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June 30, 2011

Via Federal Express

Ms. Carol Hulse Oregon Public Utility Commission 550 Capitol Street, N.E., Suite 215 P.O. Box 2148 Salem OR 97308-2148

In the Matter of PORTLAND GENERAL ELECTRIC COMPANY Re: 2012 Annual Power Cost Update Tariff (Schedule 125) Docket No. UE 228

Dear Ms. Hulse:

Enclosed please find an original and six (6) copies of the Confidential Direct Testimony and Exhibits for Donald W. Schoenbeck on behalf of the Industrial Customers of Northwest Utilities in the above-referenced Docket. Confidential copies of the testimony and exhibits on yellow paper are being provided to those parties who have signed the Protective Order, Order No. 11-102.

Please also find one (1) CD containing the confidential testimony and exhibits, three (3) CDs containing the confidential workpapers of Donald W. Schoenbeck. All backup workpapers are also being provided concurrently on CD to Staff and PGE.

Please return one file-stamped copy of the Confidential Direct Testimony in the self-addressed, stamped envelope provided. Thank you for your assistance, and please do not hesitate to contact our office if you have any questions.

Sincerely yours,

/s/ Jacqueline E. Smith Jacqueline E. Smith

Enclosures cc: Service List

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the foregoing Direct Testimony

and Exhibits of Don Schoenbeck on behalf of the Industrial Customers of Northwest Utilities

upon the parties, on the service list, by causing the same to be deposited in the U.S. Mail,

postage-prepaid, where paper service has not been waived. Confidential copies have been

provided to those parties who have signed the Protective Order, Order No. 11-102.

Dated at Portland, Oregon, this 30th day of June, 2011.

<u>/s/Jacqueline E. Smith</u> Jacqueline E. Smith

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PAGE 1 - CERTIFICATE OF SERVICE

OF OREGON

UE 228

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In the Matter of

PORTLAND GENERAL ELECTRIC

2012 Annual Power Cost Update Tariff (Schedule 125)

TESTIMONY OF

DONALD W. SCHOENBECK

ON BEHALF OF

THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

REDACTED VERSION

June 30, 2011

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. 2 A. My name is Donald W. Schoenbeck. I am a member of Regulatory & Cogeneration 3 Services, Inc. ("RCS"), a utility rate and economic consulting firm. My business address 4 is 900 Washington Street, Suite 780, Vancouver, WA 98660. 5 **Q**. PLEASE DESCRIBE YOUR BACKGROUND AND EXPERIENCE. 6 Α. I've been involved in the electric and gas utility industries for almost 40 years. For the 7 majority of this time, I have provided consulting services for large industrial customers 8 addressing regulatory and contractual matters. I have appeared before the Oregon Public 9 Utility Commission (the "Commission" or "OPUC") on many occasions since 1984. A 10 further description of my educational background and work experience can be found in Exhibit ICNU/101 in this proceeding. 11 12 **ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?** Q. 13 I am testifying on behalf of the Industrial Customers of Northwest Utilities ("ICNU"). А. 14 ICNU is a non-profit trade association whose members are large industrial customers 15 served by electric utilities throughout the Pacific Northwest, including Portland General Electric Company ("PGE" or the "Company"). 16 17 **Q**. WHAT TOPICS WILL YOUR TESTIMONY ADDRESS? 18 А. I will discuss select issues related to the Company's proposal to decrease the projected 19 net variable power costs ("NVPC") revenue that would be recovered under the current 20 Annual Update Tariff ("AUT"). At the current tariff charges, the Company would 21 recover NVPC of \$743.7 million of revenue while the Company has projected only 22 \$724.9 million for 2012 NVPC, a reduction of \$18.8 million or -2.5%. The average

23 proposed overall rate decrease is approximately 1.1% with a proposed large industrial

1		rate decrease of 1.4%. Specifically, I will address the Company's financial hedging
2		strategy and its impact on the NVPC for 2012, the forward price curves used as a starting
3		point for deriving the projected NVPC, the planned outage for the Colstrip Unit 4,
4		deriving the maximum value from Rockies gas purchases, the Port Westward forced
5		outage rate, and the projected payments to the Bonneville Power Administration ("BPA")
6		for power factor penalty charges.
7 8	Q.	PLEASE BRIEFLY SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS ADDRESSED IN THIS TESTIMONY.
9	А.	The adjustments I recommend the Commission adopt in this testimony will reduce the
10		NVPC cost by [Confidential]
11		
12		[Confidential] A brief description of all the adjustments I will
13		address is as follows.
14		1. Gas Financial Hedging Strategy
15		The Company's NVPC includes [Confidential]
16		
17		
18		[Confidential]
19		2. <u>Source of Forward Price Curves</u>
20		The Company uses internally generated confidential monthly electricity and gas
21		forward prices to determine NVPC. I recommend an independent (or third party) source
22		be used to eliminate any concerns regarding the possibility of gaming, provide greater
23		access to the associated prices, and to allow for more precise tracking of how forward

1	market movements would impact the Company's NVPC. Based on a comparative
2	analysis we have done, I recommend using Intercontinental Exchange ("ICE") settlement
3	data as the source of the forward prices. I believe this recommendation will have little if
4	any impact on the NVPC in this case, while providing the benefits I have just
5	enumerated.
6	3. <u>Planned Outage for Colstrip Unit 4</u>
7	The Company's NVPC development includes a scheduled maintenance outage for
8	Colstrip Unit 4 [Confidential]
9	[Confidential] Correcting the planned
10	outage in the Company's NVPC dispatch model ("Monet") lowers the NVPC by \$2.1
11	million.
12	4. <u>Use of Rockies Gas</u>
13	[Confidential]
14	
15	
16	
17	[Confidential] My recommendation reduces the 2012
18	NVPC projection by \$3.3 million.
19	5. <u>Port Westward Forced Outage Rate</u>
20	The Company's forced outage rate for Port Westward is [Confidential]
21	
22	
23	

1	[Confidential] This adjustment
2	reduces the NVPC by about \$0.4 million.
3	6. <u>BPA Power Factor Penalty Charges</u>
4	The Company has [Confidential]
5	
6	[Confidential] My recommended

7 adjustment will reduce the NVPC by about \$0.1 million.

#	Adjustments	\$ (in millions)
1	Gas Financial Hedging Strategy	[Confidential] [Confidential]
2	Source of Forward Price Curves	\$0.0
3	Colstrip Unit 4 Outage	-\$2.1
4	Use of Rockies Gas	-\$3.3
5	Port Westward FOR	-\$0.4
6	BPA Power Factor Charges	-\$0.1
	Total	[Confidential] [Confidential]

Table 1: Combined Adjustments

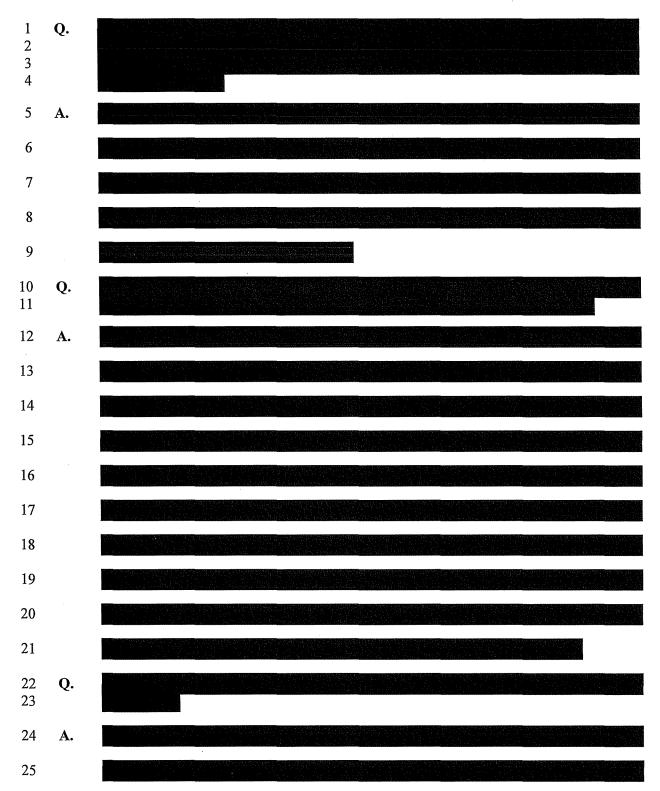
8 GAS FINANCIAL HEDGING STRATEGY

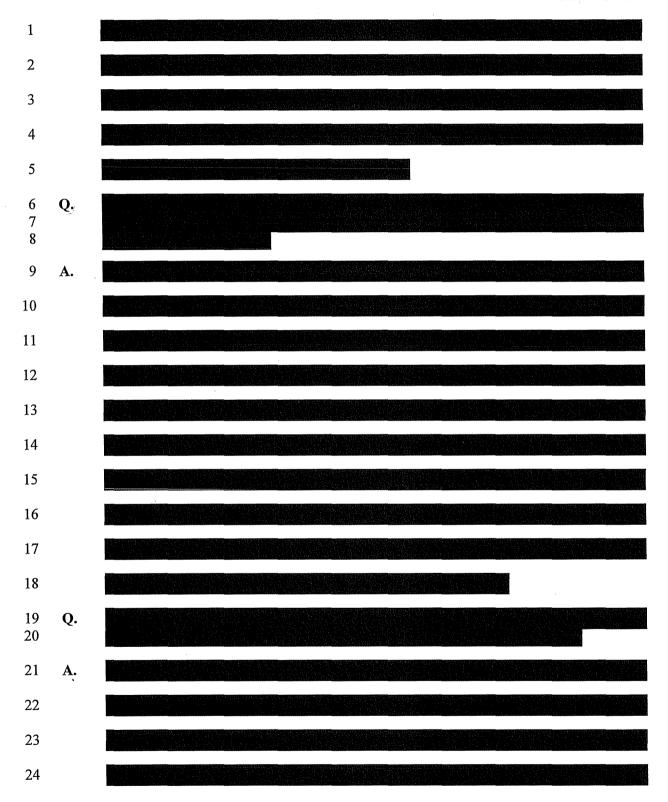
9 Q. COULD YOU PLEASE PROVIDE A BRIEF EXPLANATION OF WHY A 10 COMPANY WOULD PURSUE GAS FINANCIAL HEDGING?

A. Yes. Gas financial hedging has been part of the energy industry since at least the mid 1990's. Companies participate in hedging to manage gas commodity risk thereby
 reducing price volatility and providing some price certainty. Based on my experience
 and observation, I believe critical elements of a successful strategy include: 1)

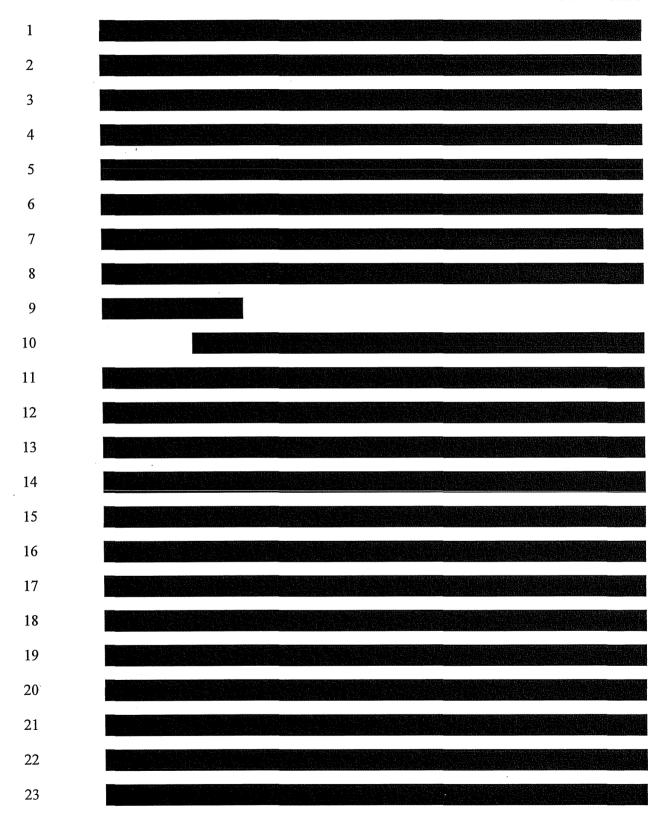
recognition that it is highly unlikely that you will be able to "beat the market" through 1 hedging; 2) the diversification principle of portfolio theory should be applied; and 3) the 2 cost and revenue risk should be aligned as closely as possible. These elements form a 3 hedging policy that relies on executing transactions on a programmatic basis, relying on 4 5 both forward and spot markets for gas transactions (either physical or financial), and not 6 contracting for gas long before it is projected to be needed. DOES THE COMPANY EXECUTE GAS HEDGES PURSUANT TO A GAS 7 Q. 8 **HEDGING STRATEGY?** 9 The Company's proposed 2012 NVPC includes the cost associated with Yes. A. [Confidential] [Confidential] gas financial hedging transactions executed from 10 11 [Confidential] [Confidential] with an associated 12 mark-to-market cost of [Confidential] [Confidential] Confidential 13 Exhibit ICNU/102, Schoenbeck/1 is a summary of each of the transactions the Company 14 has included in its NVPC determination. As provided in response to an ICNU data 15 request, [Confidential] 16 17 18 19

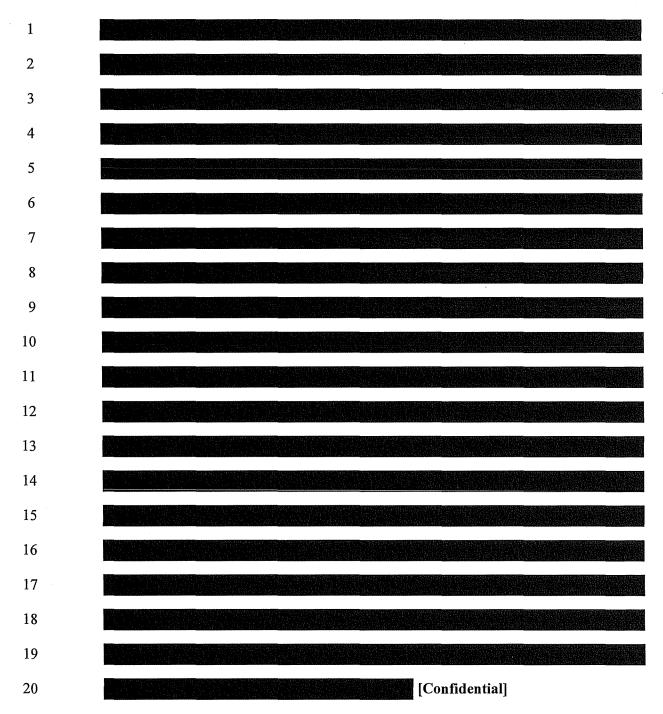
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1Q.CAN YOU PROVIDE EXAMPLES OF OTHER UTILITIES IN THE INDUSTRY2THAT HAVE A HEDGING STRATEGY SIMILAR TO THE ONE YOU ARE3ADVOCATING?

4 A. Unfortunately, most utilities declare their hedging strategies to be confidential—just as
5 the Company has done in this proceeding—so there are only very limited public
6 examples that can be provided.

However, this Commission is well aware of the hedging strategies employed by 7 8 both NW Natural Gas Company ("NW Natural") and Avista Utilities ("Avista"). NW Natural uses physical and financial hedges for up to five years but the hedges are very 9 10 limited as you move away from the prompt contract year. As reported in their 2010 annual report to the Security and Exchange Commission ("SEC"), NW Natural entered 11 12 the 2010-2011 gas contract year ("prompt year") being only 77% hedged on their projected purchased volumes. For the second year out, NW Natural is only 45% hedged 13 14 and for the third year out NW Natural has hedged only 5-10% of the forecasted purchase volume. See Exhibit ICNU/102, Schoenbeck/15. While I cannot detail the confidential 15 strategy employed by Avista, the net result of this strategy can be illustrated by Avista's 16 17 recent rate filing in Washington for a 2012 test year. The publicly available pro forma 18 power supply Exhibit WGJ-2 indicates a mark-to-market cost associated with physical 19 gas transactions of \$4.8 million and a financial hedge mark-to-market credit of \$113,000. 20 See Exhibit ICNU/102, Schoenbeck/17. These two values net to a \$4.7 million mark-to-21 market adjustment for 2012. As Avista projected 2012 gas generation is roughly 22 [Confidential] **[Confidential]** of the Company's, the Avista mark-to-market value 23 [Confidential] [Confidential] to be comparable with the Company's gas need. The difference in 2012 mark-to-market adjustments is 24

1 substantial as Portland General Electric is seeking recovery of [Confidential] 2 [Confidential] while a comparable Avista value would be only [Confidential] 3 [Confidential] a difference of [Confidential] [Confidential] WHAT IS YOUR SPECIFIC RECOMMENDATION WITH REGARD TO THE 4 Q. 5 AMOUNT OF THE COMPANY'S MARK TO MARKET GAS COSTS THAT 6 SHOULD BE ALLOWED IN THIS PROCEEDING? 7 Α. Confidential Exhibit ICNU 102, Schoenbeck/18 presents and compares my recommended 8 hedging parameters and the resulting impact on the allowable mark to market costs the 9 Company should be allowed to recover. My recommendation is based on a 10 programmatic hedging policy for all months of the year, but it also recognizes the 11 uniqueness of the second quarter (April through June) of each year when abundant hydro 12 is available to displace the vast majority if not all of the gas-fired generation in the 13 Pacific Northwest region. For these months, the hedged target should be substantially 14 lower than all remaining months of the year. Implementing this recommendation reduces

15 the Company's mark-to-market amount [Confidential]

. [Confidential]

- 16 It still allows the Company to recover the [Confidential]
- 17 [Confidential] attributable to their hedging program.
- 18 SOURCE OF FORWARD PRICE CURVES

ARE FORWARD PRICE CURVES USED IN THE DEVELOPMENT OF THE 19 Q. **COMPANY'S NVPC?** 20

21 Yes. The Company uses forward monthly gas and electricity forward price projections or A. 22 curves as inputs in developing its NVPC. The Company has declared these monthly 23 forward prices to be confidential. The monthly forward gas prices are used to determine 24 burner-tip fuel costs and in the mark-to-market gas hedging calculations.

1		[Confidential]
2		
3		
4		[Confidential] As with the gas forwards prices, these electricity
5		prices are used in deriving NVPC. The Company converts the forward monthly
6		electricity prices into hourly values required for the Monet model.
7	Q.	HOW DOES THE COMPANY DEVELOP ITS FORWARD PRICE CURVES?
8	А.	The Company's SEC 10-K filing describes the sources and method used by the Company
9		to generate their forward price curves:
10 11 12 13 14 15 16 17 18		PGE's forward price curves are created by utilizing actively quoted market indicators received from electronic and telephone brokers, industry publications, NYMEX, and other sources, and are validated using independent publications. Estimates used in creating forward price curves can change with market conditions and can be materially affected by unpredictable factors such as weather and the economy. The difference between PGE's forward price curves and four independently published price curves averages 1%. The difference at any single location, delivery date and commodity is less than 5%.
19		Portland General Electric 2009 10-K at 67.
20 21 22	Q.	HAVE YOU DONE ANY ANALYSIS COMPARING THE COMPANY'S INTERNAL MONTHLY PRICE CURVES WITH FORWARD PRICES REPORTED FROM INDEPENDENT OR THIRD PARTY SUPPLIERS?
23	А.	Yes. There are a host of third party providers willing to market or provide forward
24		prices. Our firm has access to forward prices from several sources offering a variety of
25		price points. We analyzed and compared a sample of the Company's forward price
26		curves with ICE settlement prices. It has been my experience that ICE prices are
27		recognized as a reputable source of forward prices. For example, a workshop was
28		conducted in California several years ago to evaluate and ascertain third party

1	independent forward price providers that could be used by the investor owned utilities in
2	order to determine short run avoided payments to qualifying facilities. The ICE
3	transactional data was one of four providers chosen and agreed to by all parties to form a
.4	pool of providers from which each utility would select three providers. Each of the three
5	investor owned utilities in California uses ICE data as one of the three sources. The
6	comparative analysis we performed was for five trading days in each month of January,
7	February and March of 2011. The analysis was done for the [Confidential]
8	[Confidential] and both the on-peak and off-peak
9	prices for [Confidential] [Confidential] This analysis is provided as
10	Confidential Exhibit ICNU/103. There are two important observations that should be
11	pointed out from this analysis. First, [Confidential]
12	
13	
14	
15	
16	[Confidential] Second, in the
17	electricity off-peak series, ICE does not provide individual monthly values beyond the
18	prompt twelve to fourteen months at this hub. This is not unusual. Most sources
19	generally go from monthly to quarterly to annual reported forward prices as you go out in
20	time. Generally, historic day-ahead reported prices are used to convert a quarterly value
21	into monthly values if this granularity of data is needed. However, by the time the final
22	update filing is made in this proceeding, there should be twelve monthly electricity off-
23	peak values for 2012.

1Q.WHAT CONCLUSION AND RECOMMENDATIONS DO YOU HAVE FROM2HAVING PERFORMED YOUR COMPARATIVE ANALYSIS?

3 A. [Confidential]

4

5 [Confidential] I recommend that ICE prices be used where ever possible 6 instead of the Company's prices. In my view, this will provide several benefits to the 7 AUT process. First, it results in a more transparent procedure because the data is readily 8 available from ICE so it can be obtained without going through the Company's 9 confidential discovery process. Second, as the prices are provided by an independent party, it reduces the potential for gaming by the Company and manipulating the final 10 11 curves used to establish the AUT rates. Third, forward prices change from day to day. By using ICE data for the forward prices, any party can monitor the forward price 12 movement throughout the AUT process. This will eliminate some "surprises" that could 13 14 otherwise occur when the final curves are employed in the final update. I know from experience that this last point has been very useful in past Puget Sound Energy ("PSE") 15 16 proceedings where the tracking of Kiodex forward prices (the third party supplier used by PSE for forward gas and electricity prices in its filings) has provided a before the fact 17 18 understanding of the ultimate rate increase authorized by the Washington Commission in 19 PSE proceedings.

1

PLANNED OUTAGE FOR COLSTRIP UNIT 4

2 Q. DOES THE COMPANY'S NVPC INCLUDE ANY SCHEDULED 3 MAINTENANCE OUTAGE FOR COLSTRIP UNIT 4?

- 4 A. Yes. The Company's Monet inputs show a derating of the unit's capacity of
- 5 6

[Confidential]

7 Q. IS THIS CORRECT?

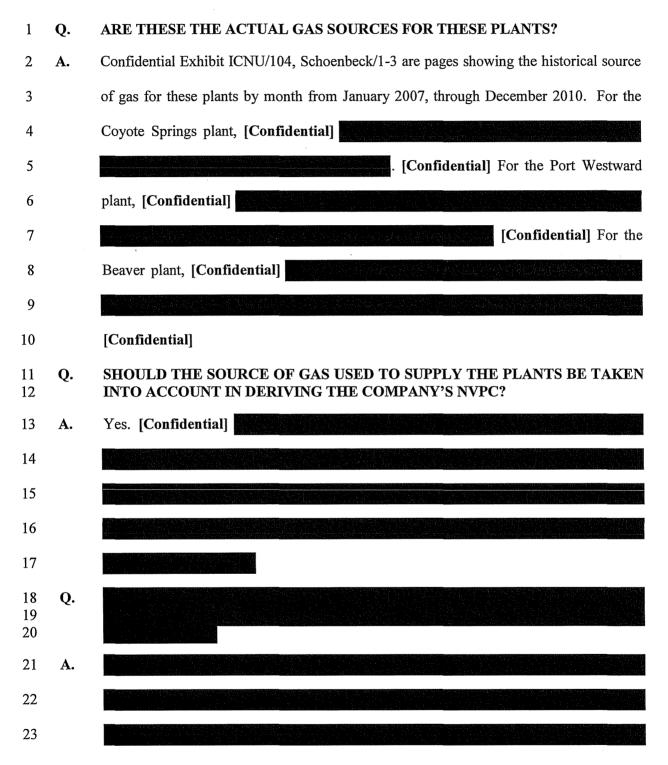
[Confidential]

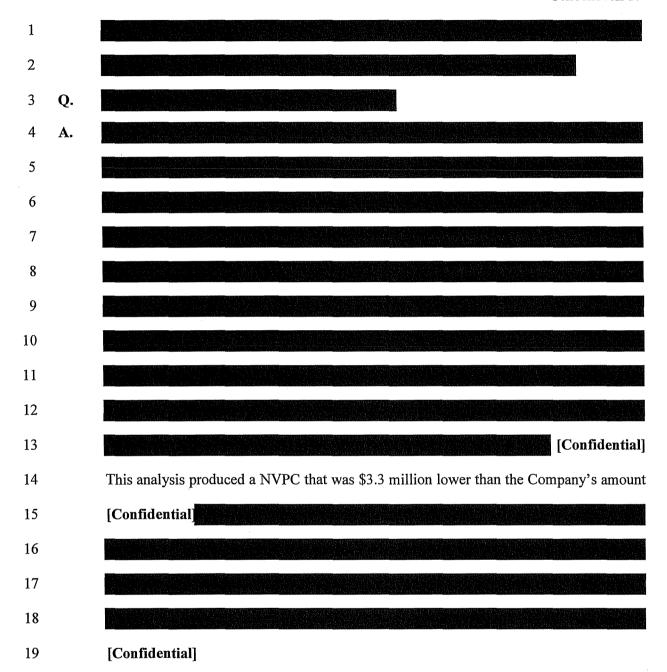
- The workpapers provided by the Company as part of the minimum filing 8 A. No. 9 requirements contained contradictory information with regard to the planned outage 10 schedule for Colstrip unit 4. In response to an ICNU data request seeking clarification, 11 the Company confirmed the current schedule for the outage is different than what had 12 been used in the Monet model. Confidential Exhibit ICNU/107. The Company stated it 13 would make the necessary correction in its July update filing. A sensitivity analysis we 14 did indicates this change will reduce the NVPC by \$2.1 million.
- 15 USE OF ROCKIES GAS

16Q.WHAT GAS SOURCE DOES THE COMPANY USE TO DERIVE THE NVPC17FOR ITS GAS-FIRED RESOURCES?

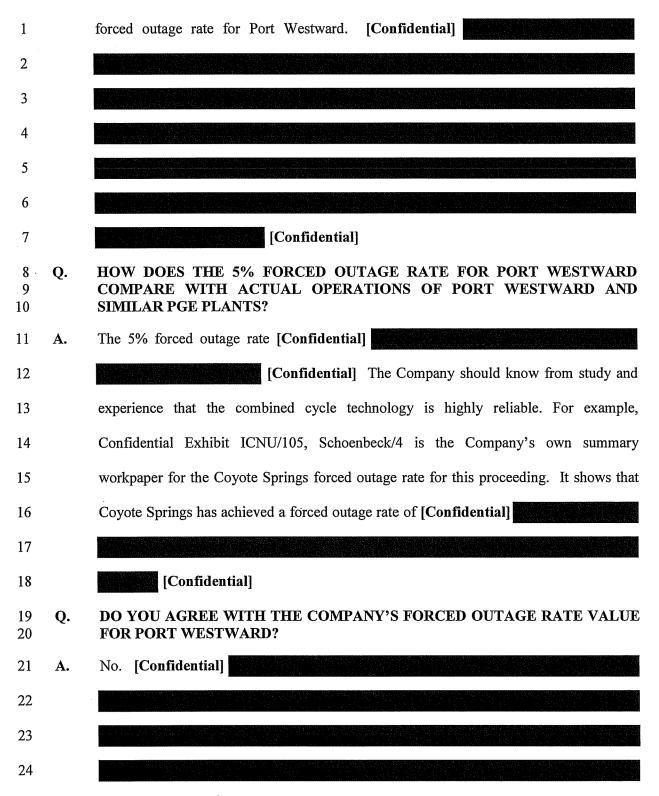
18 A. For the Coyote Springs plant, the Company derives a burnertip price using
19 [Confidential] [Confidential] For the Port Westward and Beaver
20 plants, the Company derives the burnertip prices using [Confidential]

- 21
- 22
- [Confidential]





1		PORT WESTWARD FORCED OUTAGE RATE
2 3	Q.	HOW DID THE COMPANY DERIVE THE FORCED OUTAGE RATE FOR PORT WESTWARD?
4	А.	The Company used [Confidential]
5		[Confidential] Confidential Exhibit ICNU/105,
6		Schoenbeck/1-3 are copies of the Company calculation [Confidential]
7		[Confidential]
8 9	Q.	ARE YOU AWARE WHETHER THE PORT WESTWARD FORCED OUTAGE RATE HAS BEEN ADDRESSED IN PREVIOUS PROCEEDINGS?
10	А.	Yes. ICNU witness Randall Falkenberg submitted testimony regarding the forced outage
11		rate for Port Westward in UE 215. Mr. Falkenberg recommended that a mature outage
12		rate be used for Port Westward based on the operating history of the Coyote Spring plant.
13		In his testimony, Mr. Falkenberg noted that his adjustment was not in conflict with the
14		UM 1355 docket, which investigated forced outage rates to use for new resources.
15 16	Q.	HAVE YOU REVIEWED PGE'S ESTIMATED FORCED OUTAGE RATE IN THIS CASE?
17	А.	Yes. PGE has proposed a 5% forced outage rate for the first two years [Confidential]
18		
19		[Confidential] As part of
20		the minimum filing requirements, PGE provided an explanation and summary of the data
21		regarding its estimated 5% forced outage rate for the first two years of operation. The
22		information provided in the minimum filing requirements is very useful in conducting my
23		review and analysis of all issues in this proceeding, and PGE should be commended for
24		providing this detailed information. The information, however, does not support a 5%



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1		[Confidential] Based on a sensitivity analysis we performed using Monet, this
2		recommendation lowers the Company's NVPC by \$0.4 million.
3		BPA POWER FACTOR PENALTY CHARGES
4 5	Q.	DOES THE COMPANY PAY POWER FACTOR CHARGES TO BPA UNDER ITS TRANSMISSION AGREEMENTS?
6	А.	Yes. BPA like most transmission owners will charge for reactive power in excess of a
7		certain amount or tolerance band. These penalty charges act as an incentive to manage
8		and control reactive demand in order to maximize the flow of megawatts over the
9		transmission system.
10 11	Q.	WHAT ASSUMPTION HAS THE COMPANY USED TO PROJECT THE EXPECTED POWER FACTOR PENALTY PAYMENTS TO BPA FOR 2012?
12	А.	Confidential Exhibit ICNU/106, Schoenbeck/1-3 are copies of Company workpapers
13		provided as support for the 2012 amount. These documents indicate [Confidential]
14		
15		[Confidential]
16	Q.	DO YOU ACCEPT THE COMPANY'S PROPOSED LEVEL?
17	А.	No. In response to an ICNU data request, the Company provided [Confidential]
18		
19		[Confidential] Confidential Exhibit ICNU/106, Schoenbeck/4 is a copy of the
20		attachment to this data response. [Confidential]
21		
22		
23		
24		

1		
2		[Confidential] a reduction of \$145,000.
3	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
4	А.	Yes.

OF OREGON

UE 228

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In the Matter of

PORTLAND GENERAL ELECTRIC

2012 Annual Power Cost Update Tariff (Schedule 125)

EXHIBIT ICNU/107

PGE REVISED DATA RESPONSE TO ICNU DATA REQUEST 009

REDACTED VERSION

June 30, 2011

REDACTED ICNU/107 Schoenbeck/1

June 29, 2011

TO: S. Bradley Van Cleve Davison Van Cleve, P.C.

FROM: Randy Dahlgren Director, Regulatory Policy & Affairs

PORTLAND GENERAL ELECTRIC UE 228 PGE *Revised* Response to ICNU Data Request Dated May 2, 2011 Question No. 009 (2.7)

Request:

With regard to the Colstrip 3 & 4 Proposed 2011 Budget provided as an EXCEL file in the minimum filing requirements folder Volume 3 Colstrip Fuel Costs Variable (Units+3+4+2011+Budget+Rev+0+9-1-10(2).xls), please explain why the Company is not using the planned outage schedule for the units as presented in this document for 2012, including providing any supporting and more recent documents from the plant operators.

Revised Response (Dated June 29, 2011):

This Revised Response is intended to replace PGE's Response to ICNU Data Request No. 009 dated May 13, 2011. The revision is being made in order to remove confidential information inadvertently contained in that Response.

The planned maintenance outage schedule presented in the Colstrip Units 3&4 Proposed 2011 Budget (Units+3+4+2011+Budget+Rev+0+9-1-10(2).xls) is correct. The Colstrip Unit 4 maintenance outage is not scheduled to occur as currently modeled in Monet. The schedule for maintenance was confirmed with the plant by PGE's Fundamentals Group on May 5, 2011. That confirmation e-mail is provided as Attachment 009-A Rev 1. PGE's July 15, 2011, power cost update filing will reflect this revision to the timing of the Colstrip Unit 4 maintenance outage.

Attachment 009-A Rev 1 is confidential and subject to Protective Order No. 11-102.

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UE 228 Attachment 009-A Rev 1

Confidential and Subject to Protective Order 11-102

E-mail confirming Colstrip Unit Outage

OF OREGON

UE 228

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In the Matter of

PORTLAND GENERAL ELECTRIC

2012 Annual Power Cost Update Tariff (Schedule 125)

EXHIBIT ICNU/101

QUALIFICATIONS OF DONALD W. SCHOENBECK

June 30, 2011

QUALIFICATIONS AND BACKGROUND OF DONALD W. SCHOENBECK

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	А.	Donald W. Schoenbeck, 900 Washington Street, Suite 780, Vancouver, Washington
3		98660.
4	Q.	PLEASE STATE YOUR OCCUPATION.
5	А.	I am a consultant in the field of public utility regulation and I am a member of Regulatory
6		& Cogeneration Services, Inc. ("RCS").
7 8	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
9	А.	I have a Bachelor of Science Degree in Electrical Engineering from the University of
10		Kansas and a Master of Science Degree in Engineering Management from the University
11		of Missouri.
12		From June of 1972 until June of 1980, I was employed by Union Electric
13		Company in the Transmission and Distribution, Rates, and Corporate Planning functions.
14		In the Transmission and Distribution function, I had various areas of responsibility,
15		including load management, budget proposals and special studies. While in the Rates
16		function, I worked on rate design studies, filings and exhibits for several regulatory
17		jurisdictions. In Corporate Planning, I was responsible for the development and
18		maintenance of computer models used to simulate the Company's financial and economic
19		operations.
20		In June of 1980, I joined the consulting firm of Drazen-Brubaker & Associates,
21		Inc. Since that time, I have participated in the analysis of various utilities for power cost
22		forecasts, avoided cost pricing, contract negotiations for gas and electric services, siting
23		and licensing proceedings, and rate case purposes including revenue requirement

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1		determination, class cost-of-service and rate design.
2		In April 1988, I formed RCS. RCS provides consulting services in the field of
3		public utility regulation to many clients, including large industrial and institutional
4		customers. We also assist in the negotiation of contracts for utility services for large
5		users. In general, we are engaged in regulatory consulting, rate work, feasibility,
6		economic and cost-of-service studies, design of rates for utility service and contract
7		negotiations.
8 9	Q.	IN WHICH JURISDICTIONS HAVE YOU TESTIFIED AS AN EXPERT WITNESS REGARDING UTILITY COST AND RATE MATTERS?
10 [.]	А.	I have testified as an expert witness in rate proceedings before commissions in the states
11		of Alaska, Arizona, California, Delaware, Idaho, Illinois, Maryland, Montana, Nevada,
12		North Carolina, Ohio, Oregon, Washington, Wisconsin and Wyoming. In addition, I have
13		presented testimony before the Bonneville Power Administration, the National Energy
14		Board of Canada, the Federal Energy Regulatory Commission, publicly-owned utility
15		boards and in court proceedings in the states of Washington, Oregon and California.

OF OREGON

UE 228

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In the Matter of

PORTLAND GENERAL ELECTRIC

2012 Annual Power Cost Update Tariff (Schedule 125)

EXHIBIT ICNU/102

GAS HEDGING STRATEGY

REDACTED VERSION

June 30, 2011

[PAGES 1-13 and 18 ARE CONFIDENTIAL]

REDACTED	
ICNU/102	
Schoenbeck/14	

Exhibit No. ____ (WGJ-2)

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-110876

EXHIBIT NO.___(WGJ-2)

WILLIAM G. JOHNSON

REPRESENTING AVISTA CORPORATION

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2011 Outlook

REDACTED ICNU/102 Schoenbeck/15

In 2011, we intend to remain focused on improving our core businesses, enhancing our strategic position, advancing business development projects related to our primary business segments, and strengthening our organizational effectiveness. The following is a brief summary of management's plans and objectives in these four areas. For further information, see "Issues, Challenges and Performance Measures," and "Strategic Opportunities," below.

Business improvements. We continue to develop, integrate, consolidate and streamline operations using recently acquired new technology, which include an enterprise resource planning system, an automated dispatching system and an automated meter reading system. These and other new technologies support our operating model.

Strategic position. We remain committed to creating shareholder value while balancing the interests of our customers, employees and the communities we serve. To create value, we anticipate and respond to business challenges and opportunities that lie ahead, including finding innovative solutions to economic and environmental challenges as well as regulatory, workforce and business development challenges and opportunities, such as the potential investment in long-term gas reserves on behalf of our utility customers.

Business development. We continue to focus on the development of our underground gas storage businesses, the natural gas infrastructure investment in Palomar and key utility initiatives.

Organizational effectiveness. Our employees are our most valued resource. We intend to support our employees with a positive and safe work environment, on-going training opportunities, continued refinement of our organizational structure and new technologies to achieve goals and facilitate improvements.

Issues, Challenges and Performance Measures

Economic weakness. Ongoing weakness in local and U.S. economies has continued to impact utility customer growth, business demand for natural gas and gas storage prices. Most recently, our utility's annual customer growth rate increased slightly to 0.9 percent at December 31, 2010, compared to 0.8 percent in 2009 and 1.6 percent in 2008. We are still faced with 10 to 11 percent unemployment rates in Oregon and southwest Washington and a sluggish business environment. However, despite these challenges we believe we are well positioned to continue adding utility customers due to lower natural gas prices, our relatively low market penetration, our efforts to convert homes to natural gas, and the potential for environmental initiatives that could favor natural gas use in our region.

Managing gas prices and supplies. Our gas acquisition strategy is designed to secure sufficient supplies of natural gas to meet the needs of our utility customers and to hedge gas prices to effectively manage costs, reduce price volatility and maintain a competitive advantage. With recent success in new drilling technologies and substantial new supplies from shale gas formations around the U.S. and in Canada, the supply of North American natural gas has increased dramatically, which has contributed to lower and more stable gas prices. We entered the 2010-11 gas contract year, which began November 1, 2010, hedged on gas commodity prices at approximately 77 percent of our forecasted purchase volumes. In addition, we are currently hedged at approximately 45 percent for the 2011-12 gas contract year and between 5 and 10 percent for the 2012-13 gas contract year. Our Purchased Gas Adjustment (PGA) mechanism, along with our gas price hedging strategies and gas supplies in storage, enable us to reduce earnings risk exposure and secure lower gas costs for customers. These lower gas prices, coupled with good customer service and energy efficiency programs for customers, can help strengthen natural gas' competitive price advantage compared to other fuels. In addition to hedging gas prices over the next few years, we are evaluating and developing other gas acquisition strategies to potentially manage gas price volatility for customers beyond three years, including possible investment in long-term gas reserves. Although stable gas prices provide opportunities to manage costs for our distribution customers, they present challenges for our gas storage business by lowering the value of, and reducing demand for, storage services and limiting Gill Ranch's ability to contract for longer terms at favorable prices.

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NWN 10-K 12/31/2010

Section 1: 10-K (FORM 10-K)

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2010

OR

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from ______ to_____

Commission file number 1-15973



NORTHWEST NATURAL GAS COMPANY (Exact name of registrant as specified in its charter)

Oregon (State or other jurisdiction of incorporation or organization) 93-0256722 (I.R.S. Employer Identification No.)

220 N.W. Second Avenue, Portland, Oregon 97209 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (503) 226-4211

Securities registered pursuant to Section 12(b) of the Act:

Title of each class Common Stock Name of each exchange on which registered New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [X] No []

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes $\begin{bmatrix} 1 \\ 0 \end{bmatrix}$ No $\begin{bmatrix} X \end{bmatrix}$

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No []

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No []

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer [X]

Accelerated Filer []

Exhibit No.___(WGJ-2)

Avista Corp. Power Supply Pro forma - Washington Jurisdiction System Numbers - Jan 2010 - Dec 2010 Actual and Jan 2012 - Dec 2012 Pro Forma 2010 Loads with Energy Efficiency Load Adjustment

Line		(m 10 Den 10		lan 40 Dec 40
No.		Jan 10 - Dec 10 Actuals	Adjustment	Jan 12 - Dec 12 Pro forma
1	555 PURCHASED POWER		- Algorithman	
1	Modeled Short-Term Market Purchases	\$0	\$16,924	\$16,924
2	Actual ST Market Purchases - Physical	159,193	-147,924	11,269
3	Actual ST Purchases - Financial M-to-M	0	12,326	12,326
4	Rocky Reach	2,172	-2,172	· 0
5	Rocky Reach/Rock Island Purchase	0	11,384	11,384
6	Wells - Avista Share	1,400	499	1,899
7	Wells - Colville Tribe's Share	9,496	-9,496	0
8	Priest Rapids Project	5,609	785	6,394
9 10	Wanapum	-1,228	1,228	0
10	Grant Displacement Douglas Settlement	5,653 334	-5,653 246	580
12		21,475	240 578	22.053
13	Lancaster Variable O&M Payments	2,689	-223	2,466
14	Lancaster BPA Reserves	824	-824	2,400
15		13.920	1.284	15,204
16	Deer Lake-IP&L	10,020	,,204	6
17	Small Power	1,079	13	1,092
18	Stimson	1,964	402	2,366
19	Spokane-Upriver	2.055	884	2.939
20		234	-234	
21	Non-Monetary	90	-90	Ō
22	Contract A	6,789	-6,789	0
23	Contract B	8,745		0
24	Contract C	6,658	-6,658	0
25	Contract D	7,556	-7,556	
26	Clearwater Paper Co-Gen Purchase	18,720	-18,720	
27		631		
28		3,016		
29	Total Account 555	277,080	-170,177	106,903
	557 OTHER EXPENSES			
30		366	3 () 366
31		345		350
32		() 72	5 725
33	Natural Gas Fuel Purchases	119,110	5 -119,11	ş <u>0</u>
34	Total Account 557	119,83) 1,441
	501 THERMAL FUEL EXPENSE			
38		10,55	•	•
	Kettle Fails - Start-up Gas	3	-	0 30
37		15,98		-
31		<u>13</u> 26,70		0 <u>139</u> 6 32,040
-01	9 Total Account but	20,70	4 0,30	0 52,040
	547 OTHER FUEL EXPENSE			
4		53,49	1 -15,89	4 37,697
4	1 Coyote Springs 2 Gas Transportation	7,89	1 -{	8 7,833
4	2 Lancaster Gas	46,90	2 -6,54	
4	3 Lancaster Gas Transportation	- 5,83		
	4 Lancaster Gas Transportation Optimization		0 -4	
	5 Actual Physical Gas Transactions M-to-M		0 4,8	
	6 Actual Financial Gas Transactions M-to-M	-	0 -1 [.]	
	7 Ges Transportation for BP, NE and KFCT		32	0 32
	8 Rathdrum Gas		45 -5 20	
	9 Northeast CT Gas 0 Boulder Park Gas			52 0 72 33
5	A PARKA LAN AGS	5		

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PORTLAND GENERAL ELECTRIC

2012 Annual Power Cost Update Tariff (Schedule 125)

EXHIBIT ICNU/103

SOURCE OF FORWARD PRICES

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EXHIBIT ICNU/104

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EXHIBIT ICNU/105

PORT WESTWARD FORCED OUTAGE RATE

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EXHIBIT ICNU/106

BPA POWER FACTOR PENALTY CHARGES

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