Washington electric utility fuel mix disclosure reports



For calendar year 2020

December 1, 2021

Lisa Brown, Director

Acknowledgements

Washington State Department of Commerce

Energy Division, Washington State Energy Office

Washington State Department of Commerce

Anna Batie Research and Data

Liz Reichart Research and Data

Austin Scharff Research and Data

Michael Furze Assistant Director

WASHINGTON STATE ENERGY OFFICE

1011 Plum St. SE P.O. Box 42525

Table of contents

Forward	2
About the Washington electric utilities fuel mix	3
Washington electric utilities: 2020 graphs and tables	5
Northwest Power Pool Fuel Mix	.12

Forward

The Washington Fuel Mix Disclosure process is designed to provide utilities with an assessment of the mix of fuel sources associated with the generation of the electricity used to serve their customer demand. The data supporting the process includes tabulated datasets from utilities and public agencies, as well as manually entered data.

If you have any questions about the information contained in this report, contact our office at energydata@commerce.wa.gov.

About the Washington electric utilities fuel mix

The fuel mix disclosure law, RCW 19.29A, requires Washington utilities to report to electricity consumers the sources of power they use to serve them. The law defines how the utility "fuel mix" should be calculated, which fuel categories to use, and how utilities should share this information with customers. The Department of Commerce (Commerce) collects the data supporting this effort; the fuel mix values and associated carbon dioxide emissions are calculated and summarized for utility and state level mix information.

How is a utility's fuel mix determined?

The objective of the fuel mix disclosure process is to inform customers and policy makers about the characteristics of the electricity delivered by each utility (also called a retail supplier) to consumers and businesses. Most retail suppliers use electricity from multiple sources, even if they operate their own power plants. In some cases, retail suppliers obtain power without knowing the specific generation source. Power serving Washington utilities comes from three sources: 1) Specific power plants, 2) Bonneville Power Administration (BPA), and 3) Unspecified power. Unspecified power is electricity obtained in a transaction where the seller does not identify a specific generating source. These are typically short-term transactions in bulk power markets.

In order to build a fuel mix picture for each utility, Commerce uses information reported by each utility about the quantity (megawatt-hours, represented as MWh) of electricity from specific generating plants. The fuel source for the specified generating plants is provided by the U.S. Energy Information Administration (EIA). The fuel mix law requires that a utility have documentation of ownership or contractual rights from a specific generating facility in order to report a claim on that resource. To protect against double counting of renewable energy sources, Commerce relies on the ownership of renewable energy certificates as evidence that the utility owns the right to make this claim.

Many utilities serve their retail customers using electricity provided by BPA. BPA provides Commerce with information about the mix of resources used to generate this electricity. PNGC Power, an electric generation and transmission cooperative, also provides information to Commerce on behalf of some member utilities.

Changes for post-2019 reports: Power source disclosure (fuel mix) 2019 Legislative update

- In 2019 the Legislature enacted Engrossed Substitute House Bill <u>1428</u> to reform the fuel mix statute (<u>19.29A RCW</u>). Commerce requested this legislation to make much-needed updates to the law and to improve the accuracy and timeliness of the reports.
- For utility customers, the biggest change will be a new category on the disclosure label for "unspecified sources." Utilities do not always know the sources when they purchase electricity, and the prior law had required that Commerce assign fuel shares to this power. Instead, unknown sources are now listed as a separate category.
- The law made other changes that are less obvious but important to the integrity of utility power source disclosures. Utilities are required to include known sources of electricity generation, and utilities are not allowed to make renewable energy claims if they have transferred or sold the renewable energy certificates associated with that electricity.

What is the source of information for this report?

The U.S. Energy Information Administration (EIA) publishes generation and fuel consumption data for each power plant in the United States in its report EIA-923. EIA publishes its "early release" version of the EIA-923 report on approximately July 31 each year for the previous calendar year. The "early release" version is subject to revision after publication. The EIA reports are available at www.eia.gov/electricity/data/eia923/.

Washington electricity sector emissions are determined using the prorated EIA-923 fuel consumption information for all state power claims in combination with fuel specific emission rate data. Commerce developed a fuel-specific emission rate database using information available from the EIA and the U.S. Environmental Protection Agency.

How is information presented in this report?

State level fuel mix information, expressed as energy (MWh), and fuel type is presented first. The state level information is the aggregate of all of the calculated individual utility fuel mix values. A state level time fuel mix series is also presented. The Northwest Power Pool (NWPP) Generation Mix information is presented next. Following these tables and figures is a full description of the fuel mix for each electric utility in the state.

Glossary

- "Claims on resources" refers to power obtained from specific generation facilities, with fuel source information obtained from the U.S. Energy Information Administration.
- "Unspecified rower purchase" refers to power purchases where the generation facility and fuel source information is not known.
- "BPA resource mix" includes only the portion of delivered BPA power that can be attributed to specific plants. The portion of BPA power that cannot be connected with a specified plant or fuel source is labeled as unspecified.
- "BPA claims" includes only the portion of delivered BPA power that can be attributed to specific plants.

Washington electric utilities: 2020 graphs and tables

Washington aggregate fuel mix

The Washington fuel mix is the state aggregate of fuel sources associated with the electricity delivered by all electric utilities to end users in Washington, including Bonneville Power Administration's direct electricity sales. It includes all electric power that is used to serve retail customers that is owned, purchased under contract, or purchased on the spot market.

Figure 1 presents the fuel sources associated with electricity to end users in Washington for 2019. Hydropower, at 54.77%, is the largest primary fuel used to produce electricity in the state. Natural gas is the second largest category at 12.94%, followed by unspecified power (fuel source information is not known) and coal at 11.30% and 10.18% respectively. Table 1 lists the electricity fuel sources by megawatt-hours (MWh) and percent.

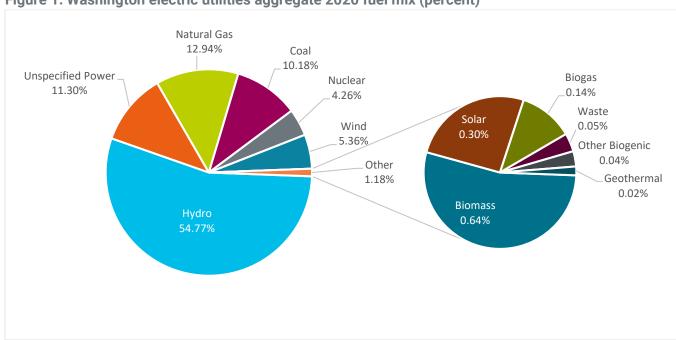


Figure 1: Washington electric utilities aggregate 2020 fuel mix (percent)

Table 1: Washington electric utilities: Aggregate fuel mix 2020

Fuel type	Total electric power MWh	Share of total
Hydro	53,400,859	54.77%
Natural gas	12,617,521	12.94%
Unspecified power	11,015,647	11.30%
Coal	9,923,208	10.18%
Wind	5,227,038	5.36%
Nuclear	4,155,396	4.26%
Biomass	619,827	0.64%
Solar	297,147	0.30%
Biogas	133,530	0.14%
Waste	44,998	0.05%
Other biogenic	37,253	0.04%
Geothermal	21,528	0.02%

Figure 2: Washington state electric utilities: Aggregate fuel mix time series 2000-2020 (MWh)¹



¹ As described above, the method of reporting claims on unspecified sources changed in 2018. Before 2018, the fuel mix law required that Commerce assign a fuel mix to unspecified sources based on regional data.

Table 2: Washington electric utilities: Aggregate fuel mix time series 2002-2020 (MWh)

Fuel Source	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hydropower	56,339,641	53,850,478	54,132,176	55,342,273	59,609,529	59,203,647	58,235,550	57,214,771	53,412,121	66,847,397
Coal	10,076,412	14,336,264	14,459,001	14,860,017	14,245,188	14,866,637	15,034,912	14,672,973	15,955,168	12,900,636
Cogeneration	3,971,751	3,590,493	2,717,321	2,660,660	2,766,515	2,157,302	1,635,296	1,867,355	1,731,728	1,319,055
Natural Gas	2,634,328	4,370,728	4,662,035	5,325,475	4,553,447	6,302,442	7,385,757	9,979,345	10,476,257	5,684,223
Nuclear	3,858,716	3,726,175	4,591,072	4,403,537	4,513,216	4,326,265	5,083,665	3,653,541	5,430,617	2,390,245
Biomass	392,378	434,700	536,643	587,085	392,712	460,983	415,226	445,076	492,371	446,890
Petroleum	22,244	34,957	53,046	44,233	62,232	69,267	69,937	94,360	81,372	68,539
Waste	23,471	139,056	102,864	150,955	331,963	288,528	276,669	296,180	332,719	336,948
Geothermal	-	-	-	-	14,399	11,189	16,866	19,237	17,376	18,107
Landfill Gas	220,705	75,125	134,122	80,500	57,858	49,041	23,043	16,058	18,787	49,209
Wind	163,134	320,540	346,470	432,667	867,392	545,622	1,010,928	587,994	567,281	1,017,702
Other	233,995	6,991	37,379	31,156	10,863	12,923	19,391	28,650	28,504	27,307
Solar										
Unspecified										
Total	77,936,775	80,885,507	81,772,129	83,918,558	87,425,313	88,293,846	89,207,239	88,875,541	88,544,303	91,106,257

Fuel Source	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hydropower	62,984,536	58,074,493	59,723,805	55,306,859	55,948,538	63,644,891	55,340,207	50,754,566	53,400,859
Coal	12,149,258	13,519,852	14,026,540	14,388,993	12,338,072	12,593,438	9,556,048	10,069,295	9,923,208
Cogeneration	486,609	1,126,515	926,691						
Natural Gas	6,952,877	10,823,275	9,515,792	11,807,835	10,055,032	10,181,880	6,861,147	10,877,913	12,617,521
Nuclear	4,239,398	4,247,504	4,617,391	4,021,955	4,307,607	3,941,745	4,441,378	4,637,654	4,155,396
Biomass	310,812	260,972	300,416	401,408	684,569	562,311	417,963	440,016	619,827
Petroleum	67,580	64,611	59,674	47,108	65,498	103,244	15,854	13,089	0
Waste	303,066	221,914	203,960	158,887	113,732	172,753	35,627	38,334	44,998
Geothermal	17,003	16,138	17,911	16,085		0	3,540	3,660	21,528
Landfill Gas	83,665	60,741	104,431	133,132	148,177	121,566	184,859	182,344	133,530
Wind	3,011,137	2,859,415	2,219,613	2,029,032	3,661,267	2,674,081	4,288,021	4,144,546	5,227,038
Other	36,396	39,528	59,964		48,095	36,678	42,931	35,950	37,253
Solar	1,433	1,709	6,618	8,807	3,491	3,071	263,695	273,906	297,147
Unspecified							12,095,395	12,339,325	11,015,647
Total	90,643,771	91,316,669	91,782,808	88,320,101	87,374,078	94,035,658	93,548,683	93,810,599	97,493,952

Commerce uses the fuel mix data to estimate aggregate carbon dioxide emissions from electricity consumed by Washington customers. This information is used by the Department of Ecology in its statewide inventory of greenhouse gases. Table 3 presents the statewide electric consumption emissions for 2020 by fuel category. Total sulfur dioxide, nitrogen oxide and mercury emissions are shown at the bottom of the table. Figure 3 below presents the carbon dioxide emissions information in chart format. Emissions from coal-fired generation dominate Washington's electric sector carbon dioxide emissions. Figure 4 illustrates the aggregate state carbon dioxide for the electric sector for 2005-2020.

Table 3: 2020 Washington utility aggregate CO2 emissions by fuel type

Fuel type	Short tons	Metric tons
Coal	9.893,228	8,974,988
Natural gas	5,353,115	4,856,265
Other biogenic/non-biogenic	163,630	148,442
Waste	127,424	115,597
Landfill gas	75,717	68,689
Petroleum	11,204	10,164
Total	15,624,317	14,174,146

Other emissions	Short tons	Metric Tons
Sulfur dioxide	27,356	24,817
Nitrogen oxides	23,886	21,669
Mercury (not measured in tons)	235 pounds	106 kilograms

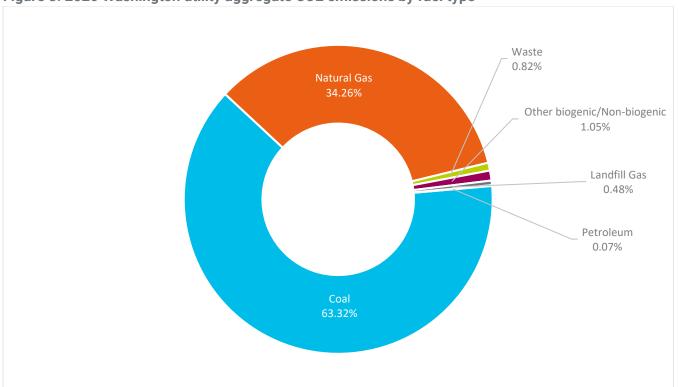
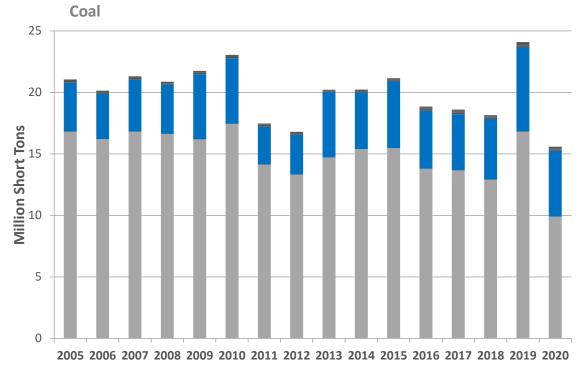


Figure 3: 2020 Washington utility aggregate CO2 emissions by fuel type

Figure 4: 2005-2020 Washington aggregate CO2 emissions by fuel type

Waste, Petroleum, Other

Natural Gas and Cogeneration



Northwest Power Pool Fuel Mix

The Northwest Power Pool Fuel Mix for 2020 is presented in Figure 5 and Table 4 below. The Northwest Power Pool includes electric utilities in Washington, Oregon, and Idaho and parts of Montana, Nevada, Utah, and California. Hydropower has the largest share of generation at 43.96%, followed by coal and natural gas fired generation at 21.62% and 17.74% respectively.

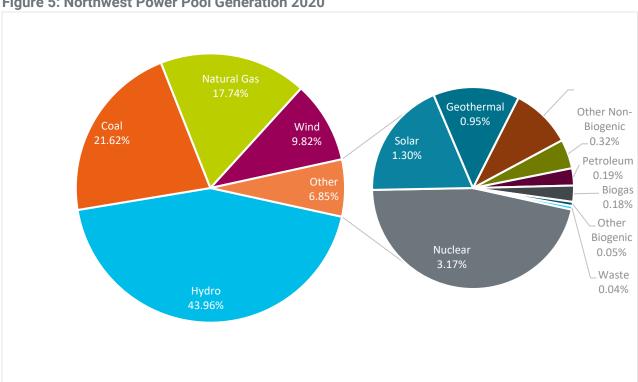


Table 4: 2020 Northwest Power Pool generation by fuel category²

Fuel category	Net generation MWh	Fuel category share
Hydro	130,648,899	43.95%
Coal	64,262,030	21.62%
Natural gas	52,716,707	17.74%
Wind	29,198,758	9.82%
Nuclear	9,427,050	3.17%
Geothermal	2,814,906	0.95%
Waste	113,206	0.04%
Other biogenic	135,503	0.05%
Petroleum	560,602	0.19%
Biogas	529,928	0.18%
Solar	3,855,722	1.30%
Other non-biogenic	954,061	0.32%
Biomass	1,981,268	0.67%
Total	297,198,640	100.00%

 $^{^2}$ Net power plant generation is used in the Washington fuel mix disclosure process. Some entities report power as gross generation, which does not include power plant parasitic losses.

Table 5 illustrates carbon dioxide emissions associated with electric power generation in the Northwest Power Pool in 2020. Coal fired electricity generation is the primary source of emissions.

Table 5: 2020 Northwest Power Pool estimated CO2 emissions by fuel type

Fuel type	CO2 emissions: Short tons	CO2 emissions: Metric tons
Coal	81,484,254	73,914,729
Natural gas	24,671,419	22,374,017
Petroleum	723,177	656,259
Other	1,122,251	1,018,221
Total	108,001,100	97,963,227

Table 6 illustrates the Northwest Power Pool Net System Mix for 2020. The Net System Mix, also known as the residual mix, is the electric generation remaining after all known claims on generation are made against the Northwest Power Pool total generation shown in Table 4 above. Hydropower generation comprises the largest share at 52.08%, followed by coal and natural gas fired generation at 22.48% and 19.52% respectively. Commerce no longer uses the residual mix in estimating Washington utility fuel mix but presents the information for other potential uses.

Table 6: Northwest Power Pool net system fuel mix 2020

Fuel type	Net generation, MWh	Fuel category share	Imputed NSM emissions, short tons
Hydro	43,489,456	52.08%	
Coal	18,776,504	22.48%	23,805,176
Natural gas	16,302,126	19.52%	7,626,408
Nuclear	2,960,311	3.54%	
Biomass	1,019,033	1.22%	
Other non-biogenic	939,091	1.12%	967,335
Waste	17,980	0.02%	10,245
Petroleum	2,817	0.00%	3,635
Total	83,507,318	100.00%	32,412,799

Washington Department of Commerce							
Alder Mutual Light							
	Utility Fuel Mix						
Fuel	Percent	Total MWh					
Biogas	0.00 %	0					
Biomass	0.00 %	0					
Coal	0.00 %	0					
Geothermal	0.00 %	0					
Hydro	84.69 %	4,616					
Natural Gas	0.00 %	0					
Nuclear	10.92 %	595					
Other Biogenic	0.00 %	0					
Other Non-Biogenic	0.00 %	0					
Petroleum	0.00 %	0					
Solar	0.00 %	0					
Unknown	0.00 %	0					
Waste	0.00 %	0					
Wind	0.00 %	0					
Unspecified	4.39 %	239					
Total	100.00 %	5,450					

BPA Claims				
Fuel	MWh			
Hydro	4,616			
Nuclear	595			
SubTotal	5,211			
BPA Unspecified Purchase	239			
BPA Total	5,450			

Asotin County PUD #1						
U	Utility Fuel Mix					
Fuel	Percent	Total MWh				
Biogas	0.00 %	0				
Biomass	0.00 %	0				
Coal	0.00 %	0				
Geothermal	0.00 %	0				
Hydro	84.69 %	3,822				
Natural Gas	0.00 %	0				
Nuclear	10.92 %	493				
Other Biogenic	0.00 %	0				
Other Non-Biogenic	0.00 %	0				
Petroleum	0.00 %	0				
Solar	0.00 %	0				
Unknown	0.00 %	0				
Waste	0.00 %	0				
Wind	0.00 %	0				
Unspecified	4.39 %	198				
Total	100.00 %	4,513				

BPA Claims	
Fuel	MWh
Hydro	3,822
Nuclear	493
SubTotal	4,315
BPA Unspecified Purchase	197
BPA Total	4,512

Avista (WA)		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	5.21 %	302,861
Coal	13.01 %	756,088
Geothermal	0.00 %	0
Hydro	33.87 %	1,968,825
Natural Gas	39.98 %	2,324,914
Nuclear	0.00 %	0
Other Biogenic	0.60 %	34,971
Other Non-Biogenic	0.00 %	0
Petroleum	0.01 %	871
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.74 %	42,741
Wind	1.65 %	95,946
Unspecified	4.93 %	286,393
Total	100.00 %	5,813,610

Utility Unspecified Purchases	
Туре	MWh
Unspecified Purchase	286,392
Total	286,392

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Boulder Park	Natural Gas	29,861	29,861
Cabinet Gorge	Water	236,205	236,205
Clearwater Paper IPP Lewiston	Black Liquor	170,795	
	Wood/Wood Waste Solids	47,372	
	Distillate Fuel Oil	0	
	Natural Gas	46,672	
	Residual Fuel Oil	0	264,840
Colstrip	Subbituminous Coal	756,088	
	Distillate Fuel Oil	822	
	Waste/Other Oil	49	
	Gaseous Propane	0	756,959
Coyote Springs II	Natural Gas	1,096,276	1,096,276
Kettle Falls Generating Station	Natural Gas	352	
	Wood/Wood Waste Solids	62,038	62,390
Little Falls (WA)	Water	131,834	131,834
Long Lake	Water	311,808	311,808
Meyers Falls	Water	7,164	7,164
Monroe Street	Water	19,576	19,576
Nine Mile	Water	27,780	27,780
Northeast (WA)	Natural Gas	413	413
Noxon Rapids	Water	376,073	376,073
Palouse	Wind	87,193	87,193
Plummer Cogen	Wood/Wood Waste Solids	22,655	22,655
Post Falls	Water	18,141	18,141
Priest Rapids	Water	218,204	218,204

Rathdrum	Natural Gas	106,085	106,085
Rathdrum Power LLC	Natural Gas	1,045,255	1,045,255
Rattlesnake	Wind	8,753	8,753
Rocky Reach	Water	260,524	260,524
Sheep Creek Hydro	Water	5,395	5,395
Spokane Waste to Energy	Non-biogenic Municipal Solid Waste	42,741	
	Biogenic Municipal Solid Waste	34,971	77,712
Upper Falls	Water	13,696	13,696
Upriver Dam Hydro Plant	Water	31,761	31,761
Wells	Water	310,664	310,664
Total		5,527,216	5,527,217

Benton County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	77.88 %	1,403,185
Natural Gas	0.00 %	0
Nuclear	9.94 %	179,185
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	8.18 %	147,426
Unspecified	4.00 %	72,061
Total	100.00 %	1,801,857

BPA Claims	
Fuel	MWh
Hydro	1,389,416
Nuclear	179,185
SubTotal	1,568,601
BPA Unspecified Purchase	72,061
BPA Total	1,640,662

Claims on Power Plants				
Plant Name	Fuel		MWh	Total MWh
Bonneville	Water		709	709
Cold Springs Windfarm	Wind		990	990
Condon Windpower LLC	Wind		5,031	5,031
Desert Meadow Windfarm	Wind		1,132	1,132
FPL Energy Vansycle LLC (WA)	Wind		4,584	4,584
Hammett Hill Windfarm	Wind		1,039	1,039
Klondike Wind Power	Wind		2,796	2,796
Klondike Windpower III	Wind		23,949	23,949
Mainline Windfarm	Wind		1,089	1,089
Nine Canyon	Wind		39,604	39,604
Packwood	Water		13,060	13,060
Ryegrass Windfarm	Wind		1,022	1,022
Two Ponds Windfarm	Wind		1,093	1,093
White Creek Wind Farm	Wind		22,277	22,277
Wolverine Creek	Wind		5,000	5,000
Yahoo Creek	Wind		37,820	37,820
Total			161,195	161,195

Benton Rural Electric Assn		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	452,998
Natural Gas	0.00 %	0
Nuclear	10.92 %	58,420
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	23,494
Total	100.00 %	534,912

BPA Claims	
Fuel	MWh
Hydro	452,998
Nuclear	58,420
SubTotal	511,418
BPA Unspecified Purchase	23,495
BPA Total	534,913

Big Bend Electric Coop		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	79.44 %	479,324
Natural Gas	0.00 %	0
Nuclear	10.25 %	61,815
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	10.31 %	62,205
Total	100.00 %	603,344

BPA Claims	
Fuel	MWh
Hydro	479,324
Nuclear	61,815
SubTotal	541,139
BPA Unspecified Purchase	24,859
BPA Total	565,998

Utility Unspecified Purchases		
Type MWh		
Unspecified Purchase	37,344	
Total 37,		

Centralia City Light		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	14.06 %	37,303
Geothermal	0.00 %	0
Hydro	75.07 %	199,125
Natural Gas	0.00 %	0
Nuclear	7.74 %	20,523
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.02 %	42
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	3.11 %	8,254
Total	100.00 %	265,247

BPA Claims		
Fuel	MWh	
Hydro	159,139	
Nuclear	20,523	
SubTotal	179,662	
BPA Unspecified Purchase	8,254	
BPA Total	187,916	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Transalta Centralia Generation	Refined Coal	37,294	
	Waste/Other Coal	8	
	Subbituminous Coal	0	
	Distillate Fuel Oil	42	37,345
Yelm	Water	39,986	39,986
Total		77,330	77,331

Chelan County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	99.98 %	1,663,395
Natural Gas	0.00 %	0
Nuclear	0.00 %	0
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	24
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.02 %	327
Unspecified	0.00 %	0
Total	100.00 %	1,663,746

Claims on Power Plants				
Plant Name Fuel MWh Total MWh				
Chelan	Water	377,119	377,119	
Nine Canyon	Wind	327	327	
Rock Island	Water	139,054	139,054	
Rocky Reach	Water	1,146,131	1,146,131	
Stehekin Diesel	Distillate Fuel Oil	24	24	
Stehekin Hydro	Water	1,091	1,091	
Total		1,663,746	1,663,746	

Cheney Light Department		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	79.44 %	112,151
Natural Gas	0.00 %	0
Nuclear	10.24 %	14,463
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	10.32 %	14,577
Total	100.00 %	141,191

BPA Claims		
Fuel	MWh	
Hydro	112,151	
Nuclear	14,463	
SubTotal	126,614	
BPA Unspecified Purchase	5,816	
BPA Total	132,430	

Utility Unspecified Purchases		
Type MWh		
Unspecified Purchase		
Total 8,7		

Chewelah Electric Department		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	17,640
Natural Gas	0.00 %	0
Nuclear	10.92 %	2,275
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	915
Total	100.00 %	20,830

BPA Claims		
Fuel	MWh	
Hydro	17,640	
Nuclear	2,275	
SubTotal	19,915	
BPA Unspecified Purchase	915	
BPA Total	20,830	

City of Blaine		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	68,150
Natural Gas	0.00 %	0
Nuclear	10.92 %	8,789
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	3,535
Total	100.00 %	80,474

BPA Claims		
Fuel	MWh	
Hydro	68,150	
Nuclear	8,789	
SubTotal	76,939	
BPA Unspecified Purchase	3,535	
BPA Total	80,474	

Clallam County PUD #1				
Utility Fuel Mix				
Fuel Percent Total MWh				
Biogas	0.00 %	0		
Biomass	0.00 %	0		
Coal	0.00 %	0		
Geothermal	0.00 %	0		
Hydro	84.90 %	574,455		
Natural Gas	0.00 %	0		
Nuclear	10.77 %	72,850		
Other Biogenic	0.00 %	0		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.00 %	0		
Solar	0.00 %	0		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	0.00 %	0		
Unspecified	4.33 %	29,298		
Total	100.00 %	676,603		

BPA Claims		
Fuel	MWh	
Hydro	564,890	
Nuclear	72,850	
SubTotal	637,740	
BPA Unspecified Purchase	29,298	
BPA Total	667,038	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Packwood	Water	9,565	9,565
Total		9,565	9,565

Clark County PUD #1			
Utility Fuel Mix			
Fuel Percent Total MWh			
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	50.94 %	2,355,224	
Natural Gas	29.87 %	1,381,142	
Nuclear	6.52 %	301,574	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	3.05 %	140,908	
Unspecified	9.62 %	444,855	
Total	100.00 %	4,623,703	

BPA Claims		
Fuel MWh		
Hydro	2,338,438	
Nuclear	301,574	
SubTotal	2,640,012	
BPA Unspecified Purchase	121,280	
BPA Total	2,761,292	

Utility Unspecified Purchases		
Type MWh		
Unspecified Purchase 323		
Total 323,		

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
BPADedicated Resource Type Sales	Unknown		60,273
Eurus Combine Hills Turbine Ranch 2	Wind	140,908	140,908
Packwood	Water	16,786	16,786
River Road Gen Plant	Natural Gas	1,381,142	1,381,142
Total		1,538,836	1,599,109

Clearwater Power (WA)		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.66 %	18,639
Natural Gas	0.00 %	0
Nuclear	10.92 %	2,404
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.42 %	972
Total	100.00 %	22,015

BPA Claims		
Fuel	MWh	
Hydro	18,639	
Nuclear	2,404	
SubTotal	21,043	
BPA Unspecified Purchase	965	
BPA Total	22,008	

Utility Unspecified Purchases		
Type MWh		
Unspecified Purchase		
Total		

Columbia Rural Electric Assn (WA) Utility Fuel Mix			
			Fuel Percent Total MWh
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	77.25 %	290,733	
Natural Gas	0.00 %	0	
Nuclear	9.96 %	37,494	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	12.79 %	48,140	
Total	100.00 %	376,367	

BPA Claims		
Fuel	MWh	
Hydro	290,733	
Nuclear	37,494	
SubTotal	328,227	
BPA Unspecified Purchase	15,079	
BPA Total	343,306	

Utility Unspecified Purchases		
Туре	MWh	
Unspecified Purchase	33,063	
Total	33,063	

Consolidated Irrigation District #19			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	2,087	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	269	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	108	
Total	100.00 %	2,464	

BPA Claims		
Fuel	MWh	
Hydro	2,087	
Nuclear	269	
SubTotal	2,356	
BPA Unspecified Purchase	109	
BPA Total	2,465	

Coulee Dam, Town of			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	14,392	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	1,856	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	746	
Total	100.00 %	16,994	

BPA Claims		
Fuel	MWh	
Hydro	14,392	
Nuclear	1,856	
SubTotal	16,248	
BPA Unspecified Purchase	746	
BPA Total	16,994	

Cowlitz County PUD #1				
	Utility Fuel Mix			
Fuel	Percent	Total MWh		
Biogas	0.00 %	0		
Biomass	1.54 %	67,647		
Coal	0.06 %	2,622		
Geothermal	0.00 %	0		
Hydro	71.69 %	3,156,681		
Natural Gas	0.38 %	16,590		
Nuclear	8.80 %	387,284		
Other Biogenic	0.03 %	1,151		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.00 %	127		
Solar	0.01 %	558		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	7.91 %	348,336		
Unspecified	9.58 %	421,995		
Total	100.00 %	4,402,991		

BPA Claims		
Fuel	MWh	
Hydro	3,003,040	
Nuclear	387,284	
SubTotal	3,390,324	
BPA Unspecified Purchase	155,752	
BPA Total	3,546,076	

Utility Unspecified Purchases		
Type	MWh	
Unspecified Purchase	266,243	
Total	266,243	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
American Falls Solar	Solar	558	558
Cold Springs Windfarm	Wind	8,933	8,933
Condon Windpower LLC	Wind	6,274	6,274
Desert Meadow Windfarm	Wind	8,934	8,934
FPL Energy Vansycle LLC (WA)	Wind	10,855	10,855
Hammett Hill Windfarm	Wind	8,933	8,933
Harvest Wind Project	Wind	108,594	108,594
High Mesa	Wind	92,794	92,794
Horse Butte Wind I, LLC	Wind	3,357	3,357
Klondike Wind Power	Wind	2,502	2,502
Klondike Windpower III	Wind	16,520	16,520
Longview Fibre	Natural Gas	11,427	
	Wood/Wood Waste Solids	10,572	
	Black Liquor	37,437	59,436
Mainline Windfarm	Wind	8,934	8,934
Nine Canyon	Wind	16,633	16,633
Nippon Dynawave Packaging Longview WA	Wood/Wood Waste Solids	4,883	
	Distillate Fuel Oil	5	
	Residual Fuel Oil	122	
	Subbituminous Coal	2,622	
	Natural Gas	5,163	
	Black Liquor	14,756	
	Sludge Waste	1,151	28,701

Power County Wind Park North	Wind	19,302	19,302
Power County Wind Park South	Wind	17,904	17,904
Priest Rapids	Water	5,888	5,888
Ryegrass Windfarm	Wind	8,933	8,933
Swift 2	Water	141,870	141,870
Two Ponds Windfarm	Wind	8,934	8,934
Wanapum	Water	5,883	5,883
Total		590,673	590,672

Douglas County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.07 %	656
Geothermal	0.00 %	0
Hydro	73.47 %	741,599
Natural Gas	0.53 %	5,337
Nuclear	0.00 %	0
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	1
Solar	0.03 %	292
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	25.90 %	261,402
Total	100.00 %	1,009,287

Utility Unspecified Purchases	
Type	MWh
Unspecified Purchase	261,401
Total 261,40	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Boardman	Subbituminous Coal	656	
	Distillate Fuel Oil	1	657
Distributed GenerationHydro (OR)	Water	111,224	111,224
Distributed GenerationNatural Gas (OR)	Natural Gas	5,337	5,337
Distributed GenerationSolar (OR)	Solar	292	292
Distributed GenerationWind (OR)	Wind	292	292
Rocky Reach	Water	298,989	298,989
Wells	Water	442,610	442,610
Total		859,401	859,401

Eatonville Electric Department		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	23,494
Natural Gas	0.00 %	0
Nuclear	10.92 %	3,030
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	1,219
Total	100.00 %	27,743

BPA Claims		
Fuel	MWh	
Hydro	23,494	
Nuclear	3,030	
SubTotal	26,524	
BPA Unspecified Purchase	1,220	
BPA Total	27,744	

Ellensburg Electric Division		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	170,796
Natural Gas	0.00 %	0
Nuclear	10.92 %	22,027
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	8,858
Total	100.00 %	201,681

BPA Claims		
Fuel	MWh	
Hydro	170,796	
Nuclear	22,027	
SubTotal	192,823	
BPA Unspecified Purchase	8,858	
BPA Total	201,681	

Elmhurst Mutual Power & Light		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	238,201
Natural Gas	0.00 %	0
Nuclear	10.92 %	30,719
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	12,354
Total	100.00 %	281,274

BPA Claims		
Fuel	MWh	
Hydro	238,201	
Nuclear	30,719	
SubTotal	268,920	
BPA Unspecified Purchase	12,354	
BPA Total	281,274	

Energy Northwest		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	20,276
Natural Gas	0.00 %	0
Nuclear	10.92 %	2,615
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	1,052
Total	100.00 %	23,943

BPA Claims		
Fuel	MWh	
Hydro	20,276	
Nuclear	2,615	
SubTotal	22,891	
BPA Unspecified Purchase	1,051	
BPA Total	23,942	

Fairchild Airforce Base			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	37,262	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	4,806	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	1,933	
Total	100.00 %	44,001	

BPA Claims		
Fuel	MWh	
Hydro	37,262	
Nuclear	4,806	
SubTotal	42,068	
BPA Unspecified Purchase	1,933	
BPA Total	44,001	

Ferry County PUD #1			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	59,888	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	7,723	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	3,106	
Total	100.00 %	70,717	

BPA Claims		
Fuel	MWh	
Hydro	59,888	
Nuclear	7,723	
SubTotal	67,611	
BPA Unspecified Purchase	3,106	
BPA Total	70,717	

Franklin County PUD #1			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	82.66 %	893,085	
Natural Gas	0.00 %	0	
Nuclear	10.50 %	113,472	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	6.84 %	73,860	
Total	100.00 %	1,080,417	

BPA Claims		
Fuel	MWh	
Hydro	879,876	
Nuclear	113,472	
SubTotal	993,348	
BPA Unspecified Purchase	45,633	
BPA Total	1,038,981	

Utility Unspecified Purchases		
Type MWh		
Unspecified Purchase	28,227	
Total 28,2		

Claims on Power Plants			
Plant Name	Total MWh		
Distributed GenerationHydro (WA)	Water	3,436	3,436
Packwood	Water	9,773	9,773
Total		13,209	13,209

Grant County PUD #2			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	22.42 %	1,172,023	
Natural Gas	0.00 %	0	
Nuclear	0.10 %	5,371	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.64 %	33,610	
Unspecified	76.84 %	4,016,059	
Total	100.00 %	5,227,063	

BPA Claims		
Fuel	MWh	
Hydro	41,647	
Nuclear	5,371	
SubTotal	47,018	
BPA Unspecified Purchase	2,160	
BPA Total	49,178	

Utility Unspecified Purchases		
Type	MWh	
Unspecified Purchase	4,013,898	
Total	4,013,898	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Nine Canyon	Wind	33,610	33,610
PEC Headworks	Water	18,191	18,191
Priest Rapids	Water	521,831	521,831
Quincy Chute	Water	31,584	31,584
Wanapum	Water	558,770	558,770
Total		1,163,986	1,163,986

Grays Harbor County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.89 %	8,040
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	83.94 %	755,205
Natural Gas	0.00 %	0
Nuclear	10.82 %	97,394
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.35 %	39,168
Total	100.00 %	899,807

BPA Claims	
Fuel	MWh
Hydro	755,205
Nuclear	97,394
SubTotal	852,599
BPA Unspecified Purchase	39,168
BPA Total	891,767

Claims on Power Plants			
Plant Name Fuel MWh Total MWh			
Sierra Pacific Aberdeen	Wood/Wood Waste Solids	8,040	8,040
Total 8,040 8,0			8,040

Inland Power & Light			
U	Utility Fuel Mix		
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	80.60 %	843,076	
Natural Gas	0.00 %	0	
Nuclear	10.39 %	108,726	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	9.01 %	94,274	
Total	100.00 %	1,046,076	

BPA Claims	
Fuel	MWh
Hydro	843,076
Nuclear	108,726
SubTotal	951,802
BPA Unspecified Purchase	43,726
BPA Total	995,528

Utility Unspecified Purchases	
Type MWh	
Unspecified Purchase 50,5	
Total 50,54	

Jefferson County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	334,525
Natural Gas	0.00 %	0
Nuclear	10.92 %	43,142
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	17,350
Total	100.00 %	395,017

BPA Claims	
Fuel	MWh
Hydro	334,525
Nuclear	43,142
SubTotal	377,667
BPA Unspecified Purchase	17,348
BPA Total	395,015

Kalispel Tribal Utility		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	23,497
Natural Gas	0.00 %	0
Nuclear	10.92 %	3,030
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	1,219
Total	100.00 %	27,746

BPA Claims	
Fuel	MWh
Hydro	23,497
Nuclear	3,030
SubTotal	26,527
BPA Unspecified Purchase	1,220
BPA Total	27,747

Kittitas County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.55 %	94,855
Natural Gas	0.00 %	0
Nuclear	10.90 %	12,233
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.55 %	5,105
Total	100.00 %	112,193

BPA Claims	
Fuel	MWh
Hydro	94,855
Nuclear	12,233
SubTotal	107,088
BPA Unspecified Purchase	4,919
BPA Total	112,007

Utility Unspecified Purchases	
Type	MWh
Unspecified Purchase	
Total 18	

Klickitat County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	75.26 %	376,883
Natural Gas	0.00 %	0
Nuclear	8.57 %	42,921
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	16.17 %	80,958
Total	100.00 %	500,762

BPA Claims		
Fuel	MWh	
Hydro	332,816	
Nuclear	42,921	
SubTotal	375,737	
BPA Unspecified Purchase	17,260	
BPA Total	392,997	

Utility Unspecified Purchases	
Type	MWh
Unspecified Purchase	63,697
Total 63,69	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
McNary Dam Fish Attraction Project	Water	41,280	41,280
Packwood	Water	2,787	2,787
Total		44,067	44,067

Lakeview Light & Power		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	218,245
Natural Gas	0.00 %	0
Nuclear	10.92 %	28,146
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	11,319
Total	100.00 %	257,710

BPA Claims		
Fuel	MWh	
Hydro	218,245	
Nuclear	28,146	
SubTotal	246,391	
BPA Unspecified Purchase	11,319	
BPA Total	257,710	

Lewis County PUD #1			
U	Utility Fuel Mix		
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	79.37 %	748,174	
Natural Gas	0.00 %	0	
Nuclear	10.18 %	95,975	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	6.36 %	59,989	
Unspecified	4.09 %	38,597	
Total	100.00 %	942,735	

BPA Claims		
Fuel	MWh	
Hydro	744,198	
Nuclear	95,975	
SubTotal	840,173	
BPA Unspecified Purchase	38,598	
BPA Total	878,771	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Burton Creek Hydro	Water	1,618	1,618
Fossil Gulch	Wind	12,551	12,551
Klondike Windpower III	Wind	1,260	1,260
Mill Creek	Water	760	760
Nine Canyon	Wind	46,178	46,178
Packwood	Water	1,598	1,598
Total		63,965	63,965

Mason County PUD #1			
U	Utility Fuel Mix		
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	85.70 %	67,503	
Natural Gas	0.00 %	0	
Nuclear	10.20 %	8,038	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.10 %	3,232	
Total	100.00 %	78,773	

BPA Claims		
Fuel	MWh	
Hydro	62,326	
Nuclear	8,038	
SubTotal	70,364	
BPA Unspecified Purchase	3,233	
BPA Total	73,597	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Lilliwaup Falls Generating	Water	4,750	4,750
Rocky Brook Hydroelectric	Water	427	427
Total		5,177	5,177

Mason County PUD #3			
U	Utility Fuel Mix		
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	82.61 %	573,771	
Natural Gas	0.00 %	0	
Nuclear	10.47 %	72,761	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.03 %	210	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	2.68 %	18,628	
Unspecified	4.21 %	29,262	
Total	100.00 %	694,632	

BPA Claims		
Fuel	MWh	
Hydro	564,196	
Nuclear	72,761	
SubTotal	636,957	
BPA Unspecified Purchase	29,262	
BPA Total	666,219	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Condon Windpower LLC	Wind	8	8
Distributed GenerationSolar (WA)	Solar	210	210
Nine Canyon	Wind	8,419	8,419
Packwood	Water	9,575	9,575
White Creek Wind Farm	Wind	10,201	10,201
Total		28,413	28,413

McCleary Light & Power			
U	Utility Fuel Mix		
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	26,063	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	3,361	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	1,352	
Total	100.00 %	30,776	

BPA Claims		
Fuel	MWh	
Hydro	26,063	
Nuclear	3,361	
SubTotal	29,424	
BPA Unspecified Purchase	1,351	
BPA Total	30,775	

Milton Electric Division			
U	Utility Fuel Mix		
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	48,057	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	6,198	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	2,492	
Total	100.00 %	56,747	

BPA Claims		
Fuel	MWh	
Hydro	48,057	
Nuclear	6,198	
SubTotal	54,255	
BPA Unspecified Purchase	2,493	
BPA Total	56,748	

Modern Electric Water Company		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	197,048
Natural Gas	0.00 %	0
Nuclear	10.92 %	25,412
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	10,220
Total	100.00 %	232,680

BPA Claims		
Fuel	MWh	
Hydro	197,048	
Nuclear	25,412	
SubTotal	222,460	
BPA Unspecified Purchase	10,219	
BPA Total	232,679	

Nespelem Valley Elec Coop		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	55,609
Natural Gas	0.00 %	0
Nuclear	10.92 %	7,172
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	2,884
Total	100.00 %	65,665

BPA Claims		
Fuel	MWh	
Hydro	55,609	
Nuclear	7,172	
SubTotal	62,781	
BPA Unspecified Purchase	2,884	
BPA Total	65,665	

Northern Lights (WA)				
Utility Fuel Mix				
Fuel Percent Total MWh				
Biogas	0.00 %	0		
Biomass	0.00 %	0		
Coal	0.00 %	0		
Geothermal	0.00 %	0		
Hydro	84.69 %	104		
Natural Gas	0.00 %	0		
Nuclear	10.92 %	13		
Other Biogenic	0.00 %	0		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.00 %	0		
Solar	0.00 %	0		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	0.00 %	0		
Unspecified	4.39 %	5		
Total	100.00 %	122		

BPA Claims		
Fuel	MWh	
Hydro	104	
Nuclear	13	
SubTotal	117	
BPA Unspecified Purchase	5	
BPA Total	122	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Lake Creek	Water	8	8
Total		8	8

Ohop Mutual Light				
Utility Fuel Mix				
Fuel Percent Total MWh				
Biogas	0.00 %	0		
Biomass	0.00 %	0		
Coal	0.00 %	0		
Geothermal	0.00 %	0		
Hydro	84.69 %	76,896		
Natural Gas	0.00 %	0		
Nuclear	10.92 %	9,917		
Other Biogenic	0.00 %	0		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.00 %	0		
Solar	0.00 %	0		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	0.00 %	0		
Unspecified	4.39 %	3,988		
Total	100.00 %	90,801		

BPA Claims		
Fuel	MWh	
Hydro	76,896	
Nuclear	9,917	
SubTotal	86,813	
BPA Unspecified Purchase	3,990	
BPA Total	90,803	

Okanogan County Electric Coop Utility Fuel Mix				
			Fuel Percent Total MWh	
Biogas	0.00 %	0		
Biomass	0.00 %	0		
Coal	0.00 %	0		
Geothermal	0.00 %	0		
Hydro	79.76 %	53,768		
Natural Gas	0.00 %	0		
Nuclear	10.29 %	6,934		
Other Biogenic	0.00 %	0		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.00 %	0		
Solar	0.00 %	0		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	0.00 %	0		
Unspecified	9.95 %	6,711		
Total	100.00 %	67,413		

BPA Claims		
Fuel	MWh	
Hydro	53,768	
Nuclear	6,934	
SubTotal	60,702	
BPA Unspecified Purchase	2,789	
BPA Total	63,491	

Utility Unspecified Purchases		
Type MWh		
Unspecified Purchase		
Total 3,92		

Okanogan County PUD #1 Utility Fuel Mix		
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.02 %	113
Geothermal	0.00 %	0
Hydro	82.86 %	525,057
Natural Gas	0.15 %	920
Nuclear	6.91 %	43,783
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	3.48 %	22,034
Unspecified	6.58 %	41,724
Total	100.00 %	633,631

BPA Claims		
Fuel	MWh	
Hydro	339,494	
Nuclear	43,783	
SubTotal	383,277	
BPA Unspecified Purchase	17,609	
BPA Total	400,886	

Utility Unspecified Purchases		
Type MWh		
Unspecified Purchase		
Total 24,11		

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Boardman	Subbituminous Coal	113	
	Distillate Fuel Oil	0	113
Distributed GenerationHydro (WA)	Water	19,168	19,168
Distributed GenerationNatural Gas (WA)	Natural Gas	920	920
Distributed GenerationWind (WA)	Wind	101	101
Nine Canyon	Wind	21,933	21,933
Wells	Water	166,395	166,395
Total		208,630	208,630

Orcas Power & Light Coop		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	190,465
Natural Gas	0.00 %	0
Nuclear	10.92 %	24,563
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	9,878
Total	100.00 %	224,906

BPA Claims		
Fuel	MWh	
Hydro	190,465	
Nuclear	24,563	
SubTotal	215,028	
BPA Unspecified Purchase	9,878	
BPA Total	224,906	

Pacific County PUD #2		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	80.33 %	249,175
Natural Gas	0.00 %	0
Nuclear	10.36 %	32,135
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	9.31 %	28,884
Total	100.00 %	310,194

BPA Claims		
Fuel	MWh	
Hydro	249,175	
Nuclear	32,135	
SubTotal	281,310	
BPA Unspecified Purchase	12,923	
BPA Total	294,233	

Utility Unspecified Purchases	
Type	MWh
Unspecified Purchase	15,961
Total 15,	

Pacific Power (WA)		
Ut	ility Fuel Mix	
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	36.00 %	1,604,372
Geothermal	0.00 %	0
Hydro	13.89 %	619,337
Natural Gas	18.17 %	809,860
Nuclear	0.25 %	11,329
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.02 %	957
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	6.52 %	290,848
Unspecified	25.15 %	1,121,090
Total	100.00 %	4,457,793

BPA Claims		
Fuel	MWh	
Hydro	87,846	
Nuclear	11,329	
SubTotal	99,175	
BPA Unspecified Purchase	4,556	
BPA Total	103,731	

Utility Unspecified Purchases	
Type	MWh
Unspecified Purchase	1,116,534
Total 1,116,	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Bend	Water	69	69
Campbell Hill Windpower	Wind	25,346	25,346
Chehalis Generating Facility	Distillate Fuel Oil	0	
	Natural Gas	501,928	501,928
Clearwater 1	Water	5,133	5,133
Clearwater 2	Water	4,831	4,831
Colstrip	Subbituminous Coal	81,060	
	Distillate Fuel Oil	88	
	Waste/Other Oil	5	
	Gaseous Propane	0	81,153
Copco 1	Water	15,286	15,286
Copco 2	Water	18,852	18,852
Dunlap	Wind	31,363	31,363
Eagle Point	Water	3,483	3,483
Fall Creek	Water	1,810	1,810
Fish Creek	Water	4,527	4,527
Glenrock	Wind	30,212	30,212
Goodnoe Hills	Wind	26,561	26,561
Hermiston Generating Plant	Natural Gas	307,932	307,932
Iron Gate	Water	17,931	17,931
Jim Bridger	Subbituminous Coal	1,523,313	
	Distillate Fuel Oil	863	1,524,176
John C Boyle	Water	38,336	38,336
Leaning Juniper	Wind	25,711	25,711

Lemolo 1	Water	16,872	16,872
Lemolo 2	Water	20,665	20,665
Marengo Wind Plant	Wind	52,729	52,729
Merwin	Water	102,686	102,686
Prospect 1	Water	2,811	2,811
Prospect 2	Water	37,888	37,888
Prospect 3	Water	3,705	3,705
Prospect 4	Water	586	586
Rolling Hills	Wind	26,997	26,997
Seven Mile Hill	Wind	32,251	32,251
Slide Creek	Water	10,444	10,444
Soda Springs	Water	8,180	8,180
Swift 1	Water	89,043	89,043
Toketee Falls	Water	34,084	34,084
Top of the World Windpower Project	Wind	39,678	39,678
Wallowa Falls	Water	1,105	1,105
West Side	Electricity for Energy Storage	-11	-11
Yale	Water	93,164	93,164
Total		3,237,517	3,237,517

Parkland Light & Water		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	97,640
Natural Gas	0.00 %	0
Nuclear	10.92 %	12,592
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	5,064
Total	100.00 %	115,296

BPA Claims		
Fuel	MWh	
Hydro	97,640	
Nuclear	12,592	
SubTotal	110,232	
BPA Unspecified Purchase	5,064	
BPA Total	115,296	

Pend Oreille County PUD #1			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Piogeo	0.00 %	0	
Biogas Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	91.01 %	892,365	
Natural Gas	0.00 %	0	
Nuclear	1.42 %	13,920	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	7.57 %	74,274	
Total	100.00 %	980,559	

BPA Claims		
Fuel	MWh	
Hydro	107,939	
Nuclear	13,920	
SubTotal	121,859	
BPA Unspecified Purchase	5,599	
BPA Total	127,458	

Utility Unspecified Purchases	
Type	MWh
Unspecified Purchase	68,676
Total	68,676

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Boundary	Water	340,151	340,151
Box Canyon	Water	444,275	444,275
Total		784,426	784,426

Peninsula Light		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	75.16 %	519,161
Natural Gas	0.00 %	0
Nuclear	9.69 %	66,953
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	11.25 %	77,722
Unspecified	3.90 %	26,926
Total	100.00 %	690,762

BPA Claims	
Fuel	MWh
Hydro	519,161
Nuclear	66,953
SubTotal	586,114
BPA Unspecified Purchase	26,925
BPA Total	613,039

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Bonneville	Water	0	0
Chief Joseph	Water	0	0
Cold Springs Windfarm	Wind	21,576	21,576
Condon Windpower LLC	Wind	5,664	5,664
Cougar	Water	0	0
Grand Coulee	Water	0	0
Harvest Wind Project	Wind	1,535	1,535
Hills Creek	Water	0	0
Horse Butte Wind I, LLC	Wind	15,635	15,635
Klondike Wind Power	Wind	458	458
Klondike Windpower III	Wind	1,212	1,212
Lookout Point	Water	0	0
Palisades Dam	Water	0	0
Vansycle II Wind Energy Center	Wind	31,642	31,642
Total		77,722	77,722

Port Angeles Light Operations		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	229,534
Natural Gas	0.00 %	0
Nuclear	10.92 %	29,602
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	11,905
Total	100.00 %	271,041

BPA Claims		
Fuel	MWh	
Hydro	229,534	
Nuclear	29,602	
SubTotal	259,136	
BPA Unspecified Purchase	11,903	
BPA Total	271,039	

Port of Seattle				
Utility Fuel Mix				
Fuel Percent Total MWh				
Biogas	0.00 %	0		
Biomass	0.00 %	0		
Coal	0.00 %	0		
Geothermal	0.00 %	0		
Hydro	84.69 %	111,229		
Natural Gas	0.00 %	0		
Nuclear	10.92 %	14,344		
Other Biogenic	0.00 %	0		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.00 %	0		
Solar	0.00 %	0		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	0.00 %	0		
Unspecified	4.39 %	5,769		
Total	100.00 %	131,342		

BPA Claims		
Fuel	MWh	
Hydro	111,229	
Nuclear	14,344	
SubTotal	125,573	
BPA Unspecified Purchase	5,769	
BPA Total	131,342	

Puget Sound Energy				
Utility Fuel Mix				
Fuel Percent Total MWh				
Biogas	0.09 %	19,362		
Biomass	0.01 %	2,087		
Coal	22.96 %	4,984,651		
Geothermal	0.02 %	3,500		
Hydro	24.12 %	5,234,658		
Natural Gas	27.04 %	5,869,992		
Nuclear	0.19 %	40,693		
Other Biogenic	0.00 %	0		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.04 %	9,430		
Solar	0.95 %	206,950		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	10.51 %	2,282,111		
Unspecified	14.07 %	3,053,442		
Total	100.00 %	21,706,876		

BPA Claims		
Fuel	MWh	
Hydro	315,539	
Nuclear	40,693	
SubTotal	356,232	
BPA Unspecified Purchase	16,365	
BPA Total	372,597	

Utility Unspecified Purchases		
Type	MWh	
Unspecified Purchase	3,037,077	
Total	3,037,077	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
3 Bar G Wind Turbine #3	Wind	80	80
American Falls Solar	Solar	7,796	7,796
American Falls Solar II	Solar	7,687	7,687
Black Creek	Water	11,913	11,913
Campbell Hill Windpower	Wind	12,726	12,726
Cassia Gulch	Wind	7,654	7,654
Cassia Wind	Wind	967	967
Cedar Creek Wind	Wind	10,000	10,000
Colstrip	Distillate Fuel Oil	2,094	
	Gaseous Propane	0	
	Waste/Other Oil	125	
	Subbituminous Coal	1,926,451	1,928,670
Crystal Mountain	Distillate Fuel Oil	490	490
Distributed GenerationBiomass (WA)	Wood/Wood Waste Solids	2,087	2,087
Distributed GenerationSolar (OR)	Solar	28,664	28,664
Distributed GenerationSolar (WA)	Solar	159	159
Double A Digester	Other Biomass Gas	1,599	1,599
Electron	Water	87,909	87,909
Encogen	Natural Gas	339,968	
	Distillate Fuel Oil	23	339,991
Escalante Solar I, LLC	Solar	25,000	25,000
Escalante Solar III, LLC	Solar	11,535	11,535
		3,770	3,770

Ferndale Generating Station	Natural Gas	1,009,486	
	Distillate Fuel Oil	40	1,009,526
Finley Buttes Landfill Gas	Landfill Gas	3,500	3,500
First Up Knudson Wind Turbine	Wind	143	143
Frederickson	Natural Gas	26,890	
	Distillate Fuel Oil	95	26,985
Frederickson Power LP	Natural Gas	438,966	438,966
Fredonia	Distillate Fuel Oil	2,915	
	Natural Gas	176,140	179,055
Glenrock	Wind	1,500	1,500
Goldendale Generating Station	Natural Gas	1,850,118	1,850,118
Goodnoe Hills	Wind	30,200	30,200
Grand View Solar Two	Solar	11,469	11,469
Hopkins Ridge Wind	Wind	253,696	253,696
Horse Butte Wind I, LLC	Wind	16,379	16,379
Horseshoe Bend Wind Park	Wind	9,130	9,130
ID Solar	Solar	7,897	7,897
Iron Springs Solar, LLC	Solar	14,961	14,961
Juniper Canyon I Wind Project	Wind	28,546	28,546
Klondike Windpower III	Wind	53,421	53,421
Koma Kulshan Associates	Water	37,334	37,334
Leaning Juniper	Wind	24,800	24,800
Lower Baker	Water	361,440	361,440
Lower Snake River Wind Energy	Wind	713,072	713,072
Project		,	, , , , , , , , , , , , , , , , , , , ,
LRI LFGTE Facility	Landfill Gas	5,000	5,000
Marengo Wind Plant	Wind	69,726	69,726
Meadow Creek Project Company	Wind	38,760	38,760
Mint Farm Generating Station	Natural Gas	1,586,428	1,586,428
Mt. Home Solar 1, LLC	Solar	4,962	4,962
Murphy Flat Solar	Solar	8,023	8,023
Neal Hot Springs Geothermal Project	Geothermal	250	250
Nine Canyon	Wind	18,937	18,937
Nooksack Hydro	Water	22,143	22,143
Orchard Ranch Solar	Solar	8,508	8,508
Pavant Solar II LLC	Solar	22,596	22,596
Priest Rapids	Water	209,971	209,971
Raft River Geothermal Power Plant		3,250	3,250
Rock Creek Dairy	Other Biomass Gas	1,901	1,901
Rock Island	Water	599,065	599,065
Rockland Wind Farm	Wind	50,743	50,743
Rocky Reach	Water	1,230,890	1,230,890
Selis Ksanka Qlispe	Water	269,458	269,458
Sheep Solar	Solar	1,572	1,572
Silverton Solar	Solar	1,490	1,490
Simcoe Solar	Solar	8,200	8,200
Skookumchuck	Water	4,106	4,106
Skookumchuck Wind Facility	Wind	23,253	23,253
Smith Creek (Whatcom County, WA		23,233	23,233
		48,152	48,152
Snoqualmie	Water		
Snoqualmie 2	Water	165,219	165,219
South Peak Wind	Wind	11,500	11,500

Utah Red Hills Renewable Energy	y Solar	30,073	30,073
Park			
Van Dyk -S Holsteins	Other Biomass Gas	111	111
Vanderhaak Dairy Digester	Other Biomass Gas	3,481	3,481
Wanapum	Water	205,707	205,707
•			
Weeks Falls	Water	14,588	14,588
Wells	Water	1,237,562	1,237,562
Whitehorn	Distillate Fuel Oil	189	
	Natural Gas	4,083	4,272
			4,212
Wild Horse	Wind	873,184	
	Solar	108	873,292
Wolverine Creek	Wind	10,000	10,000
WOOVERING CICCIC	VVIIIG	10,000	10,000

Richland Energy Services				
Utility Fuel Mix				
Fuel Percent Total MWh				
Diamag	0.00.0/			
Biogas	0.00 %	0		
Biomass	0.00 %	0		
Coal	0.00 %	0		
Geothermal	0.00 %	0		
Hydro	78.24 %	726,361		
Natural Gas	0.00 %	0		
Nuclear	10.09 %	93,674		
Other Biogenic	0.00 %	0		
Other Non-Biogenic	0.00 %	0		
Petroleum	0.00 %	0		
Solar	0.04 %	399		
Unknown	0.00 %	0		
Waste	0.00 %	0		
Wind	0.00 %	0		
Unspecified	11.63 %	107,944		
Total	100.00 %	928,378		

BPA Claims		
Fuel	MWh	
Hydro	726,361	
Nuclear	93,674	
SubTotal	820,035	
BPA Unspecified Purchase	37,672	
BPA Total	857,707	

Utility Unspecified Purchases		
Type	MWh	
Unspecified Purchase	70,271	
Total	70,271	

Claims on Power Plants				
Plant Name	Fuel	MWh	Total MWh	
Horn Rapids Solar, Storage and Training	Solar	399	399	
Total		399	399	

Ruston, Town of		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	1.63 %	57
Coal	0.00 %	0
Geothermal	0.80 %	28
Hydro	75.62 %	2,638
Natural Gas	0.00 %	0
Nuclear	0.00 %	0
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	21.95 %	766
Unspecified	0.00 %	0
Total	100.00 %	3,489

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Alder	Water	178	178
Benson Creek Windfarm (Burnt River)	Wind	44	44
Bonneville Dam Incremental Hydro G1	Unknown		0
Burley Butte Windpark	Wind	88	88
Chief Joseph	Water	28	28
Condon Windpower LLC	Wind	8	8
Cushman 1	Water	88	88
Cushman 2	Water	145	145
Durbin Creek Windfarm (Burnt River)	Wind	39	39
Elkhorn Valley Wind Farm	Wind	50	50
FPL Energy Vansycle LLC (OR)	Wind	16	16
Grand Coulee Project Hydro Authority	Water	261	261
Hood Street Reservoir	Water	3	3
Hot Springs Windfarm LLC	Wind	43	43
Jett Creek Windfarm (Burnt River)	Wind	13	13
Klondike Wind Power	Wind	5	5
Klondike Windpower III	Wind	12	12
LaGrande	Water	297	297
Lookout Point	Water	1	1
Mayfield	Water	610	610
Milner Dam Wind Park LLC	Wind	80	80
Mossyrock	Water	972	972

Neal Hot Springs Geothermal Project	Geothermal	28	28
Nine Canyon	Wind	26	26
Palisades Dam	Water	5	5
Payne's Ferry	Wind	96	96
Pilgrim Stage Wind Park	Wind	50	50
Power County Wind Park North	Wind	42	42
Power County Wind Park South	Wind	36	36
Priest Rapids	Water	11	11
Prospector Windfarm (Burnt River)	Wind	40	40
Sierra Pacific Aberdeen	Wood/Wood Waste Solids	57	57
Wanapum	Water	14	14
White Creek Wind Farm	Wind	78	78
Wynoochee	Water	25	25
Total		3,489	3,489

Seattle City Light		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	1.24 %	114,168
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	86.09 %	7,909,407
Natural Gas	0.00 %	0
Nuclear	4.98 %	457,743
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	5.14 %	472,131
Unspecified	2.55 %	234,663
Total	100.00 %	9,188,112

BPA Claims	
Fuel	MWh
Hydro	3,549,385
Nuclear	457,743
SubTotal	4,007,128
BPA Unspecified Purchase	184,086
BPA Total	4,191,214

Utility Unspecified Purchases	
Type	MWh
Unspecified Purchase	50,577
Total	50,577

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Bonneville	Water	4,092	4,092
Boundary	Water	2,012,076	2,012,076
Cedar Falls (WA)	Water	67,764	67,764
Chief Joseph	Water	23,097	23,097
Condon Windpower LLC	Wind	7,651	7,651
Cougar	Water	354	354
Diablo	Water	590,461	590,461
Eltopia Branch Canal 4.6	Water	3,217	3,217
FPL Energy Vansycle LLC (OR)	Wind	433,679	433,679
FPL Energy Vansycle LLC (WA)	Wind	15,343	15,343
Gorge	Water	804,475	804,475
Grand Coulee	Water	37,028	37,028
Hills Creek	Water	174	174
Klondike Wind Power	Wind	3,929	3,929
Klondike Windpower III	Wind	11,529	11,529
Lookout Point	Water	921	921
Main Canal Headworks	Water	43,678	43,678
Newhalem	Water	0	0
Palisades Dam	Water	3,944	3,944
Potholes East Canal 66.0	Water	1,870	1,870
Priest Rapids	Water	17,941	17,941
Ross	Water	540,891	540,891
Russell D Smith	Water	5,514	5,514
South Fork Tolt	Water	35,283	35,283

Summer Falls Power Plant	Water	162,991	162,991
Wanapum	Water	4,251	4,251
Waste Management Columbia Ridge LFGTE	Landfill Gas	100,927	100,927
West Point Treatment Plant	Natural Gas	0	
	Other Biomass Gas	13,241	13,241
Total		4,946,321	4,946,321

Skamania County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	120,589
Natural Gas	0.00 %	0
Nuclear	10.92 %	15,552
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	6,254
Total	100.00 %	142,395

BPA Claims	
Fuel	MWh
Hydro	120,589
Nuclear	15,552
SubTotal	136,141
BPA Unspecified Purchase	6,254
BPA Total	142,395

Snohomish County PUD #1			
U	Utility Fuel Mix		
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.99 %	65,472	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	73.82 %	4,896,819	
Natural Gas	0.00 %	0	
Nuclear	9.31 %	617,771	
Other Biogenic	0.02 %	1,132	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	1.21 %	80,280	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	10.90 %	722,952	
Unspecified	3.75 %	248,444	
Total	100.00 %	6,632,870	

BPA Claims	
Fuel	MWh
Hydro	4,790,259
Nuclear	617,771
SubTotal	5,408,030
BPA Unspecified Purchase	248,444
BPA Total	5,656,474

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Bonneville	Water	6,236	6,236
Brush Creek Solar	Solar	8,988	8,988
Chief Joseph	Water	35,259	35,259
Condon Windpower LLC	Wind	19,952	19,952
Cougar	Water	531	531
Distributed generation - solar (WA)	Solar	36,700	36,700
Distributed GenerationSolar (OR)	Solar	5,192	5,192
FPL Energy Vansycle LLC (WA)	Wind	41,594	41,594
Grand Coulee	Water	56,474	56,474
Hampton Lumber Mill	Wood/Wood Waste Solids	65,472	65,472
Hay Canyon Wind Power LLC	Wind	350,608	350,608
Hills Creek	Water	267	267
Klondike Wind Power	Wind	11,105	11,105
Klondike Windpower III	Wind	31,039	31,039
Lookout Point	Water	1,400	1,400
Morgan Solar Center	Solar	9,634	9,634
Ontario Solar Center	Solar	9,608	9,608
Palisades	Unknown		0
Palisades Dam	Water	6,003	6,003
Qualco Energy	Other Biomass Solids	1,132	1,132
SulusSolar17	Solar	4,784	4,784
Vale Solar Center	Solar	5,374	5,374
Wheat Field Wind Power Project	Wind	185,497	185,497
White Creek Wind Farm	Wind	83,157	83,157

Woods Creek	Water	390	390
Total		976 396	976 396

Steilacoom Electric Utility			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	32,608	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	4,205	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	1,691	
Total	100.00 %	38,504	

BPA Claims		
Fuel	MWh	
Hydro	32,608	
Nuclear	4,205	
SubTotal	36,813	
BPA Unspecified Purchase	1,691	
BPA Total	38,504	

Sumas, City of			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	25,702	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	3,315	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	1,333	
Total	100.00 %	30,350	

BPA Claims		
Fuel	MWh	
Hydro	25,702	
Nuclear	3,315	
SubTotal	29,017	
BPA Unspecified Purchase	1,333	
BPA Total	30,350	

Tacoma Power		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.75 %	36,019
Coal	0.00 %	0
Geothermal	0.37 %	18,000
Hydro	80.51 %	3,864,226
Natural Gas	0.00 %	0
Nuclear	5.84 %	280,288
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	198
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	10.18 %	488,871
Unspecified	2.35 %	112,721
Total	100.00 %	4,800,323

BPA Claims		
Fuel	MWh	
Hydro	2,173,379	
Nuclear	280,288	
SubTotal	2,453,667	
BPA Unspecified Purchase	112,721	
BPA Total	2,566,388	

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Alder	Water	113,796	113,796
Benson Creek Windfarm (Burnt River)	Wind	28,209	28,209
Bonneville	Water	3,138	3,138
Burley Butte Windpark	Wind	56,106	56,106
Chief Joseph	Water	17,752	17,752
Condon Windpower LLC	Wind	4,752	4,752
Cougar	Water	265	265
Cushman 1	Water	56,472	56,472
Cushman 2	Water	93,058	93,058
Distributed GenerationSolar (WA)	Solar	198	198
Durbin Creek Windfarm (Burnt River)	Wind	24,782	24,782
Elkhorn Valley Wind Farm	Wind	32,000	32,000
FPL Energy Vansycle LLC (WA)	Wind	10,451	10,451
Grand Coulee	Water	28,442	28,442
Grand Coulee Project Hydro Authority	Water	138,712	138,712
Hills Creek	Water	134	134
Hood Street Reservoir	Water	1,941	1,941
Hot Springs Windfarm LLC	Wind	27,515	27,515
Jett Creek Windfarm (Burnt River)	Wind	8,363	8,363
Klondike Wind Power	Wind	2,920	2,920
Klondike Windpower III	Wind	7,724	7,724
LaGrande	Water	189,725	189,725

Lookout Point	Water	704	704
Mayfield	Water	389,879	389,879
Milner Dam Wind Park LLC	Wind	51,216	51,216
Mossyrock	Water	621,398	621,398
Neal Hot Springs Geothermal Project	Geothermal	18,000	18,000
Nine Canyon	Wind	16,375	16,375
Palisades Dam	Water	3,029	3,029
Payne's Ferry	Wind	61,653	61,653
Pilgrim Stage Wind Park	Wind	31,677	31,677
Power County Wind Park North	Wind	26,797	26,797
Power County Wind Park South	Wind	23,203	23,203
Priest Rapids	Water	7,250	7,250
Prospector Windfarm (Burnt River)	Wind	25,434	25,434
Sierra Pacific Aberdeen	Wood/Wood Waste Solids	36,019	36,019
Wanapum	Water	9,186	9,186
White Creek Wind Farm	Wind	49,694	49,694
Wynoochee	Water	15,966	15,966
Total		2,233,935	2,233,935

Tanner Electric Coop			
Utility Fuel Mix			
Fuel	Percent	Total MWh	
Biogas	0.00 %	0	
Biomass	0.00 %	0	
Coal	0.00 %	0	
Geothermal	0.00 %	0	
Hydro	84.69 %	82,838	
Natural Gas	0.00 %	0	
Nuclear	10.92 %	10,683	
Other Biogenic	0.00 %	0	
Other Non-Biogenic	0.00 %	0	
Petroleum	0.00 %	0	
Solar	0.00 %	0	
Unknown	0.00 %	0	
Waste	0.00 %	0	
Wind	0.00 %	0	
Unspecified	4.39 %	4,296	
Total	100.00 %	97,817	

BPA Claims		
Fuel	MWh	
Hydro	82,838	
Nuclear	10,683	
SubTotal	93,521	
BPA Unspecified Purchase	4,297	
BPA Total	97,818	

Vera Water & Power		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	80.38 %	184,322
Natural Gas	0.00 %	0
Nuclear	10.36 %	23,771
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	9.26 %	21,246
Total	100.00 %	229,339

BPA Claims	
Fuel	MWh
Hydro	184,322
Nuclear	23,771
SubTotal	208,093
BPA Unspecified Purchase	9,560
BPA Total	217,653

Utility Unspecified Purchases	
Туре	MWh
Unspecified Purchase	11,685
Total	11,685

Wahkiakum County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	37,799
Natural Gas	0.00 %	0
Nuclear	10.92 %	4,875
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	1,960
Total	100.00 %	44,634

BPA Claims	
Fuel	MWh
Hydro	37,799
Nuclear	4,875
SubTotal	42,674
BPA Unspecified Purchase	1,961
BPA Total	44,635

Whatcom County PUD #1		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	197,775
Natural Gas	0.00 %	0
Nuclear	10.92 %	25,506
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	10,257
Total	100.00 %	233,538

BPA Claims	
Fuel	MWh
Hydro	197,775
Nuclear	25,506
SubTotal	223,281
BPA Unspecified Purchase	10,258
BPA Total	233,539

Yakama Power		
Utility Fuel Mix		
Fuel	Percent	Total MWh
Biogas	0.00 %	0
Biomass	0.00 %	0
Coal	0.00 %	0
Geothermal	0.00 %	0
Hydro	84.69 %	124,903
Natural Gas	0.00 %	0
Nuclear	10.92 %	16,108
Other Biogenic	0.00 %	0
Other Non-Biogenic	0.00 %	0
Petroleum	0.00 %	0
Solar	0.00 %	0
Unknown	0.00 %	0
Waste	0.00 %	0
Wind	0.00 %	0
Unspecified	4.39 %	6,478
Total	100.00 %	147,489

BPA Claims	
Fuel	MWh
Hydro	124,903
Nuclear	16,108
SubTotal	141,011
BPA Unspecified Purchase	6,477
BPA Total	147,488