansas	Cost Allocation and Recovery
2/07	UE- 061546	WA	ICNU/Public Counsel	Paci fi Corp	Power Cost Modeling, Jurisdictional Allocation, PCA
2/07	32710	TX	OPC	EGSI	Fuel Reconciliation
6/07	UE 188	OR	I CNU	Portland General	Wind Generator Rate Surcharge

Date	Case	Jurisdict.	Party	Utility	Subject
6/07	UE 191	OR	I CNU	Paci fi Corp	Power Cost Modeling
6/07	UE 192	OR	I CNU	Portland General	Power Cost Modeling
9/07	UM 1330	OR	I CNU	PGE, PacifiCorp	Renewable Resource Tariff
10/07	06- 152- U	AR	AEEC	EAI	CA Rider, Plant Acquisition
10/07	07- 129- U	AR	AEEC	EAI	Annual Earnings Review Tariff
10/07	06- 152- U	AR	AEEC	EAI	Purchase of combined cycle
04/08	26794	GA	GPSC Staff	Georgia Power	power plant. Fuel Cost Recovery Case
04/08	07-035-93	UT	CCS	Paci fi Corp	Power Cost Modeling
07/08	UE 200	OR	I CNU	Paci fi Corp	Renewable Adjustment Clause
08/08	20000-315 - EP- 08	WY	WI EC	Paci fi Corp	Power Cost Adjustment Mechanism
01/09	20000- 333 - ER- 08	WY	WI EC	Paci fi Corp	Power Cost Modeling/Wind resource prudence
02/09	08-035-38	UT	CCS	Paci fi Corp	Power Cost Modeling/Wind resource prudence
04/09	UM 1355	OR	I CNU	PGE/Paci fi Corp	Outage Rate Modeling
04/09	UM 1396	OR	I CNU	PGE/Paci fi Corp	Avoi ded Costs
06/09	UE 199	OR	I CNU	Paci fi Corp	Power Cost Modeling
07/09	UE 207	OR	I CNU	Paci fi Corp	Power Cost Modeling
07/09	UE 208	OR	I CNU	PGE	Power Cost Modeling
07/09	UE 210	OR	I CNU	Paci fi Corp	Transition Adjustment Mechanism
10/09	UM 1442/ 1443	OR	I CNU	PGE/Paci fi Corp	Avoided Costs
10/09	09-035-23	UT	OCS	Paci fi Corp	Power Cost Modeling
12/09	UM 1465		I CNU	Paci fi Corp	Power Cost Deferral
1/10	20000-352-	ER- 09 WY	WI EC	Paci fi Corp	Power Costs, Wind Resources
2/10	09-084-U	AR	AEEC	Entergy AR	Rate Spread, Formula Rate Plan
3/10	20000-363-	ep-10 WY	WI EC	Paci fi Corp	PCAM
4/10	10-035-13	UT	OCS	Paci fi Corp	Power impact of Major Plant Additions

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

	UE 215
In the Matter of)
PORTLAND GENERAL ELECTRIC COMPANY)))
Request for a General Rate Revision.)

ICNU/102

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER PGE MARCH 5, 2010 EMAIL

REDACTED

June 21, 2010

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UE 215	

In the Matter of)
PORTLAND GENERAL ELECTRIC COMPANY)
Request for a General Rate Revision.)

ICNU/103

CONFIDENTIAL SUBJECT TO GENERAL PROTECTIVE ORDER PGE MARCH 8, 2010 MEMORANDUM

REDACTED

June 21, 2010