



Department of Commerce

Innovation is in our nature.

Washington State Electric Utility Fuel Mix Disclosure Reports For Calendar Year 2015

May 2017

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Acknowledgements

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Forward

The Washington State Fuel Mix Disclosure process is designed to provide utilities an assessment of their 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 360-725-3120.

About the Washington State Electric Utilities Fuel Mix

The Fuel Mix Disclosure Law, RCW 19.29A, requires Washington State 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 (hereafter, 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 assign fuel type and emissions information to all of the power each utility claims in the reporting process. Power serving Washington utilities comes from three sources: 1) specific power plants, 2) the Bonneville Power Administration (BPA), and 3) the spot market.

In order to build a fuel mix picture for each, utility claims are assessed by type. Claims for power from specific plants receive the mix of the fuels used by that plant. Claims for power from BPA are connected with these plants and associated sources from which BPA acquired power over the preceding year. Claims to power from the spot market are assigned an estimated mix of fuels based upon a calculation of the power remaining, or unclaimed power, on the grid after specific plant claims have been removed.



The power grid, in this case, is defined as the electricity generated within the Northwest Power Pool. The Northwest Power Pool (NWPP) includes Washington, Oregon, Idaho, Utah, and parts of California, Montana, Wyoming and Nevada. It is assumed that power generated by plants in the pool serves customers residing in the pool.

The equation for determining the NWPP Net System Power is: System Power Generated in the NWPP minus Power Claimed from Specific Plant Sources equals the remaining power. The specific fuel sources for the Net System Power in the NWPP region are identified and are used to determine a NWPP Net System Fuel Mix.



After the NWPP Net System Fuel Mix value has been calculated, it is assigned to all utility claims of spot market purchases.

How is information presented in this report?

State level fuel mix information, expressed as power, fuel type and emissions, is presented first. The state level information is the aggregate of all of the calculated individual utility fuel mix values. The Northwest Power Pool Net System Mix information is described next and details the market power component of the state fuel mix. Following these tables and figures is a full description of the fuel mix for each electric utility in the State.

Notes

- Several utilities submitted late, but minor, changes to Commerce for the 2015 Fuel Mix Disclosure report. A reporting by the EIA was discovered and corrected. In addition, Commerce also made some changes to the categorization of certain electric power sales.
- For the 2015 calendar year, several changes were made to the fuel categories. Under the Fuel Mix Disclosure Law, cogeneration is a voluntary subcategory for natural gas. Therefore, “Cogeneration” is now incorporated into “Natural Gas” for aggregate reporting.
- The category of “Biogas” is new for 2015 and consists of landfill gas, on-farm anaerobic digesters, and wastewater treatment facilities.
- The “Other Biogenic” category consists of biogenic municipal solid waste, other biomass solids and sludge waste.
- The “Other Non-biogenic” category consists of purchased steam, waste heat, other fuel and other gas.
- The “Waste” category applies primarily to incineration of municipal solid waste. Historically, it also applied to combustion of pulping liquids in pulp and paper mills, which have now been moved into the “Biomass” category. The “Biomass” category also includes the combustion of waste wood solids.

Glossary

- “Claims on Resources” refers to power obtained from specific generation facilities, with fuel source information obtained from the US Energy Information Administration.

- “Market Purchases” refers to power obtained without known (specified) fuel sources. Commerce calculates and assigns a fuel mix to power obtained on the market.
- “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 featured in the “Market Purchases” table.
- “BPA Markets” are the portion of delivered BPA power that BPA purchased on the market and/or from another system without knowledge of specific plant or fuel sources.
- “BPA Slice Wind w/o RECs” includes a small amount of wind power that is not bundled with the Renewable Energy Credits (RECs) associated with that power. Such power is assigned the net system fuel mix, as though it were a market purchase.

Fuel Mix Software Change

For the 2015 calendar year the Department of Commerce began using a new Fuel Mix Software system to process data submitted by utilities and from other sources. The advantages to the new software system are listed below:

Hosted in-house rather than via a contractor:

- Increased access to IS technical staff
- Greater programmatic input into system design and operation
- Centralized, robust software platform
- Renewed ability to document process

Improved access to data sources used by software system:

- Utility claims
- Power plant generation
- Ability to adjust claims and generation
- Emissions rates and plant emissions

Improved ability to upload data and analyze output:

- Upload process is streamlined self-regulating
- Interim reports allowing data comparisons
- Auditable and traceable features built-in

Washington State Electric Utilities: 2015 Graphs and Tables

Washington State Aggregate Fuel Mix

The Washington “fuel mix” is the aggregate of fuel sources associated with the electricity delivered by all electric utilities to end users in the state of 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: Washington State Electric Utilities: Aggregate Fuel Mix 2015

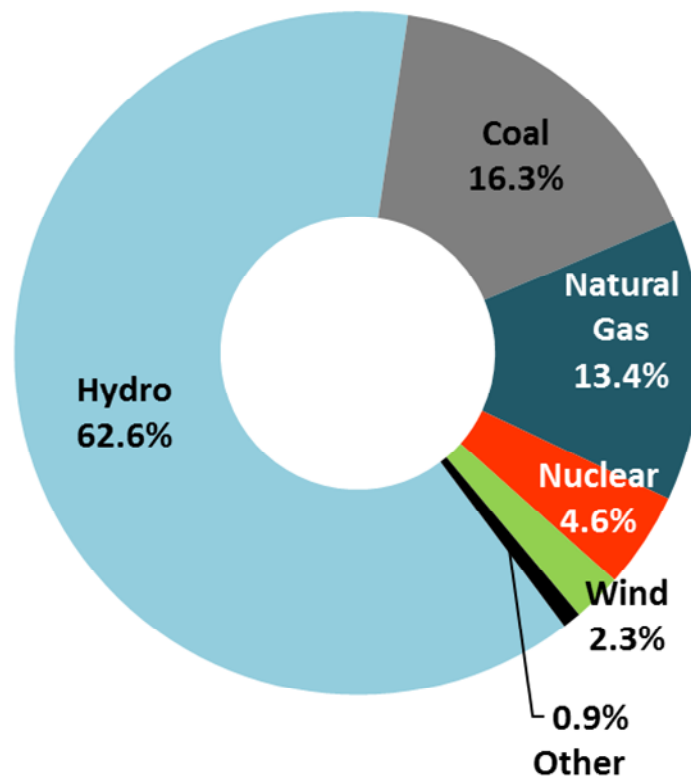


Table 1: Washington State Electric Utilities: Aggregate Fuel Mix 2015

Fuel Type	Unspecified (market) MWh	Specified (plant claims) MWh	Total MWh	Percent
Biogas	0	133,132	133,132	0.2%
Biomass	156,018	245,391	401,408	0.5%
Coal	4,296,275	10,092,718	14,388,993	16.3%
Geothermal	0	16,085	16,085	0.0%
Hydro	3,762,458	51,544,401	55,306,859	62.6%
Natural Gas	1,532,197	10,275,637	11,807,835	13.4%
Nuclear	180,821	3,841,134	4,021,955	4.6%
Other Biogenic	0	50,184	50,184	0.1%
Other Non-Biogen	64,395	8,742	73,137	0.1%
Petroleum	33,596	13,512	47,108	0.1%
Solar	0	8,807	8,807	0.0%
Waste	0	35,566	35,566	0.0%
Wind	0	2,029,032	2,029,032	2.3%
Total	10,025,760	78,294,341	88,320,101	100.0%

Figure 2: Washington State Electric Utilities: Aggregate Fuel Mix 2000-2015 (Megawatt-hours)

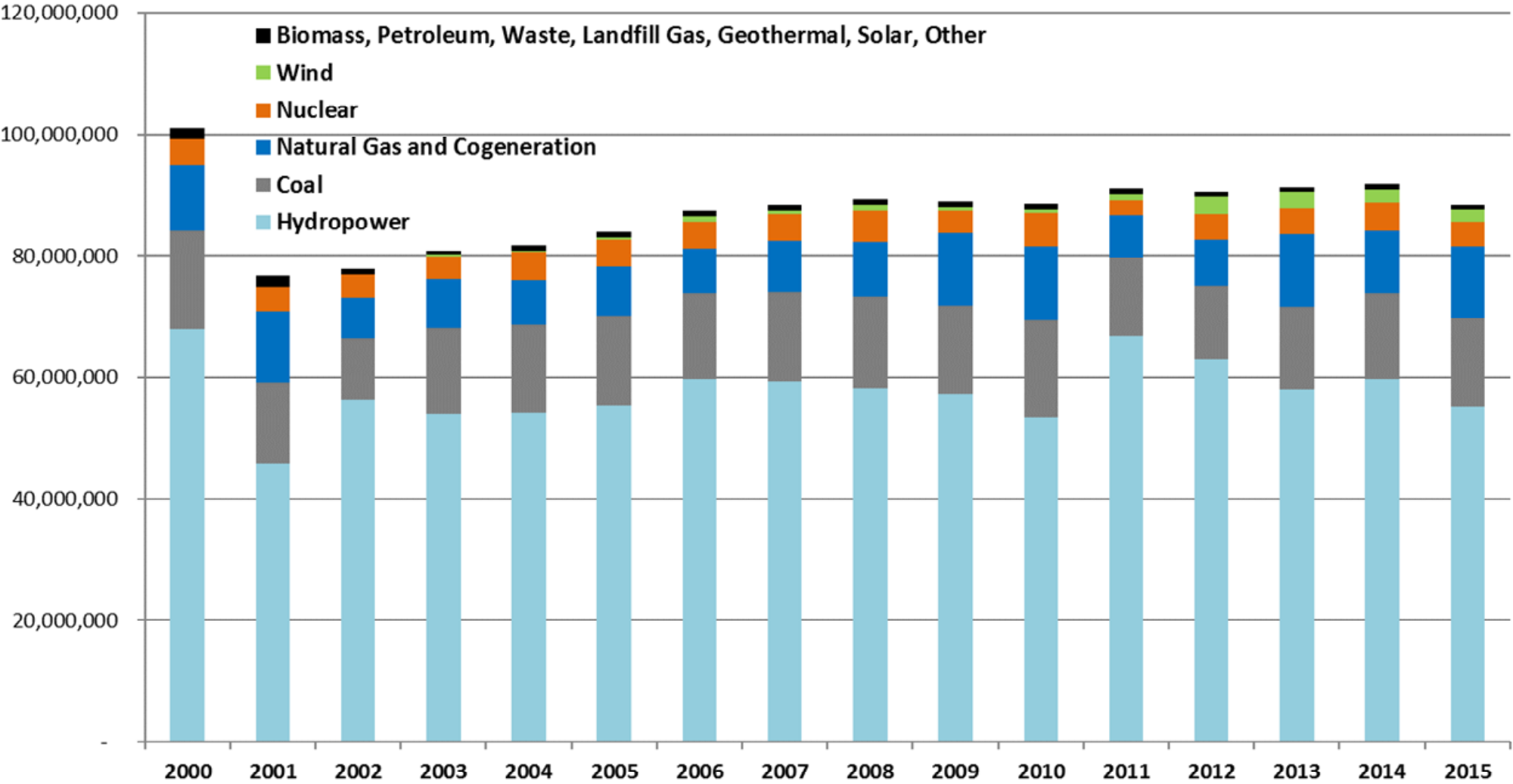


Table 2: Washington State Electric Utilities: Aggregate Fuel Mix 2000-2015 (Megawatt-hours)

Fuel Source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hydropwer	67,889,834	45,853,455	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	62,984,536	58,074,493	59,723,805	55,306,859
Coal	16,243,438	13,247,976	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	12,149,258	13,519,852	14,026,540	14,388,993
Natural Gas	10,771,994	11,863,293	6,606,079	7,961,221	7,379,356	7,986,135	7,319,961	8,459,744	9,021,054	11,846,700	12,207,985	7,003,278	7,439,486	11,949,790	10,442,484	11,807,835
Nuclear	4,285,939	3,975,371	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	4,239,398	4,247,504	4,617,391	4,021,955
Biomass	1,100,469	937,515	392,378	434,700	536,643	587,085	392,712	460,983	415,226	445,076	492,371	446,890	310,812	260,972	300,416	401,408
Petroleum	401,383	489,650	22,244	34,957	53,046	44,233	62,232	69,267	69,937	94,360	81,372	68,539	67,580	64,611	59,674	47,108
Waste	159,888	236,666	23,471	139,056	102,864	150,955	331,963	288,528	276,669	296,180	332,719	336,948	303,066	221,914	203,960	158,887
Geothermal	143,024	158,779	-	-	-	-	14,399	11,189	16,866	19,237	17,376	18,107	17,003	16,138	17,911	16,085
Landfill Gas	68,978	70,807	220,705	75,125	134,122	80,500	57,858	49,041	23,043	16,058	18,787	49,209	83,665	60,741	104,431	133,132
Wind	-	23,822	163,134	320,540	346,470	432,667	867,392	545,622	1,010,928	587,994	567,281	1,017,702	3,011,137	2,859,415	2,219,613	2,029,032
Other			233,995	6,991	37,379	31,156	10,863	12,923	19,391	28,650	28,504	27,307	36,396	39,528	59,964	
Solar													1,433	1,709	6,618	8,807
Total	101,064,948	76,857,334	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	90,643,771	91,316,669	91,782,808	88,320,101

Washington State Electric Utilities: Primary Emissions

Figure 3: Washington State Electric Utilities: Aggregate Carbon Dioxide Emissions 2015

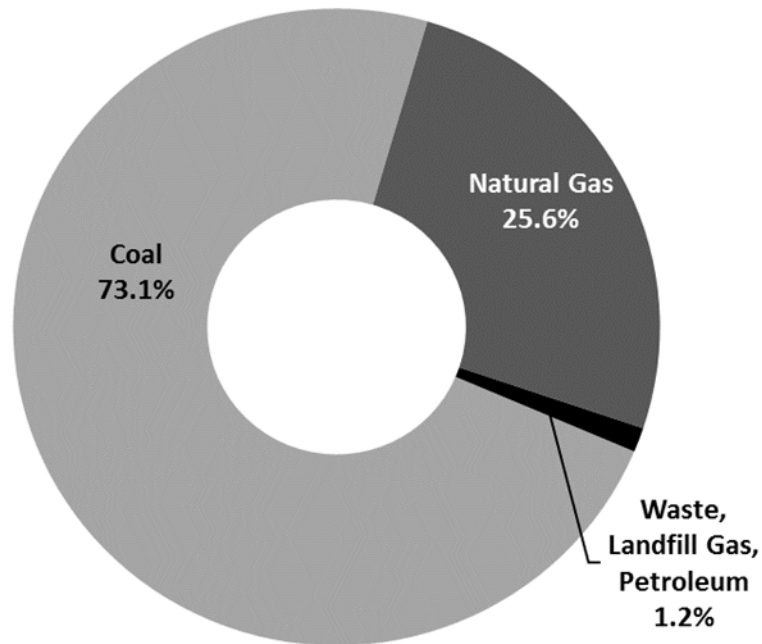


Table 3: Washington State Electric Utilities: Aggregate Primary Emissions 2015

Carbon Dioxide Emissions	Short Tons	Metric Tons
Coal	15,468,167	14,033,266
Natural Gas	5,416,550	4,914,084
Waste	109,880	99,687
Landfill Gas	73,299	68,490
Petroleum	79,656	72,267
Total	21,147,553	19,184,722
Other Emissions	Short Tons	Metric Tons
Sulfur Dioxide	30,684	27,838
Nitrogen Oxides	27,649	25,085
	Pounds	
Mercury	353	

Figure 4: Washington State Electric Utilities: Aggregate Primary Emissions 2005-2015 (short tons)

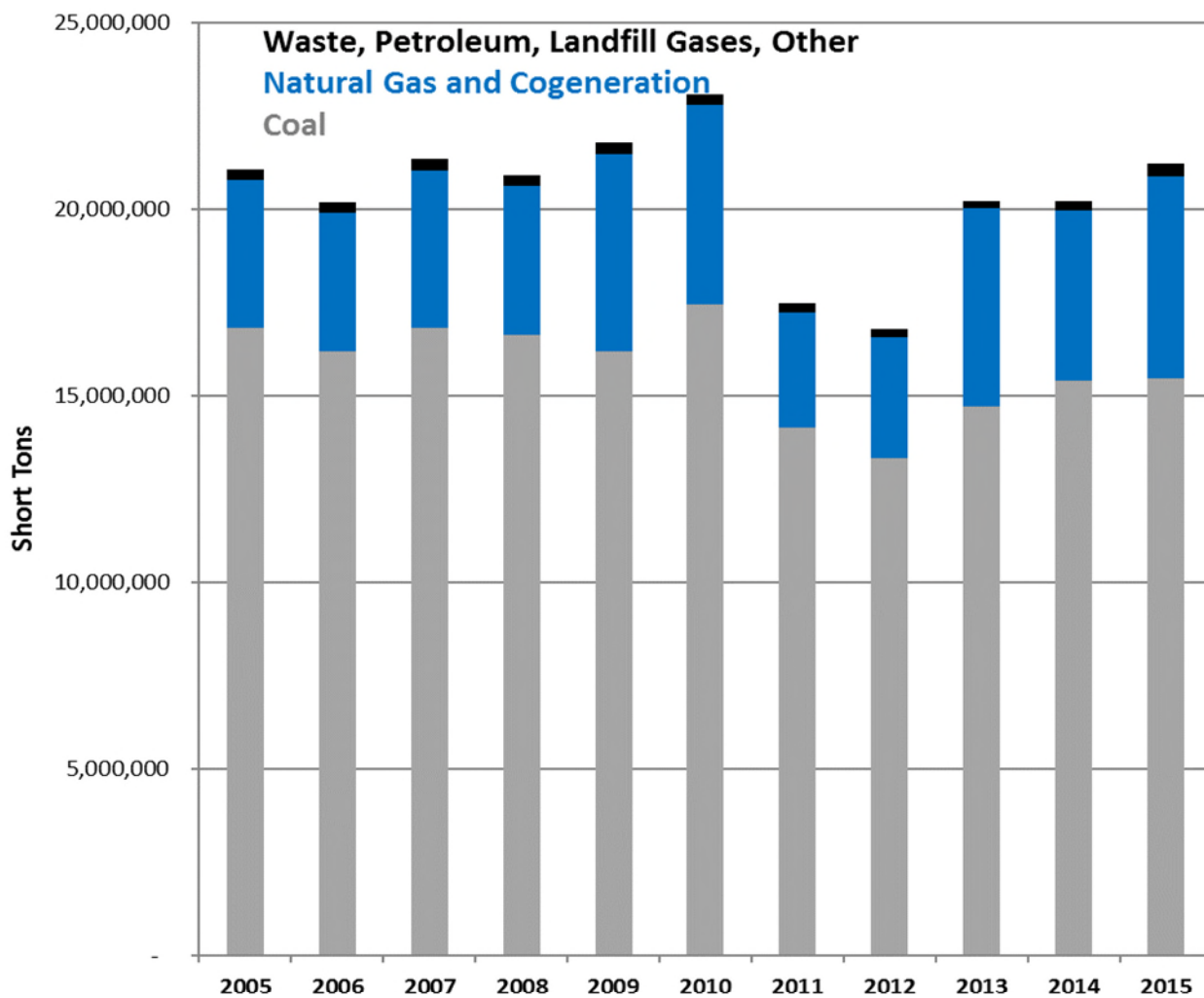


Table 4: Washington State Electric Utilities: Aggregate Carbon Dioxide Emissions 2006-2015

Fuel	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Coal	16,192,193	16,807,612	16,623,196	16,184,895	17,446,655	14,131,168	13,315,348	14,707,901	15,388,817	15,468,167
Natural Gas	3,690,128	4,231,567	3,999,440	5,294,879	5,332,433	3,081,956	3,246,821	5,306,865	4,585,795	5,416,550
Waste	132,414	133,872	122,435	128,390	139,575	146,863	101,208	80,093	104,993	109,880
Petroleum	93,863	105,428	111,529	133,445	120,419	76,738	75,656	74,618	66,775	79,656
Landfill Gases	33,923	28,215	14,342	10,016	10,694	33,894	57,696	43,376	75,498	73,299
Other	3,631	4,959	-	-	-	-	-	-	-	-
Total	20,146,152	21,311,653	20,870,942	21,751,625	23,049,776	17,470,620	16,796,730	20,212,854	20,221,878	21,147,553

Fuel	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Coal	14,689,298	15,247,597	15,080,297	14,682,678	15,827,326	12,819,569	12,079,471	13,342,773	13,960,488	14,032,474
Natural Gas	3,347,625	3,838,810	3,628,228	4,803,430	4,837,498	2,795,902	2,945,464	4,814,303	4,160,160	4,913,807
Waste	120,124	121,447	111,071	116,473	126,620	133,232	91,814	72,659	95,248	99,681
Petroleum	85,151	95,643	101,177	121,059	109,242	69,616	68,634	67,692	60,577	72,263
Landfill Gases	30,774	25,596	13,011	9,086	9,701	30,748	52,341	39,350	68,490	66,496
Other	3,294	4,499	-	-	-	-	-	-	-	-
Total	18,276,267	19,333,591	18,933,785	19,732,726	20,910,388	15,849,067	15,237,724	18,336,778	18,344,964	19,184,722

Northwest Power Pool Net System Fuel Mix

The Northwest Power Pool (NWPP) Net System Fuel Mix, also referred to as the Market or Unspecified Power Fuel Mix, is the calculated mix of fuels present in the electricity spot market available for purchase throughout the year. The NWPP includes power generated within Washington, Oregon, Idaho, Utah, and parts of California, Montana, Wyoming and Nevada.

Figure 5: Northwest Power Pool Net System Fuel Mix: Spot Market Purchases 2015

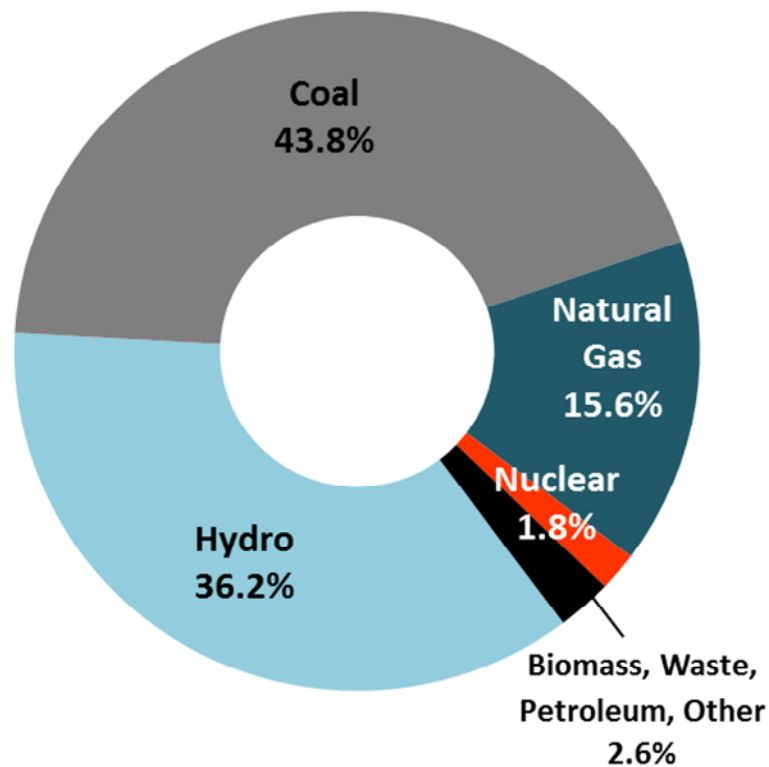


Table 5: Northwest Power Pool Net System Fuel Mix: Spot Market Purchases 2015

Fuel Type	Megawatts-hours	Percent
Coal	72,233,172	43.7%
Hydro	59,570,658	36.1%
Natural gas	25,621,488	15.5%
Nuclear	3,040,135	1.8%
Biomass	2,623,120	1.6%
Other non-biogenic	1,082,671	0.7%
Petroleum	564,771	0.3%
Biogas	494,808	0.3%
Geothermal	-	0.0%
Other biogenic	-	0.0%
Solar	-	0.0%
Waste	-	0.0%
Wind	-	0.0%
Total	165,230,823	100.0%

Figure 6: Northwest Power Pool Net System Fuel Mix: Carbon Dioxide Emissions 2015

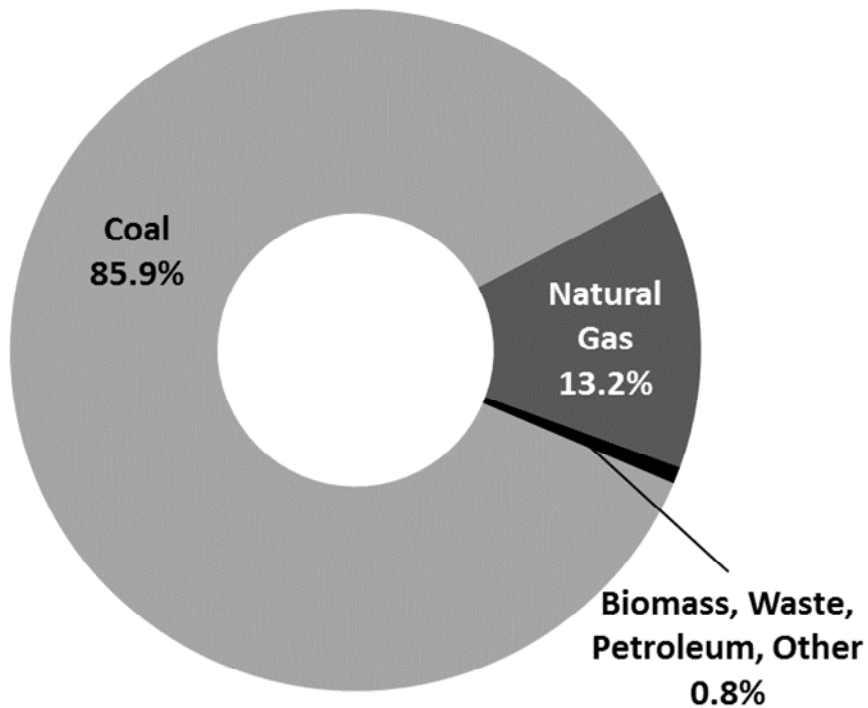


Table 6: Northwest Power Pool Net System Fuel Mix: Primary Emissions 2015

Carbon Dioxide Emissions	Short Tons	Metric Tons
Coal	75,456,938	68,457,191
Natural Gas	11,630,594	10,551,684
Waste, Landfill, Petroleum, Other	1,623,085	1,472,186
Total	88,710,617	80,463,145
Other Emissions	Short Tons	Metric Tons
Sulfur Dioxide	151,147	137,095
Nitrogen Oxides	128,093	116,184
	Pounds	
Mercury	2,427	

Table 7: 2015 Northwest Power Total Generation

Fuel Type	Megawatt-hour	Percent
Biogas	709,764	0.24%
Biomass	2,915,583	0.97%
Coal	92,552,553	30.71%
Geothermal	2,978,417	0.99%
Hydro	127,482,042	42.29%
Natural Gas	42,074,635	13.96%
Nuclear	8,160,912	2.71%
Other Biogenic	323,339	0.11%
Other Non-Biogenic	1,132,202	0.38%
Petroleum	587,403	0.19%
Solar	287,133	0.10%
Waste	99,848	0.03%
Wind	22,066,243	7.32%
Total	301,370,074	100.0%

Alder Mutual Light

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	6	4	10
Coal	2.35 %	0	106	106
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	3,798	93	3,891
Natural Gas	0.86 %	1	38	39
Nuclear	10.18 %	455	4	459
Other Biogenic	0.03 %	1	0	1
Other Non-Biogenic	0.04 %	0	2	2
Petroleum	0.02 %	0	1	1
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	4,261	248	4,509

BPA Claims

Fuel	MWh
Biomass	6
Hydro	3,798
Natural Gas	1
Nuclear	455
Other Biogenic	1
SubTotal	4,261
BPA Market Purchase	248
BPA Total	4,509

Asotin County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	8	5	12
Coal	2.35 %	0	134	134
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	4,809	117	4,926
Natural Gas	0.86 %	1	48	49
Nuclear	10.18 %	575	6	581
Other Biogenic	0.03 %	2	0	2
Other Non-Biogenic	0.04 %	0	2	2
Petroleum	0.02 %	0	1	1
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	5,395	313	5,707

BPA Claims

Fuel	MWh
Biomass	8
Hydro	4,809
Natural Gas	1
Nuclear	575
Other Biogenic	2
SubTotal	5,395
BPA Market Purchase	313
BPA Total	5,708

Avista (WA)

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	2.37 %	141,071	1,910	142,980
Coal	19.29 %	1,111,889	52,585	1,164,473
Geothermal	0.00 %	0	0	0
Hydro	35.43 %	2,093,305	46,051	2,139,356
Natural Gas	38.44 %	2,302,122	18,753	2,320,876
Nuclear	0.04 %	0	2,213	2,213
Other Biogenic	0.61 %	36,981	0	36,981
Other Non-Biogenic	0.01 %	0	788	788
Petroleum	0.02 %	967	411	1,379
Solar	0.00 %	0	0	0
Waste	0.59 %	35,532	0	35,532
Wind	3.20 %	193,311	0	193,311
Total	100.00 %	5,915,178	122,711	6,037,889

Market Purchases

Type	MWh
Utility Market Purchase	122,711
Total	122,711

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Boulder Park	Natural Gas	14,769	14,769
Cabinet Gorge	Water	382,961	382,961
Colstrip	Distillate Fuel Oil	428	
	Gaseous Propane	0	
	Waste/Other Oil	539	
	Subbituminous Coal	1,111,889	1,112,856
Coyote Springs II	Natural Gas	1,245,862	1,245,862
Kettle Falls Generating Station	Wood/Wood Waste Solids	121,703	
	Natural Gas	1,675	123,378
Little Falls (WA)	Water	97,196	97,196
Long Lake	Water	259,706	259,706
Meyers Falls	Water	5,017	5,017
Monroe Street	Water	32,367	32,367
Nine Mile	Water	25,748	25,748
Northeast (WA)	Natural Gas	707	707
Noxon Rapids	Water	629,410	629,410
Palouse	Wind	193,311	193,311
Plummer Cogen	Wood/Wood Waste Solids	19,368	19,368
Post Falls	Water	28,186	28,186
Priest Rapids	Water	209,522	209,522
Rathdrum	Natural Gas	34,609	34,609
Rathdrum Power LLC	Natural Gas	1,004,500	1,004,500
Rocky Reach	Water	229,189	229,189
Sheep Creek Hydro	Water	5,549	5,549
Upper Falls	Water	14,771	14,771
Upriver Dam Hydro Plant	Water	29,946	29,946
Wells	Water	143,737	143,737

Wheelabrator Spokane	Biogenic Municipal Solid Waste	36,981	
	Non-biogenic Municipal Solid Waste	35,532	72,513
Total		5,915,178	5,915,178

Benton County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.32 %	2,012	3,848	5,860
Coal	5.87 %	0	105,968	105,968
Geothermal	0.00 %	0	0	0
Hydro	76.79 %	1,292,329	92,802	1,385,131
Natural Gas	5.19 %	55,870	37,792	93,662
Nuclear	8.74 %	153,202	4,460	157,662
Other Biogenic	0.03 %	485	0	485
Other Non-Biogenic	0.09 %	0	1,588	1,588
Petroleum	0.05 %	0	829	829
Solar	0.03 %	562	0	562
Waste	0.00 %	0	0	0
Wind	2.89 %	52,171	0	52,171
Total	100.00 %	1,556,631	247,287	1,803,918

BPA Claims

Fuel	MWh
Biomass	2,012
Hydro	1,280,163
Natural Gas	353
Nuclear	153,202
Other Biogenic	485
SubTotal	1,436,215
BPA Market Purchase	83,221
BPA Total	1,519,436

Market Purchases

Type	MWh
Utility Market Purchase	164,067
Total	164,067

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Condon Windpower LLC	Wind	2,351	2,351
Distributed Generation--Solar (WA)	Solar	562	562
FPL Energy Vansycle LLC (WA)	Wind	4,457	4,457
Frederickson Power LP	Natural Gas	55,517	55,517
Klondike Wind Power	Wind	1,227	1,227
Klondike Windpower III	Wind	2,997	2,997
Nine Canyon	Wind	23,012	23,012
Packwood	Water	12,166	12,166
White Creek Wind Farm	Wind	18,127	18,127
Total		120,416	120,416

Benton Rural Electric Assn				
Utility Fuel Mix				
Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.27 %	793	889	1,682
Coal	3.93 %	0	24,470	24,470
Geothermal	0.00 %	0	0	0
Hydro	84.41 %	504,613	21,430	526,043
Natural Gas	1.42 %	139	8,727	8,866
Nuclear	9.85 %	60,389	1,030	61,419
Other Biogenic	0.03 %	191	0	191
Other Non-Biogenic	0.06 %	0	367	367
Petroleum	0.03 %	0	191	191
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	566,125	57,104	623,229

BPA Claims	
Fuel	MWh
Biomass	793
Hydro	504,613
Natural Gas	139
Nuclear	60,389
Other Biogenic	191
SubTotal	566,125
BPA Market Purchase	32,804
BPA Total	598,929

Market Purchases	
Type	MWh
Utility Market Purchase	24,299
Total	24,299

Big Bend Electric Coop

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	769	495	1,263
Coal	2.35 %	0	13,622	13,622
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	488,982	11,929	500,912
Natural Gas	0.86 %	135	4,858	4,993
Nuclear	10.18 %	58,518	573	59,092
Other Biogenic	0.03 %	185	0	185
Other Non-Biogenic	0.04 %	0	204	204
Petroleum	0.02 %	0	107	107
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	548,589	31,788	580,378

BPA Claims

Fuel	MWh
Biomass	769
Hydro	488,982
Natural Gas	135
Nuclear	58,518
Other Biogenic	185
SubTotal	548,589
BPA Market Purchase	31,788
BPA Total	580,377

Centralia City Light				
Utility Fuel Mix				
Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.20 %	242	266	509
Coal	2.83 %	0	7,336	7,336
Geothermal	0.00 %	0	0	0
Hydro	88.65 %	223,718	6,425	230,142
Natural Gas	1.02 %	43	2,616	2,659
Nuclear	7.22 %	18,448	309	18,756
Other Biogenic	0.02 %	58	0	58
Other Non-Biogenic	0.04 %	0	110	110
Petroleum	0.02 %	0	57	57
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	242,509	17,119	259,627

BPA Claims	
Fuel	MWh
Biomass	242
Hydro	154,150
Natural Gas	43
Nuclear	18,448
Other Biogenic	58
SubTotal	172,941
BPA Market Purchase	10,021
BPA Total	182,962

Market Purchases	
Type	MWh
Utility Market Purchase	7,099
Total	7,099

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Yelm	Water	69,568	69,568
Total		69,568	69,568

Chelan County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.07 %	0	1,142	1,142
Coal	1.97 %	0	31,448	31,448
Geothermal	0.00 %	0	0	0
Hydro	97.13 %	1,521,886	27,541	1,549,427
Natural Gas	0.70 %	0	11,216	11,216
Nuclear	0.08 %	0	1,324	1,324
Other Biogenic	0.00 %	0	0	0
Other Non-Biogenic	0.03 %	0	471	471
Petroleum	0.02 %	76	246	322
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	46	0	46
Total	100.00 %	1,522,008	73,388	1,595,396

Market Purchases

Type	MWh
Utility Market Purchase	73,388
Total	73,388

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Chelan	Water	415,173	415,173
Nine Canyon	Wind	46	46
Rock Island	Water	104,397	104,397
Rocky Reach	Water	1,001,358	1,001,358
Stehekin Diesel	Distillate Fuel Oil	76	76
Stehekin Hydro	Water	958	958
Total		1,522,008	1,522,008

Cheney Light Department

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.28 %	186	222	408
Coal	4.15 %	0	6,109	6,109
Geothermal	0.00 %	0	0	0
Hydro	84.14 %	118,535	5,350	123,885
Natural Gas	1.50 %	33	2,179	2,212
Nuclear	9.81 %	14,186	257	14,443
Other Biogenic	0.03 %	45	0	45
Other Non-Biogenic	0.06 %	0	92	92
Petroleum	0.03 %	0	48	48
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	132,985	14,257	147,242

BPA Claims

Fuel	MWh
Biomass	186
Hydro	118,535
Natural Gas	33
Nuclear	14,186
Other Biogenic	45
SubTotal	132,985
BPA Market Purchase	7,706
BPA Total	140,691

Market Purchases

Type	MWh
Utility Market Purchase	6,550
Total	6,550

Chewelah Electric Department

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	29	19	47
Coal	2.35 %	0	511	511
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	18,340	447	18,787
Natural Gas	0.86 %	5	182	187
Nuclear	10.18 %	2,195	22	2,216
Other Biogenic	0.03 %	7	0	7
Other Non-Biogenic	0.04 %	0	8	8
Petroleum	0.02 %	0	4	4
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	20,576	1,193	21,767

BPA Claims

Fuel	MWh
Biomass	29
Hydro	18,340
Natural Gas	5
Nuclear	2,195
Other Biogenic	7
SubTotal	20,576
BPA Market Purchase	1,193
BPA Total	21,769

City of Blaine

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	102	66	168
Coal	2.35 %	0	1,817	1,817
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	65,210	1,591	66,801
Natural Gas	0.86 %	18	648	666
Nuclear	10.18 %	7,804	76	7,880
Other Biogenic	0.03 %	25	0	25
Other Non-Biogenic	0.04 %	0	27	27
Petroleum	0.02 %	0	14	14
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	73,159	4,239	77,398

BPA Claims

Fuel	MWh
Biomass	102
Hydro	65,210
Natural Gas	18
Nuclear	7,804
Other Biogenic	25
SubTotal	73,159
BPA Market Purchase	4,239
BPA Total	77,398

Clallam County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	1.51 %	9,502	0	9,502
Biomass	0.21 %	822	529	1,352
Coal	2.31 %	0	14,577	14,577
Geothermal	0.00 %	0	0	0
Hydro	85.00 %	522,630	12,766	535,396
Natural Gas	0.85 %	144	5,199	5,343
Nuclear	10.04 %	62,622	614	63,235
Other Biogenic	0.03 %	198	0	198
Other Non-Biogenic	0.03 %	0	218	218
Petroleum	0.02 %	0	114	114
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	595,918	34,017	629,935

BPA Claims

Fuel	MWh
Biomass	822
Hydro	523,273
Natural Gas	144
Nuclear	62,622
Other Biogenic	198
SubTotal	587,059
BPA Market Purchase	34,017
BPA Total	621,076

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Hidden Hollow Energy	Landfill Gas	9,502	9,502
Packwood	Water	-643	-643
Total		8,859	8,859

Clark County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.32 %	3,291	11,238	14,529
Coal	6.87 %	0	309,451	309,451
Geothermal	0.00 %	0	0	0
Hydro	52.76 %	2,106,362	271,001	2,377,363
Natural Gas	34.03 %	1,422,986	110,361	1,533,347
Nuclear	5.85 %	250,606	13,024	263,631
Other Biogenic	0.02 %	794	0	794
Other Non-Biogenic	0.10 %	0	4,638	4,638
Petroleum	0.05 %	0	2,420	2,420
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	3,784,039	722,133	4,506,173

BPA Claims

Fuel	MWh
Biomass	3,291
Hydro	2,094,085
Natural Gas	578
Nuclear	250,606
Other Biogenic	794
SubTotal	2,349,354
BPA Market Purchase	136,132
BPA Total	2,485,486

Market Purchases

Type	MWh
Utility Market Purchase	585,999
Total	585,999

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Packwood	Water	12,277	12,277
River Road Gen Plant	Natural Gas	1,422,408	1,422,408
Total		1,434,685	1,434,685

Clearwater Power (WA)

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	31	20	50
Coal	2.35 %	0	542	542
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	19,456	475	19,931
Natural Gas	0.86 %	5	193	199
Nuclear	10.18 %	2,328	23	2,351
Other Biogenic	0.03 %	7	0	7
Other Non-Biogenic	0.04 %	0	8	8
Petroleum	0.02 %	0	4	4
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	21,827	1,265	23,092

BPA Claims

Fuel	MWh
Biomass	31
Hydro	19,456
Natural Gas	5
Nuclear	2,328
Other Biogenic	7
SubTotal	21,827
BPA Market Purchase	1,265
BPA Total	23,092

Columbia Rural Electric Assn

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	487	314	801
Coal	2.35 %	0	8,640	8,640
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	310,148	7,566	317,715
Natural Gas	0.86 %	86	3,081	3,167
Nuclear	10.18 %	37,117	364	37,480
Other Biogenic	0.03 %	118	0	118
Other Non-Biogenic	0.04 %	0	130	130
Petroleum	0.02 %	0	68	68
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	347,956	20,163	368,119

BPA Claims

Fuel	MWh
Biomass	487
Hydro	310,148
Natural Gas	86
Nuclear	37,117
Other Biogenic	118
SubTotal	347,956
BPA Market Purchase	20,163
BPA Total	368,119

Coulee Dam, Town of

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	21	14	35
Coal	2.35 %	0	378	378
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	13,581	331	13,913
Natural Gas	0.86 %	4	135	139
Nuclear	10.18 %	1,625	16	1,641
Other Biogenic	0.03 %	5	0	5
Other Non-Biogenic	0.04 %	0	6	6
Petroleum	0.02 %	0	3	3
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	15,236	883	16,120

BPA Claims

Fuel	MWh
Biomass	21
Hydro	13,581
Natural Gas	4
Nuclear	1,625
Other Biogenic	5
SubTotal	15,236
BPA Market Purchase	883
BPA Total	16,119

Cowlitz County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.30 %	5,893	8,857	14,750
Coal	4.91 %	0	243,905	243,905
Geothermal	0.00 %	0	0	0
Hydro	80.51 %	3,785,720	213,599	3,999,319
Natural Gas	1.77 %	1,035	86,985	88,019
Nuclear	9.24 %	448,659	10,265	458,924
Other Biogenic	0.03 %	1,422	0	1,422
Other Non-Biogenic	0.07 %	0	3,656	3,656
Petroleum	0.04 %	0	1,907	1,907
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	3.13 %	155,600	0	155,600
Total	100.00 %	4,398,329	569,174	4,967,502

BPA Claims

Fuel	MWh
Biomass	5,893
Hydro	3,749,026
Natural Gas	1,035
Nuclear	448,659
Other Biogenic	1,422
SubTotal	4,206,035
BPA Market Purchase	243,718
BPA Total	4,449,753

Market Purchases

Type	MWh
Utility Market Purchase	325,457
Total	325,457

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Condon Windpower LLC	Wind	1,910	1,910
FPL Energy Vansycle LLC (WA)	Wind	3,621	3,621
Harvest Wind Project	Wind	107,034	107,034
Klondike Wind Power	Wind	999	999
Klondike Windpower III	Wind	2,435	2,435
Nine Canyon	Wind	5,911	5,911
Swift 2	Water	23,259	23,259
Wanapum	Water	13,435	13,435
White Creek Wind Farm	Wind	33,690	33,690
Total		192,294	192,294

Douglas County PUD #1				
Utility Fuel Mix				
Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.00 %	0	0	0
Coal	0.00 %	0	0	0
Geothermal	0.00 %	0	0	0
Hydro	100.00 %	814,516	0	814,516
Natural Gas	0.00 %	0	0	0
Nuclear	0.00 %	0	0	0
Other Biogenic	0.00 %	0	0	0
Other Non-Biogenic	0.00 %	0	0	0
Petroleum	0.00 %	0	0	0
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	814,516	0	814,516

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Rocky Reach	Water	182,649	182,649
Wells	Water	631,867	631,867
Total		814,516	814,516

Eatonville Electric Department

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	36	23	59
Coal	2.35 %	0	633	633
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	22,708	554	23,262
Natural Gas	0.86 %	6	226	232
Nuclear	10.18 %	2,718	27	2,744
Other Biogenic	0.03 %	9	0	9
Other Non-Biogenic	0.04 %	0	9	9
Petroleum	0.02 %	0	5	5
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	25,477	1,477	26,953

BPA Claims

Fuel	MWh
Biomass	36
Hydro	22,708
Natural Gas	6
Nuclear	2,718
Other Biogenic	9
SubTotal	25,477
BPA Market Purchase	1,477
BPA Total	26,954

Ellensburg Electric Division

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	271	174	445
Coal	2.35 %	0	4,799	4,799
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	172,255	4,202	176,458
Natural Gas	0.86 %	48	1,711	1,759
Nuclear	10.18 %	20,614	202	20,816
Other Biogenic	0.03 %	65	0	65
Other Non-Biogenic	0.04 %	0	72	72
Petroleum	0.02 %	0	38	38
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	193,253	11,198	204,452

BPA Claims

Fuel	MWh
Biomass	271
Hydro	172,255
Natural Gas	48
Nuclear	20,614
Other Biogenic	65
SubTotal	193,253
BPA Market Purchase	11,198
BPA Total	204,451

Elmhurst Mutual Power & Light

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	346	223	569
Coal	2.35 %	0	6,140	6,140
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	220,406	5,377	225,783
Natural Gas	0.86 %	61	2,190	2,251
Nuclear	10.18 %	26,377	258	26,635
Other Biogenic	0.03 %	84	0	84
Other Non-Biogenic	0.04 %	0	92	92
Petroleum	0.02 %	0	48	48
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	247,274	14,328	261,602

BPA Claims

Fuel	MWh
Biomass	346
Hydro	220,406
Natural Gas	61
Nuclear	26,377
Other Biogenic	84
SubTotal	247,274
BPA Market Purchase	14,328
BPA Total	261,602

Ferry County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	140	90	231
Coal	2.35 %	0	2,488	2,488
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	89,315	2,179	91,494
Natural Gas	0.86 %	25	887	912
Nuclear	10.18 %	10,689	105	10,793
Other Biogenic	0.03 %	34	0	34
Other Non-Biogenic	0.04 %	0	37	37
Petroleum	0.02 %	0	19	19
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	100,203	5,805	106,008

BPA Claims

Fuel	MWh
Biomass	140
Hydro	89,315
Natural Gas	25
Nuclear	10,689
Other Biogenic	34
SubTotal	100,203
BPA Market Purchase	5,805
BPA Total	106,008

Franklin County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.28 %	1,275	1,728	3,003
Coal	4.39 %	0	47,579	47,579
Geothermal	0.00 %	0	0	0
Hydro	80.13 %	826,295	41,667	867,962
Natural Gas	2.98 %	15,347	16,968	32,315
Nuclear	9.15 %	97,096	2,002	99,098
Other Biogenic	0.03 %	308	0	308
Other Non-Biogenic	0.07 %	0	713	713
Petroleum	0.03 %	0	372	372
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	2.94 %	31,838	0	31,838
Total	100.00 %	972,159	111,029	1,083,188

BPA Claims

Fuel	MWh
Biomass	1,275
Hydro	811,341
Natural Gas	224
Nuclear	97,096
Other Biogenic	308
SubTotal	910,244
BPA Market Purchase	52,745
BPA Total	962,989

Market Purchases

Type	MWh
Utility Market Purchase	58,286
Total	58,286

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Distributed Generation--Hydro (WA)	Water	5,867	5,867
Frederickson Power LP	Natural Gas	15,123	15,123
Nine Canyon	Wind	18,415	18,415
Packwood	Water	9,087	9,087
White Creek Wind Farm	Wind	13,423	13,423
Total		61,915	61,915

Grant County PUD #2

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.55 %	60	25,189	25,249
Coal	15.06 %	0	693,644	693,644
Geothermal	0.00 %	0	0	0
Hydro	77.94 %	2,982,061	607,458	3,589,518
Natural Gas	5.37 %	10	247,377	247,387
Nuclear	0.73 %	4,533	29,194	33,727
Other Biogenic	0.00 %	14	0	14
Other Non-Biogenic	0.23 %	0	10,397	10,397
Petroleum	0.12 %	0	5,424	5,424
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	2,986,678	1,618,683	4,605,360

BPA Claims

Fuel	MWh
Biomass	60
Hydro	37,881
Natural Gas	10
Nuclear	4,533
Other Biogenic	14
SubTotal	42,498
BPA Market Purchase	2,461
BPA Total	44,959

Market Purchases

Type	MWh
Utility Market Purchase	1,616,222
Total	1,616,222

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
PEC Headworks	Water	23,158	23,158
Priest Rapids	Water	1,384,467	1,384,467
Quincy Chute	Water	36,716	36,716
Wanapum	Water	1,499,839	1,499,839
Total		2,944,180	2,944,180

Grays Harbor County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	1,175	756	1,930
Coal	2.35 %	0	20,816	20,816
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	747,239	18,229	765,468
Natural Gas	0.86 %	206	7,424	7,630
Nuclear	10.18 %	89,425	876	90,301
Other Biogenic	0.03 %	283	0	283
Other Non-Biogenic	0.04 %	0	312	312
Petroleum	0.02 %	0	163	163
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	838,328	48,576	886,903

BPA Claims

Fuel	MWh
Biomass	1,175
Hydro	747,239
Natural Gas	206
Nuclear	89,425
Other Biogenic	283
SubTotal	838,328
BPA Market Purchase	48,577
BPA Total	886,905

Inland Power & Light

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.21 %	1,203	774	1,977
Coal	2.28 %	0	21,318	21,318
Geothermal	0.00 %	0	0	0
Hydro	83.83 %	765,268	18,670	783,938
Natural Gas	0.84 %	211	7,603	7,814
Nuclear	9.89 %	91,582	897	92,479
Other Biogenic	0.03 %	290	0	290
Other Non-Biogenic	0.03 %	0	320	320
Petroleum	0.02 %	0	167	167
Solar	0.07 %	614	0	614
Waste	0.00 %	0	0	0
Wind	2.80 %	26,160	0	26,160
Total	100.00 %	885,328	49,749	935,077

BPA Claims

Fuel	MWh
Biomass	1,203
Hydro	765,262
Natural Gas	211
Nuclear	91,582
Other Biogenic	290
SubTotal	858,548
BPA Market Purchase	49,749
BPA Total	908,297

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Cold Springs Windfarm	Wind	4,008	4,008
Condon Windpower LLC	Wind	146	146
Desert Meadow Windfarm	Wind	4,491	4,491
Distributed Generation--Hydro (WA)	Water	6	6
Distributed Generation--Solar (WA)	Solar	542	542
Distributed Generation--Wind (WA)	Wind	14	14
Hammett Hill Windfarm	Wind	4,506	4,506
Inland P&L Community Solar	Solar	72	72
Mainline Windfarm	Wind	4,357	4,357
Ryegrass Windfarm	Wind	4,175	4,175
Two Ponds Windfarm	Wind	4,462	4,462
Total		26,779	26,779

Jefferson County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	479	308	788
Coal	2.35 %	0	8,493	8,493
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	304,888	7,438	312,326
Natural Gas	0.86 %	84	3,029	3,113
Nuclear	10.18 %	36,487	357	36,844
Other Biogenic	0.03 %	116	0	116
Other Non-Biogenic	0.04 %	0	127	127
Petroleum	0.02 %	0	66	66
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	342,054	19,818	361,873

BPA Claims

Fuel	MWh
Biomass	479
Hydro	304,888
Natural Gas	84
Nuclear	36,487
Other Biogenic	116
SubTotal	342,054
BPA Market Purchase	19,818
BPA Total	361,872

Kittitas County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	123	79	202
Coal	2.35 %	0	2,180	2,180
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	78,250	1,909	80,159
Natural Gas	0.86 %	22	777	799
Nuclear	10.18 %	9,364	92	9,456
Other Biogenic	0.03 %	30	0	30
Other Non-Biogenic	0.04 %	0	33	33
Petroleum	0.02 %	0	17	17
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	87,789	5,087	92,876

BPA Claims

Fuel	MWh
Biomass	123
Hydro	78,250
Natural Gas	22
Nuclear	9,364
Other Biogenic	30
SubTotal	87,789
BPA Market Purchase	5,087
BPA Total	92,876

Klickitat County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	1.58 %	6,129	0	6,129
Biomass	0.28 %	415	686	1,101
Coal	4.87 %	0	18,891	18,891
Geothermal	0.00 %	0	0	0
Hydro	78.64 %	288,705	16,544	305,249
Natural Gas	1.75 %	73	6,737	6,810
Nuclear	8.34 %	31,598	795	32,393
Other Biogenic	0.03 %	100	0	100
Other Non-Biogenic	0.07 %	0	283	283
Petroleum	0.04 %	0	148	148
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	4.40 %	17,086	0	17,086
Total	100.00 %	344,106	44,084	388,190

BPA Claims

Fuel	MWh
Biomass	415
Hydro	264,031
Natural Gas	73
Nuclear	31,598
Other Biogenic	100
SubTotal	296,217
BPA Market Purchase	17,164
BPA Total	313,381

Market Purchases

Type	MWh
Utility Market Purchase	26,921
Total	26,921

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
McNary Dam Fish Attraction Project	Water	22,469	22,469
Packwood	Water	2,204	2,204
Roosevelt Biogas 1	Landfill Gas	6,129	6,129
White Creek Wind Farm	Wind	17,086	17,086
Total		47,888	47,888

Lakeview Light & Power

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	348	224	572
Coal	2.35 %	0	6,172	6,172
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	221,564	5,405	226,969
Natural Gas	0.86 %	61	2,201	2,262
Nuclear	10.18 %	26,515	260	26,775
Other Biogenic	0.03 %	84	0	84
Other Non-Biogenic	0.04 %	0	93	93
Petroleum	0.02 %	0	48	48
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	248,572	14,403	262,975

BPA Claims

Fuel	MWh
Biomass	348
Hydro	221,564
Natural Gas	61
Nuclear	26,515
Other Biogenic	84
SubTotal	248,572
BPA Market Purchase	14,403
BPA Total	262,975

Lewis County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.27 %	1,154	1,392	2,546
Coal	4.11 %	0	38,329	38,329
Geothermal	0.00 %	0	0	0
Hydro	83.96 %	748,510	33,567	782,077
Natural Gas	1.49 %	203	13,670	13,872
Nuclear	9.61 %	87,870	1,613	89,483
Other Biogenic	0.03 %	278	0	278
Other Non-Biogenic	0.06 %	0	575	575
Petroleum	0.03 %	0	300	300
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.44 %	4,059	0	4,059
Total	100.00 %	842,074	89,446	931,519

BPA Claims

Fuel	MWh
Biomass	1,154
Hydro	734,250
Natural Gas	203
Nuclear	87,870
Other Biogenic	278
SubTotal	823,755
BPA Market Purchase	47,733
BPA Total	871,488

Market Purchases

Type	MWh
Utility Market Purchase	41,713
Total	41,713

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Burton Creek Hydro	Water	952	952
Mill Creek	Water	940	940
Nine Canyon	Wind	4,059	4,059
Packwood	Water	12,368	12,368
Total		18,319	18,319

Mason County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.31 %	90	136	227
Coal	5.12 %	0	3,753	3,753
Geothermal	0.00 %	0	0	0
Hydro	82.96 %	57,559	3,286	60,846
Natural Gas	1.85 %	16	1,338	1,354
Nuclear	9.61 %	6,888	158	7,046
Other Biogenic	0.03 %	22	0	22
Other Non-Biogenic	0.08 %	0	56	56
Petroleum	0.04 %	0	29	29
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	64,575	8,756	73,333

BPA Claims

Fuel	MWh
Biomass	90
Hydro	57,559
Natural Gas	16
Nuclear	6,888
Other Biogenic	22
SubTotal	64,575
BPA Market Purchase	3,741
BPA Total	68,316

Market Purchases

Type	MWh
Utility Market Purchase	5,014
Total	5,014

Mason County PUD #3

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.21 %	820	528	1,348
Coal	2.25 %	0	14,538	14,538
Geothermal	0.00 %	0	0	0
Hydro	83.77 %	527,540	12,732	540,272
Natural Gas	0.83 %	144	5,185	5,329
Nuclear	9.78 %	62,454	612	63,066
Other Biogenic	0.03 %	198	0	198
Other Non-Biogenic	0.03 %	0	218	218
Petroleum	0.02 %	0	114	114
Solar	0.03 %	219	0	219
Waste	0.00 %	0	0	0
Wind	3.05 %	19,687	0	19,687
Total	100.00 %	611,062	33,927	644,989

BPA Claims

Fuel	MWh
Biomass	820
Hydro	521,868
Natural Gas	144
Nuclear	62,454
Other Biogenic	198
SubTotal	585,484
BPA Market Purchase	33,927
BPA Total	619,411

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Condon Windpower LLC	Wind	932	932
Distributed Generation--Solar (WA)	Solar	219	219
Foote Creek I	Wind	500	500
Foote Creek II	Wind	33	33
FPL Energy Vansycle LLC (WA)	Wind	1,767	1,767
Klondike Wind Power	Wind	485	485
Klondike Windpower III	Wind	1,190	1,190
Nine Canyon	Wind	6,216	6,216
Packwood	Water	5,672	5,672
White Creek Wind Farm	Wind	8,564	8,564
Total		25,578	25,578

McCleary Light & Power

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	40	26	65
Coal	2.35 %	0	704	704
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	25,282	617	25,898
Natural Gas	0.86 %	7	251	258
Nuclear	10.18 %	3,026	30	3,055
Other Biogenic	0.03 %	10	0	10
Other Non-Biogenic	0.04 %	0	11	11
Petroleum	0.02 %	0	6	6
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	28,365	1,645	30,007

BPA Claims

Fuel	MWh
Biomass	40
Hydro	25,282
Natural Gas	7
Nuclear	3,026
Other Biogenic	10
SubTotal	28,365
BPA Market Purchase	1,645
BPA Total	30,010

Milton Electric Division

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	76	49	126
Coal	2.35 %	0	1,356	1,356
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	48,667	1,187	49,855
Natural Gas	0.86 %	13	484	497
Nuclear	10.18 %	5,824	57	5,881
Other Biogenic	0.03 %	18	0	18
Other Non-Biogenic	0.04 %	0	20	20
Petroleum	0.02 %	0	11	11
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	54,598	3,164	57,764

BPA Claims

Fuel	MWh
Biomass	76
Hydro	48,667
Natural Gas	13
Nuclear	5,824
Other Biogenic	18
SubTotal	54,598
BPA Market Purchase	3,164
BPA Total	57,762

Modern Electric Water Company

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	299	192	491
Coal	2.35 %	0	5,297	5,297
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	190,134	4,639	194,773
Natural Gas	0.86 %	52	1,889	1,941
Nuclear	10.18 %	22,754	223	22,977
Other Biogenic	0.03 %	72	0	72
Other Non-Biogenic	0.04 %	0	79	79
Petroleum	0.02 %	0	41	41
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	213,311	12,360	225,671

BPA Claims

Fuel	MWh
Biomass	299
Hydro	190,134
Natural Gas	52
Nuclear	22,754
Other Biogenic	72
SubTotal	213,311
BPA Market Purchase	12,360
BPA Total	225,671

Nespelem Valley Elec Coop

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	88	56	144
Coal	2.35 %	0	1,552	1,552
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	55,702	1,359	57,061
Natural Gas	0.86 %	15	553	569
Nuclear	10.18 %	6,666	65	6,731
Other Biogenic	0.03 %	21	0	21
Other Non-Biogenic	0.04 %	0	23	23
Petroleum	0.02 %	0	12	12
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	62,492	3,620	66,113

BPA Claims

Fuel	MWh
Biomass	88
Hydro	55,702
Natural Gas	15
Nuclear	6,666
Other Biogenic	21
SubTotal	62,492
BPA Market Purchase	3,620
BPA Total	66,112

Northern Lights (WA)				
Utility Fuel Mix				
Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.20 %	0	0	0
Coal	2.18 %	0	3	3
Geothermal	0.00 %	0	0	0
Hydro	87.28 %	128	3	130
Natural Gas	0.80 %	0	1	1
Nuclear	9.46 %	14	0	14
Other Biogenic	0.03 %	0	0	0
Other Non-Biogenic	0.03 %	0	0	0
Petroleum	0.02 %	0	0	0
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	142	7	148

BPA Claims	
Fuel	MWh
Hydro	117
Nuclear	14
SubTotal	131
BPA Market Purchase	7
BPA Total	138

Claims on Power Plants			
Plant Name	Fuel	MWh	Total MWh
Lake Creek	Water	11	11
Total		11	11

Ohop Mutual Light

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	109	70	179
Coal	2.35 %	0	1,927	1,927
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	69,188	1,688	70,876
Natural Gas	0.86 %	19	687	706
Nuclear	10.18 %	8,280	81	8,361
Other Biogenic	0.03 %	26	0	26
Other Non-Biogenic	0.04 %	0	29	29
Petroleum	0.02 %	0	15	15
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	77,622	4,497	82,119

BPA Claims

Fuel	MWh
Biomass	109
Hydro	69,188
Natural Gas	19
Nuclear	8,280
Other Biogenic	26
SubTotal	77,622
BPA Market Purchase	4,497
BPA Total	82,119

Okanogan County Electric Coop

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	76	49	124
Coal	2.35 %	0	1,340	1,340
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	48,114	1,174	49,288
Natural Gas	0.86 %	13	478	491
Nuclear	10.18 %	5,758	56	5,814
Other Biogenic	0.03 %	18	0	18
Other Non-Biogenic	0.04 %	0	20	20
Petroleum	0.02 %	0	10	10
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	53,979	3,127	57,105

BPA Claims

Fuel	MWh
Biomass	76
Hydro	48,114
Natural Gas	13
Nuclear	5,758
Other Biogenic	18
SubTotal	53,979
BPA Market Purchase	3,127
BPA Total	57,106

Okanogan County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.30 %	485	1,450	1,935
Coal	6.13 %	0	39,938	39,938
Geothermal	0.00 %	0	0	0
Hydro	85.29 %	520,684	34,975	555,659
Natural Gas	2.20 %	85	14,243	14,328
Nuclear	5.92 %	36,892	1,681	38,573
Other Biogenic	0.02 %	117	0	117
Other Non-Biogenic	0.09 %	0	599	599
Petroleum	0.05 %	0	312	312
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	558,263	93,198	651,461

BPA Claims

Fuel	MWh
Biomass	485
Hydro	308,271
Natural Gas	85
Nuclear	36,892
Other Biogenic	117
SubTotal	345,850
BPA Market Purchase	20,041
BPA Total	365,891

Market Purchases

Type	MWh
Utility Market Purchase	73,157
Total	73,157

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Wells	Water	212,413	212,413
Total		212,413	212,413

Orcas Power & Light Coop

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	270	174	444
Coal	2.35 %	0	4,790	4,790
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	171,939	4,195	176,134
Natural Gas	0.86 %	47	1,708	1,756
Nuclear	10.18 %	20,577	202	20,778
Other Biogenic	0.03 %	65	0	65
Other Non-Biogenic	0.04 %	0	72	72
Petroleum	0.02 %	0	37	37
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	192,898	11,178	204,076

BPA Claims

Fuel	MWh
Biomass	270
Hydro	171,939
Natural Gas	47
Nuclear	20,577
Other Biogenic	65
SubTotal	192,898
BPA Market Purchase	11,178
BPA Total	204,076

Pacific County PUD #2

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.33 %	355	612	967
Coal	5.75 %	0	16,845	16,845
Geothermal	0.00 %	0	0	0
Hydro	82.21 %	225,902	14,752	240,654
Natural Gas	2.07 %	62	6,008	6,070
Nuclear	9.48 %	27,034	709	27,743
Other Biogenic	0.03 %	86	0	86
Other Non-Biogenic	0.09 %	0	252	252
Petroleum	0.04 %	0	132	132
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	253,439	39,310	292,749

BPA Claims

Fuel	MWh
Biomass	355
Hydro	225,902
Natural Gas	62
Nuclear	27,034
Other Biogenic	86
SubTotal	253,439
BPA Market Purchase	14,685
BPA Total	268,124

Market Purchases

Type	MWh
Utility Market Purchase	24,624
Total	24,624

Pacific Power (WA)				
Utility Fuel Mix				
Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	1.56 %	0	70,474	70,474
Coal	42.85 %	0	1,940,639	1,940,639
Geothermal	0.00 %	0	0	0
Hydro	37.53 %	0	1,699,512	1,699,512
Natural Gas	15.28 %	0	692,098	692,098
Nuclear	1.80 %	0	81,677	81,677
Other Biogenic	0.00 %	0	0	0
Other Non-Biogenic	0.64 %	0	29,087	29,087
Petroleum	0.34 %	0	15,175	15,175
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	0	4,528,662	4,528,662

Market Purchases	
Type	MWh
Utility Market Purchase	4,528,662
Total	4,528,662

Parkland Light & Water

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	151	97	249
Coal	2.35 %	0	2,681	2,681
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	96,243	2,348	98,591
Natural Gas	0.86 %	27	956	983
Nuclear	10.18 %	11,518	113	11,631
Other Biogenic	0.03 %	36	0	36
Other Non-Biogenic	0.04 %	0	40	40
Petroleum	0.02 %	0	21	21
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	107,975	6,256	114,232

BPA Claims

Fuel	MWh
Biomass	151
Hydro	96,243
Natural Gas	27
Nuclear	11,518
Other Biogenic	36
SubTotal	107,975
BPA Market Purchase	6,256
BPA Total	114,231

Pend Oreille County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.04 %	226	146	372
Coal	0.48 %	0	4,013	4,013
Geothermal	0.00 %	0	0	0
Hydro	97.22 %	815,654	3,515	819,169
Natural Gas	0.17 %	40	1,431	1,471
Nuclear	2.07 %	17,241	169	17,410
Other Biogenic	0.01 %	55	0	55
Other Non-Biogenic	0.01 %	0	60	60
Petroleum	0.00 %	0	31	31
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	833,216	9,365	842,581

BPA Claims

Fuel	MWh
Biomass	226
Hydro	144,069
Natural Gas	40
Nuclear	17,241
Other Biogenic	55
SubTotal	161,631
BPA Market Purchase	9,365
BPA Total	170,996

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Boundary	Water	366,005	366,005
Box Canyon	Water	305,580	305,580
Total		671,585	671,585

Peninsula Light

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.23 %	746	586	1,332
Coal	2.76 %	0	16,129	16,129
Geothermal	0.00 %	0	0	0
Hydro	83.52 %	474,535	14,125	488,660
Natural Gas	1.01 %	131	5,752	5,883
Nuclear	9.82 %	56,789	679	57,468
Other Biogenic	0.03 %	180	0	180
Other Non-Biogenic	0.04 %	0	242	242
Petroleum	0.02 %	0	126	126
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	2.57 %	15,040	0	15,040
Total	100.00 %	547,421	37,639	585,060

BPA Claims

Fuel	MWh
Biomass	746
Hydro	474,535
Natural Gas	131
Nuclear	56,789
Other Biogenic	180
SubTotal	532,381
BPA Market Purchase	30,847
BPA Total	563,228

Market Purchases

Type	MWh
Utility Market Purchase	6,791
Total	6,791

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Condon Windpower LLC	Wind	845	845
FPL Energy Vansycle LLC (WA)	Wind	1,591	1,591
Harvest Wind Project	Wind	11,098	11,098
Klondike Wind Power	Wind	440	440
Klondike Windpower III	Wind	1,066	1,066
Total		15,040	15,040

Port Angeles Light Operations

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	657	423	1,080
Coal	2.35 %	0	11,648	11,648
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	418,115	10,200	428,316
Natural Gas	0.86 %	115	4,154	4,269
Nuclear	10.18 %	50,037	490	50,528
Other Biogenic	0.03 %	159	0	159
Other Non-Biogenic	0.04 %	0	175	175
Petroleum	0.02 %	0	91	91
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	469,083	27,181	496,266

BPA Claims

Fuel	MWh
Biomass	657
Hydro	418,115
Natural Gas	115
Nuclear	50,037
Other Biogenic	159
SubTotal	469,083
BPA Market Purchase	27,181
BPA Total	496,264

Port of Seattle

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	190	122	312
Coal	2.35 %	0	3,368	3,368
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	120,889	2,949	123,839
Natural Gas	0.86 %	33	1,201	1,234
Nuclear	10.18 %	14,467	142	14,609
Other Biogenic	0.03 %	46	0	46
Other Non-Biogenic	0.04 %	0	50	50
Petroleum	0.02 %	0	26	26
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	135,625	7,858	143,484

BPA Claims

Fuel	MWh
Biomass	190
Hydro	120,889
Natural Gas	33
Nuclear	14,467
Other Biogenic	46
SubTotal	135,625
BPA Market Purchase	7,858
BPA Total	143,483

Puget Sound Energy

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	2	0	2
Biomass	0.32 %	642	68,066	68,709
Coal	36.65 %	6,052,572	1,874,347	7,926,920
Geothermal	0.00 %	0	0	0
Hydro	28.65 %	4,554,202	1,641,457	6,195,660
Natural Gas	29.66 %	5,745,837	668,456	6,414,293
Nuclear	0.59 %	48,907	78,887	127,794
Other Biogenic	0.00 %	549	0	549
Other Non-Biogenic	0.13 %	0	28,094	28,094
Petroleum	0.10 %	7,966	14,657	22,623
Solar	0.00 %	626	0	626
Waste	0.00 %	0	0	0
Wind	3.90 %	842,578	0	842,578
Total	100.00 %	17,253,881	4,373,964	21,627,848

BPA Claims

Fuel	MWh
Biomass	642
Hydro	408,666
Natural Gas	113
Nuclear	48,907
Other Biogenic	155
SubTotal	458,483
BPA Market Purchase	26,566
BPA Total	485,049

Market Purchases

Type	MWh
Utility Market Purchase	4,347,398
Total	4,347,398

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
3 Bar G Wind Turbine #3	Wind	0	0
Bio Energy Washington	Other Biomass Gas	2	2
Black Creek	Water	6,275	6,275
Cascade Community Solar	Solar	23	23
Colstrip	Subbituminous Coal	4,427,277	
	Distillate Fuel Oil	1,706	
	Gaseous Propane	0	
	Waste/Other Oil	2,147	4,431,129
Crystal Mountain	Distillate Fuel Oil	290	290
Electron	Water	61,940	61,940
Encogen	Natural Gas	293,246	
	Distillate Fuel Oil	180	293,426
Ferndale Generating Station	Distillate Fuel Oil	101	
	Natural Gas	856,020	856,121
Frederickson	Distillate Fuel Oil	11	
	Natural Gas	39,356	39,367
Frederickson Power LP	Natural Gas	614,322	614,322
Fredonia	Distillate Fuel Oil	764	
	Natural Gas	158,238	159,002
Goldendale Generating Station	Natural Gas	1,477,360	1,477,360
Hopkins Ridge Wind	Wind	159,963	159,963
Hutchinson Creek	Water	733	733
Island Community Solar	Solar	61	61

Klamath Falls Bioenergy Facility	Other Biomass Solids	394	394
Klondike Windpower III	Wind	35,028	35,028
Koma Kulshan Associates	Water	35,581	35,581
Lake Washington -- Finn Hill	Solar	275	275
Lower Baker	Water	304,224	304,224
Lower Snake River Wind Energy Project	Wind	441,642	441,642
Mint Farm Generating Station	Natural Gas	1,676,853	1,676,853
Priest Rapids	Water	26,874	26,874
Rock Island	Water	719,353	719,353
Rocky Reach	Water	1,426,700	1,426,700
Skookumchuck	Water	4,890	4,890
Smith Creek (Whatcom County, WA)	Water	161	161
Snoqualmie	Water	17,849	17,849
Snoqualmie 2	Water	99,932	99,932
Sumas Power Plant	Natural Gas	592,508	592,508
Swauk Valley Wind	Wind	0	0
Sygitowicz Creek	Water	728	728
Transalta Centralia Generation	Subbituminous Coal	1,570,240	
	Waste/Other Coal	55,056	
	Distillate Fuel Oil	2,407	1,627,703
Twin Falls Hydro	Water	51,856	51,856
Upper Baker	Water	274,787	274,787
Wanapum	Water	26,105	26,105
Weeks Falls	Water	8,406	8,406
Wells	Water	1,079,142	1,079,142
Whitehorn	Natural Gas	37,822	
	Distillate Fuel Oil	360	38,182
Wild Horse	Solar	267	
	Wind	205,945	206,212
Total		16,795,400	16,795,399

Richland Energy Services

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	1,206	776	1,983
Coal	2.35 %	0	21,380	21,380
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	767,488	18,724	786,212
Natural Gas	0.86 %	212	7,625	7,837
Nuclear	10.18 %	91,848	900	92,748
Other Biogenic	0.03 %	291	0	291
Other Non-Biogenic	0.04 %	0	320	320
Petroleum	0.02 %	0	167	167
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	861,045	49,892	910,938

BPA Claims

Fuel	MWh
Biomass	1,206
Hydro	767,488
Natural Gas	212
Nuclear	91,848
Other Biogenic	291
SubTotal	861,045
BPA Market Purchase	49,892
BPA Total	910,937

Ruston, Town of

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.18 %	5	6	11
Coal	2.71 %	0	162	162
Geothermal	0.00 %	0	0	0
Hydro	88.64 %	5,165	142	5,307
Natural Gas	0.98 %	1	58	59
Nuclear	6.11 %	359	7	366
Other Biogenic	0.02 %	1	0	1
Other Non-Biogenic	0.04 %	0	2	2
Petroleum	0.02 %	0	1	1
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	1.30 %	78	0	78
Total	100.00 %	5,609	378	5,987

BPA Claims

Fuel	MWh
Biomass	5
Hydro	2,997
Natural Gas	1
Nuclear	359
Other Biogenic	1
SubTotal	3,363
BPA Market Purchase	195
BPA Total	3,558

Market Purchases

Type	MWh
Utility Market Purchase	184
Total	184

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Alder	Water	133	133
Bennett Creek Windfarm LLC	Wind	24	24
Condon Windpower LLC	Wind	6	6
Cushman 1	Water	74	74
Cushman 2	Water	122	122
Eltopia Branch Canal 4.6	Water	2	2
FPL Energy Vansycle LLC (WA)	Wind	11	11
Grand Coulee Project Hydro Authority	Water	0	0
Hood Street Reservoir	Water	2	2
Hot Springs Windfarm LLC	Wind	27	27
Klondike Wind Power	Wind	3	3
Klondike Windpower III	Wind	7	7
LaGrande	Water	223	223
Main Canal Headworks	Water	38	38
Mayfield	Water	514	514
Mossyrock	Water	852	852
Potholes East Canal 66.0	Water	3	3
Priest Rapids	Water	22	22
Summer Falls Power Plant	Water	169	169
Wynoochee	Water	10	10
Total		2,242	2,242

Seattle City Light

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	1.14 %	110,169	0	110,169
Biomass	0.41 %	31,299	8,278	39,578
Coal	2.36 %	0	227,960	227,960
Geothermal	0.00 %	0	0	0
Hydro	87.33 %	8,237,958	199,635	8,437,593
Natural Gas	0.85 %	1,035	81,298	82,333
Nuclear	4.74 %	448,628	9,594	458,222
Other Biogenic	0.01 %	1,422	0	1,422
Other Non-Biogenic	0.04 %	0	3,417	3,417
Petroleum	0.02 %	0	1,783	1,783
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	3.10 %	299,551	0	299,551
Total	100.00 %	9,130,062	531,965	9,662,028

BPA Claims

Fuel	MWh
Biomass	5,892
Hydro	3,748,763
Natural Gas	1,035
Nuclear	448,628
Other Biogenic	1,422
SubTotal	4,205,740
BPA Market Purchase	243,701
BPA Total	4,449,441

Market Purchases

Type	MWh
Utility Market Purchase	288,264
Total	288,264

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Bonneville Power Administration	Water	0	0
Boundary	Water	1,998,012	1,998,012
Cedar Falls (WA)	Water	37,660	37,660
Diablo	Water	618,859	618,859
Eltopia Branch Canal 4.6	Water	2,299	2,299
FPL Energy Vansycle LLC (OR)	Wind	119,820	119,820
FPL Energy Vansycle LLC (WA)	Wind	179,731	179,731
Gorge	Water	761,873	761,873
Grand Coulee Project Hydro Authority	Water	0	0
High Ross Treaty	Water	261,711	261,711
Main Canal Headworks	Water	36,043	36,043
Potholes East Canal 66.0	Water	3,221	3,221
Priest Rapids	Water	18,955	18,955
Ross	Water	546,146	546,146
Russell D Smith	Water	7,264	7,264
Sierra Pacific Burlington Facility	Wood/Wood Waste Solids	25,407	25,407
South Fork Tolt	Water	39,071	39,071
Summer Falls Power Plant	Water	158,081	158,081
Waste Management Columbia Ridge LFGTE	Landfill Gas	94,271	94,271
West Point Treatment Plant	Other Biomass Gas	15,898	
	Natural Gas	0	15,898
Total		4,924,322	4,924,322

Skamania County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	172	110	282
Coal	2.35 %	0	3,040	3,040
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	109,144	2,663	111,806
Natural Gas	0.86 %	30	1,084	1,114
Nuclear	10.18 %	13,062	128	13,190
Other Biogenic	0.03 %	41	0	41
Other Non-Biogenic	0.04 %	0	46	46
Petroleum	0.02 %	0	24	24
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	122,449	7,095	129,543

BPA Claims

Fuel	MWh
Biomass	172
Hydro	109,144
Natural Gas	30
Nuclear	13,062
Other Biogenic	41
SubTotal	122,449
BPA Market Purchase	7,095
BPA Total	129,544

Snohomish County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	-1	0	-1
Biomass	0.21 %	8,313	5,350	13,664
Coal	2.26 %	0	147,337	147,337
Geothermal	0.00 %	0	0	0
Hydro	86.71 %	5,533,282	129,030	5,662,312
Natural Gas	0.83 %	1,460	52,545	54,005
Nuclear	9.79 %	632,943	6,201	639,144
Other Biogenic	0.03 %	2,006	0	2,006
Other Non-Biogenic	0.03 %	0	2,208	2,208
Petroleum	0.02 %	0	1,152	1,152
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.12 %	7,917	0	7,917
Total	100.00 %	6,185,920	343,823	6,529,744

BPA Claims

Fuel	MWh
Biomass	8,313
Hydro	5,288,919
Natural Gas	1,460
Nuclear	632,943
Other Biogenic	2,006
SubTotal	5,933,641
BPA Market Purchase	343,823
BPA Total	6,277,464

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
H M Jackson	Water	229,609	229,609
Hampton Lumber Mill	Other Biomass Solids	0	0
Hay Canyon Wind Power LLC	Wind	0	0
Packwood	Water	13,631	13,631
Qualco Energy	Other Biomass Gas	0	0
Roosevelt Biogas 1	Landfill Gas	0	0
Wheat Field Wind Power Project	Wind	7,917	7,917
White Creek Wind Farm	Wind	0	0
Woods Creek	Water	1,123	1,123
Youngs Creek Hydroelectric Project	Water	0	0
Total		252,280	252,280

Steilacoom Electric Utility

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	52	33	85
Coal	2.35 %	0	919	919
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	33,003	805	33,808
Natural Gas	0.86 %	9	328	337
Nuclear	10.18 %	3,950	39	3,988
Other Biogenic	0.03 %	13	0	13
Other Non-Biogenic	0.04 %	0	14	14
Petroleum	0.02 %	0	7	7
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	37,027	2,145	39,171

BPA Claims

Fuel	MWh
Biomass	52
Hydro	33,003
Natural Gas	9
Nuclear	3,950
Other Biogenic	13
SubTotal	37,027
BPA Market Purchase	2,145
BPA Total	39,172

Sumas, City of

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	42	27	69
Coal	2.35 %	0	746	746
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	26,782	653	27,435
Natural Gas	0.86 %	7	266	273
Nuclear	10.18 %	3,205	31	3,237
Other Biogenic	0.03 %	10	0	10
Other Non-Biogenic	0.04 %	0	11	11
Petroleum	0.02 %	0	6	6
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	30,046	1,740	31,787

BPA Claims

Fuel	MWh
Biomass	42
Hydro	26,782
Natural Gas	7
Nuclear	3,205
Other Biogenic	10
SubTotal	30,046
BPA Market Purchase	1,740
BPA Total	31,786

Tacoma Power

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.18 %	3,794	4,752	8,545
Coal	2.71 %	0	130,845	130,845
Geothermal	0.00 %	0	0	0
Hydro	88.64 %	4,159,144	114,587	4,273,731
Natural Gas	0.98 %	666	46,664	47,330
Nuclear	6.11 %	288,848	5,507	294,355
Other Biogenic	0.02 %	915	0	915
Other Non-Biogenic	0.04 %	0	1,961	1,961
Petroleum	0.02 %	0	1,023	1,023
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	1.30 %	62,585	0	62,585
Total	100.00 %	4,515,952	305,339	4,821,290

BPA Claims

Fuel	MWh
Biomass	3,794
Hydro	2,413,636
Natural Gas	666
Nuclear	288,848
Other Biogenic	915
SubTotal	2,707,859
BPA Market Purchase	156,907
BPA Total	2,864,766

Market Purchases

Type	MWh
Utility Market Purchase	148,431
Total	148,431

Claims on Power Plants

Plant Name	Fuel	MWh	Total MWh
Alder	Water	106,991	106,991
Bennett Creek Windfarm LLC	Wind	19,034	19,034
Condon Windpower LLC	Wind	4,695	4,695
Cushman 1	Water	59,974	59,974
Cushman 2	Water	98,472	98,472
Eltopia Branch Canal 4.6	Water	1,956	1,956
FPL Energy Vansycle LLC (WA)	Wind	8,900	8,900
Grand Coulee Project Hydro Authority	Water	0	0
Hood Street Reservoir	Water	1,258	1,258
Hot Springs Windfarm LLC	Wind	21,522	21,522
Klondike Wind Power	Wind	2,450	2,450
Klondike Windpower III	Wind	5,984	5,984
LaGrande	Water	179,622	179,622
Main Canal Headworks	Water	30,932	30,932
Mayfield	Water	414,273	414,273
Mossyrock	Water	686,211	686,211
Potholes East Canal 66.0	Water	2,604	2,604
Priest Rapids	Water	18,035	18,035
Summer Falls Power Plant	Water	136,738	136,738
Wynoochee	Water	8,442	8,442
Total		1,808,093	1,808,093

Tanner Electric Coop

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	127	82	209
Coal	2.35 %	0	2,251	2,251
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	80,810	1,971	82,781
Natural Gas	0.86 %	22	803	825
Nuclear	10.18 %	9,671	95	9,766
Other Biogenic	0.03 %	31	0	31
Other Non-Biogenic	0.04 %	0	34	34
Petroleum	0.02 %	0	18	18
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	90,661	5,254	95,915

BPA Claims

Fuel	MWh
Biomass	127
Hydro	80,810
Natural Gas	22
Nuclear	9,671
Other Biogenic	31
SubTotal	90,661
BPA Market Purchase	5,254
BPA Total	95,915

Vera Water & Power

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	305	196	501
Coal	2.35 %	0	5,406	5,406
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	194,056	4,734	198,790
Natural Gas	0.86 %	54	1,928	1,981
Nuclear	10.18 %	23,223	228	23,451
Other Biogenic	0.03 %	74	0	74
Other Non-Biogenic	0.04 %	0	81	81
Petroleum	0.02 %	0	42	42
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	217,712	12,615	230,326

BPA Claims

Fuel	MWh
Biomass	305
Hydro	194,056
Natural Gas	54
Nuclear	23,223
Other Biogenic	74
SubTotal	217,712
BPA Market Purchase	12,615
BPA Total	230,327

Wahkiakum County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	55	35	90
Coal	2.35 %	0	968	968
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	34,744	848	35,592
Natural Gas	0.86 %	10	345	355
Nuclear	10.18 %	4,158	41	4,199
Other Biogenic	0.03 %	13	0	13
Other Non-Biogenic	0.04 %	0	15	15
Petroleum	0.02 %	0	8	8
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	38,980	2,260	41,240

BPA Claims

Fuel	MWh
Biomass	55
Hydro	34,744
Natural Gas	10
Nuclear	4,158
Other Biogenic	13
SubTotal	38,980
BPA Market Purchase	2,260
BPA Total	41,240

Whatcom County PUD #1

Utility Fuel Mix

Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	301	194	496
Coal	2.35 %	0	5,344	5,344
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	191,817	4,680	196,497
Natural Gas	0.86 %	53	1,906	1,959
Nuclear	10.18 %	22,955	225	23,180
Other Biogenic	0.03 %	73	0	73
Other Non-Biogenic	0.04 %	0	80	80
Petroleum	0.02 %	0	42	42
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	215,199	12,471	227,671

BPA Claims

Fuel	MWh
Biomass	301
Hydro	191,817
Natural Gas	53
Nuclear	22,955
Other Biogenic	73
SubTotal	215,199
BPA Market Purchase	12,471
BPA Total	227,670

Yakama Power				
Utility Fuel Mix				
Fuel	Percent	MWh from Claims on Resources	Total MWh from Market Purchases	Total MWh
Biogas	0.00 %	0	0	0
Biomass	0.22 %	75	48	123
Coal	2.35 %	0	1,327	1,327
Geothermal	0.00 %	0	0	0
Hydro	86.30 %	47,634	1,162	48,796
Natural Gas	0.86 %	13	473	486
Nuclear	10.18 %	5,700	56	5,756
Other Biogenic	0.03 %	18	0	18
Other Non-Biogenic	0.04 %	0	20	20
Petroleum	0.02 %	0	10	10
Solar	0.00 %	0	0	0
Waste	0.00 %	0	0	0
Wind	0.00 %	0	0	0
Total	100.00 %	53,440	3,096	56,536

BPA Claims	
Fuel	MWh
Biomass	75
Hydro	47,634
Natural Gas	13
Nuclear	5,700
Other Biogenic	18
SubTotal	53,440
BPA Market Purchase	3,096
BPA Total	56,536