EXHIBIT NO. \_\_\_(RG-1HCT) DOCKET NO. UE-072300/UG-072301 2007 PSE GENERAL RATE CASE WITNESS: ROGER GARRATT

**Docket No. UE-072300** 

### BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

Docket No. UG-072301

PUGET SOUND ENERGY, INC.,

**Respondent.** 

PREFILED DIRECT TESTIMONY (HIGHLY CONFIDENTIAL) OF ROGER GARRATT ON BEHALF OF PUGET SOUND ENERGY, INC.

> REDACTED VERSION

**REVISED DECEMBER 21, 2007** 

		REVISED DECEMBER 21
1	Q.	Did the Company accept PSRC's original offer?
2	A.	No. PSE and PSRC settled on an asset purchase price of \$ million. See
3		Exhibit No. (RG-30C) at 6.
4	Q.	What is the portfolio benefit associated with the purchase of Whitehorn
5		Generating Station Units 2 and 3?
6	A.	The portfolio benefit associated with the purchase of Whitehorn Generating
7		Station Units 2 and 3 is \$1.9 million. See Exhibit No. (WJE-1HCT) at 22.
8 9 10		VI. REPLACEMENT POWER AND PURCHASE OPTION OF THE SUMAS NATURAL GAS-FIRED COMBINED CYCLE COGENERATION PLANT
11	А.	Existing Arrangement
12	Q.	Please describe the events leading up to the default by Sumas Cogeneration
13		Company, LP ("SCCLP") under its power purchase agreement with PSE.
14	A.	In Spring 2006, SCCLP notified PSE that SCCLP would not be able to continue
15		supplying energy under the long-term firm PPA with PSE because it was
16		experiencing increasing financial pressures. SCCLP cited a variety of reasons for
17		these financial pressures, including but not limited to high gas prices, increasing
18		royalty costs on Canadian gas reserves, and concerns about meeting debt service
19		coverage. SCCLP proposed the following restructuring of the long term PPA:
	(High	ed Direct Testimony ly Confidential) of r Garratt Exhibit No(RG-1HCT) Page 60 of 98

I						L		
1 2		(i)	SCCLI not less		to PSE;	reserves a	nd make	a payment of
3 4 5		(ii)	enter in	P and PSE wounto a replacem split the saving	ent power pur	chase agre	eement, a	and the parties
6 7		(iii)		P would sell th imately	e cogeneration	n plant at a	a discou	nt to PSE for
8		After several	months	of consideration	on, PSE notifie	ed SCCLP	' that the	proposed
9		restructuring	was not	compelling giv	ven the level o	of savings	and risk	to PSE's
10		customers.						
11		On March 14	, 2007, P	PSE met with C	Commission S	taff and p	resented	the
12		presentation p	prepared	for the EMC i	meeting the fo	llowing da	ay to pro	vide an
13		update on the	status o	f these discuss	ions with SCC	CLP. Plea	se see E	xhibit
14		No(RG-:	32HC) f	or a copy of th	e presentation	made to (	Commis	sion Staff
15		regarding PSI	E's discu	ussions with So	CCLP. PSE st	aff presen	ted the s	same analysis
16		and informati	on with	a revised orde	r to the EMC	on March	15, 2007	', at which
17		time PSE staf	frecom	mended a cess	ation of furthe	r discussio	ons with	SCCLP.
18		Please see Ex	hibit No	(RG-33H	(C) for the pre	sentation	made to	PSE's Energy
19		Management	Commit	tee.				
20	Q.	How did the	Compa	ny learn abou	t SCCLP's d	efault on	its long	term firm
21		PPA?						
22	A.	On May 7, 20	)07, PSE	received a let	ter from SCCI	LP, in whi	ch SCC	LP stated that
23		it would not r	nake fur	ther deliveries	of electricity	to PSE un	der the I	PPA after June
24		30, 2007. Ple	ease see ]	Exhibit No	_(RG-34HC)	for the let	ter from	SCCLP. The
	(High	ed Direct Testin ly Confidential Garratt	-	Reda Vers		Exhib	oit No	_(RG-1HCT) Page 61 of 98

	REVISED DECEMBER 21, 20
	"market makers" and one generator. Please see Exhibit No. (RG-36C) for the
	term sheet solicitation. Two of the respondents declined to participate, citing
	reasons such as an inability to simulate the plant characteristics, complexity of the
	transaction, and other general contract issues, such as credit requirements. PSE
	received two responses to its solicitation for replacement power. Of the two
	proposals that PSE received, the analysis indicated that the cost to the Company
	to replace the contract on such terms and conditions ranged from <b>\$</b>
	Please see the prefiled direct testimony of Mr. W. James Elsea,
	Exhibit No. (WJE-1HCT), for a discussion of the projected cost to replace the
	SCCLP PPA.
Q.	What steps did the Company take next?
A.	PSE staff notified the EMC of the results of the solicitation. PSE staff then
	proceeded with replacing the energy as prescribed in the replacement power
	strategy outlined in the June 11, 2007 EMC meeting. For the long-term
	replacement (Step 3), PSE staff developed a second term sheet solicitation for a
	standard block product up to 125 MW with a term of January 1, 2009, through
	March 31, 2013. Please see Exhibit No. (RG-37C) for the term sheet for the
	standard block product solicitation.
	/////
	/////
(High	ed Direct Testimony     REDACTED     Exhibit No(RG-1HCT)       ly Confidential) of     VERSION     Page 64 of 98       · Garratt     · Garratt     · Garratt
	A. Prefile (High

	<b>Q</b> .	How did the replacement power cost compare with the cost of the remaining
2		value of the SCCLP PPA?
3	A.	PSE was able to replace the power at a cost of approximately \$
4		than the cost of energy under the SCCLP PPA. Although this lower power cost is
5		beneficial to PSE's customers, this lower price does not address the loss of the
6		inherent dispatch flexibility of the resource or the displacement optionality of the
7		resource. Please see the prefiled direct testimony of Mr. W. James Elsea, Exhibit
8		No. (WJE-1HCT) at 28-29, for a discussion of the calculation of the direct
9		damages.
10	Q.	Did the Company discuss damages with SCCLP?
11	A.	Yes. PSE met with SCCLP to discuss direct damages on August 8, 2007. At that
11	11.	Tes. FSE met with SCCLF to discuss direct damages on August 8, 2007. At that
12	71.	meeting, PSE indicated that it may suffer in the range of million of direct
	74.	
12 13	74.	meeting, PSE indicated that it may suffer in the range of million of direct
12 13 14	74.	meeting, PSE indicated that it may suffer in the range of <b>matter</b> million of direct damages as a result of the SCCLP breach. SCCLP countered that, based on
12 13 14	74.	meeting, PSE indicated that it may suffer in the range of million of direct damages as a result of the SCCLP breach. SCCLP countered that, based on PSE's solicitation and analysis, PSE suffered negligible damages, if any.
12	74.	<ul> <li>meeting, PSE indicated that it may suffer in the range of million of direct</li> <li>damages as a result of the SCCLP breach. SCCLP countered that, based on</li> <li>PSE's solicitation and analysis, PSE suffered negligible damages, if any.</li> <li>After further discussion and negotiation, PSE and SCCLP agreed to pursue a</li> </ul>
12 13 14 15 16	74.	<ul> <li>meeting, PSE indicated that it may suffer in the range of million of direct</li> <li>damages as a result of the SCCLP breach. SCCLP countered that, based on</li> <li>PSE's solicitation and analysis, PSE suffered negligible damages, if any.</li> <li>After further discussion and negotiation, PSE and SCCLP agreed to pursue a</li> <li>settlement whereby SCCLP would sell the Sumas Cogeneration Station to PSE at</li> </ul>
12 13 14 15 16 17	74.	<ul> <li>meeting, PSE indicated that it may suffer in the range of million of direct</li> <li>damages as a result of the SCCLP breach. SCCLP countered that, based on</li> <li>PSE's solicitation and analysis, PSE suffered negligible damages, if any.</li> <li>After further discussion and negotiation, PSE and SCCLP agreed to pursue a</li> <li>settlement whereby SCCLP would sell the Sumas Cogeneration Station to PSE at</li> <li>a significant discount approximately means or more for the settlement of the settleme</li></ul>

REDACTED VERSION

### C. <u>Acquisition of the Sumas Cogeneration Station</u>

### 1. <u>Ownership Arrangement</u>

1

2

### **3 Q.** Please describe the Sumas Cogeneration Station.

4 A. The Sumas Cogeneration Station is an approximately 125 MW natural gas-fired 5 combined cycle generating facility located on an approximately six-acre site 6 within the City of Sumas, Washington. The Sumas Cogeneration Station was 7 developed and constructed by a Washington joint venture formed by Industrial 8 Power Corporation and Haskell Corporation, with HIPP Engineering of 9 Vancouver, British Columbia serving as project engineer. Sumas Cogeneration 10 Station was developed on a greenfield site and achieved commercial operation in 11 April 1993.

12 The plant consists of one combined cycle train. Primary components of the plant 13 include (i) a GE Frame 7EA model combustion turbine and generator rated at 14 87 MW, (ii) a Vogt 3-pressure heat recovery steam generator with a total steam 15 output of 370,000 lbs/hr., and (iii) a GE SC2 steam turbine generator rated at 16 37 MW. The plant's heat rate is Btu/kWh and provides heat rate diversity 17 to PSE's natural gas-fired fleet.

The GE 7EA is a mature and proven technology. The GE 7EA model has
accumulated millions of hours of service and is well recognized for its high
reliability and availability. There are more than 750 units in service worldwide.

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt

REDACTED VERSION

I	I	
1		Independent data confirms that average reliability is 99% with an availability of
2		96%. The availability of parts and service is excellent.
3		The Sumas Cogeneration Station was originally designed for baseload operations,
4		with the entire electrical output of the plant sold to PSE under a 20-year firm
5		PPA. The steam host, which is adjacent to the plant, is a lumber drying plant
6		owned by Socco Forest Products ("Socco"), an affiliate of SCCLP. Exhaust
7		steam from the plant provides the thermal requirements for the lumber dry kilns.
8		An exhaust boiler ensures supply of saturated steam during curtailment events.
9		After acquiring the Sumas Cogeneration Station, PSE will continue to supply
10		steam to the lumber dry kilns under the terms and conditions of a steam supply
11		agreement.
12	Q.	Please describe the electric transmission arrangements for the Sumas
13		Cogeneration Station.
_		
14	А.	The Sumas Cogeneration Station is interconnected to PSE's transmission grid at
15		the Sumas substation. There are two 115 kV overhead transmission lines that
16		direct the output of the plant east and west on PSE's transmission system. The
17		maximum interconnection capacity is 135MW. As a westside resource, the
18		Sumas Cogeneration Station provides a reliable source of power for PSE's
19		customers, particularly during Puget Sound Area Northern Intertie events, in
20		which BPA may require PSE to run the Sumas Cogeneration Station to clear

**Revised December 21, 2007** TO REMOVE REDACTIONS

I	I	<b>REVISED DECEMBER 21, 20</b>
1		congestion in the Puget Sound area. Upon closing, the resource will be
2		designated as a network resource to serve PSE's network load.
3	Q.	Please describe the gas transportation arrangements for the Sumas
4		Cogeneration Station.
5	A.	The Sumas Cogeneration Station owns a 3.7 mile, 8 inch, natural gas pipeline that
6		connects the plant with Westcoast's pipeline facilities at the U.S./B.C. border at
7		Huntingdon, British Columbia. There is a pressure reducing gate station, trip
8		valve and condensate facility located on the U.S. side that PSE will maintain as
9		operator of the pipeline.
10		PSE will own the pipeline as a tenant-in-common with Sumas Pipeline Company
11		and Socco. The capacity of the pipeline is 45,000 Mcf. Of that, PSE's pro rata
12		share will be 57.3%, or 25,785 Mcf per day, with the remaining capacity to be
13		allocated between Sumas Pipeline Capacity (41%) and Socco (1.7%).
14		To effectuate the change in ownership of the pipeline, PSE, Socco, Sumas
15		Pipeline Company, and SCCLP will file a joint application to amend the
16		Presidential Permit issued to SCCLP in 1991. PSE anticipates that the
17		amendment application will be filed with FERC in December 2007, and the
18		parties estimate that such amendment application will take six to nine months to
19		be approved. In addition to FERC approval, the U.S. Department of State and the
20		U.S. Department of Defense must approve the application. The transaction
21		closing is contingent upon approval of the amendment application.

**Revised December 21, 2007** TO REMOVE REDACTIONS

Q.

### How will the gas pipeline be operated?

2	A.	PSE will operate the natural gas pipeline. Representatives of PSE, Socco, and
3		Sumas Pipeline Company will establish a management committee to determine
4		policies and procedures for the operation of the pipeline. The management
5		committee will have budget authority for operational and maintenance issues.
6		Each of the parties will contribute based on their pro rata share of the pipeline.
7	Q.	Please describe the fuel supply arrangements for the Sumas Cogeneration
8		Station.
9	A.	Natural gas is the sole fuel supply for the Sumas Cogeneration Station. PSE will
10		manage fuel supply requirements in a manner consistent with the Company's
11		hedging strategies. PSE's operations and trading group will monitor and evaluate
12		the need for additional fuel supplies based on daily updates of its dispatch models.
13	Q.	Please describe PSE's obligations under the steam supply agreement with
14		Socco's lumber dry kiln facilities.
15	A.	PSE will supply steam to the lumber dry kilns when the Sumas Cogeneration
16		Station is operating at PSE's sole election. PSE has no obligation to supply steam
17		to Socco when the station is not operating. When PSE does supply steam to
18		Socco, the dry kiln operation must return condensate to the Sumas Cogeneration
19		Station. Socco has an auxiliary boiler that supplies adequate steam when the
20		Sumas Cogeneration Station is not operating. PSE projects that the auxiliary
	Prefil	ed Direct Testimony [RG-1HCT] Exhibit No. (RG-1HCT)

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt

**REVISED DECEMBER 21, 2007** TO REMOVE REDACTIONS

I	I	REVISED DECEMBER 21, 20
1		boiler will supply much of the steam demand for the lumber operations post
2		closing because of the expected reduced capacity factor of the plant.
3		2. <u>Due Diligence</u>
4	Q.	Did PSE evaluate the Sumas Cogeneration Station during the RFP?
5	A.	Yes. PSE evaluated the Sumas Cogeneration Station during the RFP post-
6		proposal period. In PSE's updated analysis of the Sumas Cogeneration Station in
7		March 2007, the Company's analysis indicated a portfolio benefit of \$32 million,
8		a positive benefit ratio of 0.121, and a levelized cost of MWh (all based on a
9		capital cost of <b>Contractor</b> ). Please see the prefiled direct testimony of Mr. W.
10		James Elsea, Exhibit No. (WJE-1HCT), for a discussion of this analysis.
11		Further, PSE reviewed comparable asset sales for natural gas-fired generation
12		plants to estimate a reasonable purchase price based on adjustment for plant
13		efficiency, vintage, fixed gas transportation and transmission costs. As compared
14		to the other resource alternatives from the short list of RFP projects, the
15		acquisition of the Sumas Cogeneration Station by PSE is reasonable. See Exhibit
16		No(WJE-1HCT).
17		/////
18		/////
19		////
	(High	ed Direct Testimony ly Confidential) of r Garratt Exhibit No(RG-1HCT) Page 71 of 98

1	Q.	What additional due diligence did PSE conduct with respect to the Sumas
2		Cogeneration Station?
3	A.	The Company conducted a review of legal, commercial, environmental, real
4		estate, insurance, operations and maintenance, and technical concerns related to
5		the Sumas Cogeneration Station.
6		a. <u>Commercial and Legal Due Diligence</u>
7	Q.	Please describe the commercial and legal due diligence conducted by the
8		Company.
9	A.	The Company and its outside counsel reviewed the various contracts pertaining to
10		the ownership and operation of the Sumas Cogeneration Station. The Company
11		focused on potential liabilities and provisions that could affect the acquisition,
12		such as consents, assignments, and accrued liabilities.
13		b. <u>Real Estate Due Diligence</u>
14	Q.	Please describe the real estate due diligence conducted by the Company.
15	A.	Real estate due diligence included title review, boundary and easement survey
16		review, and review of legal descriptions and survey documentation related to the
17		fee property acquired and appurtenant and encumbering easements.
18		As discussed above, the Sumas Cogeneration Station is located within the City of
19		Sumas, Washington. During the due diligence period, SCCLP purchased, in fee,
	(High	ed Direct Testimony ly Confidential) of Garratt Exhibit No. (RG-1HCT) Page 72 of 98

I	I	REVISED DECEMBER 21,
1		the property upon which the Sumas Cogeneration Station is located. Previously,
2		SCCLP leased the property from the then-fee owners, the Port of Bellingham.
3		The Port of Bellingham approved the sale of fee property to SCCLP on November
4		6, 2007.
5		PSE expects that in December 2007 SCCLP will submit a permit application to
6		the City of Sumas to amend the previously recorded short plat of the property.
7		The amended short plat, once approved, will consist of Lots A, B and C. At
8		closing, PSE will acquire Lot A, the power plant property consisting of
9		approximately 5.54 acres and Lot C, the affiliated substation lot consisting of
10		approximately 0.59 acres.
11	Q.	Are there any easements required in order for the facility to operate?
12	А.	The Sumas Cogeneration Station is served by a series of easements. Utility
13		easements benefiting the plant include a 40 foot wide easement for ingress and
14		egress to and from the Sumas Cogeneration Station. Additional easements
15		appurtenant to the plant include those for industrial and potable water, sanitary
16		sewer, communication lines, electric distribution and transmission lines, and other
17		related operation infrastructure. Additionally, an easement corridor for natural
18		gas pipelines begins at the Canadian border and ends at the south border of the
19		5.54 acre power plant property.
20		/////

**REVISED DECEMBER 21, 2007** TO REMOVE REDACTIONS Exhibit No. (RG-1HCT) Page 73 of 98

#### **Environmental Due Diligence** c.

1		c. <u>Environmental Due Diligence</u>
2	Q.	Please describe the environmental due diligence conducted by the Company.
3	A.	PSE's environmental due diligence review consisted of site visits, interviews with
4		facility employees, review of all available environmental documentation,
5		including but not limited to review of correspondence with environmental
6		agencies, status of existing environmental permits, Phase I Environmental Site
7		Assessment to support the transfer of ownership and operation of the plant,
8		environmental plans and policies, and regulatory requirements.
9	Q.	Will the Sumas Cogeneration Station require new air permits?
10	A.	Yes. The Sumas Cogeneration Station, under PSE's ownership, will require
11		Title IV (Acid Rain) and Title V (Clean Air Act) permits.
12 13	Q.	Will these permits require modifications due to the expected lower dispatch rate of the Sumas Cogeneration Station?
14	A.	No. The Company does not anticipate that either the Title IV (Acid Rain) permit
15		or the Title V (Clean Air Act) permit will trigger stricter emission limits, provided
16		that New Source Review (NSR) is not triggered.
17		/////
18		/////
	(High	ed Direct Testimony ly Confidential) of Garratt Exhibit No(RG-1HCT) Page 74 of 98

Q. Please describe the water supply arrangements for the Sumas Cogeneration Station.

3 The Sumas Cogeneration Station receives its water supply from the City of Sumas A. 4 pursuant to the 50-year Agreement for Utility Services that expires in 2041. The 5 City of Sumas also provides for industrial wastewater discharge pursuant to an 6 Agreement for Waster Water Utility Services between the City of Sumas and 7 SCCLP. PSE expects SCCLP and the City of Sumas will enter into an Upgrade 8 and Chemical Treatment Agreement in December 2007, in which SCCLP will 9 agree to fund construction and operation of an upgrade to the City's treatment 10 plant. The installation of this chemical injection system will treat the formation 11 and buildup of bacterial growth before discharge to the City of Abbotsford, 12 British Columbia, at the site where the City of Abbotsford and Fraser Valley 13 Regional District of British Columbia treat and dispose of the City of Sumas's 14 sewage. SCCLP estimates that the installation of the injection equipment will be 15 completed by December 31, 2007. Additionally, SCCLP, the City of Sumas and 16 the City of Abbottsford will enter into a Payment and Release Agreement in 17 December 2007 to ensure full payment to the City of Abbottsford for 18 extraordinary sewer system cleaning services rendered.

20

19

1

2

21

At closing, SCCLP will assign the Agreement for Utility Services, Agreement for Waste Water Utility Services, and the Upgrade and Chemical Treatment Agreement to PSE. Please see Exhibit No. \_\_\_(RG-39HC) for a copy of the

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt

**REVISED DECEMBER 21, 2007** TO REMOVE REDACTIONS Agreement for Utility Services, Agreement for Waster Water Utility Services, and the Upgrade and Chemical Treatment Agreement.

# Q. What are the ongoing costs for the operation of the wastewater treatment program?

A. The ongoing costs associated with the wastewater discharge system include the
chemical costs, consulting services for periodic monitoring and testing of the
system, and periodic trunk sewer line cleaning by the City of Abbotsford. Please
see Exhibit No. (RG-40HC) for an analysis of these costs.

## 9 Q. Please describe the stormwater separation between the power plant and the 10 lumber operations.

11 A. Currently, the Sumas Cogeneration Station and Socco share a detention pond and 12 stormwater conveyance pipes. The stormwater system requires separation to meet 13 current regulatory agency requirements because the lots will be subdivided with separate owners post-closing. In October 2007, SCCLP requested a proposal 14 15 from David Evans and Associates to provide engineering services to design modifications to the existing stormwater system at the power plant and at the 16 17 Socco site in order to separate the two. Modifications at the power plant site 18 include a V-shaped cutoff drain along the northern property line to prevent runoff 19 from leaving the site, installation of a new catch basins and underground drain 20 lines, and an increase in the depth of the existing detention pond. PSE reviewed

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt

1

2

**REVISED DECEMBER 21, 2007** TO REMOVE REDACTIONS Exhibit No. (RG-1HCT) Page 76 of 98

1		the David Evans and Associates design with its consultants for constructability
2		and compliance. SCCLP anticipates that the project will be completed by June
3		2008.
4	Q.	Please describe other facilities that were required to be separated or
5		relocated by SCCLP?
6	А.	In addition to the separation of the stormwater facilities, SCCLP must relocate the
7		ammonia tank onto Lot A, in close proximity to the heat recovery steam
8		generator. SCCLP anticipates that relocation of the ammonia tank will be
9		complete by the end of calendar year 2007.
10		d. <u>Insurance Due Diligence</u>
11	Q.	Please describe the insurance due diligence conducted by the Company.
12	A.	PSE hired Marsh USA Inc. to conduct a property evaluation survey. The property
13		insurance engineer conducted a site visit on September 12, 2007. The Property
14		Evaluation Report submitted to PSE indicates that the facility has an excellent
15		operating history with no property losses. Please see Exhibit No(RG-41HC)
16		for a copy of the Property Evaluation Report.
17		The Property Evaluation Report indicates that the Sumas Cogeneration Station is
18		well separated from the lumberyard operation. Nonetheless, the Property
19		Evaluation Report suggests the parties take the following three actions:

**Revised December 21, 2007** TO REMOVE REDACTIONS

**REVISED DECEMBER 21, 2007** 

I							
1 2 3		(i)	main g	generation step		block wall betwe s to protect the fires;	
4 5		(ii)				ction systems in the trical breaker root	
6 7 8		(iii)	electric		that contain the	l enclosure around generation outpu	
9	Q. W	ere there a	ny othe	er concerns ide	entified?		
10	A. Y	es. Later, in	the due	e diligence pro	cess, PSE obtain	ned an April 2007	' boroscope
11	in	spection rep	ort fron	n SCCLP that s	showed cracking	g on one of the gu	ide vanes of
12	th	e first stage	nozzles	. First stage n	ozzles are subje	ct to the highest to	emperatures
13	in	the turbine	section,	and such cond	litions can cause	e cracking. GE ha	ad previously
14	nc	oted this crac	cking in	an April 2006	inspection repo	ort. Generally, fir	st stage
15	no	ozzles are rej	paired o	or replaced at e	ach hot gas path	n inspection. PSE	requested
16	th	at SCCLP w	ork wit	h GE to gain a	better understa	nding of the conti	nued safe
17	oŗ	peration of the	ne plant	until the next	scheduled hot g	as path inspectior	n. GE
18	re	sponded wit	h a lette	er to PSE, whic	ch recommended	d periodic boresco	ope
19	in	spections bu	it no ope	erational curta	ilments or chang	ges to normal ope	rating
20	pr	ocedures. T	This resp	oonse was satis	factory to PSE'	s insurers.	
21	///	///					
22	///	///					
22							
23	///	///					
		Direct Testin Confidential) urratt			EMBER 21, 2007 REDACTIONS	Exhibit No	_(RG-1HCT) Page 78 of 98

#### O&M Due Diligence

e.

### 2 Q. Please describe the O&M due diligence conducted by the Company. 3 A. The Company and its consultants reviewed the operating reports, maintenance inspection records, and software used at the plant, and conducted site visits to the 4 5 Sumas Cogeneration Station. The plant was determined to be exceptionally clean 6 and well-maintained at the time of the site visit. The gas turbine enclosure and 7 exterior buildings were in excellent repair. 8 The Sumas Cogeneration Station has historically run at a high load factor and 9 with few starts. The plant performance and availability have consistently 10 exceeded 97%. The Contractual Services Agreement between GE and SCCLP 11 currently has approximately 14,000 factored fired hours remaining. Based on the 12 contract provisions, the expiration of the contract is estimated to occur in 2013, 13 which coincides with the second hot gas path inspection, unless such inspection is 14 accelerated. A routine combustion inspection is planned at the next 2,000 factor-15 fired hours. At such inspection, GE will assess the cracking of the first stage 16 nozzles to determine whether the hot gas path inspection should be performed 17 simultaneously with the combustion inspection. 18 **Q**. How does the Company propose to staff the Sumas Cogeneration Station?

19 20 A.

SCCLP entered into an Amended and Restated Operations and Maintenance Agreement with Calpine Operating Services, Inc. ("Calpine") on January 24,

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt

**REVISED DECEMBER 21, 2007** TO REMOVE REDACTIONS Exhibit No. (RG-1HCT) Page 79 of 98 1992. That contract originally had an expiration date of December 31, 2007, but it will be extended until the transaction closes (estimated to be third quarter of 2008).

4 PSE is in the process of developing an Asset Management Plan to transition the 5 existing Calpine employees, all software and vendor contracts, and all O&M 6 policies and procedures of the plant. PSE anticipates that many of the Calpine 7 employees will become PSE employees and expects staffing at the Sumas 8 Cogeneration Station to remain at approximately 15 employees. PSE expects that 9 this level of staffing will remain over the life of the plant. PSE plans to staff the 10 plant in a manner similar to the current design, though the labor force would 11 become members of IBEW Local 77, pursuant to PSE's human resources labor 12 relations protocol. PSE plans to operate the project with a Plant Manager, an 13 Operations Supervisor, and an Assistant Manager.

- f. <u>Technical Due Diligence</u>
- 15 Q. Please describe the technical due diligence conducted by the Company.

A. PSE staff engineers conducted the technical due diligence, with some assistance
from North American Energy Services. The Sumas Cogeneration Station is a
conventional one-on-one combined cycle cogeneration power plant. As stated
above, the plant achieved commercial operation in April 1993, is rated nominally
at 125 MW, and is designed for baseload operation.

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt

1

2

3

14

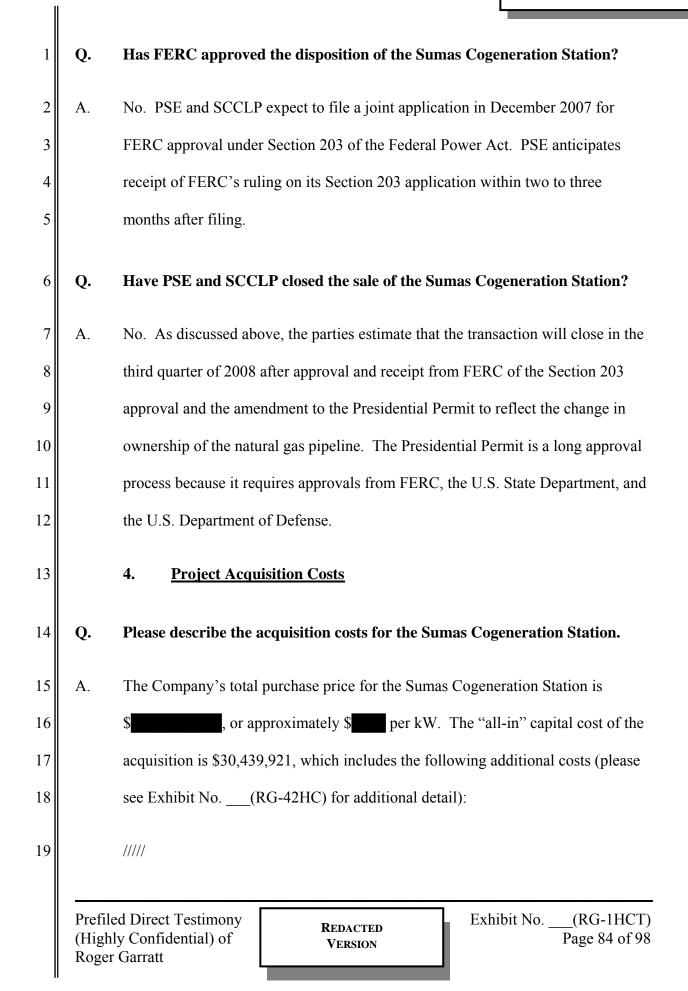
**REVISED DECEMBER 21, 2007** TO REMOVE REDACTIONS

II		REVISED DECEMBER 21, 2
1		A GE Frame 7EA combustion turbine provides electrical power via a GE
2		generator and exhaust heat ducted to a Vogt three-pressure heat recovery steam
3		generator, which is used to generate high, intermediate, and low pressure steam.
4		Steam generated by the heat recovery steam generator drives a GE SC2 steam
5		turbine. The plant has redundancy on almost every system and has proven to be
6		very reliable over time. PSE's technical due diligence team concluded that
7		SCCLP maintained the plant well and that the plant has an excellent operating
8		history.
9	Q.	Has PSE and SCCLP finalized contracts for PSE's acquisition of the Sumas
10		Cogeneration Station?
11	A.	No. PSE and SCCLP have finalized all major business terms with respect to
12		PSE's acquisition of the Sumas Generating Station, and the parties are, as of the
13		time of this filing, finalizing several definitive agreements, including the
14		following:
15 16		(i) a Membership Interest Purchase and Sale Agreement by and between SCCLP and PSE;
17 18		<ul><li>(ii) an Agreement for the Ownership and Operation of Gas Pipeline by and among PSE, Sumas Pipeline Company, and Socco;</li></ul>
19		(iii) a Steam Supply Agreement by and between PSE and Socco; and
20 21		(iv) a Statutory Warranty Deed by and between SCCLP and Sumas SPE, LLC.
22		After PSE and SCCLP finalize the definitive agreements, PSE will supplement
23		this testimony to provide copies of such definitive agreements. PSE anticipates
	(High	ed Direct Testimony ly Confidential) of Garratt Exhibit No. (RG-1HCT) Page 81 of 98

1 2	that PSE and SCCLP will finalize and enter into the definitive agreements before the end of calendar year 2007.
3	Consummation of the transaction will be final at the time that all precedent
4	conditions have been satisfied, FERC has approved transfer of the Station and the
5	amendment and transfer of the Presidential Permit, and the parties are in receipt
6	of such approvals.
7 8	Q. Does the Company's acquisition of the Sumas Cogeneration Station satisfy the evaluation criteria set out in the RFP?
9 10	<ul> <li>A. Yes. The Company's acquisition of the Sumas Cogeneration Station satisfies the evaluation criteria as follows:</li> </ul>
11 12 13 14	<ul> <li>(i) <u>The Sumas Cogeneration Station is compatible with PSE's need</u>. The Sumas Cogeneration Station provides up to 135 MW of winter capacity, has significant operational flexibility, and has a reasonable heat rate among PSE's natural gas fleet.</li> </ul>
15 16 17 18 19	<ul> <li>(ii) <u>The Sumas Cogeneration Station will minimize PSE's costs</u>. PSE was able to acquire the Sumas Cogeneration Station at a favorable price. There are no additional transmission costs as the plant is located in PSE's service territory and is interconnected to PSE's 115 kV system.</li> </ul>
20 21 22 23	<ul> <li>(iii) <u>The Sumas Cogeneration Station minimizes PSE's risks</u>. By purchasing an existing facility, the costs are known and quantifiable. The Sumas Cogeneration Station has proven to be very reliable over time.</li> </ul>
24 25 26 27	(iv) <u>The Sumas Cogeneration Station includes public benefits</u> . The Sumas Cogeneration Station is an efficient gas fired generating facility with low regulated emissions and CO <sub>2</sub> levels that meet the performance standards established in SB 6001.
	Prefiled Direct Testimony (Highly Confidential) of Roger Garratt Revised December 21, 2007 TO REMOVE REDACTIONS Exhibit No(RG-1HCT) Page 82 of 98

**REVISED DECEMBER 21, 2007** 

I		
1 2 3 4 5 6		(v) <u>The Sumas Cogeneration Station met PSE's strategic and financial needs</u> . Acquisition of the Sumas Cogeneration Station at a discounted price provides for the settlement of damages and all other claims arising from SSCLP's default under the PPA. Owning a west-side resource in PSE's control area allows PSE the flexibility with respect to future dispatch of the plant.
7		3. <u>Project Acquisition Process</u>
8	Q.	Please describe the process resulting in PSE's acquisition of the Sumas
9		Facility.
10	A.	As discussed above, PSE and Sumas entered into a Letter of Intent on August 31,
11		2007, for the purchase and sale of the Sumas Cogeneration Station as settlement
12		of SCCLP's PPA default. PSE and Sumas established an exclusive due diligence
13		period ending November 16, 2007. Concurrent with the due diligence activity,
14		PSE and Sumas negotiated in earnest the Membership Interests Purchase and Sale
15		Agreement and ancillary agreements. PSE and Sumas expect to successfully
16		conclude negotiations and execution of definitive agreements in December 2007
17	Q.	What concessions did PSE secure from SCCLP?
18	A.	Through negotiations, PSE was able to obtain concessions that included a reduced
19		purchase price for the spare parts inventory and payment by SCCLP of 100% of
20		the real estate excise tax.
21		/////
22		/////
	(High	ed Direct Testimony ly Confidential) of Garratt Exhibit No. (RG-1HCT) Page 83 of 98



Sumas Cogeneration Station	Project Costs
Facility Purchase Price	
Spare Parts Inventory	
Facility Improvements	
One Time Permitting Fees	
Transaction & Due Diligence	
Property Taxes	
Total Capital Expense	\$30,125,113

### Q. Please describe the line item "Facility Purchase Price."

A. The "Facility Purchase Price" represents the costs associated with the purchase of
all assets of the Sumas Cogeneration Station.

### 4 Q. Please describe the line item "Facility Improvements."

5 "Facility Improvements" are funds to upgrade the communications and security A. systems at the Sumas Cogeneration Station (\$ 6 ) and to retrofit the 7 cooling tower exhaust stack to mitigate rust particulate that is emitted during start 8 up of the plant (\$ 1000 ). PSE anticipates that startups of the plant occur more 9 frequently because the plant will now be dispatched based on the market signals. 10 Therefore, retrofit of the cooling tower will include a stack damper, coating the 11 inside of the stack, and adding a heat exchanger.

### 12 Q. Please describe the line item "Transaction & Due Diligence."

A. "Transaction & Due Diligence" costs are PSE's internal costs for due diligence
and negotiations, title insurance, third party expert consultants and legal fees

I	I		REVISED DECEMBER 21, 2
1		associated with the transaction. For example, "	Transaction & Due Diligence"
2		costs reflect (i) the costs paid by PSE to third pa	arties that assisted in due diligence
3		efforts for the Sumas Cogeneration Station, and	(ii) fees paid to legal counsel.
4	Q.	Please describe the line item "Property Taxe	s."
5	А.	In Washington State, property is assessed at the	end of each calendar year with
6		taxes paid in April and October of the following	g year, in arrears. It is customary
7		in real estate transactions in Washington for pro-	operty taxes to be prorated based
8		on taxes payable in the year of closing. Consist	ent with accounting treatment,
9		where property taxes are accrued, those taxes pa	aid at closing and those paid up
10		until the first anniversary of the closing date are	e capitalized.
11		5. <u>O&amp;M Expenses</u>	
12	Q.	What does the Company project its expenses	will be for the Sumas
13		Cogeneration Station during the rate year?	
14	A.	The Company projected total O&M expenses o	f \$ 4,342,942 for the Sumas
15		Cogeneration Station.	
		Sumas Cogeneration Station Expense	Expense
		Production O&M	\$3,693,382
	1		

Sumas Cogeneration Station Expense	Expense
Production O&M	\$3,693,382
Property Tax	\$543,257
Insurance	\$106,303
Total O&M Expense	\$4,342,942

**REVISED DECEMBER 21, 2007** TO REMOVE REDACTIONS

1		Please see Exhibit No. (RG-43HC) for detail regarding the projected total		
2		O&M expenses for the Sumas Cogeneration Station.		
3 4		VII. EXTENSION OF POINT ROBERTS SUPPLY CONTRACT WITH POWEREX		
5	Q.	Please describe the Point Roberts contract extension with Powerex.		
6	A.	Due to the unique geography of Point Roberts, Washington, it is not electrically		
7		connected to PSE's system, and PSE must use Powerex to serve this load in the		
8		absence of a distribution tariff on BC Hydro's system.		
9		The contract extension with Powerex to supply the Point Roberts load provides		
10		for another two (2) years of service, commencing October 1, 2007, and ending		
11		September 30, 2009, at a renegotiated price of <b>Example</b> . The contract is a full		
12		requirements contract, up to a maximum of 8 MW. Peak capacity is estimated to		
13		be 6 MW with an annual average load of 2.5 aMW.		
14	Q.	Has the Company discussed the potential for a distribution tariff with BC		
15		Hydro?		
16	A.	PSE contacted BC Hydro in June 2007 to discuss the potential for a distribution		
17		tariff. At the time, BC Hydro was in a rate proceeding but indicated interest in		
18		meeting with PSE in the future.		
19		////		
	Prefiled Direct Testimony (Highly Confidential) of Roger Garratt       REDACTED VERSION       Exhibit No(RG-1HCT Page 87 of 9			