### **Portland General Electric Company**

Legal Department 121 SW Salmon Street • Portland, Oregon 97204 (503) 464-8926 • Facsimile (503) 464-2200

April 1, 2009

Douglas C. Tingey Assistant General Counsel

Via Electronic Filing and U.S. Mail

Oregon Public Utility Commission Attention: Filing Center 550 Capitol Street NE, #215 PO Box 2148

Salem OR 97308-2148

Re: In the Matter of PORTLAND GENERAL ELECTRIC COMPANY'S 2010 Annual Power Cost Update Tariff (Schedule 125)

Attention Filing Center:

Enclosed for filing in the above-captioned docket please find the following:

Original and five copies of testimony of:

- Mike Niman and Jay Tinker (PGE/100); and
- Marc Cody (PGE/200)

Two copies on CD and three paper copies of:

• Work Papers (non-confidential portions only)

Original and one copy of:

• Portland General Electric Company's Motion for Protective Order

PGE will submit the confidential exhibits and work papers after entry of a Protective Order.

PGE's initial forecast of 2010 NVPC is \$830.7 million. At this level of NVPC, PGE projects a base rate reduction effective January 1, 2010 of 2.6%.

These documents are being filed electronically. Hard copies will be sent via postal mail. An extra copy of this cover letter is enclosed. Please date stamp the extra copy and return it to me in the envelope provided.

Thank you in advance for your assistance.

Sincerely,

DOUGLAS C. TINGEY

DCT:cbm Enclosures

cc: UE 197 Service List

### CERTIFICATE OF SERVICE

I hereby certify that I have this day caused DIRECT TESTIMONY AND WORK PAPERS (non-confidential portions only) and MOTION FOR PROTECTIVE ORDER OF PORTLAND GENERAL ELECTRIC COMPANY to be served by electronic mail to those parties whose email addresses appear on the attached service list and by method specified, postage prepaid and properly addressed, to those parties on the attached service list who have not waived paper service from OPUC Docket No. UE 197.

Dated at Portland, Oregon, this 1st day of April, 2009.

GGLAS C. TINGEY, OSB # 044366

Assistant General Counsel

Portland General Electric Company 121 SW Salmon St., 1WTC1301

Portland, OR 97204

(503) 464-8926 (telephone)

(503) 464-2200 (fax)

doug.tingey@pgn.com

### SERVICE LIST - OPUC DOCKET # UE 197

PUC DOCKET # UE 197
Kurt J. Boehm, Attorney
BOEHM KURTZ & LOWRY
36 E Seventh Street, #1510
Cincinatti, OH 45202
kboehm@bklawfirm.com
G. Catriona McCracken
CITIZEN'S UTILITY BOARD OF OREGON
610 SW Broadway – Suite 308
Portland, OR 97205
catriona@oregoncub.org
OPUC Dockets
CITIZEN'S UTILITY BOARD OF OREGON
dockets@oregoncub.org
(*Waived Paper Service)
S. Bradley Van Cleve
DAVISON VAN CLEVE
333 SW Taylor, Suite 400
Portland, OR 97204
mail@dvclaw.com
Janet L. Prewitt, Assistant AG
Department of Justice
1162 Court Street NE
Salem, OR 97301-4096
Janet.prewitt@doj.state.or.us
Roger D. Colton
FISHER SHEEHAN & COLTON
roger@fsonline.com
(*Waived Paper Service)
Kip Pheil
OREGON DEPARTMENT OF ENERGY
kip.pheil@state.or.us
(*Waived Paper Service)
•
Joan Cote
OREGON ENERGY COORDINATORS
ASSOCIATION
cotej@mwvcaa.org
(*Waived Paper Service)

## BEFORE THE PUBLIC UTILITY COMMISSION OF THE STATE OF OREGON

# MOTION FOR APPROVAL OF PROTECTIVE ORDER

PORTLAND GENERAL ELECTRIC COMPANY

### BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UE	

In the Matter of Portland General Electric Company's 2010 Annual Power Cost Update Tariff (Schedule 125) MOTION FOR APPROVAL OF PROTECTIVE ORDER [EXPEDITED CONSIDERATION REQUESTED]

Pursuant to ORCP 36(C)(7) and OAR 860-12-0035(1)(k), Portland General Electric Company ("PGE") requests the issuance of a Protective Order in this proceeding. PGE believes good cause exists for the issuance of such an order to protect confidential market information and confidential business information, plans and strategies. In support of this Motion, PGE states:

- 1. Concurrent with the filing of this Motion, PGE has filed its annual power cost update pursuant to its tariff Schedule 125.
- 2. Some of the exhibits and work papers supporting the power cost filing contain confidential information regarding PGE's natural gas, electric and coal market activities as well as other confidential business matters. This information will include proprietary modeling code, PGE's timing of and expected prices for electricity purchases, PGE's timing of and expected prices for natural gas purchases, PGE's forward position for electricity, PGE's forward position for natural gas, and whether and the amount by which PGE is long or short for electricity and natural gas during various periods in 2010 and 2011. This information is confidential commercial information and/or trade secrets under ORCP 36(C)(7).
- 3. PGE would like to file with the Commission, and provide to other parties, a complete set of work papers as soon as possible, and requests expedited consideration of this motion.

4. PGE also anticipates that parties participating in this docket will make further requests for confidential information. PGE further anticipates it will be required to file periodic

updates containing confidential information in this proceeding.

5. While PGE desires to provide parties with requested information, the information is

of significant commercial value, and its public disclosure could be detrimental to PGE and its

customers. The information discloses PGE's position, strategy and future needs to purchase and

sell electricity, natural gas and coal. If other parties involved in the wholesale electricity, natural

gas and coal markets obtained this information, they could use it to the financial harm of PGE

and its customers.

6. The Commission should therefore issue a Protective Order to protect the

confidentiality of that material. The requested order, identical to the one that the Commission

customarily issues, is attached.

For the reasons stated above, PGE requests that a protective order be issued in this

proceeding.

DATED this 1st day of April, 2009.

Respectfully submitted,

Douglas C. Tingey, OSB No. 044366

Assistant General Counsel

Portland General Electric Company

121 SW Salmon Street, 1WTC1301

Portland, Oregon 97204

(503) 464-8351 phone

(503) 464-2200 fax

doug.tingey@pgn.com

ORDER NO.

**ENTERED** 

### BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

Ū	$\mathbf{E}$	

In the Matter of Portland General Electric Company's 2010 Annual Power Cost Update Tariff (Schedule 125)

**ORDER** 

### DISPOSITION: MOTION FOR PROTECTIVE ORDER GRANTED

On April 1, 2009, Portland General Electric Company ("PGE") filed a Motion for a Protective Order with the Public Utility Commission of Oregon ("Commission"). PGE states that the exhibits and work papers accompanying its initial testimony in this docket will contain confidential information regarding PGE's natural gas, electric and coal market activities as well as other confidential business matters PGE anticipates that there may be requests for further confidential information in this docket. PGE states that good cause exists for the issuance of a protective order to protect confidential business information, plans and strategies. PGE adds that the public release of such information could prejudice PGE and its customers.

Pursuant to OAR 860-012-0035(1)(k), I find that good cause exists to issue a Protective Order, attached as Appendix A. Under the terms of the order, a party may designate as confidential any information that falls within the scope of ORCP 36(C)(7).

Confidential Information shall be disclosed only to a "qualified person" as defined in paragraph 3 of the Protective Order. Authors of the confidential material, the Commission or its Staff, and counsel of record for a party or persons directly employed by counsel are "qualified persons" who may review confidential information. Other persons desiring confidential information must become qualified pursuant to paragraph 10.

To receive confidential information, however, all parties—with the general exception of Staff—must sign the Consent to be Bound Form attached as Appendix B. This includes the party seeking the issuance of the protective order, because any party may designate information as confidential under this order.

The confidentiality of confidential information shall be preserved for a period of five years from the date of the final order in this docket, unless extended by the Commission at the request of the party desiring confidentiality.

### ORDER NO.

All persons who are given access to confidential information have the duty to monitor their own conduct to ensure their compliance with the Protective Order. Such persons shall not use or disclose the information for any purpose other than the preparation for and conduct of this proceeding, and shall take all reasonable precautions to keep the confidential information secure. If any questions exist as to the status of any person to receive confidential information, the parties may contact the Administrative Hearings Division at (503) 378-6678.

### **ORDER**

IT IS ORDERED that the Protective Order, attached as Appendix A, shall govern the disclosure of confidential information in this case.

Made, entered, and effective on	•
	[Judge]
	Administrative Law Judge

A party may appeal this order to the Commission pursuant to OAR 860-014-0091.

#### PROTECTIVE ORDER

DOCKET NO.	UE
------------	----

### Scope of this Order-

1. This order governs the acquisition and use of "Confidential Information" in this proceeding.

#### **Definitions-**

- 2. "Confidential Information" is information that falls within the scope of ORCP 36(C)(7) ("a trade secret or other confidential research, development, or commercial information").
  - 3. A "qualified person" is an individual who is:
    - a. An author(s), addressee(s), or originator(s) of the Confidential Information;
    - b. A Commissioner or Commission staff;
    - c. Counsel of record for a party;
    - d. A person employed directly by counsel of record; or
    - e. A person qualified pursuant to paragraph 10. This includes parties and their employees.

### **Designation of Confidential Information-**

4. A party providing Confidential Information shall inform other parties that the material has been designated confidential by placing the following legend on the information:

### CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

To the extent practicable, the party shall designate as confidential only those portions of the document that fall within ORCP 36(C)(7).

5. A party may designate as confidential any information previously provided by giving written notice to the other parties. Parties in possession of newly designated Confidential

APPENDIX A PAGE 1 Information shall, when feasible, ensure that all copies of the information bear the above legend to the extent requested by the party desiring confidentiality.

### Information Given to the Commission-

6. Confidential Information that is: (a) filed with the Commission or its staff; (b) made an exhibit; (c) incorporated into a transcript; or (d) incorporated into a pleading, brief, or other document, shall be printed on yellow paper, separately bound and placed in a sealed envelope or other appropriate container. An original and five copies each separately sealed shall be provided to the Commission. Only the portions of a document that fall within ORCP 36(C)(7) shall be placed in the envelope/container. The envelope/container shall bear the legend:

THIS EN	ELOPE IS SEALED PURSUANT TO ORDER	
NO.	AND CONTAINS CONFIDENTIAL	
INFORM	TION. THE INFORMATION MAY BE SHOW	N
ONLY T	QUALIFIED PERSONS AS DEFINED IN THE	
ORDER		

7. The Commission's Administrative Hearings Division shall store the Confidential Information in a locked cabinet dedicated to the storage of Confidential Information.

### Disclosure of Confidential Information-

- 8. Parties desiring receipt of Confidential Information shall sign the Consent to be Bound Form attached as Appendix B. This requirement does not apply to the Commission staff. Confidential Information shall not be disclosed to any person other than a "qualified person," as defined in paragraph 3. When feasible, Confidential Information shall be delivered to counsel. In the alternative, Confidential Information may be made available for inspection and review by qualified persons in a place and time agreeable to the parties or as directed by the Administrative Law Judge.
- 9. Qualified persons may disclose confidential information to any other qualified person, unless the party desiring confidentiality protests as provided in Section 11.
  - 10. To become a qualified person under paragraph 3(e), a person must:
    - a. Read a copy of this Protective Order;
    - b. Execute a statement acknowledging that the order has been read and agreeing to be bound by the terms of the order;
    - c. Date the statement;

- d. Provide a name, address, employer, and job title; and
- e. If the person is a consultant or advisor for a party, provide a description of the nature of the person's consulting or advising practice, including the identity of his/her current, past, and expected clients.

Counsel shall deliver a copy of the signed statement including the information in (d) and (e) above to the party desiring confidentiality and to all parties of record. Such notification may be made via e-mail or facsimile. A person qualified under paragraph 3(e) shall not have access to Confidential Information sooner than five (5) business days after receipt of a copy of the signed statement including the information in (d) and (e) above by the party desiring confidentiality.

11. All qualified persons shall have access to Confidential Information, unless the party desiring confidentiality protests as provided in this paragraph. The party desiring to restrict the qualified person(s) from accessing specific Confidential Information must provide written notice to the qualified person(s) and counsel for the party associated with the qualified person(s) as soon as the party becomes aware of reasons to restrict access. The parties must promptly confer and attempt to resolve any dispute over access to Confidential Information on an informal basis before filing a motion with the Administrative Law Judge. If the dispute cannot be resolved informally, either party may file a motion with the Administrative Law Judge for resolution. Either party may also file a motion if the other party does not respond within five days to a request to resolve the dispute. A motion must describe in detail the intermediate measures, including selected redaction, explored by the parties and explain why such measures do not resolve the dispute. After receipt of the written notice as required in this paragraph, the specific Confidential Information shall not be disclosed to the qualified person(s) until the issue is resolved.

### Preservation of Confidentiality-

12. All persons who are given access to any Confidential Information by reason of this order shall not use or disclose the Confidential Information for any purpose other than the purposes of preparation for and conduct of this proceeding, and shall take all reasonable precautions to keep the Confidential Information secure. Disclosure of Confidential Information for purposes of business competition is strictly prohibited.

Qualified persons may copy, microfilm, microfiche, or otherwise reproduce Confidential Information to the extent necessary for the preparation and conduct of this proceeding. Qualified persons may disclose Confidential Information only to other qualified persons associated with the same party.

#### **Duration of Protection-**

13. The Commission shall preserve the confidentiality of Confidential Information for a period of five years from the date of the final order in this docket, unless extended by the Commission at the request of the party desiring confidentiality. The Commission shall notify the party desiring confidentiality at least two weeks prior to the release of confidential information.

### **Destruction After Proceeding-**

14. Counsel of record may retain memoranda, pleadings, testimony, discovery, or other documents containing Confidential Information to the extent reasonably necessary to maintain a file of this proceeding or to comply with requirements imposed by another governmental agency or court order. The information retained may not be disclosed to any person. Any other person retaining Confidential Information or documents containing such Confidential Information must destroy or return it to the party desiring confidentiality within 90 days after final resolution of this proceeding unless the party desiring confidentiality consents, in writing, to retention of the Confidential Information or documents containing such Confidential Information. This paragraph does not apply to the Commission or its Staff.

### Appeal to the Presiding Officer-

- 15. If a party disagrees with the designation of information as confidential, the party shall contact the designating party and attempt to resolve the dispute on an informal basis. If the parties are unable to resolve the dispute, the party design to use the information may move for exclusion of the information from the protection conferred by this order. The motion shall:
  - a. Specifically identify the contested information, and
  - b. Assert that the information does not fall within ORCP 36(C)(7) and state the reasons therefore.

The party resisting disclosure has the burden of showing that the challenged information falls within ORCP 36(C)(7). If the party resisting disclosure does not respond to the motion within ten (10) calendar days, the challenged information shall be removed from the protection of this order.

The information shall not be disclosed pending a ruling by the Administrative Law Judge on the motion.

#### Additional Protection-

16. The party desiring additional protection may move for any of the remedies set forth in ORCP 36(C). The motion shall state:

### ORDER NO.

- a. The parties and persons involved;
- b. The exact nature of the information involved;
- c. The exact nature of the relief requested;
- d. The specific reasons the requested relief is necessary; and
- e. A detailed description of the intermediate measures, including selected redaction, explored by the parties and why such measures do not resolve the dispute.

The information need not be released and, if released, shall not be disclosed pending the Commission's ruling on the motion.

### SIGNATORY PAGE

DOCKET NO. UE \_\_\_\_

I.	Consent to be Bound-	
	This Protective Order governs	ne use of "Confidential Information" in this proceed
	PGE a	ees to be bound by its terms of this Protective Order
Ву:		
	Signature & Printed	Date
II.	Persons Qualified pursuant	Paragraphs 3(a) through 3 (d)
		GE identifies the following person(s) automatically
quali	fied under paragraph 3(a) throug	(d).
	Printed	Date
	Printed	 Date

### III. Persons Qualified pursuant to Paragraph 3(e) and Paragraph 10.

I have read the Protective Order, agree to be bound by the terms of the order, and will provide the information identified in paragraph 10.

By:		
_	Signature & Printed	Date
By: _		
Бу -	Signature & Printed	Date
Ву:	Signature & Printed	Date
Ву:	Signature & Printed	Date

## BEFORE THE PUBLIC UTILITY COMMISSION OF THE STATE OF OREGON

**UE** \_\_\_\_

## **Annual Update Tariff Filing For Prices Effective January 1, 2010**

PORTLAND GENERAL ELECTRIC COMPANY

**Direct Testimony and Exhibits** 



**Portland General Electric** 

**April 1, 2009** 

UE \_\_\_/PGE/100 Niman - Tinker

## BEFORE THE PUBLIC UTILITY COMMISSION OF THE STATE OF OREGON

### **Power Costs**

PORTLAND GENERAL ELECTRIC COMPANY

Direct Testimony and Exhibits of

Mike Niman Jay Tinker

### **Table of Contents**

1.	Introduction	1
II.	Monet Model	4
III.	Monet Updates and Model Changes	6
IV.	Load Forecast	11
V.	Comparison with 2009 UE 197/198 NVPC Forecast	14
VI.	Qualifications	17
List	of Exhibits	18

### I. Introduction

- 1 Q. Please state your names and positions with PGE.
- 2 A. My name is Mike Niman. My position at PGE is Manager, Financial Analysis.

Our qualifications are included at the end of this testimony.

- My name is Jay Tinker. I am a project manager for PGE. My areas of responsibility include revenue requirement and other regulatory analyses.
- 6 Q. What is the purpose of your testimony?
- 7 A. The purpose of our testimony is to provide the initial Annual Update Tariff (AUT) forecast
- of PGE's 2010 net variable power costs (NVPC), adjusted for the inclusion of Biglow
- 9 Canyon Phase 2. We then compare this estimate with the 2009 General Rate Case (GRC)
- NVPC as approved by the Commission in Order No. 08-505 (UE 198) and 08-601 (UE 197).
- We also discuss updates to 2010 AUT parameters and explain why per unit NVPC have
- decreased by \$2.26 per MWh from 2009 to 2010.
- 13 Q. What is your AUT net variable power cost estimate?
- 14 A. Our 2010 AUT forecast is \$830.7 million, based on contracts and forward curves on
- 15 February 26, 2009.

5

- O. What schedule in this docket do you propose for NVPC updates?
- 17 A. We propose the following schedule for the power cost updates:
- July update power, fuel, and transportation/transmission contracts; gas and electric
- forward curves; planned thermal and hydro maintenance outages; and loads;
- September update power, fuel, and transportation/transmission contracts; gas and
- 21 electric forward curves; planned thermal and hydro maintenance outages; and loads;
- 22 and

### **UE** \_\_\_\_ Annual Update Tariff For 2010 – Direct Testimony

- November final updates of power, fuel, and transportation/transmission contracts,
   and gas and electric forward curves.
- Q. Will the final AUT forecast update serve as the basis for the 2010 Power Cost

  Adjustment Mechanism established by Order No. 07-015?
- 5 A. Yes, with one modification. In the UE 201 (2007 PCAM) Stipulation, parties supported a
- 6 change in the language of Schedule 126 to clarify that adjustments to forecasted NVPC are
- 7 made to reflect the impact of customer direct access enrollments under Schedules 515
- through 594 that take place after the final Monet<sup>1</sup> power cost run is filed in mid-November.
- If there is a change in the enrollments, then a new Monet run that reflects these changes will
- form the baseline unit net variable power cost for the PCAM calculations.
- 11 Q. Are there Minimum Filing Requirements (MFRs) associated with AUT NVPC?
- 12 A. Yes. In PGE's most recent general rate case, Docket No. UE 197/198, parties agreed to
- MFRs for NVPC. The MFRs define the documents PGE will provide in conjunction with
- the NVPC portion of PGE's initial (direct case) and update filings of its GRC and/or AUT
- proceedings.
- Q. Will PGE take reasonable steps to ensure MFRs are available to Citizens' Utility
- 17 Board (CUB) and Industrial Customers of Northwest Utilities (ICNU) quickly?
- 18 A. Yes. PGE will take reasonable steps to ensure that the MFRs can be made available to CUB
- and ICNU at or close to the time of the filing $^2$ .
- 20 Q. What information and timeframe did Parties agree to for the MFRs?
- 21 A. Parties agreed that in either an AUT or a GRC, at a minimum, Monet's summary documents
- and a few additional documents, if applicable, will be delivered with the initial filing. The

<sup>&</sup>lt;sup>1</sup> Per the UE 198 Stipulation, most of the MFRs will be filed on or before April 15, 2009. The summary MFRs are filed with the testimony.

<sup>&</sup>lt;sup>2</sup> Monet is PGE's power cost forecasting model described in more detail in Section II.

- remainder of the MFRs will be delivered with the initial filing, if practical, or no later than
- 2 fifteen days after the filing (e.g., April 15 for an AUT filing). The remainder of the MFRs
- 3 consists of the supporting documents and work papers for the various sections of Monet and
- 4 historical operating data. The AUT Update Filing MFRs will be delivered with the update
- 5 filings.

### 6 Q. Are you delivering Monet's summary documents with the initial filing?

- 7 A. Yes. We will provide the summary MFRs to the PUC with the April 1 filing. Then, we will
- deliver the summary MFRs to ICNU and CUB as soon as a protective order is issued and
- 9 parties have signed it. We have applied for a protective order and expect the Commission to
- issue it shortly. We expect this process to take 2-3 business days, at most. Finally, we
- expect to deliver the remainder of the MFRs to all parties on or before April 15, 2008.

### 12 Q. How do you organize the remainder of your testimony?

- 13 A. After this introduction, we have five sections:
- Section II: Monet Model;
- Section III: Monet Updates and Model Changes;
- Section IV: Load Forecast;
- Section V: Comparison with 2009 UE 197/198 NVPC Forecast; and
- Section VI: Qualifications.

### II. Monet Model

### 1 Q. How did PGE forecast its NVPC for 2010?

- 2 A. As in previous dockets, we used our power cost forecasting model, called "MONET" (or Monet).
- 4 Q. Please briefly describe Monet.

9

10

11

12

13

14

15

- A. We built this model in the mid-1990s and have since incorporated several refinements. In brief, Monet models the hourly dispatch of our generating units. Using data inputs, such as forecasted load and forward electric and gas curves, the model minimizes power costs by economically dispatching plants and making market purchases and sales.
  - Monet dispatches PGE resources to meet customer loads based on the principle of economic dispatch. Generally, any plant is dispatched when it is available and its dispatch cost is below the market electric price, subject to operational constraints, such as minimum unit commitment times. Given thermal output, expected hydro and wind generation, and contract purchases and sales, Monet fills any resulting gap between total resource output and PGE's retail load with market purchases (or sales) priced at the forward market price curve.

### Q. How does PGE define NVPC?

A. NVPC include wholesale (physical and financial) power purchases and sales ("purchased power" and "sales for resale"), fuel costs, and other costs that generally change as power output changes. PGE records its net variable power costs to FERC accounts 501, 547, 555, 565, and 447. We include some fixed power costs, such as excise taxes and transportation charges, because they relate to fuel used to produce electricity. We "amortize" these fuel-related costs even though, for purposes of FERC accounting, they appear in a balance sheet account (FERC 151). We also exclude some variable power costs, such as variable

- operation and maintenance costs (O&M), because they are already included elsewhere in
- 2 PGE's accounting. However, variable O&M is used to determine the economic dispatch of
- our thermal plants. The "net" refers to net of forecasted wholesale sales.

### 4 Q. Has PGE provided additional information on Monet in other dockets?

- 5 A. Yes. PGE Exhibit 100 in our 2008 Annual Update Tariff filing (UE 192), PGE Exhibit 100
- in our 2006 Resource Valuation Mechanism filing (UE 172), and PGE Exhibit 400 in our
- 7 2007 test year general rate case (UE 180) describe Monet in greater detail. We have also
- 8 held informal workshops for parties to understand several aspects of Monet.

### 9 Q. Do the MFRs provide even more detailed information regarding the inputs to Monet?

10 A. Yes. The MFRs provide detailed work papers supporting the inputs used to develop this

initial forecast of 2010 NVPC.

### **III.** Monet Updates and Model Changes

- Q. What updates are allowed under PGE's Schedule 125, Annual Power Cost Update
- 2 (AUT) Tariff?
- 3 A. Schedule 125 states that the following updates are allowed in AUT filings:
- Forced Outage Rates based on a four-year rolling average;
- Projected planned plant outages;
- Forward market prices for both gas and electricity;
- Projected loads;
- Contracts for the purchase or sale of power and fuel;
- Changes in hedges, options, and other financial instruments used to serve retail load;
- 10 and
- Transportation contracts and other fixed transportation costs.
- 12 Q. Which of these updates do you include in this initial filing?
- 13 A. We include all of the adjustments listed and address significant items below.
- 14 Q. Did you include any Biglow Canyon Phase 2 costs in the 2010 AUT NVPC?
- 15 A. Yes. We include costs for BPA tariff integration, royalty payments, an imbalance premium,
- and day-ahead forecast error estimate, which total \$7.1 million in the 2010 forecast. We
- also include Biglow Canyon Phase 2 in operating reserve calculations.
- Q. Are the NVPC for Biglow Canyon Phase 2 comparable to the costs approved for
- 19 **Phase 1?**
- 20 A. Yes. The BPA tariff integration, royalty payments, imbalance premium, and day-ahead
- 21 forecast estimate for Phase 1 are approximately \$6 million.

- Q. What is the basis for your forecast of royalty payments related to Phase 2 of Biglow
- 2 Canyon?
- 3 A. PGE has contracts with the Biglow Canyon land owners and original site developer, Orion
- 4 Energy, LLC. These contracts specify royalty payments based on a contractual value of
- 5 energy multiplied by the developer/landowner royalty percentage. The annual royalty
- payment is the product of four factors: the contractual base power price (\$34.3/MWh), an
- 7 inflation index escalator, the annual plant generation in MWh, and the developer/landowner
- 8 royalty percentage.
- 9 Q. Did you use this same approach in UE 197 related to Biglow Canyon Phase 1?
- 10 A. Yes, it is the same approach, but the royalty percentage is different for Biglow Canyon
- Phase 2.
- Q. What impact does Biglow Canyon Phase 2 have on 2010 power costs?
- A. Biglow Canyon Phase 2 reduces 2010 NVPC by approximately \$15.4 million. This is the
- result of lower net market purchases and sales (\$19.8 million), lower wheeling cost (\$2.3
- million), and lower WECC incremental reserves cost (\$0.4 million). As we noted above,
- new variable costs for Biglow Canyon Phase 2 are approximately \$7.1 million. Confidential
- PGE Exhibits 101C and 102C are the Monet output files with and without Biglow Canyon
- Phase 2.
- 19 Q. Do any of the stipulated items from UE 197/198 impact the 2010 NVPC?
- 20 A. Yes, five items impact the 2010 NVPC. First, the Boardman Simulator forced outage rate
- benefit has been included and was modeled in a manner consistent with the UE 198
- 22 Stipulation. Second, PGE included two-thirds of the 2009 annual Super Peak extrinsic value
- because the contract is only in effect for 2 months rather than 3 months. Third, in the

- UE 198 Stipulation, parties agreed that the projection for non-running station service 1 (NRSS) costs for Colstrip Units 3 and 4 should be removed from Monet for 2009. However, 2 NRSS for all other thermal generating plants remained as in the UE 198 final filing. The 3 parties further agreed that PGE can propose a modification for Colstrip NRSS in the 2010 4 5 AUT proceeding; however, we did not include Colstrip NRSS in this filing. For 2010, we extended the NRSS modeling for our other thermal plants, excluding Colstrip. We did not 6 update the parameters, such as the NRSS power draw in megawatts when the plant is down. 7 Finally, the wind day-ahead forecast error estimate and the Boardman heat rate remain at the 8 values agreed to in UE 197/198. 9
  - Q. Has PGE incorporated changes to the inputs to Monet in the 2010 NVPC estimates?
- 11 A. Yes. Changes made to the inputs to Monet model are as follows:

10

12

13

14

15

16

17

18

19

20

21

22

23

- Mercury Sorbent chemical costs have been added to Colstrip coal costs. The chemicals cost approximately \$1.20 per ton, or \$0.74/MWh of generation.
  - PGE's BPA IR contracts will expire on December 31, 2009. We assume that in 2010
    these contracts are converted to Point-to-Point (PTP) contracts. However, PGE was
    recently contacted by BPA and there is a possibility that these contracts may be
    renegotiated. If a renegotiation is successful, PGE will include them in our Monet
    update.
  - PGE has also included a 1-year amortization of the 2007 GRC gas transportation deferral (UM 1290, Order No. 07-452), returning approximately \$3.25 million to customers in 2010.
- For net ancillary services sales revenues, we base our 2010 forecast of \$0.6 million on actual 2008 sales of reserves to the California Independent System Operator (Cal-

ISO), net of grid management charges imposed by the Cal-ISO on those sales.

According to Schedule 126, NVPC shall be adjusted as needed to comply with

Commission Order No. 07-015 that states that ancillary services, the revenues from sales as well as the costs from the services, should be taken into account in the mechanism.

### 6 Q. Are any of PGE's capacity contracts expiring?

- A. Yes. PGE has one contract with PacifiCorp Power Marketing (PPM) that expires in 2010.
- The PPM Winter Super-peak contract, which was in effect for the months of December
- 9 through February, will expire at the end of February 2010. This capacity shortfall will be
- analyzed in PGE's Integrated Resource Plan.

improved compared to those for 2009?

11

12

- Q. Overall, have the 2010 four-year rolling average forced outage rates maintained or
- A. Yes. The majority of PGE's thermal units have maintained, or improved their four-year 13 averages for 2010. Table 1 below compares the 2009 and 2010 four-year averages used in 14 our Monet modeling. The 2010 rate for Boardman and Colstrip Units 3 and 4 have 15 decreased by about 1-1.5% from 2009. The outage rates for Coyote Springs, Port 16 Westward, and Beaver Unit 8 have remained constant. The forced outage rate for Beaver 17 Units 1-7 increased 6.7 percentage points due to additional forced maintenance hours on 18 Unit 6 in 2008. We updated forced outage rates based on actual 2005-2008 operating data 19 for Boardman, Colstrip, Coyote Springs, and Beaver Units 1-7. We used the same 5.0% 20
- forced outage rate for Port Westward from UE 197, because this plant has only a year and a
- 22 half of operating history.

Table 1
Four-Year Rolling Average Forced Outage Rate – Thermal Units

Unit	2009	2010
Boardman	10.7%	9.9%
Colstrip Unit 3	7.9%	6.3%
Colstrip Unit 4	7.9%	6.3%
Coyote Springs	1.3%	1.3%
Beaver Units 1-7	17.9%	24.6%
Beaver Unit 8	36.4%	36.4%
Port Westward	5.0%	5.0%

### **IV.** Load Forecast

### 1 Q. Please summarize PGE's forecast for its 2010 retail load.

- 2 A. Table 2 below summarizes actual and forecast deliveries to various customer groups from
- 3 2007 through 2010 in million kWh at average weather conditions.

Table 2 Retail Deliveries: 2007 – 2010 (Million kWh, average weather)

	,	,		*	
	2007	2008	(UE 197/198)	Current	(UE)2010
	<u>Actual</u>	<u>Actual</u>	2009 Forecast	2009 Forecast	<b>Forecast</b>
Residential	7,619	7,692	7,655	7,586	7,570
General Service	7,683	7,649	7,785	7,566	7,568
Industrial	4,137	4,259	4,663	4,309	4,393
Lighting	<u>108</u>	<u>110</u>	<u>111</u>	<u>111</u>	<u>113</u>
Total Retail	19,547	19,710	20,214	19,572	19,644

<sup>\*</sup> The 2007 and 2008 Actual loads are weather adjusted.

### 4 Q. Does the 2010 forecast include all loads?

- 5 A. Yes. The forecast includes both PGE cost-of-service loads and deliveries of energy to
- 6 customers under Schedules 483/489. We sometimes refer to these deliveries as
- 7 "non-cost-of-service" loads.
- 8 Q. Does the 2010 cost-of-service load forecast assume that certain long-term, opt-out
- 9 customers return to a cost-of-service rate?
- 10 A. Yes. Under Schedules 483/489, large commercial and industrial customers have an option
- to receive electric service from an Energy Service Supplier for a period of 3 years. Those
- who choose this option are referred to as "opt-out" customers. Since some of those terms are
- ending in 2009, the 2010 cost-of-service load forecast assumes that approximately 140 MWa
- of opt-out load returns to a cost-of-service rate.
- 15 Q. What happens if these customers (or other eligible customers) select a long-term,
- opt-out program in September?

- 1 A. PGE will reduce the 2010 cost-of-service load forecast accordingly, as specified in Schedule 125.
- 3 Q. How does the 2010 forecast differ from the UE 197/198 forecast?
- Table 2 shows PGE's historical weather-adjusted retail deliveries for 2007 and 2008, the UE 4 5 197/198 forecast for 2009, and our current forecast for 2009 and 2010. The total deliveries for all retail customers were 19,547 million kWh in 2007 and 19,710 million kWh in 2008. 6 In UE 197/198, we projected total deliveries of 20,214 million kWh for 2009 and we 7 currently project 19,572 million kWh for 2009 and 19,644 million kWh for 2010 under 8 average weather conditions. Our forecast for 2010 loads is 2.8% lower than the forecast 9 used to set rates in UE 197/198 for 2009 but is essentially flat from our current forecast of 10 2009 loads. 11
  - We applied the same model and input assumptions that drive the UE 197/198 delivery forecast to develop our 2010 delivery forecast. PGE Exhibit 1200 in Docket UE 180 (particularly pages 7 and 9) explains the estimation procedures in detail.

### Q. What load do you use in your 2010 test year power cost forecast?

12

13

14

15

A. The load listed in Table 2 represents total system load at the customer meter and is used to calculate rates. The load used to generate power costs with Monet is based on cost-of-service load (i.e., total system load less Schedule 483/489 and less market price option load), as shown below in Table 3.

Table 3

Total Retail Deliveries by Cost of Service Rates & Schedule 483/494: 2010
(Cycle Month Energy in million kWh)

Cost of Service Load	19,235.8
Schedules 483/489	401.8
Market Price Options	6.7
Total System Load	19,644.3

- Q. The Cost-of-Service load in Table 3 is at the customer meter. What is the
- 2 corresponding busbar load?
- 3 A. The busbar load is 2,362 MWa, or 20,689,300 MWh (or 20,689.3 million kWh). This load
- 4 is the basis for the hourly Monet load input data.

### V. Comparison with 2009 UE 197/198 NVPC Forecast

- 1 Q. Please restate your initial 2010 NVPC forecast.
- 2 A. The initial forecast is \$830.7 million including Biglow Canyon Phase 2. Without Biglow
- Canyon Phase 2 the forecast is \$846.1 million.
- 4 Q. How does the 2010 forecast (including Biglow Canyon Phase 2) compare with the UE
- 5 197/198, 2009 forecast approved in Commission Order Nos. 08-601 and 08-505?
- 6 A. Based on PGE's final updated Monet run for the 2009 test year, the 2009 forecast was
- 7 \$848.4 million, or \$42.41 per MWh. The 2010 forecast is \$830.7 million, or \$40.15 per
- 8 MWh³, approximately \$2.26/MWh lower.

12

13

14

15

16

- 9 Q. What are the primary factors that explain the decrease in the 2010 forecast of \$830.7 million versus the UE 197/198 forecast of \$848.4 million?
- 11 A. As Table 1 demonstrates, the approximate \$18 million decrease is due to several factors:

Table 1
Factors in Power Cost Differences (\$Million)

Element	Effect
Hydro Cost and Performance	\$8
Coal Cost and Performance	-4
Gas Cost and Performance	-26
Wind Cost and Performance	-10
Contract and Market Purchases	16
Market Purchases for Cost of Service Load Increase	28
Lower Market Purchase Price	-29
Other (Net)	<u>-1</u>
Total	-\$18

PGE expects less hydro production primarily due to the renewal of the Wanapum agreement being effective for the entire year of 2010. The old Wanapum contract is in place for ten months of 2009 (January through October), while in 2010 the renewed contract, with its lower PGE share, is in place for the entire year. This lower hydro production necessitates additional market purchases. Coal-generated output increases in 2010 because of two

 $<sup>^3</sup>$  These calculations are based on bus-bar cost-of-service load and include the fact that the 2010 cost-of-service load forecast is 78 MWa (2,362 MWa – 2,284 MWa) higher than the 2009 cost-of-service load forecast.

factors: shorter planned maintenance outages at both Boardman and Colstrip, and reduced 1 thermal plant forced outage rates. In addition to increased output leading to higher coal 2 costs, coal costs at Colstrip are higher due in large part to increased mining costs and costs 3 for the addition of mercury control chemicals. The cost of gas-generated production 4 5 decreases is due to reduced output, lower gas forward price curves, and the effect of markto-market gas financial hedge contracts. Contract costs for 2010 are higher on a per MWh 6 basis, and more market purchases are needed to offset a lesser quantity of contract MWh. 7 8 Market purchases in 2010 are expected to be significantly less costly than in 2009 on a per MWh basis due to lower forward electric price curves. Market purchases are also necessary 9 to serve the approximate 78 MWa increase in cost-of-service loads from 2009 to 2010. 10

## Q. Does PGE rely more on financial markets, rather than the physical market, to hedge its open electric position?

A. Yes. During the last year, the market has witnessed a profound change in the trading of term

power products, increasing PGE's volume of financial transactions for 2010 and beyond.

Previously, the majority of traded power products were physical in nature (i.e., an agreement to deliver a specified amount of power over a specified time period). More recently, the market has emerged as an all-financial term power market and has shifted PGE's power purchases from fixed-price physical transactions to fixed/index-price financial swaps coupled with physical index-price purchases.

### Q. What benefits transpired with the development of the financial markets?

A. A robust financial market has allowed non-traditional entities to participate in the market.

The entrance of these participants initially provided more liquidity and better price discovery. Credit issues also became simplified as Intercontinental Exchange (ICE) or an

11

12

20

- over-the-counter broker can clear transactions. The alleviation of counter-party credit
- concerns led to better capitalized participants. However, the improvement in market
- 3 liquidity was temporary.
- 4 Q. As the U.S. economy rapidly entered into a deep and prolonged recession, how have the
- 5 credit markets been affected by the current recession?
- 6 A. The bankruptcy of Lehman Brothers in mid-September 2008 with the subsequent collapse of
- short-term credit markets removed substantial liquidity from the term power market.
- 8 Counterparties refused to deal directly because of credit concerns. Transactions that
- 9 normally would have been done on a bi-lateral basis were now cleared through exchanges
- such as ICE.
- Q. What impact has this had on the volume of transactions in the market?
- 12 A. The volume of market transactions fell dramatically and even ICE reported significantly
- reduced earnings for the fourth quarter, 2008 as the volume of cleared transactions fell.

### VI. Qualifications

- 1 Q. Mr. Niman, please describe your qualifications.
- 2 A. I received a Bachelor of Science degree in Mechanical Engineering from Carnegie-Mellon
- 3 University and a Master of Science degree in Mechanical Engineering from the California
- Institute of Technology. I am a registered Professional Mechanical Engineer in the state of
- 5 Oregon.
- I have been employed at PGE since 1979 in a variety of positions including: Power
- 7 Operations Engineer, Mechanical Engineer, Power Analyst, Senior Resource Planner, and
- 8 Project Manager before entering into my current position as Manager, Financial Analysis in
- 9 1999. I am responsible for the economic evaluation and analysis of power supply including
- power cost forecasting, new resource development, least-cost planning, and avoided cost
- estimates. The Financial Analysis group supports the Power Operations, Business Decision
- Support, and Rates & Regulatory Affairs groups within PGE.
- 13 Q. Mr. Tinker, please state your educational background and experience.
- 14 A. I received a Bachelor of Science degree in Finance and Economics from Portland State
- University in 1993 and a Master of Science degree in Economics from Portland State
- University in 1995. In 1999, I obtained the Chartered Financial Analyst (CFA) designation.
- 17 I have worked in the Rates and Regulatory Affairs department since 1996.
- 18 Q. Does this conclude your testimony?
- 19 A. Yes.

### **List of Exhibits**

PGE Exhibit	<u>Description</u>
101C	April 1 Initial Filing Monet Output Files and Assumptions Summary
102C	Monet Output Files and Assumptions Summary without Biglow Canyon Phase 2

UE \_\_\_\_ / PGE / 200 Cody

# BEFORE THE PUBLIC UTILITY COMMISSION OF THE STATE OF OREGON

## **Pricing**

PORTLAND GENERAL ELECTRIC COMPANY

Direct Testimony and Exhibits of

Marc Cody

**April 1, 2009** 

### **Table of Contents**

List	of Exhibits	11
V.	Qualifications of Witness	10
IV.	Changes in Schedule 83 and 89 System Usage Charges	6
III.	Calculation of Schedule 125 Prices	4
II.	Estimated Rate Impacts	2
I.	Introduction and Summary	1

### I. Introduction and Summary

- 1 Q. Please state your name and position.
- 2 A. My name is Marc Cody. I am a Senior Analyst in the Pricing and Tariffs Department. My
- qualifications are listed in Section V.
- 4 Q. What is the purpose of your testimony?
- 5 A. This testimony describes the following:
- The estimated price impacts from this filing as well as other price changes
  anticipated to occur on January 1, 2010.
- The calculation of the Schedule 125 prices.
- The calculation of the changes in the system usage charges for Schedules 83 and 89

  (as well as their direct access equivalents) based on estimates of load returning to

  Cost of Service (COS) pricing from multi-year direct access.
- PGE will file the final Schedule 125 rates incorporating the final updates to Net Variable
  Power Costs on November 16. PGE will also file the new system usage charges for
  Schedules 83 and 89 on November 16.

### **II.** Estimated Rate Impacts

### Q. What base rate changes do you anticipate to occur on January 1, and what are their

### 2 **cumulative impacts?**

1

- 3 A. Table 1 below summarizes the COS base rate impacts for 2010 for selected Schedules.
- These estimates contain not only the projected \$46.8 million reduction in Schedule 125
- 5 prices, but also the \$41.3 million revenue requirement associated with Schedule 122
- Renewable Resources Automatic Adjustment Clause and changes in System Usage Charges
- 7 resulting from projected load returning to COS pricing from Schedules 483 and 489. These
- 8 estimates are preliminary and subject to change due to among other items, market electric
- and gas prices, and the potential for large changes in projected COS loads resulting from the
- multi-year direct access window in September. The 2010 load forecast used to develop
- these estimated impacts includes the loads of those customers on the three-year optout
- option contained in Schedules 483 and 489 who are eligible to return to COS in 2010.

Table 1
Estimated Base Rate Impacts

Schedule	Rate Impact
Sch 7 Residential	-0.3%
Sch 32 Small Non-residential	-0.3%
Sch 83 Secondary	-4.2%
Sch 83 Primary	-4.4%
Sch 89 Secondary	-4.4%
Sch 89 Primary	-4.8%
Sch 89 Subtransmission	-5.1%
Overall	-2.1%

### Q. What other price changes do you expect to occur on January 1, 2010?

- A. In addition to the changes in Schedule 122, I anticipate changes in Schedule 126 Annual
  Power Cost Variance Mechanism, and Schedule 105 Regulatory Adjustments. I expect that
- Schedule 126 will be set to zero from the current level of a credit of 1.10 mills/kWh and

1	Schedule 105	will capture	the amortization	of miscellaneous	deferrals. U	Jpdated estimates of

these price changes will be provided later in this proceeding.

### III. Calculation of Schedule 125 Prices

- 1 Q. Please describe how you calculated the Schedule 125 amount.
- 2 A. I determined the Schedule 125 amount by comparing the projection of 2010 Net Variable
- Power Costs (NVPC) to the amount of NVPC that is recovered through the combination of
- 4 our current energy prices adjusted to exclude fixed generation cost recovery, multiplied by
- 5 the 2010 load forecast by schedule (the resulting revenues I reference as NVPC revenues).
- The difference between NVPC and NVPC revenues constitutes the Change in NVPC. This
- amount, either positive or negative is multiplied by 1.0337 to account for revenue sensitive
- 8 costs such as uncollectibles and franchise fees. Page 1 of PGE Exhibit 202 provides a
- 9 summary of the Schedule 125 amount of (\$46.8) million and how it is spread to the
- respective schedules. Also included on page 1 are the proposed Schedule 125 prices.
- 11 Q. Please provide a more detailed description of how you calculate the NVPC revenues.
- 12 A. Page 2 of PGE Exhibit 202 demonstrates the calculation. I start with the tariff energy prices
- for each schedule and remove the portion of these energy prices that recovers the UE 197
- fixed generation costs. I then multiply these prices by the respective energy billing
- determinants to calculate the amount of NVPC projected to be recovered for the 2010 test
- period. For 2010 I project NVPC revenues of \$875.9 million. This amount is carried over
- to Page 1 of PGE Exhibit 202 in order to calculate the Schedule 125 amount.
- 18 Q. Please describe how you allocate the Schedule 125 amount to each rate schedule and
- 19 **how you calculate the Schedule 125 price.**
- 20 A. I allocate and price the Schedule 125 amount consistent with Special Condition 1 of
- 21 Schedule 125 which states the following:
- 22 Costs recovered through this schedule will be allocated to each schedule using
- 23 the applicable schedule's forecasted energy based on the basis of an equal

### **UE** \_\_\_\_ Annual Update Tariff For 2010 – Direct Testimony

- percent of generation revenue applied on a cents per kWh basis to each applicable rate schedule.
- 3 Q. Where can I find the calculation of the basis of the Schedule 125 allocations, the 2010
- **Base Generation Revenues?**
- 5 A. I present this calculation, which is simply the 2010 projected energy billing determinants
- 6 times the tariff energy price on page 2 of PGE Exhibit 202.

### IV. Changes in Schedule 83 and 89 System Usage Charges

- Q. Why are you proposing to change the System Usage Charges for Schedules 83/483/583
- 2 **and 89/489/589?**
- 3 A. I propose to change the System Usage Charges for these schedules in accordance with
- 4 Special Conditions 1-3 of Schedule 129 Long-Term Transition Adjustment. These Special
- 5 Conditions specify the manner in which PGE trues-up year-to-year changes in both
- 6 Schedule 129 transition adjustments and fixed generation contributions from changes in
- Schedules 483 and 489 levels of participation. These trued-up amounts are recovered or
- refunded by adjusting the appropriate System Usage charges for Schedules 83/483/583 and
- 9 89/489/589.
- 10 Q. What is the purpose of the Special Conditions contained in Schedule 129?
- 11 A. As mentioned above, the Special Conditions true-up the differences in fixed generation cost
- allocations from our most recent general ratecase (UE 197) and Schedule 129 transition
- adjustment transfer payments that occur due to multi-year COS optout Schedules 483 and
- 489. Because PGE's rate making is generally done on a single calendar year test-period
- basis, the multi-year COS optout and the accompanying Schedule 129 Long-Term
- 16 Transition Cost Adjustment creates unique ratemaking issues.
- 17 Q. What is the amount of Schedule 129 Long-Term Transition Adjustment you project
- for 2010 and what are the ramifications for customers?
- 19 A. Presuming that all eligible load returns to COS pricing, I project that the Schedule 129
- amount paid to multi-year direct access customers will be approximately \$3.6 million. This
- translates to a volumetric recovery rate of 0.35 mills/kWh for applicable customers. The
- current Schedule 129 recovery rate embedded in the system usage charges of applicable

customers is 1.78 mills/kWh; therefore, customers should see a decrease in their system
usage charges should all eligible multi-year direct access load return to COS pricing. The
converse may also apply should a number of large customers choose to receive service
under Schedules 483 and 489 for 2010 and should the Schedule 129 transition adjustment be
a credit. This could cause the Schedule 129 amount paid to customers in 2010 to exceed
that which is embedded in current rates.

### **Q.** What is the amount of fixed generation true-up you project for 2010?

A. Should all eligible load return to COS pricing, I estimate a \$19.4 million increase in fixed generation revenues. Of this amount I propose to pass through to customers \$18.0 million as a reduction to applicable customers' System Usage Charges. Below, I discuss why I do not propose to pass through the full amount of the true-up.

## Q. Have you prepared an exhibit that summarizes the potential changes to the system usage charges based on the true-ups?

A. Yes. Page 1 of PGE Exhibit 203 presents the current System Usage Charge, the portion of the current charge unrelated to Schedule 129, the 2010 proposed true-ups, and the resulting 2010 System Usage Charge. Given the presumption of eligible load returning to COS pricing, the 2010 system usage charge would be greatly reduced for eligible customers. The final determination of the changes in the System Usage Charge will depend on customer elections during the September 2009 enrollment window.

### Q. Have you prepared exhibits that demonstrate how you calculate the true-up amounts?

A. Yes. Page 2 of PGE Exhibit 203 details the calculation of the 2010 Schedule 129 transition amount recovery and the resulting price of 0.35 mills/kWh. This amount is considerably lower than the current UE 197 Schedule 129 recovery amount of 1.78 mills/kWh.

### **UE** \_\_\_\_ Annual Update Tariff For 2010 – Direct Testimony

20

- Q. Please explain how you calculate both the increase in fixed generation revenues and the amount of the reduction in eligible customers' System Usage Charges.
- A. In order to calculate the increase in fixed generation revenues, I simply multiply the 3 estimated returning load by the factors contained in Special Condition 3 of Schedule 129. I 4 5 note that these factors will need to be updated for the prices resulting from a Commission Order in PGE's UE 204 docket. I pass less than the full amount of fixed generation 6 revenues through to the System Usage Charges because Special Condition 2 of Schedule 7 129 requires that "the adjustment to the System Usage Charge resulting from changes in 8 fixed generation revenues shall not result in a rate increase or decrease to Schedules 83 or 89 9 of more than 2 percent." This 2% limit was stipulated in UE 197 and incorporated into 10 Order No. 09-020. 11
- Q. Can you please demonstrate how you calculated the appropriate amount of fixed generation revenues to be passed through to eligible customers?
  - A. I first calculated the current base rate revenues for Schedule 83 and 89 customers and then calculated the overall mills/kWh for both schedules. I then calculated the proposed Schedule 125 prices as well as the Schedule 125 prices that would prevail if the returning load remains on Schedules 483 and 489. The latter calculation is consistent with Special condition 2 of Schedule 129 that states: "For purpose of calculating the percent change in rates, Schedule 125 prices with and without the increased/decreased Schedules 483 and 489 participating load will be determined." From the calculated mills/kWh of the case of customers remaining on Schedules 483 and 489, I simply calculated an amount of allowable decrease. Any amount of fixed generation adjustment that causes the overall mills/kWh to exceed the 2% limitation is not passed through to eligible customers through their System

14

15

16

17

18

19

20

21

22

23

- Usage Charges. PGE Exhibit 203 contains the detailed calculations of the 2% limitation and
- the estimated NVPC and NVPC revenues that would occur should the projected Schedule
- 3 483 and 489 returning load remain on multi-year direct access.

### V. Qualifications of Witness

- 1 Q. Mr. Cody, please state your educational background and qualifications.
- 2 A. I received a Bachelor of Arts degree and a Master of Science degree from Portland State
- University. Both degrees were in Economics. The Master of Science degree has a
- 4 concentration in econometrics and industrial organization.
- 5 Since joining PGE in 1996, I have worked as an analyst in the Rates and Regulatory
- 6 Affairs Department. My duties at PGE have focused on cost of capital estimation, marginal
- 7 cost of service, rate spread and rate design.
- **Q.** Does this complete your testimony?
- 9 A. Yes.

### **List of Exhibits**

PGE Exhibit	<u>Description</u>
201	Schedule 125-1
202	Calculation of Schedule 125 Prices
203	System Usage Charge Prices

Second Revision of Sheet No. 125-1 Canceling First Revision Sheet No. 125-1

### SCHEDULE 125 ANNUAL POWER COST UPDATE

### **PURPOSE**

The purpose of this adjustment schedule is to define procedures for annual rate revisions due to changes in the Company's projected Net Variable Power Costs (the Annual Power Cost Update). This schedule is an "automatic adjustment clause" as defined in ORS 757.210(1), and is subject to review by the Commission at least once every two years.

### **APPLICABLE**

To all bills for Electricity Service served under the following rate schedules 7, 15, 32, 38, 47, 49, 75, 83, 87, 89, 91, 92, 93 and 94.

### **NET VARIABLE POWER COSTS**

Net Variable Power Costs (NVPC) are the power costs for energy generated and purchased. NVPC are the net cost of fuel, fuel transportation, power contracts, transmission/wheeling, wholesale sales, hedges, options and other financial instruments incurred to serve retail load.

### **RATES**

This adjustment rate is subject to increases or decreases, which may be made without prior hearing, to reflect increases or decreases, or both, in NVPC.

### **ANNUAL UPDATES**

The following updates will be made in each of the Annual Power Cost Update filings:

- Forced Outage Rates based on a four-year rolling average.
- Projected planned plant outages.
- Forward market prices for both gas and electricity.
- Projected loads.
- Contracts for the purchase or sale of power and fuel.
- Changes in hedges, options, and other financial instruments used to serve retail load.
- Transportation contracts and other fixed transportation costs.
- No other changes or updates will be made in the annual filings under this schedule.

### **CHANGES IN NET VARIABLE POWER COSTS**

Changes in NVPC for purposes of rate determination under this schedule are the projected NVPC as determined in the Annual Power Cost Update less the NVPC revenues that would occur at the NVPC prices determined in the Company's most recent general rate case, adjusted for a revenue sensitive cost factor of 1.0337.

Advice No. 09	
Issued	Effective for service
Maria M. Pope, Senior Vice President	on and after

### **SCHEDULE 125 (Continued)**

### **FILING AND EFFECTIVE DATE**

On or before April 1<sup>st</sup> of each calendar year, the Company will file estimates of the adjustments to its NVPC to be effective on January 1<sup>st</sup> of the following calendar year.

On or before October 1<sup>st</sup> of each calendar year, the Company will file updated estimates with final planned maintenance outages, final load forecast, updated projections of gas and electric prices, power, and fuel contracts.

On November 15<sup>th</sup>, the Company will file the final estimate of NVPC and will calculate and file the final change in NVPC to be effective on the next January 1<sup>st</sup> with: 1) projected market electric and fuel prices based on the average of the Company's internally generated projections made during the period November 1<sup>st</sup> through November 7<sup>th</sup>, 2) load reductions from the October update resulting from additional participation in the Company's Long-Term Cost of Service Opt-out that occurs in September, 3) new market power and fuel contracts entered into since the previous updates, and 4) the final planned maintenance outages and load forecast from the October 1<sup>st</sup> filing.

### **RATE ADJUSTMENT**

The rate adjustment will be based on the Adjusted NVPC less the NVPC revenues that would occur at the NVPC prices determined in the Company's most recent general rate case applied to forecast loads used to determine changes in Net Variable Power Costs. NVPC prices are defined as the price component that recovers the level of NVPC from the Company's most recent general rate case contained in each Schedule's Cost of Service energy prices.

### **ADJUSTMENT RATES**

		Part A
Sch	edule	¢ per kWh
7		-0.247
15		-0.229
32		-0.247
38	Large Nonresidential	-0.246
47	<b>W</b>	-0.229
49		-0.230
75	Secondary	-0.246 <sup>(1)</sup>
`	Primary	-0.235 <sup>(1)</sup>
	Subtransmission	-0.227 <sup>(1)</sup>
83	Secondary	-0.245
	Primary	-0.237
87	Secondary	-0.246
	Primary	-0.235
	Subtransmission	-0.227

<sup>(1)</sup> Applicable only to the Baseline and Scheduled Maintenance Energy.

Advice No. 09	
Issued	Effective for service
Maria M. Pope, Senior Vice President	on and after

### **SCHEDULE 125 (Concluded)**

### ADJUSTMENT RATES (Continued)

		Part A
Schedule		¢ per kWh
89	Secondary	-0.246
	Primary	-0.235
	Subtransmission	-0.227
91		-0.229
92		-0.240
93		-0.245
94		-0.240

### **SPECIAL CONDITIONS**

1. Costs recovered through this schedule will be allocated to each schedule using the applicable schedule's forecasted energy on the basis of an equal percent of generation revenue applied on a cents per kWh basis to each applicable rate schedule.



Advice No. 09	
Issued	
Maria M. Pope, Senior Vice President	

PORTLAND GENERAL ELECTRIC Calculation of Schedule 125 Prices

Schedules	2010 Calendar COS Energy MWH	2010 Base Generation Revenues	Generation Allocation	2010 Base NVPC Revenues	Sch 125 Allocation	2010 NVPC Revenues	2010 Sch 125 Rate mills/kWh	2010 Sch 125 Revenues
Schedule 7	7.561.317	\$484,601	39.90%	\$349.480	(\$18.663)	\$330,818	(2,47)	(\$18,676)
Schedule 15	23,933	\$1,426	0.12%	\$1,029	(\$55)	\$974	(2.29)	(\$22)
Schedule 32	1,495,562	\$95,776	7.89%	\$69,095	(\$3,688)	\$65,407	(2.47)	(\$3,694)
Schedule 38	70,389	\$4,504	0.37%	\$3,247	(\$173)	\$3,074	(2.46)	(\$173)
Schedule 47	22,076	\$1,312	0.11%	\$947	(\$51)	\$896	(2.29)	(\$51)
Schedule 49	68,335	\$4,078	0.34%	\$2,942	(\$157)	\$2,785	(2.30)	(\$157)
Schedule 83-S	5,176,754	\$329,397	27.12%	\$237,665	(\$12,686)	\$224,979	(2.45)	(\$12,683)
Schedule 89-S	669,778	\$42,698	3.52%	\$30,789	(\$1,644)	\$29,145	(2.46)	(\$1,648)
Schedule 83-P	282,533	\$17,384	1.43%	\$12,542	(699\$)	\$11,872	(2.37)	(\$670)
Schedule 89-P	2,516,174	\$153,317	12.62%	\$110,491	(\$5,904)	\$104,587	(2.35)	(\$5,913)
Schedule 89-T	1,243,302	\$73,189	6.03%	\$52,848	(\$2,819)	\$50,030	(2.27)	(\$2,822)
Schedule 91	107,337	\$6,396	0.53%	\$4,614	(\$246)	\$4,368	(2.29)	(\$246)
Schedule 92/94	5,016	\$313	0.03%	\$226	(\$12)	\$214	(2.40)	(\$12)
Schedule 93	573	<b>92\$</b>	0.00%	\$26	(\$1)	\$25	(2.45)	(\$1)
TOTAL	19,243,078	\$1,214,426	100%	\$875,941	(\$46,769)	\$829,172		(\$46,801)
			Sch 125 TARGET	3ET ===>	(\$46,769)			
2010 NVPC 2010 NVPC Revenues	\$830,697 \$875,941	(page 2 of Exhibit 202)	it 202)					
Change in NVPC Revenue Senstitive Adj. 3.37% Sch 125 Revenue Requirement	(\$45,244) ( <u>\$1,525)</u> (\$46,769)							

PORTLAND GENERAL ELECTRIC
Calculation of Generation and NVPC Revenues

,	2010 Calendar	Enerav	2010 Base Generation	UE 197 Fixed. Gen.	NVPC	2010 NVPC	2010 Cycle	
	MWh	Price	Revenues	Price	Price	Revenues	MWh	
					٠			
	2,087,557	51.24	\$106,966	17.87	33.37	\$69,662	2,088,184	
	5,473,760	68.99	\$377,635	17.87	51.12	\$279,819	5,475,405	
	23,933	59.59	\$1,426	•	42.99	\$1,029	23,933	
	1,495,562	64.04	\$95,776	17.84	46.20	\$69,095	1,494,294	
On-peak	32,745	70.73	\$2,316	•	52.88	\$1,732	32,821	
Off-peak	37,644	58.11	\$2,187		40.26	\$1,516	37,730	
	22,076	59.44	\$1,312	16.56	42.88	\$947	21,900	
	68,335	59.67	\$4,078		43.05	\$2,942	68,505	
	5,176,754	63.63	\$329,397	17.72	45.91	\$237,665	5,167,663	
	282,533	61.53	\$17,384	17.14	44.39	\$12,542	276,888	
On-peak	428,490	68.98	\$29,557		51.20	\$21,939	432,725	
Off-peak	241,288	54.46	\$13,141	17.78	36.68	\$8,850	243,673	
On-peak	1,487,268	09.99	\$99,052	17.02	49.58	\$73,739	1,487,960	
Off-peak	1,028,906	52.74	\$54,265		35.72	\$36,753	1,029,385	
On-peak	683,136	64.80	\$44,267	16.36	48.44	\$33,091	682,317	
Off-peak	560,166	51.63	\$28,921	16.36	35.27	\$19,757	559,494	
	107,337	59.59	\$6,396	'	42.99	\$4,614	107,337	
	5,016	62.42	\$313	17.39	45.03	\$226	5,016	
	573	63.53	\$36	17.70	45.83	\$26	573	
	19.243.078		\$1.214.426			\$875.941	19.235.804	
	)		)			· · · · · · · · · · · · · · · · · · ·		

Note: See Attachment B page 48 of PGE UE 197 compliance work papers for source of fixed generation prices.

PORTLAND GENERAL ELECTRIC Calculation of 2010 System Usage Charge

Schedules	UE 197 System Usage Charge mills/kWh	UE 197 Sch 129 Component mills/kWh	Net UE 197 System Usage Charge mills/kWh	2010 Sch 129 Transition Adj mills/kWh	2010 Sch 129 Fixed Gen. Adj. mills/kWh	2010 System Usage Charge mills/kWh
Schedule 83S/583S/483S	4.06	1.78	2.28	0.35	(1.75)	0.88
Schedule 89S/589S/489S	3.94	1.78	2.16	0.35	(1.75)	0.76
Schedule 83P/583P/483P	3.91	1.78	2.13	0.35	(1.75)	0.73
Schedule 89P/589P/489P	3.73	1.78	1.95	0.35	(1.75)	0.55
Schedule 89T/589T/489T	3.60	1.78	1.82	0.35	(1.75)	0.42

# PORTLAND GENERAL ELECTRIC ALLOCATION OF SCHEDULE 129 TRANSITION ADJUSTMENT 2010

Grouping	Calendar Energy	Percent	Transition Adjustment Allocations (\$000)	Transition Adjustment Recovery mills/kWh	Transition Adjustment Recovery (\$000)	Fixed Generation Allocation (\$000)	Fixed Generation True Up mills/kWh	Fixed Generation Revenue (\$000)
Schedule 83-S	5 211 287	50 6%	#4 800		&1 80A		(1.75)	(49 120)
Schedule 89-S	687.032	6.7%	\$241	0.35	\$240	(\$1,202)	(1.75)	(\$1,202)
Schedule 83-P	282,533	2.7%	66\$	0.35	66\$		(1.75)	(\$494)
Schedule 89-P	2,723,407	26.4%	\$956	0.35	\$953		(1.75)	(\$4,766)
Schedule 89-T	1,394,032	13.5%	\$489	0.35	\$488	(\$2,440)	(1.75)	(\$2,440)
TOTAL	10,298,291	100.00%	\$3,615	0.35	\$3,604	(\$18,022)		(\$18,022)
		TARGET	\$3,615		TARGET	(\$18,022)		

Note: energy includes direct access customers

### 2010 Projection of Schedule 483/489 Loads & Schedule 129 Revenues

Delivery Voltage	Enrollment Period	Calendar MWH	Schedule 129 mills/kWh	Schedule 129 Revenues (\$000)
Secondary (vintage 2003)	Α	12,609	0.00	\$0
Secondary (vintage 2008)	F	39,178	(12.48)	(\$489)
Primary (vintage 2004)	• В	71,776	0.00	\$0
Primary (vintage 2008)	<b>=</b>	135,457	(12.48)	(\$1,691)
Subtransmission (vintage 2007)	E	143,995	(9.97)	(\$1,436)
Total		403,015		(\$3,615)
2010 Sch 129 transition adjustment payments				\$3,615

### 2010 Projection of Fixed Generation Revenues from Schedule 483/489 returning to COS

Schedule	Enrollment Period	Calendar MWH	Fixed Revenue Recovery factor mills/kWh	Fixed Gen. Revenues (\$000)	
Schedule 83S	E	3,715	17.72	\$66	
Schedule 89S	E	16,286	17.78	\$290	
Schedule 83P	E	0	17.14	\$0	
Schedule 89P	E	744,248	17.02	\$12,667	
Schedule 89T	E	390,989	16.36	\$6,397	
Total		1,155,238		\$19,419	
Increase in Fixed Generation Revenue Decrease in System Usage Charges		•		\$19,419 (\$19,419)	
Eligible MWh				10,298,291	
Unadjusted Change to System Usage Charge	•			, ,	nills/kWh)
Adjust for 2% limitation:					
Reduction in System Usage Charges			•	(1.89) (n	nills/kWh)
Mills/kWh limitation				<u>0.14</u> (n	nills/kWh)
Adjusted Reduction in System Usage Charges				(1.75) (n	nills/kWh)
Adjusted Decrease in system usage revenue				(\$18,022)	
Amount exceeding 2% limitation				\$1,397	

PORTLAND GENERAL ELECTRIC Calculation of 2% limitation of Schedule 129 Fixed Generation True-up

# 1. Load Returns to COS Pricing

	t				Fixed Gen.		2% Test	
	COS Cycle	COS Cycle Current Base	Base Rate	Sch 125	Adjustment	Subtotal	Adjustment	Proposed
Schedules		Revenues	mills/kWh	mills/kWh	mills/kWh	mills/kWh	mills/kWh	mills/kWh
83-8	5,167,663	5,167,663 \$430,329,834		83.27 (2.45)	(1.89)	9) 78.93	3 0.14	79.07
83-P	276,888	\$21,533,628		77.77	(1.89)	9) 73.51		73.65
89-S	676,398	\$53,769,916	, -	79.49 (2.46)	. •	9) 75.14	1 0.14	
89-P	2,517,345	2,517,345 \$180,649,879	, -	71.76 (2.35)	_			
1-68	1,241,812	1,241,812 \$83,230,110		67.02 (2.27)	_	9) 62.86	3 0.14	
Totals	9,880,106	3,880,106 \$769,513,367		77.89		73.59	Ġ	73.73
				Two percent	wo percent limiter ===>	73.73	~	

# 2. Load Remains on Multi-year Direct Access

Percent	Change <sup>1</sup>	-1.9%	-2.0%	-2.0%	-2.2%	-2.3%	-2.0%
		80.57	75.16	76.78	69.17	64.51	75.24
Subtotal	mills/kWh	(0	<del>-</del>	<del>-</del>	(6	<b>1</b>	2)
Sch 125	mills/kWh	(2.70)	(2.6	(2.7	(2.59)	(2.5	(2.65)
Base Rate		83,27	77.77	79.49	71.76	67.02	77.89
	Schedules	83-8	83-P	S-68	89-P	T-68	Totals

Source of Schedule 125 estimate is on page 5 of Exhibit 203 1. Percent change is with 2% limiter.

PORTLAND GENERAL ELECTRIC Calculation of Schedule 125 Price: Eligible Load Remains on Schedules 483/489

	2010						2040	
odi-fodos	Calendar COS Energy	2010 Base Generation	Generation	2010 Base NVPC	Sch 125	2010 NVPC	Sch 125 Rate	2010 Sch 125
	11 00 101	CONTRACT	Allocation	nevenues	Allocation	Cannada	IIIIIS/VAII	nevenues
Schedule 7	7,561,317	\$484,601	42.32%	\$349,480	(\$20,585)	\$328,896	(2.72)	(\$20,567)
Schedule 15	23,933	\$1,426	0.12%	\$1,029	(\$61)	\$968	(2.53)	(\$61)
Schedule 32	1,495,562	\$95,776	8.36%	\$69,095	(\$4,068)	\$65,027	(2.72)	(\$4,068)
Schedule 38	70,389	\$4,504	0.39%	\$3,247	(\$191)	\$3,056	(2.72)	(\$191)
Schedule 47	22,076	\$1,312	0.11%	\$947	(\$56)	\$891	(2.52)	(\$56)
Schedule 49	68,335	\$4,078	0.36%	\$2,942	(\$173)	\$2,769	(2.53)	(\$173)
Schedule 83-S	5,173,039	\$329,160	28.74%	\$237,494	(\$13,982)	\$223,512	(2.70)	(\$13,967)
Schedule 89-S	653,492	\$41,667	3.64%	\$30,048	(\$1,770)	\$28,278	(2.71)	(\$1,771)
Schedule 83-P	282,533	\$17,384	1.52%	\$12,542	(\$738)	\$11,803	(2.61)	(\$737)
Schedule 89-P	1,771,926	\$108,146	9.44%	\$77,988	(\$4,594)	\$73,394	(2.59)	(\$4,589)
Schedule 89-T	852,313	\$50,317	4.39%	\$36,373	(\$2,137)	\$34,236	(2.51)	(\$2,139)
Schedule 91	107,337	\$6,396	0.56%	\$4,614	(\$272)	\$4,343	(2.53)	(\$272)
Schedule 92/94	5,016	\$313	0.03%	\$226	(\$13)	\$213	(2.65)	(\$13)
Schedule 93	573	\$36	%00.0	\$26	(\$2)	\$25	(2.70)	(\$2)
TOTAL	18,087,841	\$1,145,117	100%	\$826,051	(\$48,642)	\$777,410		(\$48,606)
			Sch 125 TARGET ===>	)ET ===>	(\$48,642)			
2010 NVPC Adjustment for Returning Load Adjusted NVPC	\$830,697 (\$51,701) (page 8) \$778,995	(page 8)			•		.*	
2010 NVPC Revenues		(page 6)						
Change in NVPC Revenue Senstitive Adj. 3.37% Sch 125 Revenue Requirement	(\$47,056) (\$1,586) (\$48,642)							

PORTLAND GENERAL ELECTRIC Calculation of Generation and NVPC Revenues: Eligible Load Remains on Direct Access

·																									
2010 NVPC Revenues	\$69,662	\$279,819	\$1,029	\$69,095		\$1,732	\$1,516	\$947	\$2,942	\$237,494	\$12,542		\$21,432	\$8,616		\$52,566	\$25,422		\$23,216	\$13,157	\$4,614	\$226	\$26	0000	\$826,051
NVPC Price	33.37	51.12	42.99	46.20	٠	52.88	40.26	42.88	43.05	45.91	44.39		51.20	36.68		49.58	35.72		48.44	35.27	42.99	45.03	45.83		
UE 197 Fixed. Gen. Price	17.87	17.87	16.60	17.84		17.85	17.85	16.56	16.62	17.72	17.14		17.78	17.78		17.02	17.02		16.36	16.36	16.60	17.39	17.70		
2010 Base Generation Revenues	\$106,966	\$377,635	\$1,426	\$95,776		\$2,316	\$2,187	\$1,312	\$4,078	\$329,160	\$17,384		\$28,875	\$12,792		\$70,611	\$37,535		\$31,057	\$19,260	\$6,396	\$313	\$36		\$1,145,117
Energy Price	51.24	68.99	59.59	64.04		70.73	58.11	59.44	59.67	63.63	61.53		68.98	54.46		99.99	52.74		64.80	51.63	59.59	62.42	63.53		
2010 Calendar MWh	2,087,557	5,473,760	23,933	1,495,562		32,745	37,644	22,076	68,335	5,173,039	282,533		418,600	234,893		1,060,222	711,704		479,275	373,038	107,337	5,016	573	1000	18,087,841
Schedule	Sch 7 Block 1	Block 2	Sch 15	Sch 32	Sch 38	On-peak	Off-peak	Sch 47	Sch 49	Sch 83-S	Sch 83-P	Sch 89-S	On-peak	Off-peak	Sch 89-P	On-peak	Off-peak	Sch 89-T	On-peak	Off-peak	Sch 91	Sch 92	Sch 93	: - -	lotais

PORTLAND GENERAL ELECTRIC Calculation of NVPC Decrement due to Current Schedule 483/489 Customers Remaining on Direct Access

Current Schedule Schedule 483-S Total Energy (MWh)	Jan-10	Feb-10	Mar-10	Apr-10	Мау-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	12 Month Avg/Total
On-Peak Off-Peak Total	173 118 290	176 297	170 115 285	197 131 328	189 144 333	162 110 273	185 128 313	144 244 244	176 116 293	186 139 325	233 162 396	199 141 340	2,190 1,524 3,715
Schedule 489-5 Total Energy (MWh) On-Peak Off-Peak Total	835 560 1,395	776 505 1,281	863 574 1,437	849 548 1,397	814 570 1,384	832 499 1,331	850 <u>532</u> 1,381	883 <u>581</u> 1,464	843 49 <u>8</u> 1,341	795 <u>541</u> 1,337	813 511 1,324	737 478 1,215	9,890 <u>6,395</u> 16,286
Schedule 489-P Total Energy (MWh) On-Peak Off-Peak Total	33,536 26,205 59,741	35,427 25,344 60,771	35,000 <u>25,751</u> 60,750	33,330 25,919 59,248	36,097 <u>26,237</u> 62,334	35,555 <u>25,232</u> 60,787	36,442 <u>28,510</u> 64,952	38,031 <u>26,784</u> 64,814	35,042 26,731 61,774	36,624 <u>26,366</u> 62,990	36,221 25,840 62,062	35,741 <u>28,284</u> 64,026	427,046 <u>317,202</u> 744,248
Schedule 489-T Total Energy (MWh) On-Peak Off-Peak Total	15,593 14,618 30,211	15,171 13,503 28,674	17,773 1 <u>5,122</u> 32,896	16,702 14,593 31,295	17,602 14,933 32,535	19,047 1 <u>5,910</u> 34,957	17,986 18,365 36,352	18,581 17,499 36,080	16,867 17,189 34,056	16,967 16,43 <u>7</u> 33,405	16,014 15,744 31,758	15,558 13,213 28,77,1	203,862 187,128 390,989
Secondary Energy Totals On-Peak Off-Peak Total	1,008 678 1,685	953 626 1,578	1,033 688 1,722	1,047 678 1,725	1,002 214 717,1	995 1,603	1,034 660 1,694	1,027 1,707	1,019 615 ,634	981 68 <u>0</u> 1,661	1,046 673 1,719	936 <u>619</u> 1,554	12,081 <u>7,920</u> 20,001
Primary Energy Totals On-Peak Off-Peak Total	33,536 <u>26,205</u> 59,741	35,427 25,344 60,771	35,000 <u>25,751</u> 60,750	33,330 <u>25,919</u> 59,248	36,097 <u>26,237</u> 62,334	35,555 25,232 60,787	36,442 <u>28,510</u> 64,952	38,031 <u>26,784</u> 64,814	35,042 <u>26,731</u> 61,774	36,624 <u>26,366</u> 62,990	36,221 25,840 62,062	35,741 28,284 64,026	427,046 317,202 744,248
Subtransmission Energy Totals On-Peak Off-Peak Total	otals 15,593 14,618 30,211	15,171 13,503 28,674	17,773 <u>15.122</u> 32,896	16,702 14,593 31,295	17,602 14,933 32,535	19,047 15,910 34,957	17,986 18,365 36,352	18,581 - 17,499 36,080	16,867 17,189 34,056	16,967 16,437 33,405	16,014 15,744 31,758	15,558 13,213 28,771	203,862 187,128 390,989

PORTLAND GENERAL ELECTRIC Calculation of NVPC Decrement due to Current Schedule 483/489 Customers Remaining on Direct Access

Current Schedule	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	12 Month Avg/Total
Busbar Loads		٠											
Secondary Energy Totals On-Peak Off-Peak Total	1,092 734 1,826	1,032 678 1,710	1,120 746 1,865	1,134 735 1,869	1,086 774 1,860	1,078 660 1,737	1,121 715 1,836	1,112 738 1,850	1,104 666 1,770	1,063 737 1,800	1,134 729 1,862	1,014 670 1,684	13,088 <u>8,580</u> 21,669
Primary Energy Totals On-Peak Off-Peak Total	35,172 27,484 62,656	37,156 <u>26,580</u> 63,736	36,707 27,007 63,715	34,956 27,183 62,140	37,858 27,518 65,376	37,290 26,463 63,753	38,221 29,901 68,122	39,887 28,091 67,977	36,752 <u>28,036</u> 64,788	38,411 27,653 66,064	37,989 27,101 65,090	37,486 29,664 67,150	447,886 332,682 780,567
Subtransmission Energy Totals On-Peak Off-Peak Total	otals 16,119 15,111 31,229	15,682 13,958 29,641	18,372 15,632 34,004	17,265 15,085 32,350	18,196 15,436 33,632	19,689 16,446 36,135	18,592 18,984 37,577	19,207 18,089 37,296	17,436 17,768 35,204	17,539 16,991 34,530	16,553 16,275 32,828	16,082 13,658 29,740	210,732 193,434 404,165
Total Busbar Loads On-Peak Off-Peak Total	52,383 43,328 95,711	53,870 41,216 95,087	56,199 43,385 99,584	53,355 43,003 96,358	57,139 43,728 100,867	58,056 <u>43,569</u> 101,625	57,934 49,601 107,534	60,206 46,917 107,123	55,292 46,470 101,762	57,013 45,381 102,394	55,676 44,10 <u>5</u> 99,781	54,581 43,993 98,574	671,706 <u>534,696</u> 1,206,401
Note: Losses are 8.34%, 4.88%, and 3.37% for secondary, primary and subtransmission delivery voltages.	18%, and 3.37	% for second	lary, primary a	ınd subtransn	nission delive	ny voltages.							
Mid-Columbia Projected Prices On-peak Off-peak	<b>rices</b> 52.75 45.25	46.75 40.00	40.50	38.75 32.50	34.25	31.50 20.25	52.75 37.00	58.00 41.50	53.00 40.00	50.00 40.00	54.25 44.75	56.50 48.25	47.42 37.08
Net Variable Power Cost Decrement On-Peak S2,76 Off-Peak Total	ecrement \$2,763 \$1,961 \$4,724	\$2,518 \$1,649 \$4,167	\$2,276 \$1,475 \$3,751	\$2,067 \$1,398 \$3,465	\$1,957 \$940 \$2,897	\$1,829 . <u>\$882</u> \$2,711	\$3,056 <u>\$1,835</u> \$4,891	\$3,492 <u>\$1,947</u> \$5,439	\$2,930 \$1,859 \$4,789	\$2,851 \$1.815 \$4,666	\$3,020 <u>\$1,974</u> \$4,994	\$3,084 \$2,123 \$5,206	\$31,844 \$19,857 \$51,701

PORTLAND GENERAL ELECTRIC
ALLOCATION OF SCHEDULE 129 TRANSITION ADJUSTMENT
2009

	Cvcle		Allocations		
Grouping	Energy	Percent	(2000)	mills/kWh	
Schedule 83-S	5,368,304	20.0%	9,531	1.78	
Schedule 89-S 1-4 MW	683,443	6.4%	1,213	1.78	
Schedule 89-S GT 4 MW	26,194	0.5%	47	1.78	
Schedule 83-P	289,156	2.7%	513	1.78	
Schedule 89-P 1-4 MW	683,792	6.4%	1,214	1.78	
Schedule 89-P GT 4 MW	2,014,310	18.8%	3,576	1.78	
Schedule 89-T	1,664,965	15.5%	2,956	1.78	
TOTAL	10,730,165	100.00%	19,050		
	•	TARGET	19,050		

Note: cycle energy includes direct access customers