

ORIGINAL

Exhibit No. ____ (MRM-__)
Docket UE-132027

Exhibit No. ____ (WAG-T)

**BEFORE THE WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

In the Matter of the Application of
PUGET SOUND ENERGY, INC.

for (1) Approval of the Proposed Sale of PSE's
Share of the Centralia Facilities, and
(2) Authorization to Amortize Gain Over a Five-
Year Period.

Docket No. UE-99 ____

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DIRECT TESTIMONY OF WILLIAM A. GAINES

September 10, 1999

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PUGET SOUND ENERGY, INC.

Direct Testimony of William A. Gaines

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5 **Q. Please state your name, address and position.**

6 A. My name is William A. Gaines, and my address is 411 - 108th Avenue NE, Bellevue,
7 Washington. I am Vice President, Energy Supply, with Puget Sound Energy, Inc.

8 **Q. What topics will you be covering in your testimony?**

9 A. My testimony will describe PSE's interests in the two Centralia generating units that are
10 the subject of the proposed sale, and I will describe the terms of the proposed sale. My
11 testimony will also explain why the proposed sale presents a unique opportunity for PSE
12 and its customers to sell its Centralia interests in a transaction that is consistent with the
13 public interest.

14 **Q. What other witnesses are testifying in support of the proposed transaction?**

15 A. Karl Karzmar will testify about accounting and tax issues. In addition, I have reviewed
16 the testimony of the witnesses for PacifiCorp and Avista in support of their respective
17 applications to the Commission for sale of the Centralia Plant, and in an effort to
18 minimize duplication and the burden on the Commission, I will refer at times to the
19 testimony and exhibits of those witnesses.

20 **Overview**

21 **Q. What is PSE requesting from the Commission?**

22 A. Pursuant to RCW 80.12.020 and WAC 480-143-010, PSE is requesting Commission
23 approval to sell its 7% ownership interest in the Centralia Generating Units 1 and 2 (the
24 "Centralia Plant") together with associated transmission assets to PacifiCorp and

1 TECWA Power, Inc., an indirect subsidiary of TransAlta Corporation, a Canadian
2 Business Corporation Act corporation. A copy of the Centralia Plant Purchase and Sale
3 Agreement and related transmission sale documents is attached as Exhibit No. ____
4 (WAG-1). There are eight owners of the Centralia Plant holding ownership shares
5 ranging from 2.5% to 47.5%. The sale requires all existing ownership shares to be sold to
6 TECWA, which will end the existing fractionated ownership status of the Centralia Plant.
7 The sale, which is scheduled to close on December 31, 1999, will produce a net gain for
8 PSE's share of the plant of approximately \$13.5 million, which PSE requests
9 authorization to amortize over five years.

10 PSE is seeking an order that:

- 11 • makes a determination pursuant to RCW 80.12.020, WAC 480-100-036 and
12 WAC 480-143-010 that the proposed sale is consistent with the public interest and
13 approves the proposed sale of PSE's 7% interest in Centralia Units 1 & 2, and
14 PSE's interest in the 500 kV and 230 kV Centralia Transmission Systems;
- 15 • authorizes PSE to amortize the net gain from the sale for ratemaking purposes
16 over the five-year period commencing January 1, 2000; and,
- 17 • makes a determination pursuant to 15 U.S.C. § 79z-5a(c) allowing TransAlta to
18 operate the Centralia facilities as an eligible facility: "(1) will benefit consumers,
19 (2) is in the public interest, and (3) does not violate State law" if the sale is
20 ultimately approved.

21 **Q. Why does the proposed sale present a beneficial opportunity for PSE and its**
22 **customers?**

23 **A.** As explained in some detail below, the proposed sale gives rise to several significant
24 benefits. First, it eliminates PSE's potential reclamation liability associated with the

1 mine. PSE's potential share of that liability has been estimated to be as high as \$31
2 million. Second, the proposed sale eliminates PSE's responsibility to install expensive
3 new environmental controls on the plant, including scrubbers. Absent a sale, these costs
4 and liabilities likely would fall on PSE's customers. Third, the buyer is paying a control
5 premium in purchasing the Centralia Plant because the sale will consolidate ownership
6 into one entity and prevent the inefficiencies that would result from continuing the current
7 fractionated ownership. As the owner of a 7% interest in the Centralia Project, it is
8 unlikely that PSE acting alone could sell its minority interest for the price now offered.

9 **Public Interest**

10 **Q. What is your understanding of the standards governing the Commission's**
11 **determination whether to approve the proposed transaction?**

12 A. The Commission's approval process for proposed property transfers requires the
13 transaction to be consistent with the public interest. *See* WAC 480-143-050.

14 **Q. Is the proposed sale consistent with the public interest?**

15 A. Yes. As described in more detail below, the proposed sale of PSE's Centralia facilities is
16 consistent with the public interest for several reasons:

- 17 • **The sale will eliminate significant operational risks associated with**
18 **older coal-fired generation plants.**

19 The Centralia coal plant was completed in 1972. Older coal-fired generation plants pose
20 a significant risk of increased operational costs, especially environmental costs. These
21 costs include: 1) costs to retrofit the Centralia Plant with scrubbers to meet increasingly
22 stringent emission standards¹ (estimated to exceed \$200 million); 2) costs to repair and

¹ To meet emissions limits imposed by the Southwest Washington Air Pollution Control Act (SWAPCA), contracts have been entered into with Stone & Webster and ABB to design and install SO₂

1 replace worn-out equipment;² and 3) increased costs from potentially more restrictive
2 federal and state regulations.

3 The Centralia Plant, located west of Mt. Rainier National Park, has come under increased
4 criticism from several environmental organizations, which creates added operational risk
5 and uncertainty. A number of these organizations wrote an open letter to bidders
6 expressing their intent to continue to oppose coal operations at the plant, a copy of which
7 is attached as Exhibit No. ____ (WAG-3).

- 8 • **The sale will limit PSE's potential environmental liabilities and will**
9 **terminate PSE's coal mine reclamation costs.**

10 The sale limits PSE's potential environmental liabilities for the Centralia Plant and Mine
11 on terms favorable to PSE and its customers. The principal liability-reclamation of the
12 Centralia coal mine-is being assumed by TECWA Fuel and guaranteed by TransAlta as a
13 part of the sale. A chart of the estimates of coal reclamation costs is attached as Exhibit
14 No. ____ (WAG-2). The Centralia Plant Purchase and Sale Agreement specifically limits
15 other environmental-contamination liability on terms favorable to PSE and its customers.

- 16 • **The sale will provide value by allowing TECWA to consolidate**
17 **ownership of the plant and mine in one entity and eliminate the**
18 **unique operational challenges associated with owning a minority**
19 **interest in a major generation station.**

20 The existing ownership arrangement of the Centralia Plant is an example of the
21 difficulties presented by fractionated ownership. PSE has a 7% interest in Centralia.

22 There are seven other owners: PacifiCorp (47.5%), Avista Corporation (15%), Seattle

scrubbers and low NOX burners which are estimated to cost in excess of \$200 million. TECWA, in its purchase agreement with the Project Owners, has agreed to assume this cost after closing.

² Projected capital budgets for the Centralia Plant describe some of the equipment that may have to be replaced with age (see WAG-3). Over the next five years, these capital costs are estimated to exceed \$48 million, not including clean air project costs.

1 City Light (8%), Snohomish County PUD (8%), Tacoma (8%), Grays Harbor PUD (4%),
2 and Portland General Electric³ (2.5%). Under the current ownership agreement, any one
3 owner may veto capital additions to the Centralia Plant. As described in more detail in
4 the prefiled testimony of C. Alex Miller of PacifiCorp and Gary Ely of Avista,
5 disagreement between the existing owners on management issues, such as how to deal
6 with environmental issues, and capital budget items such as scrubbers, helped precipitate
7 the decision to sell the Centralia Plant.

- 8 • **The sale will not affect PSE's ability to provide an adequate and**
9 **reliable power supply to its customers.**

10 After the sale of its 7% share (or 93.8 MW) of the Centralia Plant, PSE will remain able
11 to meet forecasted loads. PSE anticipates using market purchases and other options to
12 replace Centralia power. As a percentage of PSE's peak load of 5,146 MW, 93.8 MW is
13 less than 2%. In addition, regional estimates show roughly 71,000 MW of generation
14 available to meet peak loads of 55,000 MW. The proposed sale will not change the
15 balance of load and resources in the region.

- 16 • **The sale will permit increased flexibility in power supply strategy.**

17 There is significant uncertainty about how changes in industry structure will affect the
18 provision of energy. The Centralia Plant, after scrubber installation and other capital
19 additions, is projected to have above-market costs. The proposed sale will enable PSE to
20 respond with more flexibility to these uncertainties. PSE may find that it will not need to
21 replace its share of the output of the Centralia facility in kind. If replacement is
22 necessary, PSE can replace it with any one of a variety of options, including spot market

³ PGE has sold its 2.5% share to Avista, which Avista describes in its related Application to Sell the Centralia Power Plant and its testimony.

1 purchases, shorter fixed-term purchases, DSM, renewable energy or cost-effective
2 distributed generation.

- 3 • **The sale is consistent with PSE's merger commitment to pursue cost**
4 **savings.**

5 PSE made a commitment during the Puget/WNG merger proceedings to pursue cost
6 savings following the merger. The Commission agreed that this was appropriate and
7 ordered PSE to do so as part of the Commission's approval of the merger. This
8 transaction furthers that objective. PSE has run several net present value analyses to
9 estimate the potential financial benefits of the proposed sale. The analyses are attached as
10 Exhibit No. ____ (WAG-4) and show a range of potential values. Although long-term
11 power costs are unknowable (and uncertainty increases with the duration of the forecast),
12 applying reasonable assumptions yields a positive ten-year net present value of
13 approximately \$17.7 million.

14 **Description of the Centralia Facilities**

15 **Q. Please describe the Centralia facilities PSE is proposing to sell.**

16 **A.** PSE is proposing to sell its 7% ownership interest in the Centralia generating project.
17 Centralia Units 1 & 2 are twin 670 MW plants that have been in operation since 1972.⁴
18 PSE's Centralia interests also include the approximately 0.2 mile 500 kV transmission
19 system running from the Centralia Plant to BPA's Tono Substation and an associated 230
20 kV transmission system serving the plant and mine. The assets are described more fully
21 in the Centralia Plant Purchase and Sale Agreement and associated schedules attached as
22 Exhibit No. ____ (WAG-1).

⁴ PSE's Centralia interests also include the Skookumchuck Dam Reservoir as part of the intake water system, which will be separately sold at a later time to local authorities for coordinated flood control purposes.

1 **Q. What happened after PSE decided it would pursue a sales agreement with**
2 **TransAlta?**

3 A. After PSE and the other owners negotiated details of the sales agreements with
4 TransAlta/TECWA, PSE sought and obtained approval of the transaction from its senior
5 management and its board of directors.

6 **Terms of the Proposed Sale**

7 **Q. What are the terms of the proposed sale?**

8 A. A summary of the terms of the Plant Purchase and Sale Agreements for the Centralia
9 Plant and the Centralia 500 kV and 230 kV transmission facilities, together with copies of
10 the agreements, is included in attached Exhibit No. ____ (WAG-1). For additional details,
11 please refer to the testimony of C. Alex Miller of PacifiCorp.

12 **Q. How does PSE plan to replace its share of Centralia power?**

13 A. It is not entirely clear that PSE will have to replace the power in kind, but, in any event,
14 PSE intends to take advantage of market resources to the extent it needs to replace the
15 resource. PSE is also analyzing other flexible power replacement products, including, for
16 example, winter-only energy supplies and capacity and load-factoring products. The
17 opportunity for distributed generation and BPA in lieu power is also being considered.

18 **Q. When is the proposed sale expected to close?**

19 A. The expected closing date is December 31, 1999.

20 **Q. Does PSE have any further right to reject the proposed sale?**

21 A. Yes. PSE's board of directors, through its Strategic Opportunities Committee, retains
22 authority to approve or reject the proposed sale, subject to satisfactory regulatory
23 treatment.

1 **Transaction Price**

2 **Q. Does PSE believe it is receiving a fair price for the assets?**

3 A. Yes. Again, much of the relevant information is set forth in the testimony of C. Alex
4 Miller of PacifiCorp. In summary, TransAlta will acquire 100% of both the Centralia
5 Plant and the Centralia Mine and will have sole authority to manage the plant and the
6 mine as a unit. Single ownership of the plant and mine will produce significant added
7 value, including the ability to manage environmental issues and mine reclamation costs.
8 The Centralia Plant Purchase and Sale Agreement reflects the added value TransAlta
9 places on obtaining sole control of all the assets.

10 **Reliability of Supply**

11 **Q. Will the proposed sale adversely affect PSE's ability to provide an adequate and**
12 **reliable power supply to its customers?**

13 A. No. The proposed sale of PSE's 7% share of Centralia will not affect PSE's ability to
14 provide an adequate and reliable power supply to its customers. PSE's share of the
15 Centralia Plant represents 93.8 MW of capacity, which is a miniscule portion of PSE's
16 peak load of 5,146 MW. Moreover, the sale will not change the balance of load and
17 resources in the region; Centralia will continue to be interconnected to serve regional
18 loads. The proposed sale will simply change ownership interests in the plant and end the
19 present fractionated ownership situation. As described above, PSE anticipates replacing
20 Centralia power as necessary with spot market purchases, shorter fixed-term purchases,
21 DSM, renewable energy or cost effective distributed generation. PSE also expects
22 continued development of new generation resources in the region.

23 **Q. How does PSE expect new resource development to occur?**

24 A. New resource development is continuing in the region despite regulatory uncertainties.
25 Merchant plant development is providing significant new resource additions across the

1 country. A recent survey reported that merchant plants representing more than 47,000
2 MW are now under development nationwide. Another recent report stated that merchant
3 plants representing more than 13,000 MW are currently operational, nearly 6,000 MW are
4 under construction, more than 8,000 MW are under development, and plans are reported
5 for another 50,000 MW. The Northwest Power Planning Council estimated in its 1996
6 Power Plan that the Pacific Northwest alone had enough sites to accommodate 7,400 MW
7 of new combined cycle combustion turbine plants, 4,600 MW of industrial cogeneration,
8 5,000 MW of coal-fired plants, and several thousand MW of additional renewable energy
9 applications. Several new gas-fired generation projects have been proposed in the region.
10 PSE has had discussions about power purchase agreements with several of these proposed
11 projects.

12 **Improved Flexibility in Power Supply Strategy**

13 **Q. How will the sale provide PSE with increased flexibility in managing its power**
14 **supply?**

15 A. Whether and when Washington State will move to retail open access is uncertain, but the
16 sale of PSE's Centralia interests will help position PSE for any transition by eliminating
17 an above-market portion of PSE's fixed-cost supply portfolio. PSE will have the
18 flexibility to replace Centralia with spot-market purchases, shorter fixed-term purchases,
19 DSM, renewable energy, or cost-effective distributed generation. In light of the uncertain
20 industry structure and the potential technological advancements, this approach has value.
21 The increased flexibility will allow PSE to pursue the benefits of the emerging robust
22 wholesale market for new generation, which FERC predicts will reduce generation costs.

23 The sale will also position PSE to accommodate the uncertainties in future demand for
24 energy. It may not be necessary for PSE to replace the entire Centralia resource -
25 especially for its forecasted life. An energy portfolio that uses shorter-term, staggered

1 contracts, for example, would allow PSE to respond to changes in demand and to match
2 its resources more closely to customer demands. PSE currently has approximately
3 300 aMW of loads based on market prices. This load includes Schedule 48 customers
4 and other customers under special contracts incorporating market-based pricing. Over
5 time, market-priced loads may increase. Replacing PSE's Centralia generation with
6 market-based resources will allow PSE to achieve a better match between the pricing and
7 other characteristics of its resources and the demands of its customers.

8 **Q. Why is this flexibility consistent with PSE's merger commitment to pursue cost**
9 **savings and produce significant financial benefits to customers?**

10 A. In its order approving the Puget/WNG merger, the Commission expressly encouraged
11 PSE to pursue any and all cost savings. PSE has relied on the Commission's admonition
12 in conducting its business; the proposed sale is one of the actions PSE is taking consistent
13 with that goal, by replacing an above-market resource with less expensive, more flexible
14 supply options.

15 **Effects of the Sale**

16 **Q. How did PSE estimate the potential effects of the sale?**

17 A. PSE modeled several scenarios to compare the effect of the proposed sale on power costs.
18 In performing these analyses, PSE compared Centralia costs to market costs as predicted
19 by the AURORA model, which is a regionally recognized electric energy market model
20 used by the Northwest Power Planning Council, Bonneville Power Administration, and
21 other entities to develop market price forecasts.

22 The scenarios assumed that PSE could retain its Centralia interests or sell them and
23 procure alternate power supplies under various cost scenarios. In formulating the

1 scenarios, PSE looked at factors that may affect Centralia costs⁵ and replacement power
2 costs. PSE relied in part on market forecasts from the Northwest Power Planning
3 Council, including high-, medium-, and low-price assumptions as run through Aurora.

4 As might be expected, results vary depending on assumptions. Exhibit No. __ (WAG-4)
5 sets forth a scenario using medium market-price assumptions with related sensitivity
6 analyses on both power costs and market replacement. This "NERC Availability"
7 scenario shows an approximate \$17.7 million benefit over the next ten years. These
8 benefits result not only from the amortization of the gain, but also from the replacement
9 of above-market power with power purchased at the projected medium-priced market
10 prices. Some of the net present-value scenarios produce sizable variances around the
11 NERC Availability scenario.

12 Exhibit No. __ (WAG-4) presents the NPV for the sale based on the variance of several
13 assumptions. One of the larger variances is shown when the sale is analyzed using the
14 high and low market-price scenarios for the NWPP market-price assumptions. These two
15 scenarios change various market assumptions that would tend to drive the low and high
16 market prices to their lowest and highest relative values. For comparison purposes, PSE
17 adjusted the NWPP's single largest function in variability - the price of fuel - to produce
18 further sensitivity on the market forecasts. To reflect the variability of fuel prices only,
19 PSE ran two additional scenarios that used the low and high fuel-price forecasts for the
20 medium market-price scenario. These scenarios resulted in market prices approximately

⁵ Various potential future developments may burden the costs of the Centralia project and increase uncertainty and create upward pressure around future "all in" project costs, including environmental costs (such as carbon tax), capital costs associated with installation of scrubbers and reclamation costs.

1 plus or minus 20%. The results of these two scenarios are also included in Exhibit
2 No. ____ (WAG-4).

3 These analyses show the variations in savings due to changes in some quantitative
4 assumptions. It is important to note, however, that there are qualitative factors that are
5 not included in the analyses. For example, the analyses do not reflect the significant
6 potential technological or political changes that may occur within the planning horizon,
7 including retail access, increased benefits from wholesale competition, and improvements
8 in gas drilling, combustion technology and distributed generation technology. Nor do the
9 analyses account for the uncertain value of the plant in a future sale. The Centralia
10 project is based on 30-year-old technology that uses more environmentally damaging fuel
11 than newer fossil-fueled plants. And the analyses do not attribute any value to the
12 flexibility that disposing of Centralia will give PSE to match its power supply portfolio to
13 the needs of its customers.

14 In addition, because TransAlta is assuming reclamation liability for the coal mine, PSE no
15 longer has to pay into the reclamation fund and its liability for final coal mine reclamation
16 costs will be limited.

17 **Q. Is PSE's estimate consistent with that of PacifiCorp?**

18 A. Yes. PacifiCorp's model produces similar results.

19 **Elimination of Coal-Fired Generation Risks**

20 **Q. What are the risks of coal-fired generation that would be eliminated with the sale of**
21 **Centralia?**

22 A. The Centralia Plant, located west of Mt. Rainier National Park, is the only coal-fired
23 power plant in Washington State. Continued ownership of a coal-fired resource at
24 Centralia would leave PSE's customers exposed to the uncertainties and significant

1 potential increased costs associated with coal-fired generation. These increased costs
2 include coal mine reclamation costs and more stringent environmental standards and
3 taxes. The risk of increased costs due to changing regulations associated with coal-fired
4 generation is likely to be relatively higher.⁶ As described above, the Centralia Plant has
5 been criticized by several environmental organizations that wish to stop the burning of
6 coal at the Centralia Plant.

7 **Limiting Exposure to Environmental-Remediation Liability**

8 **Q. How would the sale limit exposure to coal mine reclamation costs?**

9 A. The sale fixes potential environmental-remediation liabilities for the Centralia Plant on
10 terms favorable to PSE and its customers. For example, the Centralia Plant Purchase and
11 Sale Agreement limits PSE's liability for costs for coal mine reclamation of the Centralia
12 Mine. Although the estimates vary widely, the reclamation liability has been estimated at
13 up to \$486 million. PSE's unfunded 7% share of that liability would be \$31 million. See
14 Exhibit No. ____ (WAG-2).

15 **Q. How would the sale limit exposure to coal mine closure costs?**

16 A. Under the existing contracts the current plant owners would have to pay PacifiCorp a coal
17 mine termination payment if the mine is closed, in addition to coal reclamation costs.

⁶ The 1998 Legislature commissioned the Washington Utilities and Transportation Commission and the Department of Community Trade and Economic Development, Energy Division to submit a report on Washington's electric utility industry on a number of issues that may require consideration in policy changes affecting electricity services. The Electricity System Study ESSB 6560 noted that "electricity production is a significant source of carbon dioxide. *Most of the carbon dioxide produced by electric generators that serve Washington loads is produced by the Centralia and Colstrip coal-fired power plants.*" (Emphasis added.) The study further stated: "The 1997 Kyoto Protocol, negotiated by more than 150 countries, would require the U.S. to reduce its greenhouse gas emissions to 7% below 1990 levels by 2008-2012. Scientists indicate that substantially greater reductions (50-70%) would be necessary to stabilize the climate." Finally, the study concluded: "Even though most of our power comes from hydroelectricity, internalization of carbon costs in power prices *could have a significant effect on prices in Washington, depending on how it is accomplished.*" (Emphasis added.)

1 This amount is estimated to be approximately \$101.4 million. If the pending sale is
2 approved, that potential payment would be eliminated. TransAlta and its subsidiaries
3 would be able to operate the plant and mine as a unit in whatever manner made the most
4 economic sense.

5 **Q. How would the sale limit other environmental risks?**

6 A. The sale limits other future environmental risks; continued ownership of the Centralia
7 Plant would expose PSE to potential environmental liabilities related to the ongoing
8 operation of the plant. As an example, on May 1, 1997, the Environmental Protection
9 Agency extended the reach of the Toxic Release Inventory reporting requirements under
10 section 313 of the Emergency Planning and Community Right-to-Know Act of 1986
11 (EPRCA) to coal-fired generating plants. 62 Fed. Reg. 23, 834 (1997); *see also* Section
12 313 Emergency Planning and Community Right-to-Know Act Guidance Document,
13 Electricity Generating Facilities, EPA 745-B-97-016.

14 **Treatment of the Gain**

15 **Q. Please explain the reasons PSE is proposing to amortize the gain over a five-year**
16 **period.**

17 A. The Commission's order approving the Puget/WNG merger and setting the five-year rate
18 stability period establishes that PSE, absent exceptional circumstances (sufficient to
19 justify an application for emergency rate relief), bears the risks of increased costs and has
20 the opportunity to benefit from cost savings. It would be consistent with the
21 Commission's order and with the record in the merger case to realize the gain
22 immediately. Nevertheless, as Mr. Karzmar describes in his testimony, PSE proposes to
23 amortize the gain over a five-year period beginning on January 1, 2000. Doing so will
24 ensure that approximately 60% of the gain is amortized after the end of the rate stability
25 period.

1

Conclusion

2 **Q. Are there other exhibits attached to your testimony that you have not yet described?**

3 A. Yes. Exhibit No. ____ (WAG-5) is a copy of PSE's Form 10-K for the year ended
4 December 31, 1998. Exhibit No. ____ (WAG-6) is a copy of PSE's 10-Q for the quarter
5 ended June 30, 1999.

6 **Q. Does this conclude your testimony, Mr. Gaines?**

7 A. Yes.

