Exhibit No. \_\_\_(DWS-12) Docket No. UE-070565 Witness: Donald W. Schoenbeck

	)	
WASHINGTON UTILITIES AND	)	
TRANSPORTATION COMMISSION	)	
	)	Docket No. UE-070565
Complainant,	)	
	)	
<b>v.</b>	)	
	)	
PUGET SOUND ENERGY, INC.	)	
	)	
Respondent.	)	
	)	

EXHIBIT NO.\_\_\_(DWS-12)

DECEMBER 2004 PACIFIC NORTHWEST

LOADS AND RESOURCES STUDY

OPEARATING YEARS 2006 TO 2015

June 25, 2007

TECHNICAL APPENDIX VOLUME 2 CAPACITY ANALYSIS

## 2004 PACIFIC NORTHWEST LOADS AND RESOURCES STUDY

OPERATING YEARS 2006 THROUGH 2015

Technical Appendix Volume 2 Capacity Analysis

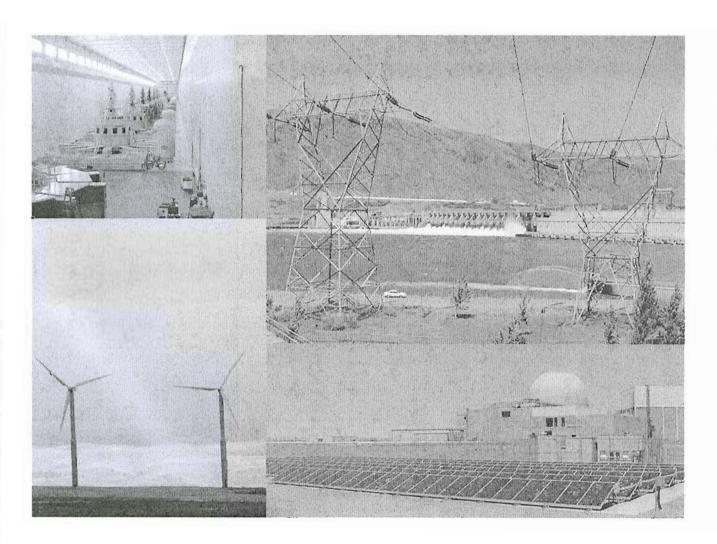




Table A-10: Regional Large Thermal PNW Loads and Resource Study 2005 - 2006 Operating Year (27) 2004 White Book

12/31/2004

Capacity in Megawatts	Aug1	Aug16	Şêp .	Oct	Nov	Dec	Jan	<u>Feb</u>	Mar	Ap <u>r1</u>	Apr16	Жау	Jun	Jul
Boardman. Coal-														
1 Ioʻaho Power Company	59	59	59	59	59	59	59	59	59	59	59	0	59	59
2 Portland General Electric	384	384	384	384	384	384	384	384	384	384	384	Ō	384	364
3 San Diego Gas & Electric	87	B7	87	87	87	87	87	87	87	87	87	0	87	67
4 Turlock Irrigation District	59	59	59	59	59 589	59	59	59	59	59	59	. 0	59	59
5 Boardman: Regional Total	589	589	589	589	283	589	589	589	589	589	589	0	589	589
-Centralla #1 Coal- 6 Trans Alla Utilibus Corp	670	670	670	670	670	670	670	670	670	670	670	0	670	670
7 Centralia #1. Regional Total	670	670	670	670	670	670	670	670	670	670	670	0	670	670
Centralla #2: Coal-														
8 Trans Alia Utilities Corp	670	670	670	670	670	670	670	670	670	670	670	670	870	670
9 Centralia #2; Regional Total	670	670	670	670	670	670	670	670	670	670	670	670	670	670
-Colstrip #1; Caal- 10 Puget Sound Energy	154	154	154	154	154	154	154	154	154	154	154	154	154	154
11 Colstrip #1: Regional Total	154	154	154	154	154	154	154	154	154	154	154	154	154	154
-Colst/p #2: Coal-	461	454	161	454	454	454	454	454	(6)	154	454	453	451	251
12 Puget Sound Energy	154	154	154	154	154	154	154	154	154	154	154	154	154	154
13 Colstrip #2: Regional Total	154	154	154	154	154	154	154	154	154	154	154	154	154	154
-Calstrip #3: Coal- 14 Austa Corp (WWP Division)	111	111	111	111	111	111	111	111	111	111	111	111	111	111
16 Pacific Power	74	74	74	74	74	74	74	74	74	74	74	74	74	74
16 Pontand General Electric	148	148	148	148	148	148	148	148	148	148	148	148	148	148
17 Puget Sound Energy	185	185	185	185	185	185	185	185	185	185	185	185	185	185
18 Colstrip #3: Regional Total	518	518	518	518	518	518	518	518	518	518	518	518	518	518
-Colstrip #4 Coal-														
19 Avista Corp (WWP Division)	111	111	111	0	115	115	115	115	115	115	115	115	115	115
20 Northwestern Energy LLC (MPC)	222	222	222	0	230	230	230	230	230	230	230	230	230	230
21 Pacific Power	74	74	74	0	76	76	76	76	76	76	76	76	76	76
22 Portland General Electric 23 Puget Sound Energy	148 185	148 185	148 185	0	153 191	153 191	153 191	153 191	153 191	153 191	153 191	153 191	153 191	153 191
24 Colstrip #4: Regional Total	740	740	740	0	765	765	765	765	765	765	765	765	765	765
Columbia Generating Station: Uranium-														
25 BPA · Power Business	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150
26 Columbia Generating Station; Regional Total	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150
Jim Bridger #1: Coal-														
27 Idaho Power Company	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 35 <b>3</b>	177 353	177	177	177 353
28 Pacific Power 29 Jim Bridger #1: Regional Total	530	530	530	530	530	530	530	530	530	530	530	353 530	353 530	530
	330	330	330	330	330	330	330	330	330	230	330	330	300	330
-Jim Bridger #2: Coal- 30 Idaho Power Company	177	177	177	177	177	177	177	177	177	177	177	177	177	177
31 Pacific Power	353	353	353	353	353	353	353	353	353	353	353	353	353	353
32 Jim Bridger #2: Regional Total	530	530	530	530	530	530	530	530	530	530	530	530	530	530
-Jlm Bridger #3: Coal-														
33 Idaho Power Company 34 Pacific Power	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 353	177 363
35 Jim Bridger #3: Regional Total	530	530	530	530	530	530	530	530	530	530	530	530	530	530
Jim Bridger #4, Coal-														
36 Idaho Power Company	177	177	177	177	177	177	177	177	177	f77	0	177	177	177
37 Pacific Power	353	353	353	353	353	353	353	353	353	353	0	353	353	353
38 Jlm Bridger #4: Regional Total	530	530	530	530	530	530	530	530	530	530	0	530	530	530
-Valmy #1: Coal- 39 Idaho Power Compeny	128	128	128	128	128	128	128	128	128	128	128	128	128	128
40 Valmy #1: Regional Total	128	128	128	128	128	128	128	128	128	128	128	128	128	128
-Valmy #2: Coal-														
41 Idaho Power Company	134	134	134	134	134	134	134	134	134	134	134	134	134	134
42 Valmy #2: Regional Total	134	134	134	134	134	134	134	134	134	134	134	134	134	134
-T <b>otal Large Thermal-</b> 43 Føderal System	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150
44 Public Entities	59	59	59	59	1 150 59	59	59	1 150 59	1150 59	1150 59	1150 59	1159	1150 59	1150
45 Investor-Owned Entities	5817	5817	5817	5077	5842	5842	5842	5842	5842	5842	5312	4642	5842	5842
46 Other Entities	0	0	0	0	0	0	0	۵	0	0	0	0	0	0
47 Non-NW Entities	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table A-10: Regional Large Thermal PNW Loads and Resource Study 2006 - 2007 Operating Year [27] 2004 White Book

12/31/2004

Capacity in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apri	Apr16	May	Jun	<u>Ju</u> )
-Boardman: Coal-				<b>F</b> 0										
1 Idaho Power Company	59	59	59	59	59	59	59	59	59	59	59	0	59	59
2 Portland General Electric	384 87	384 87	384 87	384 87	384 87	3B4 87	384 87	384 87	384 87	384 87	384 87	0	384 87	384 87
3 San Diago Gas & Electric 4 Turlock Irrigation District	59	59	59	59	59	59	59	59	59	59	59	0	59	59
5 Boardman: Regional Total	589	589	589	589	589	589	589	589	589	589	- 589	<u>-</u>	589	589
•	303	303	303	303	303	303	<b>J</b> 03	300	203	303	203	•	305	343
-Centralla #1: Coal- 6 Trans Alta Utilities Corp	670	670	670	870	670	670	670	670	670	670	670	670	670	670
7 Centralia #1 Regional Total	670	670	670	670	670	670	670	670	670	670	670	670	670	670
-Centralia #2: Coal-														
8 Trans Alta Utiliuas Corp	670	670	670	670	670	670	670	670	670	670	670	0	670	870
9 Centralia #2: Regional Total	670	670	670	870	670	670	670	670	670	670	670	0	670	670
Colstrip #1: Coal-	154	464	0	٥	160	160	160	160	160	160	160	150	160	160
10 Puget Sound Energy 11 Colstrip #1: Regional Total	154	154	D	0	160	160	160	160	160	160	160	160	160	160
•	104		·	v	100		100	100			100	,,,	700	,,,,
-Colstrip #2: Coal- 12 Pugat Sound Enargy	154	154	154	154	154	154	154	154	154	154	154	154	154	154
13 Colstrip #2: Regional Total	154	154	154	154	154	154	154	154	154	154	154	154	154	154
-Colstrip #3: Coal-			_	_		4	4			,			4	
14 Avista Corp (WWP Division)	111	111	D	0	111	115	115	115	115	115	115	115	115	115
15 Pacific Power	74	74 148	0	0	74	76	76	76	76	76	76	76	78	76
16 Portland General Electric 17 Puget Sound Energy	148 185	185	0	0	148 185	153 191	153 191	153 191	153 191	153 191	153 191	153 191	153 191	153 191
18 Colstrip #3: Regional Total	518	518	0	0	518	536	536	536	536	536	536	536	536	536
-Colstip #4: Coat-														
19 Avista Corp (WWP Division)	115	115	115	115	115	115	145	115	115	115	115	115	115	115
20 Northwestern Energy LLC (MPC)	230	230	230	230	230	230	230	230	230	230	230	230	230	230
21 Pacific Power	76	76	76	76	76	76	76	78	76	76	76	76	76	76
22 Portland General Electric	153	153 191	153 191	153 191	153 191									
23 Puget Sound Energy 24 Colstrip #4: Regional Total	765	765	765	765	765	765	765	765	765	765	765	765	765	765
	703	103	100	703	105	700	700	700	700	103	703	703	705	700
-Columbia Generating Station: Uranium- 25 BPA - Power Business	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	0	0	1150
26 Columbia Generaling Station: Regional Total	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	0	0	1150
√lm Bridger#1. Coal-														
27 Idano Power Company	177	177	177	177	177	177	177	177	177	177	177	D	٥	177
28 Pacific Power	353	353	353	353	353	353	353	353	353	353	353	0	0	353
29 Jim Bridger #1 Regional Total	530	530	530	530	530	530	530	530	530	530	530	0	0	530
√im Bridger #2: Coal-														
30 Idaho Power Company 31 Pacific Power	177 3 <b>53</b>	177 353	177 353	177 353	177 353	177 353	177 353	177 3 <b>5</b> 3	177 353	177 353	0	177 353	177 353	177 353
32 Jim Bridger #2, Regional Total			333	222	333	230	300	330	330	333	Ü	303	300	
	53 <b>0</b>	530	530	530	530	530	530	530	530	530	0	530	530	530
the Dridger #2: Cont.	530	530	530	530	530	530	530	530	530	530	0	530	530	530
33 Idaho Power Compeny	177	177	177	177	177	177	177	177	177	177	177	0	û	177
33 Idaho Power Company 34 Pacific Power	177 353	177 363	177 353	0	û <b>0</b>	177 353								
Jim Bridger #3: Coal- 33 Idako Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total	177	177	177	177	177	177	177	177	177	177	177	0	û	177
33 Idaho Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal-	177 353 <b>530</b>	177 353 530	177 353 <b>530</b>	0 0	0 0	177 353 <b>530</b>								
33 Idaho Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idaho Power Company	177 353	177 363	177 353	0	û <b>0</b>	177 353 <b>530</b>								
33 Idako Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power	177 353 <b>530</b>	177 353 530	177 353 530	177 353 530	177 353 <b>530</b>	177 353 530	177 353 <b>530</b>	177 353 530	177 353 <b>530</b>	177 353 <b>530</b>	177 353 530	0 0 0	0 0 0	1777 3533 <b>530</b> 1777 353
33 Idaho Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  -Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1 · Coal-	177 353 <b>530</b> 177 363 <b>530</b>	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 363 530	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 353 530	177 363 530 177 353 530	177 353 530 177 353 530	0 0 0 177 353 530	177 353 530	177 353 530 177 353 530
33 Idako Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company	177 353 530 177 353 530	177 363 530 177 353 530	177 353 530 177 353 530	0 0 0 177 353 530	177 353 530	1777 3533 530 1777 353 530								
33 Idaho Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company 40 Valmy #1: Regional Total	177 353 <b>530</b> 177 363 <b>530</b>	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 363 530	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 353 530	177 353 530 177 353 530	177 363 530 177 353 530	177 353 530 177 353 530	0 0 0 177 353 530	177 353 530	1777 353 530 1777 353 530
33 Idako Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  -Jim Bridger #4: Coal- 36 Idako Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company 40 Valmy #1: Regional Total  -Valmy #1: Regional Total	177 353 530 177 353 530	177 363 530 177 353 530	177 353 530 177 353 530	0 0 0 177 353 530	177 353 530	177 353 530 177 353 530								
33 Idako Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  -Jim Bridger #4: Coal- 36 Idako Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company 40 Valmy #1: Regional Total  -Valmy #2: Coal- 41 Idaho Power Company	177 353 530 177 353 530 128 128	177 353 530 177 353 530 128 128	177 353 530 177 353 530 128	177 363 530 177 353 530 128	177 353 530 177 353 530 126 128	0 0 177 353 530	0 0 0 177 353 530	1777 353 530 1777 353 530 128 128						
34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company 40 Valmy #1: Regional Total  -Valmy #2: Coal- 41 Idaho Power Company 42 Valmy #2: Regional Total  -Total Large Thermal-	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134	177 353 530 177 353 530 126 128 134	177 353 530 177 353 530 128 128 134	177 353 530 177 353 530 128 128 134	177 353 530 177 353 530 128 128 134	177 353 530 177 353 530 128 128 134	177 353 530 177 353 530 128 128 134	177 353 530 177 353 530 128 128 134	177 363 530 177 353 530 128 128 124	177 353 530 177 353 530 126 128 134	0 0 177 353 530 128 128 134	0 0 0 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134
33 Idako Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company 40 Valmy #1: Regional Total  -Valmy #1: Regional Total  -Valmy #2: Coal- 41 Idaho Power Company 42 Valmy #2: Regional Total  -Total Large Thermal- 43 Faderal System	177 353 530 177 353 530 128 128 134 134	177 363 530 177 353 530 128 128 124 134	177 353 530 177 353 530 126 128 134 134	0 0 1777 353 530 128 128 134 134	0 0 0 1777 3533 530 128 128 134 134	1777 353 530 1777 353 530 128 128 134 134 1150								
33 Idaho Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company 40 Valmy #1: Regional Total  -Valmy #2: Coal- 41 Idaho Power Company 42 Valmy #2: Regional Total  -Total Large Thormal- 43 Federal System 44 Public Entitles	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134 1150 59	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134 1150 59	177 353 530 177 353 530 128 128 134 134 1150 59	177 353 530 177 353 530 128 128 134 1150 59	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134	177 363 530 177 353 530 128 128 124 134	177 353 530 177 363 530 126 128 134 1150 59	0 0 0 177 353 530 128 128 134	0 0 177 353 530 128 128	177 353 530 177 353 530 128 128 134 134 1150 59
33 Idako Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  Jim Bridger #4: Coal- 36 Idako Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idako Power Company 40 Valmy #1: Regional Total  -Valmy #2: Coal- 41 Idako Power Company 42 Valmy #2: Regional Total  -Total Large Thermal- 43 Federal System 44 Public Entitles 46 Investor-Owned Entitles	177 353 530 177 353 530 128 128 134 134 1150 59 5842	177 353 530 177 353 530 128 128 134 134 1150 59 5842	177 353 530 177 353 530 128 128 134 134 1150 59 5171	177 353 530 177 353 530 128 128 134 134 1150 59 5171	177 353 530 177 353 530 128 128 134 134 1150 59 5848	177 353 530 177 353 530 128 128 134 134 1150 59 5866	177 353 530 177 353 530 128 128 134 134 1150 59 5866	177 353 530 177 353 530 128 128 134 134 1150 59 5866	177 353 530 177 353 530 128 128 134 134 1150 59 5866	177 363 530 177 353 530 128 128 124 134 1150 59 5866	177 353 530 177 353 530 126 128 134 134 1150 59 5336	0 0 177 353 530 128 128 134 134	0 0 177 353 536 128 128 134 134	177 353 530 177 353 530 128 128 134 134 1150 59 5866
33 Idaho Power Company 34 Pacific Power 35 Jim Bridger #3: Regional Total  -Jim Bridger #4: Coal- 36 Idaho Power Company 37 Pacific Power 38 Jim Bridger #4: Regional Total  -Valmy #1: Coal- 39 Idaho Power Company 40 Valmy #1: Regional Total  -Valmy #2: Coal- 41 Idaho Power Company 42 Valmy #2: Regional Total  -Total Large Thermal- 43 Federal System 44 Public Entitles	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134 1150 59	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134 1150 59	177 353 530 177 353 530 128 128 134 134 1150 59	177 353 530 177 353 530 128 128 134 1150 59	177 353 530 177 353 530 128 128 134 134	177 353 530 177 353 530 128 128 134 134	177 363 530 177 353 530 128 128 124 134	177 353 530 177 363 530 126 128 134 1150 59	0 0 0 177 353 530 128 128 134	0 0 177 353 530 128 128	177 353 530 177 353 530 128 128 134 134