

EXHIBIT NO. ___(EMM-1HCT)
DOCKET NO. _____
2005 POWER COST ONLY RATE CASE
WITNESS: ERIC M. MARKELL

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

Docket No. UE-_____

**PREFILED DIRECT TESTIMONY OF
ERIC M. MARKELL (HIGHLY CONFIDENTIAL)
ON BEHALF OF PUGET SOUND ENERGY, INC.**

REDACTED VERSION

JUNE 7, 2005

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PUGET SOUND ENERGY, INC.

PREFILED DIRECT TESTIMONY OF ERIC M. MARKELL

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PUGET SOUND ENERGY, INC.

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PREFILED DIRECT TESTIMONY OF ERIC M. MARKELL

3

I. INTRODUCTION

4

Q. Please state your name, business address, and position with Puget Sound Energy, Inc.

5

6

A. My name is Eric M. Markell. My business address is 10885 N.E. Fourth Street

7

Bellevue, WA 98004. I am the Senior Vice President Energy Resources for Puget

8

Sound Energy, Inc. ("PSE" or "the Company").

9

Q. Have you prepared an exhibit describing your education, relevant employment experience, and other professional qualifications?

10

11

A. Yes, I have. It is Exhibit No. ___(EMM-2).

12

Q. What are your duties as Senior Vice President Energy Resources for PSE?

13

A. My present responsibilities include oversight of: (i) the operation and

14

maintenance of the Company's electric generating facilities and gas storage

15

facilities; (ii) contracts for electric supply, merchant transmission services, long-

16

term gas supply, and long-term gas transportation services; (iii) generation

1 resource acquisition and management activities; and (iv) Integrated Resource
2 Planning.

3 **Q. What is the nature of your testimony in this proceeding?**

4 A. My testimony presents certain changes to the Company's long-term power
5 portfolio, including its decision to acquire the 150 MW (nameplate capacity) wind
6 powered electric generation facility to be located in Columbia County,
7 Washington (the "Hopkins Ridge Project").

8 My testimony first describes the Hopkins Ridge Project and related costs. I then
9 summarize PSE's decision process with regard to acquisition of the Hopkins
10 Ridge Project and how such process meets the Commission's prudence standard
11 that is described in the prefiled direct testimony of Ms. Kimberly J. Harris,
12 Exhibit No. ___(KJH-1T). My testimony then provides additional information
13 regarding the Hopkins Ridge Project, including how the transaction was
14 structured, what it costs, and how it is being financed. My testimony in this
15 regard is in the nature of an executive summary and overview. Details regarding
16 the Company's resource acquisition process and Hopkins Ridge Project are
17 presented in the prefiled direct testimony of Mr. Roger Garratt, Exhibit
18 No. ___(RG-1HCT) and Mr. W. James Elsea, Exhibit No. ___(WJE-1T).

19 Finally, my testimony explains other changes to the Company's long-term power
20 portfolio related to power costs in this case.

1

II. THE HOPKINS RIDGE WIND POWER PROJECT

2 A. Summary

3 Q. Why did the Company acquire the Hopkins Ridge Project?

4 A. The Company issued a Least Cost Plan in 2003 that identified a need for
5 additional electric resources. The Company then issued requests for proposals to
6 fill that need through the Commission's Chapter 480-107 WAC competitive
7 bidding process. The Hopkins Ridge Project was the least cost long-term resource
8 alternative to emerge from the more than 80 alternatives the Company evaluated
9 through that process.

10 B. Description of the Hopkins Ridge Project

11 1. The Project

12 Q. Please describe what the Company is acquiring pursuant to the Hopkins 13 Ridge Project transactions.

14 A. The Hopkins Ridge Project is a wind turbine project that was developed by Blue
15 Sky Wind LLC ("Blue Sky"), an indirect wholly-owned subsidiary of Renewable
16 Energy Systems Limited of the United Kingdom ("RES"). RES is a leading
17 worldwide developer, constructor and operator of wind energy projects with over
18 20 years experience in the industry. RES, in turn, is an affiliate of the Sir Robert

1 McAlpine Group, a leading United Kingdom building and civil engineering
2 contractor.

3 The Project consists of a 150 MW nameplate capacity wind powered electric
4 generating facility to be situated on approximately 11,000 acres of land located in
5 Columbia County, Washington. See Exhibit ___(EMM-17HC) at 12. It consists
6 of 83 1.8-MW wind turbine generators (the "WTGs") and associated electrical
7 collection systems, a site substation, a site maintenance building, an
8 interconnecting transmission line approximately eight miles long, and other
9 interconnection facilities. The Project is sited on land leased for that purpose that
10 is virtually uninhabited dryland wheat fields owned by multiple landowners,
11 mostly farmers or ranchers.

12 **Q. Is the Hopkins Ridge Project expected to consistently produce 150 MW of**
13 **wind power?**

14 A. No. As described in Mr. Garratt's direct testimony, wind facilities are intermittent
15 resources. Based on the analysis PSE caused to be performed on the Hopkins
16 Ridge Project site, the Project is expected to produce approximately 50 aMW
17 (■ aMW) annual average energy, with even more average energy production in
18 January of each year (■ aMW).

HIGHLY CONFIDENTIAL per
WAC 480-07-160

1 **Q. How will the power from Hopkins Ridge Project be delivered to PSE's**
2 **system?**

3 A. The Project includes construction of an eight-mile long, 115 kV transmission line
4 that will interconnect with BPA's transmission system at BPA's North Lewiston-
5 Walla Walla 115 kV line. From there, the power will be wheeled to the
6 Mid-Columbia trading hub utilizing BPA firm transmission rights acquired by
7 PSE. PSE will then use its existing transmission infrastructure and rights to move
8 the energy to PSE's service area.

9 **Q. When will the Hopkins Ridge Project be completed and begin generating**
10 **power?**

11 A. Construction of the project is expected to be completed prior to the end of
12 November 2005. However, as described more thoroughly in Mr. Garratt's
13 testimony, the Project will most likely begin generating test power in September
14 2005 as strings of WTGs come on line.

15 **2. Impact of the Project on PSE's Costs**

16 **Q. How will addition of the Hopkins Ridge Project affect PSE's costs?**

17 A. The capital cost for the Project is expected to be approximately \$200 million.
18 Like other generating facilities, there will also be ongoing O&M and transmission
19 expenses. In the long-run, the estimated \$46/MWh 20-year levelized cost of

1 power from the Project is projected to result in a net present value savings to
2 PSE's electric portfolio of \$30 million, as described in Mr. Elsea's testimony.

3 **Q. How does addition of the Hopkins Ridge Project affect the level of rate relief**
4 **PSE is requesting in this case?**

5 A. As described in the prefiled direct testimonies of Ms. Julia M. Ryan, Exhibit
6 No. ___(JMR-1T), and Mr. John H. Story, Exhibit No. ___(JHS-1T), the net
7 impact of adding the Hopkins Ridge Project to PSE's portfolio is an increased
8 revenue requirement of approximately \$5.7 million out of the total revenue
9 requirement of approximately \$55.6 million for this case.

10 **C. Summary of the Company's Compliance with the Prudence Standard**

11 **1. Overview**

12 **Q. What is your understanding of the Commission's prudence standard?**

13 A. My understanding is consistent with the description provided by Ms. Kimberly
14 Harris in her direct testimony in this case. To summarize, a company must
15 establish that it adequately studied the question of whether to purchase a resource
16 and made a reasonable decision, using the data and methods that a reasonable
17 management would have used at the time the decisions were made. A company
18 must first determine whether new resources are necessary, then evaluate a
19 potential resource against available alternatives. The Commission has also

1 cautioned in the past that a company should keep its board of directors informed
2 and document its decision making process.

3 **Q. Do you believe that the Company's acquisition of the Hopkins Ridge Project**
4 **was reasonable?**

5 A. Yes, I do. The Company's resource acquisition activities that led to the Hopkins
6 Ridge Project acquisition were similar to, and in some cases overlapped with, the
7 Company's efforts with respect to its acquisition of the Frederickson I gas-fired
8 generation facility that was the subject of the Company's 2003 PCORC
9 proceeding. The Commission determined in that case that "PSE employed
10 decision-making tools and processes that meet our expectations." (Order No. 12,
11 Docket No. UE-031725, at ¶ 29).

12 As described below and in the testimonies of Mr. Garratt and Mr. Elsea, the
13 Company's decision to acquire the Hopkins Ridge Project occurred in the context
14 of formal requests for proposals ("RFPs") issued pursuant to the Commission's
15 competitive bidding rules, WAC Chapter 480-107, shortly after completion of the
16 Company's 2003 Least Cost Plan. The acquisition was the result of an extensive
17 process through which the Company evaluated the relative costs and risks of many
18 potential alternative resource opportunities. The Company determined through
19 this process that the Hopkins Ridge Project was the least cost long-term resource
20 option available to the Company at this time. The Company's efforts clearly meet

1 the "adequate study" and "reasonable data and methods" standards applied by the
2 Commission in determining whether an acquisition was prudent.

3 In addition, as described below, the Company worked proactively to further
4 improve the terms and conditions of the Hopkins Ridge transaction through tough
5 negotiation and proactive efforts to address challenges and risks associated with
6 the Project.

7 **2. Determination of Need**

8 **Q. How did the Company determine it had a need for new resources prior to the**
9 **Hopkins Ridge Project acquisition?**

10 A. Analysis presented in the Company's 2003 Least Cost Plan documented a
11 growing resource need due to increasing load growth and expiration of several
12 long-term purchased power agreements. Additionally, analysis in the 2003 Least
13 Cost Plan documented the Company's generic resource strategy to pursue a
14 balanced long-term power portfolio that should include renewable energy.

15 Further analysis performed in conjunction with the Company's RFP evaluation
16 process and the Company's 2005 Least Cost Plan continued to support the
17 conclusion of need and desirability of a diversified portfolio including renewable
18 resources.

1 **3. Consideration of Alternatives**

2 **Q. Did the Company consider potential alternatives to acquisition of the**
3 **Hopkins Ridge Project?**

4 A. Yes, the Company considered an exhaustive list of resource alternatives. After
5 filing the Company’s 2003 Least Cost Plan, the Company issued three RFPs in
6 compliance with Chapter 480-107 WAC: a Wind RFP, an All Generation Source
7 RFP, and an Energy Efficiency RFP. Analysis and consideration of resources
8 from the Wind RFP were ultimately combined with responses from the All
9 Source, such that all generation resources were considered on the same basis.

10 PSE received 47 unique proposals from 39 different owners/developers. Many of
11 the proposals contained multiple offer options such as Purchased Power
12 Agreements (“PPAs”), asset ownership, and a combination of a PPA and a partial
13 ownership. Considering all the options offered under each proposal, more than 80
14 different proposals were submitted. Furthermore, PSE considered “self-build”
15 alternatives for adding additional resources to its portfolio.

16 **Q. Did the Company analyze these resource alternatives using current**
17 **information that took into account factors relevant to the various resource**
18 **alternatives?**

19 A. Yes, the Company’s analytic effort in support of the resource acquisition effort
20 that led to the purchase of the Hopkins Ridge Project was comprehensive. The
21 Company’s analysis of alternatives included a comprehensive set of criteria that

1 included qualitative and quantitative factors relevant to resource costs and risks.
2 These factors included items such as end effects, capital costs, operating costs,
3 transmission costs, equipment availability, impacts on the Company's capital
4 structure and credit costs, dispatchability, the track record of the developer and
5 key vendors, feasibility of the technology, access to transmission, and a host of
6 other factors. Furthermore, the Company performed extensive analysis with
7 regard to uncertainty of future market power prices, natural gas prices, and hydro
8 conditions.

9 **4. The Decision Process**

10 **Q. Did the Company keep its Board of Directors informed with respect to this**
11 **analysis?**

12 A. Yes. As described below, Company management regularly updated the Board of
13 Directors and involved the Board in the decision to acquire the Hopkins Ridge
14 Project.

15 **Q. Did the Company document the decision making process associated with the**
16 **Hopkins Ridge Project?**

17 A. Yes. Documentation was created and preserved on an ongoing basis as the
18 analytical teams worked through the various stages of analysis. High-level
19 documentation of the Company's decision making process is included in my
20 exhibits and in the exhibits submitted by Mr. Garratt and Mr. Elsea.

1 **5. Implementation of Decision**

2 **Q. Has the Company performed a reasonable job of implementing the**
3 **acquisition of the Hopkins Ridge Project?**

4 A. Yes. The Company aggressively negotiated key commercial terms of the
5 definitive agreements through which the acquisition occurred. In several respects,
6 the final terms of the acquisition agreements are superior to the terms included as
7 part of the Hopkins Ridge Project proposal that was submitted in response to the
8 Company's RFP.

9 Additionally, PSE personnel and representatives have been very engaged in
10 development activities associated with the Project, such as in negotiating and
11 drafting final land lease and easement terms, assuring that land survey work was
12 timely and complete, communicating regularly with key local community leaders,
13 and facilitating a firm transmission solution. The Company is also fully engaged
14 in overseeing construction management activities that are currently underway.

15 **D. Additional Description of the Company's Resource Evaluation**
16 **Process**

17 **Q. Please summarize the following section of your testimony.**

18 A. The following section provides more detail regarding the Company's resource
19 acquisition process and analyses to support the high-level prudence discussion set
20 forth in the preceding section of my testimony. Although I provide additional

1 detail here regarding the RFP evaluation process and analyses, this is only an
2 executive summary of that process and analyses. More comprehensive
3 descriptions are set forth in the prefiled direct testimonies of Mr. Garratt and
4 Mr. Elsea.

5 **1. The Company Needed to Acquire Additional Electric**
6 **Resources**

7 **Q. Did the Company need to acquire additional power resources?**

8 A. Yes. In several proceedings over the past two years, the Company has extensively
9 documented its need to acquire additional power resources now and well into the
10 future. That need was uncontested in the 2003 PCORC, which ultimately
11 determined that the Company's acquisition of a 49.85 percent ownership interest
12 in the Frederickson I gas-fired generation facility located near Spanaway,
13 Washington was prudent. *See* Order No. 12, Docket No. UE-031725, at ¶¶ 17-18.

14 The Company's continuing need to acquire additional resources – even taking into
15 account the approximately 125 MW supplied by the Frederickson I acquisition --
16 was also uncontested in the Company's most recent general rate case. *See* Order
17 No. 06, Docket Nos. UG-040640 *et al.*, at ¶ 17.

18 Nevertheless, I provide below an overview of the analyses underlying the
19 Company's determination that it needed to acquire additional long-term power
20 resources.

1 **Q. What analyses did the Company undertake in determining that it needed to**
2 **acquire additional power resources?**

3 A. Although the Company recently filed its 2005 Least Cost Plan with the
4 Commission (on May 2, 2005, in Docket No. UE-050664), the Hopkins Ridge
5 Project acquisition resulted from an extensive process that began much earlier,
6 with analyses the Company developed and ultimately documented in its April 30,
7 2003 Least Cost Plan and August 29, 2003 Least Cost Plan Update (collectively
8 "2003 LCP" or "2003 Least Cost Plan"). These were filed with the Commission
9 in accordance with its Least Cost Planning Rules (WAC 480-100-238 and 480-90-
10 238), in Docket Nos. UE-030594 and UG-030595. Copies are provided with my
11 testimony at Exhibit No. ____ (EMM-3) (April 30, 2003 Least Cost Plan) and
12 Exhibit No. ____ (EMM-4) (August 29, 2003 Least Cost Plan Update).

13 **Q. What resource adequacy standards did the Company use for planning**
14 **purposes?**

15 A. For the Company's April 2003 LCP the Company analyzed eight combinations of
16 energy and capacity levels using different combinations of potential resources to
17 assess the costs and cost volatility of different standards and methods for meeting
18 those standards. *See* Exhibit No. ____ (EMM-3). The Company ultimately
19 concluded that it should:

20 1. Plan to acquire long-term firm energy resources sufficient to ensure that
21 customer energy needs are met on an expected monthly basis (rather than
22 relying on wholesale market purchases);

- 1 2. Plan to meet a capacity planning level associated with loads at a minimum
2 hour temperature of 16 degrees Fahrenheit and seek lower-cost approaches
3 than relying only on simple-cycle gas turbines to meet this capacity
4 planning level; and
- 5 3. Develop a diversified portfolio of multiple resource technologies to meet
6 its customers' future energy and capacity needs, including establishment of
7 a goal based on the analysis to meet 5% of its customers' energy needs by
8 2013 through the use of renewable resources. The Company also believed
9 there might be opportunities to cost effectively meet 10% of its resource
10 needs through renewable resources.

11 *See Exhibit No. ____ (EMM-3) at 230-231.*

12 **Q. Did the 2003 Least Cost Plan conclude that the Company had a need to**
13 **acquire additional electric supply resources?**

14 A. Yes. As shown in the April 2003 LCP, PSE was anticipated to be short on an
15 energy basis in seven months during 2004, and that short position was anticipated
16 to grow. By 2013, PSE was anticipated to be short in every month. *See Exhibit*
17 No. ____ (EMM-3) at 40. Additionally, there is a shortfall between PSE's projected
18 winter peak demand and peak capacity, which grows over time. The result was
19 that as of 2003, the Company was projected to have a significant near-term need
20 for resources that grows significantly over time. After analyzing the potential to
21 meet PSE's needs through energy efficiency measures, the August 2003 LCP
22 Update concluded that the Company had a present need to acquire resources for
23 approximately 476 aMW by 2005 growing to approximately 618 aMW by 2008
24 and to approximately 1,715 aMW by 2013. *See Exhibit No. ____ (EMM-3) at 38;*
25 Exhibit No. ____ (EMM-4) at 52.

1 **Q. Did the 2003 LCP support adoption of any particular strategies for meeting**
2 **the Company's resource needs?**

3 A. Yes. The Company concluded in its 2003 LCP that the Company should pursue a
4 strategy of acquiring a diversified portfolio of resources in order to mitigate
5 exposure to a variety of risks. This portfolio includes a mix of energy efficiency,
6 renewable and thermal resources. *See* Exhibit No. ___(EMM-3).

7 **Q. Is PSE's need for new resources the same during all parts of the year?**

8 A. No. The Company's existing and mid-term need for new energy resources has a
9 seasonal profile or "shape". The need for new resources is largest during the
10 winter months when PSE's retail electric loads are highest. The need for new
11 resources is generally smaller during other months of the year. Exhibit
12 No. ___(EMM-3).

13 **Q. What is driving the growing need for resources?**

14 A. The growing need for resources is primarily driven by load growth and by the
15 need to replace expiring energy supply contracts as well as other reductions of
16 generation from existing resources.

17 **Q. Did the Company consider conservation as a potential resource opportunity?**

18 A. Yes. PSE has consistently viewed conservation as a resource opportunity
19 throughout the planning process. As PSE began its least cost planning process, it

1 assumed for planning purposes that it could obtain 15 aMW of conservation per
2 year at a reasonable cost. PSE then performed an extensive assessment of
3 conservation resource potential during the development of the August 2003 LCP
4 Update. This analysis identified an estimated 276 aMW of economic potential
5 conservation savings over 20 years. *See* Exhibit No. ____ (EMM-4).

6 **Q. Did the Company update its analysis of PSE's resource needs subsequent to**
7 **the August 2003 LCP Update?**

8 A. Yes. The Company first updated its need for new resources at the time it issued
9 its All-Source RFP in order to take into account the anticipated acquisition of the
10 Frederickson I facility. *See* Exhibit No. ____ (EMM-5).

11 In mid-2004, as part of the Stage Two RFP evaluation process, the Company
12 conducted a more extensive update of 2003 LCP analysis, as described in the
13 prefiled direct testimony of Mr. W. James Elsea, Exhibit No. ____ (WJE-1T).

14 Such updating confirmed the Company's need for resources well in excess of the
15 energy acquired through the Hopkins Ridge Project acquisition. The mid-2004
16 Stage Two RFP analysis update also confirmed conclusions reached in the 2003
17 LCP such as the importance of resource type diversity and risks associated with
18 fuel costs.

1 **Q. Is the Company's acquisition of the Hopkins Ridge Project consistent with**
2 **the load/resource analysis documented in the Company's May 2005 LCP?**

3 A. Yes. The 2005 LCP shows a need for 305 aMW by 2008 growing to 739 aMW by
4 2011 and 1,471 aMW by 2013. *See* Exhibit No. ___(EMM-6). Such need,
5 moreover, was calculated based on the assumption that PSE would acquire the
6 Hopkins Ridge Project and an additional wind project that it is currently pursuing:
7 the Zilkha Wild Horse wind project.

8 The 2005 LCP also reconfirmed the value of a diverse portfolio that includes
9 significant amounts of generation from renewable resources. *Id.* at 10-11. The
10 Company's acquisition of the Hopkins Ridge wind generating facility is consistent
11 with the strategic direction identified in the 2005 LCP.

12 **2. The Company Evaluated How to Fill the Need in a Cost-**
13 **Effective Manner**

14 **a. The Company issued Requests for Proposals to meet its**
15 **resource needs.**

16 **Q. How did the Company pursue implementing its strategy to meet the growing**
17 **needs noted above?**

18 A. Shortly after completion and filing of its 2003 LCP, the Company issued three
19 Requests for Proposals (RFPs) under the Commission's competitive bidding rules
20 (WAC Chapter 480-107): one for wind resources, one for all generation
21 resources, and one for energy efficiency (conservation) resources. The Company's

1 letters submitted with its proposed RFPs are provided at Exhibit No. ___(EMM-7)
2 (wind), Exhibit No. ___(EMM-8) (all generation resources), and Exhibit
3 No. ___(EMM-9) (energy efficiency). The Commission received and considered
4 public comment on such draft RFPs and ultimately approved their issuance, with
5 some revisions, in Docket No. UE-031353.

6 **Q. Please describe the Company's Wind Power Projects RFP (Wind RFP)?**

7 A. The Wind RFP sought proposals for long-term purchased power agreements
8 ("PPAs") or PSE ownership of wind-power projects for approximately 150 MW
9 of wind power capacity. A copy of the final RFP approved by the Commission
10 and issued by PSE is provided as Exhibit No. ___(EMM-10). The Wind RFP was
11 issued on November 19, 2003, with responses due on January 16, 2004.

12 **Q. What response did PSE receive to its Wind RFP?**

13 A. In response to the Wind RFP, PSE received 13 proposals for new wind
14 development projects. Many of the proposals contained multiple offer options
15 such as PPAs, asset ownership, and a combination of a PPA and a partial
16 ownership.

17 **Q. Please describe the Company's All-Source RFP?**

18 A. The All-Source RFP sought proposals for long-term PPAs or PSE ownership of
19 generation resources of all types. After taking into account acquisition of the
20 Frederickson I generating facility and anticipated conservation acquisitions, the

1 All-Source RFP sought to fill the Company's remaining near-term need of
2 approximately 355 aMW of winter energy commencing during the 2005 through
3 winter 2007/08 period. A copy of the final RFP approved by the Commission and
4 issued by PSE is provided as Exhibit No. ___(EMM-5). The All-Source RFP was
5 issued on February 4, 2004, with responses due on March 12, 2004.

6 **Q. What response did PSE receive to its All-Source RFP?**

7 A. PSE received 47 unique proposals from 39 different owners/developers. Again,
8 many of the proposals contained multiple offer options such as PPAs, asset
9 ownership, and a combination of a PPA and a partial ownership. Considering all
10 the options offered under each proposal, more than 80 different proposals were
11 submitted.

12 **Q. Please describe the Company's Energy Efficiency RFP?**

13 A. On February 4, 2004, the Company also issued an RFP for acquisition of energy
14 efficiency resources. The Company had already been working closely with its
15 Conservation Resource Advisory Group ("CRAG") to scope the elements and
16 timing of an energy efficiency resource acquisition program. The Energy
17 Efficiency RFP was issued in addition to the ongoing efforts of the Company and
18 the CRAG to acquire cost-effective energy efficiency projects. A copy of the final
19 RFP approved by the Commission and issued by PSE is provided as Exhibit
20 No. ___(EMM-11).

1 **b. The Company evaluated the resource alternatives**
2 **proposed in response to the RFPs using current**
3 **information that adjusted for appropriate factors and**
4 **risks.**

5 **Q. Did the Company compare the bids responding to the Wind RFP with the**
6 **bids responding to the All Source RFP and Energy Efficiency RFP?**

7 A. The Company compared the responses from the Wind RFP with responses from
8 the All-Source RFP, but evaluated the Energy Efficiency RFP through a different
9 process. Respondents to the Wind RFP were informed that they only needed to
10 file a request to be considered in the All Source RFP process. Nearly all of the
11 respondents to the Wind RFP resubmitted their proposals in response to the All-
12 Source RFP. Some wind proposals were updated and others remained as initially
13 submitted. Shortly after the Company received responses to the All-Source RFP,
14 it merged the two evaluation processes into a single combined evaluation effort.

15 Because of the Company's ongoing work with the CRAG on the Company's
16 energy efficiency programs, evaluation of responses to the Energy Efficiency RFP
17 was assigned to the Company's Energy Efficiency Services Department. The
18 Energy Efficiency Services Department is currently seeking to finalize contracts
19 with the five finalists from the Energy Efficiency RFP process.

1 **Q. Please summarize the process that the Company conducted to evaluate**
2 **responses to the Wind and All-Source RFPs?**

3 A. The Company engaged in a comprehensive process to evaluate the costs and risks
4 associated with each proposal, both as individual projects and when viewed as
5 potential additions to the Company's resource portfolio. PSE evaluated the
6 proposals in two stages based on the criteria set forth in its RFPs. These criteria
7 were designed to take into account qualitative and quantitative factors impacting
8 the decision whether to acquire a potential resource. They included consideration
9 of end effects, dispatchability, transmission costs, capital costs, impact on the
10 Company's credit quality, and project feasibility, among other factors.

11 **Q. What analyses did the Company conduct during Stage One of the evaluation**
12 **process?**

13 A. During Stage One, PSE screened the proposals to eliminate any that were
14 obviously infeasible or inconsistent with the Company's needs. The Company
15 then applied a modified form of its Portfolio Screening Model called the
16 Acquisition Screening Model to analyze the projected levelized cost of each
17 potential project on a 20-year net present value basis. The Portfolio Screening
18 Model and Acquisition Screening Model are described in detail in the prefiled
19 direct testimony of Mr. Elsea. The Company also evaluated the proposals based
20 on qualitative factors such as permitting and other timing risks, feasibility risks

1 including developer experience, and the availability or status of transmission
2 rights.

3 Based on the Company's evaluation of qualitative factors as well as quantitative
4 analysis performed with PSE's Acquisition Screening Model, the Company
5 developed a short list of potential projects that advanced to Stage Two evaluation.
6 In addition, the Company identified several projects that it felt were worth some
7 continuing evaluation even though they did not make the formal short list.

8 **Q. What analyses did the Company conduct during Stage Two of the evaluation**
9 **process?**

10 A. During Stage Two, PSE continued to apply the Stage One evaluation criteria and
11 placed further emphasis on qualitative factors such as developers' experience and
12 ability to deliver, guarantees and security, comparison of PPAs and ownership
13 alternatives, and transmission and integration issues. PSE further evaluated
14 potential projects through application of its Portfolio Screening Model to look at
15 the projected cost impact of adding each of the various proposals to PSE's
16 portfolio.

17 **Q. Did the Company itself conduct all of the analysis for the RFP process?**

18 A. PSE conducted the bulk of the evaluation itself, and has added staff to its Energy
19 Resource department so that it has the internal capability to do so. However, PSE
20 also retained some expertise to assist PSE in conducting due diligence to test the

1 claims made by the entities that had responded to the RFPs and to analyze
2 specialized issues associated with wind resource assessment, wind turbine farm
3 design and wind turbine technology.

4 For example, the Company retained the consulting firm Garrad Hassan Americas,
5 Inc., a leading international authority on wind energy and technology, to evaluate
6 wind generation projections set forth in the various potential wind resource
7 proposals and to provide an independent assessment of the various projects
8 proposed in response to the Wind RFP. The Company obtained additional
9 assistance from consultants related to integration of wind generation into PSE's
10 electric portfolio.

11 The Company's evaluation of responses to the Wind RFP and All-Source RFP is
12 described in greater detail in the testimonies of Mr. Elsea, Exhibit No. ___(WJE-
13 1T) and Mr. Garratt, Exhibit No. ___(RG-1HCT).

14 **Q. Why did the Company ultimately decide to acquire a wind generation**
15 **facility?**

16 A. A number of factors caused wind resources to rise to the top of the list compared
17 to other proposals. A significant factor in the attractiveness of wind was the lack
18 of fuel cost risk, particularly given consensus industry projections for high natural
19 gas prices over the next several years. The Company's Portfolio Screening Model
20 indicated that the best portfolios – in terms of lowest cost and lowest risk – had
21 significant chunks of wind generation. In addition, the wind generation proposals

1 submitted in response to PSE's RFPs were even better than we had anticipated
2 with respect to turbine technology, the attractiveness of potential sites, and the
3 capabilities of the project developers.

4 **Q. Why did the Company ultimately decide to acquire the Hopkins Ridge**
5 **Project?**

6 A. A number of factors led to PSE's decision to acquire the Hopkins Ridge Project at
7 this time. The Hopkins Ridge Project:

- 8 • Was the least-cost alternative on a 20-year levelized-cost basis, with
9 the largest benefit to PSE's electric portfolio;
- 10 • Offered the best wind resource, particularly because its significant
11 amount of winter wind should provide energy to the Company at a
12 time of the year when it has the most need for additional resources;
- 13 • Was sponsored by an experienced wind developer and construction
14 contractor with a proven track record;
- 15 • Incorporated turbines from Vestas, the world's leading wind turbine
16 supplier, with proven technology;
- 17 • Was the most viable opportunity for project completion by year-end
18 2005 – positioning the project to benefit from Production Tax Credits
19 set to expire at the end of 2005; and
- 20 • Enjoyed strong local community support for the Project, thereby
21 reducing the risk that necessary permits would not be timely issued or
22 would be litigated.

23 In addition, the Company was able to resolve transmission issues that had lowered
24 the ranking of the Hopkins Ridge Project during the RFP evaluation process.

25 Details regarding the above factors are described further in the testimonies of

26 Mr. Garratt and Mr. Elsea.

1 **Q. Are you aware of additional arguments that have been made in support of**
2 **utility acquisitions of wind resources?**

3 A. There are other favorable factors related to wind acquisitions, such as
4 comparatively few environmental concerns and the avoidance of possible
5 emissions taxes that may be imposed in the future on fossil fuel resources.
6 Additionally, there are considerable efforts in the environmental and power
7 communities underway to create markets for Renewable Energy Credits and
8 Greenhouse Gas Emission Credits, which credits could increase the relative value
9 of wind energy. Such prospective benefits were not included in our formal
10 resource analysis. The Hopkins Ridge Project was clearly the most attractive
11 long-term energy resource to acquire at this time, even without taking into
12 consideration these criteria. However, such benefits related to wind projects do
13 hold the potential for an additional “upside” for our customers and may become
14 more important in future resource acquisition evaluations.

15 **Q. Could you elaborate on the matters of Renewable Energy Credits and**
16 **Greenhouse Gas Emission Credits?**

17 A. Renewable Energy Credits ("RECs") and Greenhouse Gas Emission Credits
18 ("GHG Credits") are the intangible attributes ascribed to the production of one
19 megawatt hour of renewable energy or an emission unit. With respect to RECs,
20 there are presently 19 states that, by law, have established Renewable Portfolio
21 Standards ("RPS") for utilities that set forth a date by which a certain percentage
22 of a utility's energy requirement must be provided by renewable energy resources.

1 **Q. Is there a single definition of renewable energy?**

2 A. No. At present, there are 19 different state markets for the buying and selling of
3 RECs as defined by those states. States that have adopted an RPS are known as
4 “compliance states” and those that have not are known as “voluntary states”.

5 **Q. Could you describe such markets in more detail?**

6 A. The market for RECs is growing but badly fragmented by state rules. On a
7 weekly basis, PSE receives prices from a broker of RECs and other energy
8 products for various state and regional markets such as Massachusetts,
9 Connecticut, New Jersey, Texas, NYISO, and WECC. The prices are a function
10 of supply and demand in each state or area, limited by vintage, geography, and
11 other parameters.

12 **Q. Could you describe GHG Credits in greater detail?**

13 A. GHG Credits are created when a source reduces its carbon dioxide ("CO₂")
14 emissions or a source creates CO₂ offsets. At present, the Chicago Climate
15 Exchange (CCX), a not-for-profit organization created by a number of large
16 philanthropic institutions and industrial companies concerned with the
17 environment and an efficient marketplace, is trying to make a market in GHG
18 Credits. The CCX is unique in that it is a private and voluntary market for GHG
19 Credits between participating firms. These allowance-based transactions are
20 created under the CCX's allocation scheme. Today there are no GHG reduction

1 mandates in place, therefore the demand for GHG Credits is relatively small.
2 However, in Europe a trading system has developed in response to the Kyoto
3 Protocol and there is discussion of an East Coast initiative that will create some
4 mandated demand in the United States.

5 **Q. Has PSE made any determinations regarding the potential creation or use of**
6 **RECs and GHG Credits with respect to the Hopkins Ridge Project?**

7 A. No. These credits and markets are currently in the early stages of development
8 and any such determinations would be premature at this time. PSE will continue
9 to monitor these developments.

10 **Q. Was the Hopkins Ridge Project the only resource the Company ultimately**
11 **pursued as a result of the All-Source and Wind RFP process?**

12 A. No, the Company has also pursued acquisition of several other resources proposed
13 in response to these RFPs that provided the best combination of low costs and
14 risks. The list of projects that PSE ultimately pursued acquiring out of its RFP
15 process consisted of the following resources:

1

Code	Project Name Owner/Developer
A02b	Wild Horse Wind Project Zilkha Renewable Energy
A03	Hopkins Ridge Wind Project RES North America, LLC
A19	2-yr PPA (Centralia Coal Plant) Arizona Public Service (APS)
A30	22-yr Seasonal On-Peak PPA
A39	NWPL Sumas Recovered Heat Project ORMAT Nevada, Inc.

2 On June 25, 2004, PSE and Arizona Public Service (APS) signed definitive
3 contracts for the short-term power purchase agreement ("PPA") proposed by APS.
4 PSE began receiving energy from this contract on January 1, 2005.

5 **Q. What is the status of the other potential acquisitions?**

6 A. A brief description and status report on these other potential projects is as follows:

7 *22-year Seasonal On-Peak PPA.* PSE determined that this long-term PPA
8 proposal for on-peak power had a number of potential advantages related to
9 reliability of the resource and mitigation of costs and risks such as credit support.
10 However, several of these potential benefits evaporated as PSE and the supplier
11 attempted to finalize commercial terms. This resource is no longer under active
12 discussion.

1 *Wild Horse Wind Project.* The Wild Horse project is attractive for many of the
2 same reasons as the Hopkins Ridge Project, but is on a slower timeline due to
3 permitting requirements and required transmission line upgrades. On
4 September 1, 2004, PSE and Zilkha signed a non-binding Letter Of Intent for
5 PSE's acquisition of the Wild Horse project, and negotiations of definitive
6 contracts are underway. Public hearings, coordinated by the Kittitas County
7 Planning Commission and County Commissioners, began January 25, 2005, and
8 the Kittitas Board of County Commissioners approved the Wild Horse project on
9 March 3, 2005. The state Energy Facility Site Evaluation Council held hearings
10 on March 7 and 8, 2005. On May 25, 2005, the Council issued its favorable
11 recommendation to the governor for a final decision.

12 *NWPL Sumas Recovered Heat Project.* This project involves generating energy
13 using recovered heat at an existing Northwest Pipeline compressor station. PSE
14 entered into a non-binding Letter Of Intent with ORMAT Nevada on April 14,
15 2005, and definitive agreements are expected to follow by mid-year 2005. In
16 addition, studies are underway to identify and resolve possible transmission
17 constraints. The projected commercial operations date is the second quarter of
18 2007.

1 **Q. Is the Company seeking approval or cost recovery at this time for any of the**
2 **potential projects you just described?**

3 A. The Company is seeking approval and cost recovery in this proceeding for the
4 Hopkins Ridge Project and APS PPA. The Company will file an appropriate
5 proceeding at a future time concerning the Wild Horse Wind Project and NWPL
6 Sumas Recovered Heat Project if those acquisitions occur.

7 c. **The Company's efforts to meet its resource needs are**
8 **not limited to issuance and evaluation of RFPs.**

9 **Q. Did the Company analyze a self-build option in addition to the projects**
10 **proposed in response to the RFPs?**

11 A. Yes. As described in the direct testimonies of Mr. Garratt and Mr. Elsea, the
12 Company evaluated a self-build option against the proposals received in response
13 to the RFPs, and concluded that self-build was not as attractive as other options
14 that were available at this time.

15 **Q. Has the Company taken steps to meet its resource needs other than pursuing**
16 **acquisition of new long-term generating resources or PPAs?**

17 A. Yes. In addition to the energy efficiency efforts described above, the Company is
18 taking steps to further increase the energy generated by its existing facilities. For
19 example, we have increased PSE's share of the capacity of the Frederickson I
20 facility by approximately 12.5 MW through installation of additional

1 infrastructure that allows the facility to more fully utilize its duct firing capacity.
2 We are also planning upgrades to our Colstrip Project steam turbines that will
3 increase the output of those generating units by a total of 28 MW.

4 **3. The Company Informed and Involved its Board of Directors**

5 **Q. Did PSE actively involve its Board of Directors during the evaluation**
6 **process?**

7 A. Yes. PSE management made several presentations to the Board of Directors
8 regarding the status of the Company's analysis of the many potential resource
9 opportunities it was considering to meet its need for additional resources. The
10 Board was thereby advised of the management teams' evaluation methods, key
11 assumptions, and preliminary conclusions as the RFP evaluation progressed. *See*
12 Exhibit No. ____ (EMM-13HC); Exhibit No. ____ (EMM-14HC); Exhibit
13 No. ____ (EMM-15HC); Exhibit No. ____ (EMM-16HC); and Exhibit
14 No. ____ (EMM-12HC).¹

15 Ultimately, the Board of Directors was asked to approve, and did approve,
16 acquisition of the Hopkins Ridge Project. *See* Exhibit No. ____ (EMM-17HC).

¹ To avoid burdening the record, PSE has excluded pages of Board materials not relevant to the RFP process from these exhibits, as well as unnecessarily voluminous pages (such as draft forms of agreement).

- 1 1. Pursuant to an Asset Purchase Agreement ("APA"), PSE would first
2 acquire a 100% ownership interest in the development assets owned by
3 Blue Sky and its affiliates relating to the Hopkins Ridge Project (including
4 wind data and analyses, land leases, environmental studies, final permits, a
5 BPA Interconnection Agreement and other development assets) (the
6 "Project Development Assets") as of a closing date of March 31, 2005, for
7 a purchase price of \$ [REDACTED] payable half at closing and half on
8 substantial completion. PSE was not obligated to close until after receipt
9 by Blue Sky of all permits, consents, authorizations and approvals and
10 satisfaction of waiver of conditions precedent specified in the APA.
- 11 2. Immediately following closing of the purchase of the Project Development
12 Assets by PSE, RES America Construction, Inc. ("RES America), an
13 affiliate of Blue Sky, would perform, or cause to be performed, all
14 engineering, procurement and construction for the Hopkins Ridge Project
15 pursuant to a fixed-price turnkey Engineering, Procurement and
16 Construction Agreement (the "EPC Agreement"). The contract price to
17 RES America for performing the work, commissioning and completing the
18 Project and performing its duties under the EPC was fixed at \$ [REDACTED]
19 (subject to scope changes), payable by PSE as milestones on the
20 construction schedule are reached. RES America would, in turn, contract
21 with Vestas-American Wind Technology Inc. ("Vestas-American") for the
22 purchase of the 83 WTGs. RES also would contract with various
23 subcontractors for the construction of the other facets of the Hopkins
24 Ridge Project (such as the roads, WTG foundations, the electrical
25 collection system, the project substation, and the interconnecting
26 transmission line); and
- 27 3. Once the WTGs are placed into service, Vestas-American would provide a
28 power curve warranty, a five-year availability warranty, a five-year
29 mechanical warranty and five years of maintenance, operation, spare parts
30 and service of the WTGs under a separate Operation, Maintenance &
31 Warranty Agreement ("OM&W Agreement") between PSE and Vestas-
32 American.

33 Additional details regarding the terms of the definitive agreements for the Project
34 are found in Exhibit No. ____ (EMM-17HC). Copies of the APA, EPC Agreement
35 and OM&W Agreement are found in Exhibit No. ____ (EMM-18HC).² For a

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² To avoid burdening the record, PSE has excluded certain voluminous schedules and exhibits to the APA, EPC Agreement and OM&W Agreement.

1 complete list of the definitive agreements, please see Exhibit No. ___(EMM-
2 19HC).

3 **Q. Does the transaction include a "regulatory out" provision of the kind**
4 **addressed in the Company's 2003 PCORC proceeding regarding the**
5 **acquisition of the Frederickson 1 facility?**

6 A. No. A "regulatory out" provision makes a buyer's obligation to close a transaction
7 contingent on receipt of approvals by regulators, such as the WUTC. While such
8 provisions may be appropriate in some circumstances, PSE did not believe that a
9 "regulatory out" provision was appropriate for the Hopkins Ridge Project
10 transaction. Reasons for that determination included the need to acquire the
11 project as it was constructed and PSE's desire to complete the project by year-end
12 2005 to take advantage of Production Tax Credits (PTCs) that are scheduled to
13 expire at that time.

14 **Q. Did the Company take reasonable steps to obtain favorable terms to these**
15 **agreements?**

16 A. Yes. While the Hopkins Ridge Project was the most attractive bid produced by
17 the RFP process described above, the Company undertook aggressive efforts to
18 negotiate more favorable terms and conditions than proposed by the developer in
19 its response to the RFP. These efforts were successful in improving the value of
20 and reducing risks associated with the Hopkins Ridge Project such that the

1 acquisition is even more favorable than anticipated in PSE's analysis of competing
2 RFP proposals.

3 **Q. Would you please provide some examples?**

4 A. Certainly. A very significant concession we obtained from RES was its
5 agreement to assume the financial risk that the Project would not be completed
6 prior to year-end 2005 such that it did not qualify for PTCs. RES essentially
7 agreed to indemnify the Company for the lost value of the PTCs if they expire and
8 the Project is ultimately denied the credits. The Company also obtained RES's
9 agreement to absorb \$ [REDACTED] in PSE's transaction costs associated with the
10 acquisition. In addition, PSE's negotiations with Vestas resulted in an agreement
11 for very favorable turbine pricing.

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12 **Q. Are there other examples of Company efforts to**
13 **obtain a favorable result with respect to the Hopkins Ridge Project?**

14 A. Yes. PSE's obligation to acquire the development assets and rights was
15 contingent on a number of items, including acquisition by RES of all necessary
16 permits and real estate rights related to the Project. Rather than waiting to see if
17 RES would be able to obtain all such rights prior to the March 31, 2005 deadline,
18 PSE staff worked actively with RES in an effort to ensure that the environmental,
19 permitting, and real estate contingencies were met and that the relationships with
20 key community leaders were established on a sound foundation. PSE did so to
21 increase the likelihood of the Project going into service by year-end 2005 so that

1 the Project would meet the current PTC deadline and PSE could secure the
2 considerable economic benefits offered by this Project.

3 **Q. Were the contingencies met in time?**

4 A. Yes. With the exception of one minor detail that PSE waived (and that has since
5 been satisfied), all contingencies were met and the Asset Purchase Agreement
6 closed on March 11, 2005. RES America commenced construction of the Project
7 immediately thereafter.

8 **Q. What is the status of the construction?**

9 A. Mr. Garratt describes the current construction schedule and status in greater detail.
10 Generally, RES is on pace to complete the Project such that PSE can place it into
11 service by December 1, 2005.

12 **2. Overview of Project Costs and Financing**

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13 **Q. What is the anticipated total cost of the Hopkins Ridge Project?**

14 A. The Company anticipates an "all in" cost of approximately \$200 million for the
15 Hopkins Ridge Project acquisition. This includes approximately \$■ million for
16 the acquisition of the development rights and assets, \$■ million for engineering,
17 procurement and construction by RES America, and \$■ million in "Owner's
18 Costs" including BPA network upgrades, AFUDC, transaction, due diligence and
19 development costs, and an allowance for the cost of possible scope changes.

1 In addition, as with PSE's other generating units, PSE will have ongoing O&M
2 costs for the facility. Unlike other types of generating resources, PSE will also
3 incur costs associated with integrating a wind resource into its electric portfolio,
4 because of the short-term uncertainty and variability of wind generation.

5 Such costs are detailed in Mr. Garratt's testimony.

6 **Q. What is the resulting anticipated cost of energy from the Project?**

7 A. The resulting energy cost for the project is anticipated to be approximately
8 \$46/MWh on a 20-year levelized basis. Mr. Story's testimony addresses the net
9 effect that Hopkins Ridge will have on revenue requirement during the rate year.

10 **Q. How does this cost compare with other resources?**

11 A. As described in Mr. Elsea's direct testimony, the cost of the Hopkins Ridge
12 project was at the low end of the range of projected levelized costs for projects of
13 all fuel types submitted in response to PSE's RFPs. Additionally, when viewed
14 from the perspective of how various resources impact the costs of PSE portfolio
15 as a whole, the Hopkins Ridge Project is anticipated to result in the greatest net
16 present value savings compared to any of the resources considered in the RFP
17 evaluation.

1 **Q. How does PSE plan to finance acquisition of the Project?**

2 A. The Company has included the cash requirements for the Project in PSE's capital
3 budget and plans to fund it as a component of the Company's overall financing
4 strategy. The Company financed the payments that have been made to date and
5 will initially fund additional cash requirements with its short-term credit facilities.
6 The Company plans to refund those borrowings using the proceeds of longer term
7 financings when conditions for issuing such securities are favorable. The
8 permanent financing will most likely consist of a combination of senior secured
9 notes (secured by a mortgage on electric and/or gas property) and issuance of
10 common equity by Puget Energy, Inc., with those proceeds invested into PSE.

11 **Q. How is PSE proposing to recover the Project costs?**

12 A. The Company seeks to have the Project's acquisition costs capitalized and
13 recovered in rates over a 20-year period, together with the Company's authorized
14 return on rate base. In this case, the Company is seeking to re-set the power cost
15 baseline rate to include recovery of a portion of these capital costs as well as the
16 projected costs associated with the operation and maintenance of the Project
17 during the rate year for this proceeding. Mr. Story's testimony and exhibits show
18 how costs associated with the Hopkins Ridge Project will be recovered through
19 this case and how such costs will be treated in the Company's current PCA
20 mechanism.

1 **III. OTHER CHANGES RELATED TO THE COMPANY'S**
2 **LONG-TERM POWER RESOURCES**

3 **Q. Are there any other changes or adjustments to PSE's long-term power supply**
4 **portfolio since the Company's 2004 general rate case?**

5 **A. Yes.**

6 1. In late June 2004, the Company obtained a new FERC license for
7 its Snoqualmie Falls hydroelectric project. Thus, PSE is seeking in
8 this case to begin recovering in rates costs associated with
9 obtaining the new license.

10 2. The Company's entitlement to power generated by Douglas County
11 PUD's Mid-Columbia hydroelectric Wells Project is decreasing
12 and its costs associated with the Wells Project are increasing due to
13 settlement of a dispute between Douglas County PUD and the
14 Colville Confederated Tribes that has been approved by FERC.

15 3. The Company's entitlement to power generated by Grant County
16 PUD's Mid-Columbia hydroelectric project at Priest Rapids
17 changes as of November 1, 2005 due to expiration of an existing
18 contract and commencement of a replacement contract.

19 4. The Company also seeks in this proceeding to incorporate costs
20 associated with restructuring and early termination of its CanWest
21 gas supply contract used in the power portfolio.

1 5. Finally, I discuss the Company's renewal of its contract with
2 PowerEx to serve Point Roberts.

3 **A. Snoqualmie Relicensing**

4 **Q. Please describe the Company's efforts to relicense the Snoqualmie**
5 **hydroelectric project.**

6 A. Since 1988, PSE has been in the process of seeking to obtain a new FERC license
7 for its Snoqualmie hydroelectric project ("Project"). The Company submitted a
8 license application in November 1991 that proposed to raise plant capacity to
9 73 MW from 42 MW, and was based on an additional 1,500 cfs water right.
10 *See* Exhibit No. ____ (EMM-20). The original long-term license expired in
11 December 1993, and the Project has operated under annual licenses since that
12 time. In 1995, PSE determined that its plan to significantly expand the Project
13 was no longer a viable course of action. Thus, PSE submitted a revised and
14 scaled-back license application that raised capacity to 47 MW from 42 MW and
15 did not involve an additional water right. *See* Exhibit No. ____ (EMM-21).

16 In pursuit of a Project license, the Company engaged in significant efforts to
17 address federal, state and local regulatory requirements including obtaining
18 environmental reviews and the permits necessary to continue operating the
19 Project. The Company also sought to reach common ground with the Snoqualmie
20 Indian Tribe ("Snoqualmie Tribe"), which sought to secure an order from FERC

1 requiring decommissioning of the Project. *See, e.g.*, Exhibit No. ____ (EMM-
2 22HC).

3 **Q. Has the license been issued?**

4 A. Yes. On June 29, 2004, FERC issued a new license for the project with a 40-year
5 term.

6 **Q. Are the license terms final?**

7 A. No. On July 29, 2004, the Snoqualmie Tribe petitioned FERC for rehearing
8 seeking denial of the license and decommissioning of the project. On March 1,
9 2005, FERC issued its “Order on Rehearing and Dismissing Stay Request.” That
10 order denied the Snoqualmie Tribe’s rehearing request, except that the order
11 required that the Company release additional flows of 1,000 cfs of water during
12 the months of May and June each year in order to provide for sufficient water
13 flow over Snoqualmie Falls to permit the Snoqualmie Tribe to conduct religious
14 rituals involving mists generated by the Falls. PSE’s petition for rehearing of that
15 order was denied by FERC on June 1, 2005. In the meantime, the Tribe
16 petitioned the Ninth Circuit for review of the FERC’s original order granting the
17 license.

1 **Q. Then why is the Company seeking recovery of its Snoqualmie Project**
2 **licensing costs in this proceeding?**

3 A. The terms of the license have not been stayed so the Company is operating the
4 Project pursuant to the terms of that license.

5 **Q. What evaluations did the Company perform prior to deciding to accept the**
6 **new license?**

7 A. As shown in the exhibits cited above, the Company conducted extensive and
8 ongoing evaluations during the course of its pursuit of a new license which
9 showed the projected costs of a Snoqualmie Project with potential new license
10 terms to be economic relative to other potential sources of long term power
11 supply. *See also* Exhibit No. ____ (EMM-23).

12 At the time the license issued in mid-2004, the Company considered whether to
13 accept the license, appeal the license, reject the license, or transfer the license and
14 Project to the Snoqualmie Tribe or a federal agency as part of a process of
15 decommissioning the Project. The Company determined that it should accept the
16 license. *See* Exhibit No. ____ (EMM-24HC).

17 After FERC issued its order on rehearing requiring additional flows, the Company
18 determined that the all-in cost of power from the Project would still be economic.
19 *See* Exhibit No. ____ (EMM-25HC).

1 The terms of the new license that FERC has actually issued will have a modest
2 effect upon energy production from the Snoqualmie project but will add
3 substantial complexity to its operations. Over the period 2005-2010, various
4 capital improvements must be made that will raise the all-in cost of power from
5 the project, which at present, is a highly depreciated asset. However, even after
6 implementation of the license articles and related investment, the project will
7 remain a highly cost-effective resource for the Company's portfolio, with or
8 without the additional flows required in May and June of each year. Such
9 additional flows are anticipated to result in a loss of production for these two
10 months of approximately three to four percent of annual production. The all-in
11 cost of power from the Falls, including the additional flows, is projected to be
12 approximately \$34/MWh on a levelized basis.

13 **Q. How does the Company propose to recover the costs of obtaining the license**
14 **for the Snoqualmie Project?**

15 A. PSE has included as part of the production ratebase associated with the
16 Snoqualmie project the costs that it has expended in obtaining the new license.
17 These costs are further detailed in Exhibit No. ___(EMM-26). Costs associated
18 with license-related capital improvements will be included in future filings.

1 **B. Mid-Columbia Hydropower Contracts**

2 **1. Changes related to Douglas County PUD's Wells Project**

3 **Q. Please explain the changes in PSE's portfolio related to the Douglas County**
4 **PUD's Wells Project.**

5 A. The Company's contract with Douglas County Public Utility District ("Douglas")
6 is one of several long-term contracts PSE has with Washington Public Utility
7 Districts ("PUDs") that own hydroelectric projects on the Columbia River. PSE's
8 annual share of the capacity and energy from Douglas' 840 MW Wells
9 Hydroelectric Project No. 2149 ("Wells Project") has been 31.3%. On February
10 11, 2005, FERC approved a settlement that Douglas entered into with the Colville
11 Confederated Tribes ("Colville Tribe") concerning claims that the Colville Tribe
12 had asserted against Douglas for the use by the Wells Project of Tribal lands (the
13 "Settlement"). Additionally, Douglas plans to issue an additional \$70 million in
14 debt to cover the cost of stator rewinds at all ten generators at the Wells project.

15 **Q. Please describe the resulting impact on PSE's contract with Douglas.**

16 A. As part of the Settlement, Douglas agreed to pay the Tribe \$13.5 million as
17 remuneration for past use of Indian land for the Wells Project. Under its Douglas
18 contract, PSE pays a cost-based rate, and is obligated to pay a share of the
19 Settlement payment proportionate to its entitlement to a share in the output of the
20 Wells Project. Douglas is required to make this payment to the Tribe on or before

1 August 9, 2005, which will be funded through issuance of debt and amortized
2 over the remaining term of the Douglas contract. PSE estimates its proportionate
3 share of the debt obligation to be \$542,000 for the rate year.

4 In addition, starting April 1, 2005, 4.5% of the output of the Wells Project will be
5 allocated to the Tribe, increasing to 5.5% on August 31, 2018, at the expiration of
6 PSE's current power sales contract with Douglas. As a result, PSE's annual share
7 of the Wells Project will decrease from 31.3% to 29.9%, meaning that PSE will
8 receive approximately 12 MW less capacity from the Wells project for the
9 remainder of the contract term. During the rate year, PSE is estimating that
10 generation received under the Douglas contract will be reduced by 55,444 MWhs.

11 As noted above, PSE pays Douglas a cost-based rate for power from the Wells
12 project. Douglas will be issuing approximately \$70 million in debt to cover the
13 cost of stator rewinds. This debt will be amortized over 30 years. PSE is required
14 by the terms of the project participation agreement to pay its share of associated
15 debt service.

16 **2. Changes to PSE's share of the Priest Rapids Project.**

17 **Q. Please describe the Company's power sales contracts associated with Grant**
18 **County's Priest Rapids and Wanapum Developments.**

19 A. The Company currently receives a relatively small share of the output of Grant
20 County Public Utility District's ("Grant County") Priest Rapids and Wanapum

1 hydroelectric projects. These long-term power sales contracts expire at midnight
2 on October 31, 2005 for the Priest Rapids Development and at midnight on
3 October 31, 2009 for the Wanapum Development.

4 In December 2001, PSE and twenty one other purchasers entered into three new
5 power sales contracts with Grant County. Upon expiration of the existing
6 contracts, such new contracts will govern sales of power from the Priest Rapids
7 and Wanapum Developments.

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8 **Q. Why did the Company execute the new contracts?**

9 A. The existing contracts provide the Company with a right of first refusal, upon
10 expiration of those contracts, to purchase thereafter a share of the output of the
11 projects in excess of Grant County's needs that was proportionate to the
12 Company's existing share of the projects. Grant County sought to force its
13 purchasers to execute new contracts in 2001, in the wake of the Western Power
14 Crisis. Some purchasers sued Grant County over its interpretation of the
15 contractual right of first refusal, but that litigation had not yet been resolved by the
16 deadline set by Grant County for expiration of its offer to enter into new contracts
17 with the Company. To preserve its access to project power, which was
18 significantly less expensive than other alternatives, the Company exercised its
19 right to enter into a contract with Grant County that was as favorable as Grant
20 County's new contracts with other purchasers. Projections at the time showed that
21 the cost of power from the projects was anticipated to be between ■■■/MWh and

1 █/MWh in 2006 at implementation of the new contracts. *See generally* Exhibit
2 No. ____ (EMM-27HC).

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3 **Q. Have there been material changes to these new**
4 **contracts subsequent to December 2001?**

5 A. The parties to these contracts have agreed to execute an amendment to these
6 contracts related to the percentage of various types of output to which the
7 purchasers will be entitled once the new contracts go into force. Specifically, the
8 amendment governs the purchasers' share of firm and non-firm energy, pondage
9 and ancillary benefits from the projects.

10 All twenty-two purchasers including PSE have agreed to sign the amendment,
11 which PSE executed on May 27, 2005. PSE expects Grant County to execute the
12 amendment upon receipt of the other Purchasers' executed amendments.

13 **Q. Why did the Company agree to the amendment?**

14 A. The amendment will improve the potential benefits to PSE from the new Priest
15 Rapids and Wanapum contracts because it simplifies and clarifies the purchasers'
16 rights to a share of the projects. The amendment was developed after extensive
17 negotiations between Grant County and the purchasers as they realized that
18 implementation of the new contracts would be administratively difficult and could
19 lead to disputes and litigation. PSE participated in those negotiations with 21

1 other parties in an effort to obtain as beneficial an agreement as possible for the
2 purchasers.

3 The amendment to which the parties have agreed essentially converts a non-firm
4 energy product into a product that includes firm energy, non-firm energy, pondage
5 and ancillary benefits. This will permit PSE to conduct long-term as well as daily
6 planning with more reasonable certainty over the remaining term of the new
7 contracts.

8 Further information regarding the background of this amendment, as well as the
9 Company's analysis and decision making process, are found at Exhibit
10 No. ___(EMM-28HC).

11 **Q. How do these matters impact the current proceeding?**

12 A. The Company's projected power costs in this case incorporate the impact of the
13 new power contract for the Priest Rapids Development, as amended, which is
14 effective as of November 1, 2005.

15 **C. CanWest Natural Gas Supply Contract**

16 **Q. Please describe the CanWest gas supply contract.**

17 A. In 1991, Encogen Northwest, which then owned the Encogen combined cycle
18 combustion turbine facility located near Bellingham, WA, entered into a long-
19 term gas supply agreement with CanWest--a Canadian producer pool. By way of

1 background, a producer pool is essentially a marketing organization formed to
2 aggregate gas supplies from numerous, often small, producers. By aggregating
3 supply, the pool can diversify its production fields and related risks--such risks
4 include high well depletion rates of 20 to 100% per year. By aggregating supply
5 across various producing fields, a pool arguably can enter into longer-lived supply
6 contracts with buyers who seek multi-year supply contracts and possibly fixed
7 prices. The CanWest contract supplied 9,300 MMBtu/day for use at the Encogen
8 project at an escalating fixed price [REDACTED]. The term of the original contract
9 was July 1, 1993 until June 30, 2008.

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WAC 480-07-160

10 **Q. Why was the CanWest gas supply contract terminated?**

11 A. In February, 2004, the management of CanWest informed the Company that
12 CanWest had decided to wind up its business by October 2005 and that it did not
13 possess back-to-back supply agreements to meet its post 2005 contractual supply
14 obligations to four customers, including PSE. CanWest is a marketing entity that
15 is at present essentially without assets and judgment-proof. All but [REDACTED] of
16 CanWest's sales contracts expire before October 2005; similarly, all its contracts
17 for gas supply to the pool expire at the end of October 2005. Accordingly, the
18 pool determined it would wind up its business and not secure additional supplies
19 to meet its remaining contractual obligations.

1 **Q. What did the Company do when CanWest informed PSE of its position?**

2 A. PSE conducted legal due diligence inquiries to determine what courses of action
3 and relief might be available to the Company. Subsequent to such investigation,
4 the Company entered into commercial settlement negotiations with CanWest.

5 **Q. What legal due diligence did the Company conduct?**

6 A. PSE retained Canadian counsel and extensively studied its legal and commercial
7 alternatives. The conclusion of these efforts was that PSE's best option was to
8 seek a settlement arrangement with CanWest. Litigation was unlikely to achieve a
9 better result. Not only did a litigation alternative pose uncertain results under
10 Canadian law, it was also estimated to be very expensive due in part to
11 uncertainties posed by the nature of CanWest itself.

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WAC 480-07-160

12 **Q. Was PSE able to reach a negotiated settlement with CanWest?**

13 A. Yes. PSE negotiated a settlement value of [REDACTED] of its expected damages and has
14 received a warranty from CanWest that its settlement, in the aggregate, is

15 [REDACTED]

16 [REDACTED]. The effective date of the

17 settlement agreement is October 1, 2004. Pursuant to the settlement, the CanWest
18 contract will terminate on October 31, 2005. The settlement's value will be
19 captured by applying a monthly credit to amounts owed for gas received during

1 the remaining term of the amended contract. The expected value of settlement
2 credits is approximately [REDACTED].

3 **Q. Has PSE taken actions to replace the gas supplies that CanWest will no**
4 **longer provide?**

5 A. Yes. PSE replaced the CanWest fixed-price supply with 5,000 MMBtu/day at a
6 price of [REDACTED]/MMBtu and 5,000 MMBtu/day at a price of [REDACTED]/MMBtu.

7 **Q. Why did the Company do so?**

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WAC 480-07-160

8 A. Analysis at the time PSE learned of the early termination showed that PSE would
9 be short gas for its power portfolio during the remaining term of the original
10 contract. PSE's Gas Operations staff recommended that the hedge be replaced to
11 preserve the reduction of cost volatility provided by the CanWest contract.
12 PSE's Energy Resources Committee ("ERC") authorized the purchase of 10,000
13 MMBtu/day to replace the 9,300/MMBtu CanWest supply in two standard lots of
14 5,000 MMBtu/day each in order to avoid the market premium demanded by odd-
15 lot transactions. The ERC further approved entering into hedging transactions on
16 two different days, which would reduce the risks associated with purchasing all of
17 the replacement gas in one transaction. The ERC also approved purchase of the
18 supply at Station #2 on the Duke/Westcoast Pipeline rather than the Sumas
19 delivery point of the CanWest contract because the Company had firm
20 transportation available from Station #2 and prices there were more favorable than

1 at Sumas. Finally, because of the volatility of the gas markets at the time and
2 differing opinions regarding the direction of the markets, the ERC approved
3 immediate purchase of the first lot, followed by strike prices for purchase of the
4 second lot at the first Station #2 purchase price plus [REDACTED]/MMBtu should the
5 market go up and less [REDACTED]/MMBtu should the market go down. See Exhibit
6 No. ___(EMM-29C).

7 On October 4, 2004, in compliance with the direction of the ERC, Gas Operations
8 purchased firm physical gas for 5,000 MMBtu/day from November 2005 through
9 June 2008 at Station #2. The price to be paid was [REDACTED]/MMBtu. The
10 subsequent strike prices, established by this purchase, were [REDACTED]/MMBtu, and
11 [REDACTED]/MMBtu. Three days later, PSE purchased the remaining 5,000 MMBtu/d
12 on October 7, 2004 at Station #2 at a price of [REDACTED]/MMBtu. See Exhibit
13 No. ___(EMM-30C). This subsequent purchase completed the replacement of the
14 lost CanWest volume at fixed prices.

15 **Q. Is the price change for the CanWest contract**
16 **included in PSE's updated power costs?**

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WAC 480-07-160

17 A. Yes. On November 24, 2004, in Docket No. UE-041846, the Commission
18 approved PSE's petition for an accounting order permitting PSE to defer amounts
19 received from CanWest in compliance with the settlement agreement and to
20 amortize such deferred payments beginning November 1, 2005 through the
21 remaining life of the original contract with CanWest, June 30, 2008. This

1 recognizes that the payments are benefits to ratepayers that should help offset the
2 increased price for gas supply caused by CanWest's early termination of the
3 contract that will be incurred through the remaining life of the original contract.
4 Mr. Story's accounting exhibits provide details regarding the impact on the PCA.

5 **D. Point Roberts**

6 **Q. Please explain the changes with regard to serving Point Roberts.**

7 A. Point Roberts is an isolated portion of PSE's service territory with small loads that
8 require service through British Columbia. PSE's contract with PowerEx for
9 energy to serve Point Roberts, under which the cost of delivered power for Point
10 Roberts was \$67/MWh, expired on September 30, 2004. As that contract was set
11 to expire, PSE investigated whether it could obtain lower cost service to Point
12 Roberts. In the end, due to an inability to access BC Hydro's distribution system,
13 the best alternative available to PSE was to extend the existing contract with
14 PowerEx at the same price (\$67/MWh) through September of 2007.
15 Documentation of the Company's analysis is provided in Exhibit No. ___(EMM-
16 31C).

17 **IV. CONCLUSION**

18 **Q. Does that conclude your testimony?**

19 A. Yes, it does.