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**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of

PUGET SOUND ENERGY, INC.

Petition for a Determination of
Emissions Compliance

Docket No. UE-12____

Petition of Puget Sound Energy, Inc. for an
Emissions Performance Determination

1. In accordance with RCW 80.80.060(5), WAC 480-100-405 through 480-100-435 and WAC 480-07-370(b), Puget Sound Energy, Inc. (“PSE”) respectfully petitions the Washington Utilities and Transportation Commission (“Commission”) for an order determining that the Tenaska Ferndale Cogeneration Station (the “Ferndale Generation Station”) complies with the greenhouse gas emissions performance standards in Chapter 80.80 RCW, Greenhouse Gas Emissions.

2. PSE is not requesting in this Petition that the Commission address: (1) the prudence of PSE’s acquisition of the Ferndale Generation Station; or, (2) the final rate treatment for recovery of PSE’s revenue requirement related to the deferral of fixed costs, total net variable costs and carrying charges for the Ferndale Generation Station. PSE will present its case on these issues in its next rate proceeding. Thus, the Commission will have before it in the next rate proceeding, the evidence necessary to address the prudence and rate

Petition of Puget Sound Energy, Inc.
for a Determination of Emissions Compliance

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Bellevue, WA 98004-5579
Phone: 425.635.1400
Fax: 425.635.2400

1 treatment issues, and will be able to rule on the prudence portion of the acquisition prior to
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3 new rates going into effect.
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5 3. PSE is engaged in the business of providing electric and gas service within
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7 the State of Washington as a public service company, and is subject to the regulatory
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9 authority of the Commission as to its retail rates, service, facilities and practices. Its full
10
11 name and mailing address for purposes of this proceeding are:
12
13

14 Tom DeBoer
15 Director – Federal and State Regulatory Affairs
16 Puget Sound Energy, Inc.
17 P.O. Box 97034
18 Bellevue, Washington 98009-9734
19 Phone: 425-462-3495
20
21

22 PSE's representatives for purposes of this proceeding are:
23
24

25 Jason Kuzma
26 Sheree Strom Carson
27 Donna L. Barnett
28 Perkins Coie LLP
29 10885 N.E. Fourth Street, Suite 700
30 Bellevue, WA 98004-5579
31 Phone: 425-635-1400
32 Fax: 425-635-2400
33 Email: jkuzma@perkinscoie.com
34 scarson@perkinscoie.com
35 dbarnett@perkinscoie.com
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39 4. Rules and statutes that may be brought at issue in this Petition include
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41 RCW 80.01.040, RCW 80.28.020, Chapter 80.80 RCW, WAC 173-407-100 through 173-
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43 407-400, WAC 480-100-405, WAC 480-100-415, WAC 480-100-435, and WAC 480-07-
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45 370(b).
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Petition of Puget Sound Energy, Inc.
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**THE FERNDALE GENERATION STATION COMPLIES WITH
EMISSION PERFORMANCE STANDARDS**

5. PSE and Tenaska Washington Partners, L.P. (“TWP”) intend to enter into definitive agreements in early October 2012, pursuant to which PSE intends to acquire the Ferndale Cogeneration Station. The Ferndale Cogeneration Station is a 270 megawatt (MW) operating natural gas thermal electric generation facility serving PSE today. It is a dual-fueled,¹ combined-cycle² cogeneration facility located on an approximately 16-acre site,³ wholly within the boundaries of the approximately 850-acre Phillips 66 Refinery site near Ferndale, Washington. The Ferndale Cogeneration Station interconnects to Cascade Natural Gas Corporation’s distribution system via a 6-mile pipeline just east of the Phillips 66 Refinery, and interconnects to PSE’s 115 kilovolt transmission system through the Lake Terrell Substation.

6. The Ferndale Generation Station has been providing electricity to PSE since 1994. PSE and TWP entered into a long-term power purchase agreement (“PPA”) for 245 MW of firm electricity from the Ferndale Cogeneration Station beginning April 8, 1994. Effective June 1, 2001, TWP entered into an excess power agreement with PSE to share in the margins generated by PSE when the Ferndale Cogeneration Station generated energy in excess of the contracted capacity of 245 MW. At the same time, the Ferndale Cogeneration

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¹ The primary fuel for the Ferndale Generation Station is natural gas and the backup fuel is No. 2 fuel oil (“distillate”).

² The Ferndale Generation Station is a conventional 2x1 (“two-on-one”) combined cycle power plant with two combustion turbine generators and one steam turbine generator.

³ The total leased area for the site is approximately 16 acres. The Ferndale Cogeneration Station uses roughly 14 acres, and a PSE substation and transmission line easement occupy the other two acres.

1 Station was enhanced with a gas turbine inlet cooling system to increase summer capacity.

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3 The PPA terminated upon expiration of its term on December 31, 2011.

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5 7. The Ferndale Generation Station was designed and intended to operate as a
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baseload power plant, capable of achieving an annual capacity factor greater than 60
percent.⁴ The Ferndale Generation Station is a 2 x 2 x 1 combustion turbine combined cycle
plant, is a firm resource, and is fully dispatchable, subject only to availability and ambient
site conditions.⁵ From the time the plant commenced commercial operation under the PPA,
the net availability factor⁶ over its term averaged approximately 99 percent.

8. The two gas turbines are GE PG7111EA dual fuel gas turbines with can-
annular combustors. The two heat recovery steam generators (“HRSGs”) are ABB-CE triple
pressure units with duct firing capability, selective catalytic reduction catalyst and free
standing stacks. The steam turbine is a GE non-reheat controlled extraction, uncontrolled
admission condensing unit designed for 1250 psig/925°F throttle conditions. Each was
manufactured in 1992 and installed in 1993.

9. Natural gas is delivered to the Ferndale Generation Station via a 20-inch
pipeline owned by Cascade Natural Gas Corporation (“Cascade Natural Gas”). The Cascade
Natural Gas pipeline provides direct access to Canadian gas from the Westcoast pipeline at

⁴ *WUTC v. PSE*, Docket No. UE-090704, Order 11 at ¶ 359 (holding that “the design of a plant is the
primary consideration, unless operations are specifically constrained by other factors, such as air permits”).
Note that Ferndale is not constrained by other factors.

⁵ See Exhibit C, Air Operating Permit – Final, for information regarding requirements surrounding
ambient air quality.

⁶ Actual output plus available capacity expressed as a percentage of contract capacity for the period
excluding scheduled outage.

1 the international border at Sumas, Washington, and from domestic U.S. natural gas supplies
 2
 3 from Northwest Pipeline near Sumas. The natural gas heat input to each gas turbine (base
 4
 5 load, 31°F) is approximately 1,057 MMBtu/hr. Duct burners in each of the HRSGs are
 6
 7 designed for 250 MMBtu/hr of heat input. The natural gas heat input to each duct burner
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 9 (corresponding to the rated capacity in this proposal without steam to process) is less than
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 11 100 MMBtu/hr. The maximum hourly consumption rate of natural gas with duct firing is
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 13 approximately 2,390 MMBtu/hr at 286.4 MW at 20°F. (The maximum daily rate is 57,360
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 15 MMBtu.) The maximum hourly consumption rate of natural gas without duct firing is 2.173
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 17 MMBtu/hr at 266.7 MW (maximum daily is 52,152 MMBtu). The Ferndale Generation
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 19 Station also has approximately 2.05 million gallons storage capability for low sulfur No. 2
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 21 fuel oil onsite.

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 26 10. The Ferndale Generation Station currently operates under authority of Air
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 28 Operating Permit No. 006R2, issued by the Northwest Clean Air Agency on August 1, 2012.
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 30 Carbon dioxide factors for the Ferndale Generation Station are 116.9 lbs/MMBtu for natural
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 32 gas and 163.1 MMBtu for fuel oil. The Ferndale Generation Station's emissions over the
 33
 34 past five years were as follows:

| Year | 2008 | 2009 | 2010 | 2011 | 2012 (YTD) |
|------------------------------|--------|----------|----------|----------|------------|
| Pounds of GHG per MWh | 999.83 | 1,005.87 | 1,016.51 | 1,012.61 | 1,083.44 |

1 In each of the listed years, the emissions of the Ferndale Generation Station were below the
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3 emissions performance standard limit of 1,100 lb/MWh.
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5 11. Exhibits A, B, C, and D, attached hereto, provide the information required by
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7 WAC 480-100-415 to assist the Commission in making its determination that the Ferndale
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9 Generation Station complies with the greenhouse gas emissions performance standard.
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11 Additionally, PSE will provide to the Commission supplementary documents as they are
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13 made available to PSE after closing.
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16 **REQUEST FOR EXPEDITED TREATMENT**


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18 12. PSE and TWP intend to close the transaction for the purchase and sale of the
19
20 Ferndale Cogeneration Station in early November 2012. Accordingly, PSE respectfully
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22 requests that the Commission issue an order in this proceeding on or before November 2,
23
24 2012. Concurrent with this filing, PSE is filing an application with the Federal Energy
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26 Regulatory Commission (“FERC”) for the acquisition of the Ferndale Cogeneration Station
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28 pursuant to section 203 of the Federal Power Act, 16 U.S.C. § 824b. In that filing, PSE is
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30 also requesting that FERC issue an order on or before November 2, 2012.
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34 **PRAYER FOR RELIEF**

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36 13. Based on the foregoing, PSE respectfully requests that the Commission issue
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38 an order determining that the Ferndale Generation Station complies with the greenhouse gas
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40 emissions performance standards in Chapter 80.80 RCW, Greenhouse Gas Emissions.
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Dated this 2nd day of October, 2012

PERKINS COIE LLP

By: 

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Attorneys for Puget Sound Energy, Inc.

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VERIFICATION

STATE OF WASHINGTON)
)
COUNTY OF KING) ss.

Roger Garratt, being first duly sworn, on oath deposes and says:


That he is Director of Financial Planning & Strategic Initiatives with Puget Sound Energy, Inc., that he has read the foregoing Petition of Puget Sound Energy, Inc. for An Emissions Performance Determination, that he knows the contents thereof, and that he believes the same to be true to the best of his knowledge and belief.



Roger Garratt

SUBSCRIBED and SWORN to before me this 1st day of October, 2012.





Print Name: Emily G. Janiszewski
Notary Public in and for the State of
Washington, residing at Redmond, WA
My commission expires: 05/31/2014