

**EXHIBIT NO. ___(WJE-1HCT)
DOCKET NO. UE-07___/UG-07___
2007 PSE GENERAL RATE CASE
WITNESS: W. JAMES ELSEA**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

**Docket No. UE-07___
Docket No. UG-07___**

**PREFILED DIRECT TESTIMONY (HIGHLY CONFIDENTIAL) OF
W. JAMES ELSEA
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**REDACTED
VERSION**

REVISED DECEMBER 21, 2007

1 investor partner and that partnership will effectively reduce the net benefits from
2 PTCs by approximately 14%--or about \$3.35/MWh levelized over 20 years.

3 However, the Hopkins Ridge Wind Infill Project is not a candidate for a tax
4 investor because it is located within a wind farm wholly owned by PSE. Thus,
5 the Company assumed that PSE would exceed its tax credits, which would then
6 be carried forward. PSE estimated the carrying cost of this PTC deferral at about
7 \$7.30/MWh.

8 **Q. Please summarize the quantitative analysis of the Hopkins Ridge Wind Infill**
9 **Project.**

10 A. Using the Portfolio Screening Model version 8-4 with the August 2006 updated
11 prices, the Hopkins Ridge Infill Wind Project provides a present value \$5 million
12 of portfolio benefit over 20 years. The levelized cost of approximately
13 \$[REDACTED]/MWh is competitive with (and over \$3/MWh less than) the \$[REDACTED]/MWh
14 levelized cost of the Klondike PPA.

15 **F. Acquisition of the Sumas Cogeneration Station**

16 **Q. How did PSE evaluate the incremental cost of SCCLP's breach of the Sumas**
17 **PPA?**

18 A. As discussed in the prefiled direct testimony of Mr. Roger Garratt, Exhibit
19 No. ___(RG-1HCT), PSE, in response to the notice of intent to breach received
20 May 7, 2007 from SCCLP, issued a term sheet to solicit bids to replace the

1 energy, capacity and displacement benefits of the existing PPA. PSE received
 2 bids from two of the four parties solicited and used these bids to assess the direct
 3 cost of replacing the SCCLP PPA from July 2007 through the term of the
 4 contract, expiring April 2013.

5 **Q. Did the Company adjust these bids in performing its analysis?**

6 A. Yes. PSE made two adjustments to the bids to make them more consistent with,
 7 and comparable to, the SCCLP PPA. First, the Company adjusted the bids to add
 8 the costs of transmission of the power to the PSE transmission system. Second,
 9 the Company adjusted the bids to account for the cost of market purchases
 10 necessary to cover the difference between the bid amounts of 125 MW and the
 11 nominal capacity of the Sumas Cogeneration Station, which is higher than
 12 125 MW in the winter months.

13 **Q. What was the present value cost of the replacement power?**

14 A. The Company's analysis showed that the replacement bids would have a present
 15 value cost within the range of [REDACTED]. Please see Exhibit
 16 No. ___(WJE-20HC) for a summary of the calculation of the potential
 17 incremental cost of replacing the SCCLP PPA with identical energy, capacity,
 18 displacement and delivery to PSE service territory.

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1 PSE staff notified the EMC of the results of the solicitation and proceeded with
2 replacing the energy as prescribed in the replacement power strategy outlined by
3 the EMC.

4 **Q. Did PSE compare the cost of replacement power purchased and described in**
5 **Section IV D above with the energy cost of the SCCLP PPA?**

6 A. Yes. The replacement market power was about [REDACTED] less than the price of
7 the SCCLP PPA. See Exhibit No. ___(WJE-20HC) at 4.

8 PSE adjusted these market purchases for (i) the costs of transmission of such
9 power to the PSE system and (ii) the displacement options lost with the breach of
10 the SCCLP PPA. The Company projects that the bottom line impact of the
11 breach, accounting for the [REDACTED] benefit of lower market price, is a present
12 value cost of about [REDACTED].

13 As discussed in the prefiled direct testimony of Mr. Roger Garratt, Exhibit
14 No. ___(RG-1HCT), PSE and SCCLP agreed to a settlement of the breach
15 whereby SCCLP would sell the Sumas Cogeneration Station to PSE at a
16 significant discount -- approximately [REDACTED] or [REDACTED]/kW.

17 **Q. How did PSE's quantitative team analyze the acquisition of the Sumas**
18 **Cogeneration Station?**

19 A. PSE's quantitative team evaluated the acquisition of the Sumas Cogeneration
20 Station from three perspectives. First, PSE compared the Sumas Cogeneration

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Station with the short list of projects from the 2005 RFP using the Portfolio Screening Model, with the August 2006 price update. Second, PSE evaluated the Sumas Cogeneration Station value using several approaches, including comparing the plant characteristics to the Goldendale Generating Station in a manner similar to a “real estate comparable” evaluation. Finally, PSE evaluated the Sumas Generating Station using Portfolio Screening Model version 10-2, which reflects updated 2007 IRP pricing.

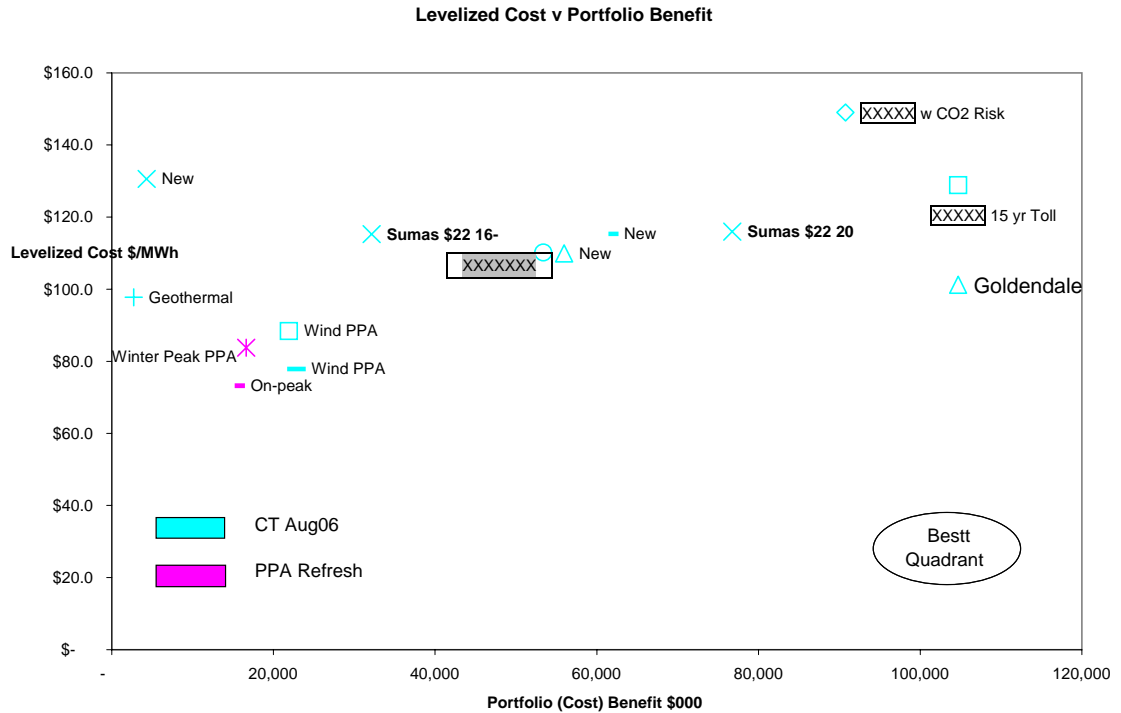
Q. How did the acquisition of the Sumas Cogeneration Station compare with the short list of projects?

A. PSE evaluated the Sumas project using Portfolio Screening Model version 8-4 in March 2007. At that time, acquisition of the Sumas Cogeneration Station resulted in a portfolio benefit that would have placed it on the short list, had it been in the 2005 RFP. Please see Exhibit No. ___(RG-32) and Exhibit No. ___(RG-33) for presentations to the WUTC staff and EMC, respectively. The following scatter-plot graph shows that the Sumas Cogeneration Station, with a 16-year life, is reasonable when compared with the other projects evaluated at that time.

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Q. Why did the Company evaluate the acquisition of the Sumas Cogeneration Station in March 2007, before SCCLP notified PSE that it could no longer honor the existing PPA?

A. As discussed in the prefiled direct testimony of Mr. Roger Garratt, Exhibit No. ___(RG-1HCT), PSE was considering the opportunity to restructure the SCCLP PPA and purchase the Sumas Cogeneration Station at a discount during the period from 2006 to early 2007. The purchase price at that time was a net [REDACTED], with the potential of a [REDACTED] reduction resulting from PSE’s share of benefits of the contract restructure.

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1 **Q. How did PSE estimate the asset value of the Sumas Cogeneration Station?**

2 A. PSE used several simple approaches to estimate asset value, including but not
3 limited to (i) evaluation of recent sales of gas fired generation plants, (ii) Portfolio
4 Screening Model results, and (iii) adjustment of the recent Goldendale Generating
5 Station sale for factors of plant efficiency, age, and fixed costs of gas
6 transportation and power transmission.

7 **Q. What asset values resulted from these approaches?**

8 A. The survey of market sales of gas fired generation indicated an average price of
9 \$415/kw or about \$54 million for the 130 MW Sumas Cogeneration Station.
10 Please see Exhibit No. ___(WJE-21) for the results of the survey of market sales
11 of gas fired generation.

12 The Portfolio Screening Model methodology (assuming a 20-year remaining life
13 for the Sumas Cogeneration Station) results in an asset value of approximately
14 \$50 million.

15 The adjusted Goldendale Generating Station methodology results in an estimated
16 asset value range for the Sumas Generation Station of between \$43 million and
17 \$51 million. Please see Exhibit No. ___(WJE-22HC) for the results of the
18 adjusted Goldendale Generating Station methodology.

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1 **Q. Has the Company updated its quantitative analysis of the Sumas**
 2 **Cogeneration Station acquisition?**

3 A. Yes. PSE updated the Portfolio Screening Model for assumptions contained in
 4 the 2007 Integrated Resource Plan in May 2007. Although PSE has not
 5 completed all Portfolio Screening Model updates for the anticipated 2008 Request
 6 for Proposals, PSE developed an interim model (PSM version 10-2) to evaluate
 7 the acquisition of the Sumas Cogeneration Station relative to the acquisition of
 8 the Goldendale Generation Station and the Klondike III Wind PPA. Please see
 9 Exhibit No. ___(WJE-23C) for graphs demonstrating the portfolio benefit,
 10 levelized cost, and portfolio benefit ratios for each of the Goldendale Generation
 11 Station acquisition, the Klondike III Wind PPA, and the Sumas Cogeneration
 12 Station acquisition (assuming both a 15-year and a 20-year remaining life). The
 13 results of this analysis is also provided in the following table.

PSM 10-2			
Resource Name	Benefit Ratio	Benefit \$000	Levelized \$/MWh
Goldendale	0.200	199,601	██████
Sumas 15yr	0.253	64,520	██████
Sumas 20yr	0.495	162,761	██████
Klondike III PPA	0.251	30,442	██████

14 For purposes of the acquisition, PSE assumed that the Sumas Cogeneration
 15 Station, a plant that started commercial operations in 1993, has approximately
 16 15 years of remaining economic life.

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1 Assume a remaining economic life of 15 years, the present value of the portfolio
2 benefit of the Sumas Cogeneration Station is over \$64 million, and the ratio of
3 portfolio benefit to all in plant cost, including fuel, is 0.253. A benefit ratio of
4 0.253 is slightly greater than the benefit ratio of 0.251 associated with the
5 Klondike III Wind PPA. The Portfolio Screening Model version 10-2 analysis
6 indicates that the Sumas Cogeneration Station acquisition would be among the
7 leaders on the 2005 RFP short list. The levelized costs for the Goldendale
8 Generating Station and the Sumas Cogeneration Station reflect the fact that the
9 model results in a capacity factor of about 40% for the Goldendale Generation
10 Station and in a capacity factor of about 25% to 30% for the Sumas Cogeneration
11 Station.

12 V. CONCLUSION

13 Q. Please summarize your conclusions.

14 A. For the 2005 RFP, PSE evaluated approximately 120 different resource
15 alternatives that included unsolicited proposals and offers from the 2005 RFP.
16 Cost and portfolio benefit measures helped screen these proposals down to
17 16 projects on the short list. PSE evaluated the short list projects and portfolio
18 combinations (i) in four different price scenarios and (ii) using a Monte Carlo
19 simulation testing power price, gas price, hydro and wind variability.

20 All projects on the short list lowered PSE's portfolio cost relative to the
21 combination of generic resources that were determined in the 2005 LCP to be the

1 low cost portfolio. PSE acquired the [REDACTED] PPA and the Klondike III Wind
2 PPA as a result of the 2005 RFP process.

3 PSE evaluated the purchase of Whitehorn Generating Station Units 2 and 3 at the
4 end of the lease term in February 2009 by comparing such purchase to the
5 capacity resource proposals submitted in the 2005 RFP. The acquisition of
6 Whitehorn Generating Station Units 2 and 3 was the lowest cost capacity option.

7 PSE acquired the [REDACTED] and Sempra PPAs to replace the fixed price energy that
8 PSE had been purchasing pursuant to the now terminated SCCLP PPA. The
9 [REDACTED] and Sempra PPAs were the lowest cost alternatives resulting from four
10 rounds of competitive bids for replacement power.

11 The Hopkins Ridge Wind Infill Project was a low cost opportunity to add to
12 PSE's renewable resource base.

13 The acquisition of the Sumas Cogeneration Station, when evaluated with the
14 Portfolio Screening Model, compared favorably with the group of short listed
15 projects identified in Phase II of the 2005 RFP. The purchase price of [REDACTED]
16 represents a significant discount to the recent market sales of gas fired plants and
17 to the recent purchase of Goldendale Generating Station when adjusted for
18 efficiency, age and fixed costs of operation.

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

20 A. Yes, it does.