

**NPC Reports - Testimony One-offs**

NPC	Delta	WA Allocation	Study	WA Allocated NPC
548,582,138	n/a	123,969,086	UE-111190 (May13)	22.6%
580,642,563	n/a	131,447,129	_WA_GRC_CY2014_WCA_NPC_Study_2012_12_07	
580,597,342	(45,221)	(10,237)	Excluding WA Commercial weather normalization	
533,357,558	(47,285,005)	(10,704,482)	Excluding OR and CA QFs in WCA	
579,306,875	(1,335,688)	(302,376)	Including ECA sale	
581,220,199	577,636	130,767	Hydro generation weekly from UE-111190	
581,710,731	1,068,168	241,814	Using the derated dynamic overlay capacity of the Idaho PTP/decreased Bridger ratio	
576,223,317	(4,419,246)	(1,000,439)	Wind generation using P50	
579,838,055	(804,508)	(182,126)	Non-owned wind integration excluded	
575,893,341	(4,749,222)	(1,075,139)	DC intertie/NOB excluded	
574,199,076	(6,443,487)	(1,458,691)	Load only Regulation, no wind integration	

**Testimony References**

Value	WA Allocated	Description	UE-111190 (May13)	UE-13XXXX (CY14)	UE-13XXXX (CY14)	Dollars	MWH	\$/MWH
32,060,424	7,478,043	WCA NPC Delta						
(515,479)		Change in load (MWh)	20,495,885	19,980,406	MWh	STF Purchases 899,640	47,600	18.90
-2.5%						System Balancing Purchases 67,404,819	2,166,115	31.12
(15,905,163)	(3,600,646)	Cost reduction due to drop in load				Total Purchases 68,304,459	2,213,715	30.86
(24,220,510)	(5,483,092)	Cost reduction due to natural gas and electric swaps						
97.29		PSE QF price (2009 GRC)	From: <a href="http://www.wut.wa.gov/RMS2_nsf/177d98baa5918c7388256a550064a61e/c11467e20383b628882578fe00701f0810OpenDocument">www.wut.wa.gov/RMS2_nsf/177d98baa5918c7388256a550064a61e/c11467e20383b628882578fe00701f0810OpenDocument</a>					
72.72		PSE QF price (2011 GRC)	UE-111048_UG-111049 PSE Redacted Mills attach 2 DEM-10C 9-01-2011.xls ID: 403E16					
77.20		Cost of QFs in this case						
118.83		Cost of QFs in previous case						
99.43%		Bridger share without dynamic overlay derate						
96.50%		Bridger share with dynamic overlay derate						
15%		BPA rate case - transmission expense impact (%)						
5,009		BPA transmission capacity						
83%		Share of BPA transmission that is PTP and FPT						
19.6%		Approximate rate increase for PTP and FPT						
-5%		NT and IS rate reduction						
13,419,790	3,038,001	BPA rate case - transmission expense impact (\$)						
3.7	0.85	Coal price increase (\$)						
3.4	0.76	Bridger coal price increase (\$)						
0.4	0.08	Colstrip coal price increase (\$)						
1.3	0.29	Increase in Black Butte Coal costs (\$)						
35.93		BB delivered cost/ton (prior case)						
36.71		BB delivered cost/ton (current case)						
1.9	0.42	Increase in Bridger Coal Company costs (\$)						
37.01		BCC delivered cost/ton (prior case)						
37.52		BCC delivered cost/ton (current case)						
0.4	0.08	Increase in Colstrip coal costs (\$)						
20.95		Colstrip delivered cost/ton (prior case)						
21.80		Colstrip delivered cost/ton (current case)						
(24,220,510)	(5,483,092)	E&G Swap impact from prior case (\$)	UE-111190 (May13)	UE-12XXXX (CY14)				
1,414,370	320,188	Electric Swaps impact (\$)	(2,709,694)	(1,295,325)				CY14 has Electric Swap Sales in Sales section
37,814,512	8,560,532	Gas Swap impact in prior case (\$)						
12,179,633	2,757,252	Gas Swap impact in current case (\$)						
(25,634,880)	(5,803,280)	Delta in gas swap impact						
(4,419,246)	(1,000,439)	Wind P50 vs 48 month impact - Owned and PPAs						
-12%		Company owned wind generation change (%)						
1,014,554		Company Wind - Current Case						
1,152,722		Company Wind - Prior Case						
3.13		Wind integration costs (\$/MWh)						
		<b>PCAM</b>						
36%		Wind and hydro capacity vs WCA (%)						
32%		Wind and hydro generation vs WCA load (%)						
6%		Wind and hydro generation vs WCA load (Min%)						
86%		Wind and hydro generation vs WCA load (Max%)						
405		New wind resources since 2006 - Company owned (MW)						
74		New wind resources since 2006 - PPAs (MW)						
521		Wind resources (owned and contracted) to serve load (MW) - Current						
561		Wind resources (owned and contracted) to serve load (MW) - Test Period						
484		WCA Gas generation capacity (MW) prior to 2006						
484		Hermiston Capacity (100%)						
512		Chehalis Capacity						
29%		WCA wind capacity factor (12ME June 2012)						
-0.7%		WCA wind output (min, % nameplate, 12ME June 2012)						
93%		WCA wind output (max, % nameplate, 12ME June 2012)						
		<b>2006 Hydro Variation analysis</b>						
-17%		10 year hydro min (% vs median)						
22%		10 year hydro max (% vs median)						
34,015,078		Variation between high and low hydro (NPC \$)						
55%		% of variation due to high hydro						

WCA Company-owned Capacity		
Coal	1485.3	38%
Gas	996	26%
Hydro	986	25%
Wind	405	10%
Total	3872	100%
Lewis	575	
Klamath	178	
North Umpqua	176.10	
Other West	56.4	

NPC Impacts Due to Hydro Variations

	Total MWh	MWh Delta VS Median	MWh Delta %	Total NPC (\$)	NPC impact (\$) VS Median	NPC impact %
Filed	3,594,352	247,022	7%	580,642,563	(6,539,116)	-1.1%
10 year Min	2,786,100	(561,230)	-17%	602,391,010	15,209,331	2.6%
10 year Median	3,347,329	-	0%	587,181,679	-	0.0%
10 year Max	4,094,893	747,564	22%	568,375,931	(18,805,748)	-3.2%

Note: includes Swift 2 Exchange

	West	Expired West	Normalized	vs 10 Year Median
2002	3,324,930	164,999	3,159,931	-5.9% -
2003	3,522,941	126,050	3,396,891	1.2% -
2004	3,200,159	113,070	3,087,089	-8.1% -
2005	2,886,969	76,153	2,810,816	-16.3% Min
2006	4,213,641	121,352	4,092,289	21.9% Max
2007	3,447,896	95,294	3,352,602	-0.2% Median
2008	3,472,958	92,952	3,380,006	0.7% -
2009	3,195,324	90,524	3,104,800	-7.5% -
2010	3,462,802	99,907	3,362,895	0.2% Median
2011	4,060,597	90,244	3,970,353	18.2% -
(GRC May2013) (Settlement)	3,672,270		3,672,270	9.4% vs 10 Year Median
WA GRC CY2014 Filed	3,594,352		3,594,352	7.0% vs 10 Year Median
10 year Median	3,455,349	97,601	3,357,748	

Expired West:

- Eastside
- Westside
- Condit
- Stayton
- Cline Falls
- Powerdale
- Naches

Naches Drop

Skookumchuck

Year	Version	Month								
		1	2	3	4	5	6	7	8	9
	2014 WA GRC Filed	458,628	369,094	425,127	353,353	311,271	285,403	178,977	165,305	205,579
	2005 10 year Min	307,835	201,200	188,857	298,390	350,354	204,095	154,374	156,792	127,845
	2006 10 year Max	636,643	506,248	377,638	306,442	361,617	341,173	178,664	138,230	141,306
	2007/2010 10 year Median	426,503	256,507	388,528	337,855	284,370	280,475	164,956	135,342	153,668

As a percentage of WA GRC Filed

WA GRC Filed	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 year Min	67%	55%	44%	84%	113%	72%	86%	95%	62%	
10 year Max	139%	137%	89%	87%	116%	120%	100%	84%	69%	
10 year Median	93%	69%	91%	96%	91%	98%	92%	82%	75%	



Does not include Swift 2 Exchange

10	11	12	Total
159,813	287,497	394,304	3,594,352
174,043	298,053	348,978	2,810,816
183,399	453,957	466,972	4,092,289
205,254	290,045	434,247	3,357,748
100%	100%	100%	100%
109%	104%	89%	78%
115%	158%	118%	114%
128%	101%	110%	93%