

Washington State Electric Utility Fuel Mix Disclosure Reports for Calendar Year 2012

July 2013 Brian Bonlender, Director

## Acknowledgements

**Washington State Department of Commerce** 

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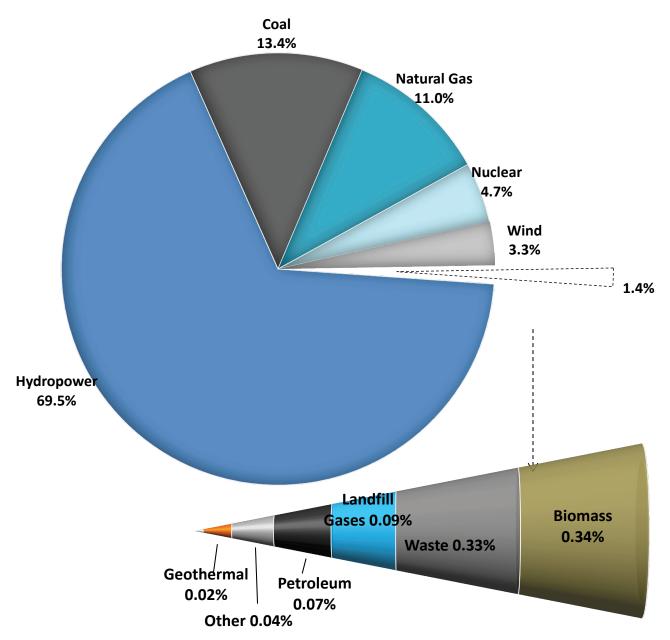
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# Washington State Electric Utilities Aggregate Fuel Mix 2012

(90,643,770 megawatt hours)



#### Notes:

- "Fuel Mix" is the range of energy sources that make up total retail electricity sales to customers.
- "Market Purchases" are utility and BPA purchases or claims acquired on the spot market and not connected with a specified energy plant (16% of total).
- "Claims on Facilities" are utility purchases or claims connected with a specified energy plant, typically representing a
  contracted agreement for energy purchase (84% of total).
- The "Other" fuel category consists of fuel remaining after categories listed in fuel mix disclosure legislation have been matched with reported categories. It contains blast furnace gas, other biomass gas such as digester gas and methane, and purchased steam.
- Black liquor is reported in the "Waste" category.

# Washington State Electric Utilities Aggregate Fuel Mix 2012 Dataset

(megawatt hours)

Fuel	Market Purchases	Claims on Facilities	Total	Percent
Hydropower	6,513,046	56,471,491	62,984,536	69.49%
Coal	4,694,947	7,454,311	12,149,258	13.40%
Natural Gas	1,676,778	5,276,100	6,952,877	7.67%
Nuclear	359,918	3,879,480	4,239,398	4.68%
Wind	-	3,011,137	3,011,137	3.32%
Cogeneration	-	486,609	486,609	0.54%
Biomass	82,293	228,518	310,812	0.34%
Waste	85,597	217,469	303,066	0.33%
Landfill Gases	20,844	62,821	83,665	0.09%
Petroleum	47,932	19,648	67,580	0.07%
Other	21,105	15,291	36,396	0.04%
Geothermal	-	17,003	17,003	0.02%
Solar	-	1,433	1,433	0.00%
Total	13,502,458.96	77,141,311.55	90,643,770.50	100.00%

#### Notes:

- "Fuel Mix" is the range of energy sources that make up total retail electricity sales to customers.
- "Market Purchases" are utility and BPA purchases or claims acquired on the spot market and not connected with a specified energy plant (16% of total).
- "Claims on Facilities" are utility purchases or claims connected with a specified energy plant, typically representing a contracted agreement for energy purchase (84% of total).
- The "Other" fuel category consists of fuel remaining after categories listed in fuel mix disclosure legislation have been matched with reported categories. It contains blast furnace gas, other biomass gas such as digester gas and methane, and purchased steam.
- Black liquor is reported in the "Waste" category.

## **NWPP Net System Mix\* Calendar Year 2012**

Assigned to "spot" market purchases

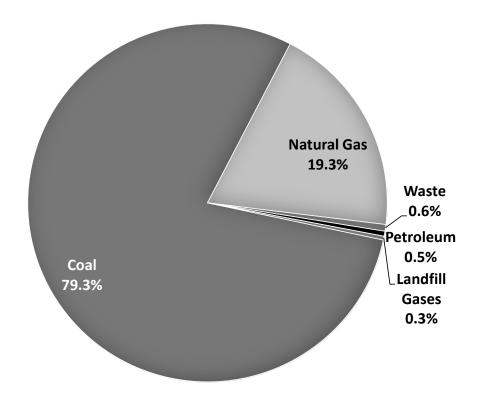
The Net System is the mix for the balance of power pool resources *after utilities' claims on specific resources are deducted.* The Net System Mix is assigned to "spot" market purchases, which are non-contractual, or very short-term contract, purchases- and which, are not associated with a specified fuel source. The Mix is *not* the aggregate mix for the Northwest power pool.

Biomass	0.61%
Coal (anthracite)	0.00%
Coal (bituminous)	35.07%
Coal (lignite)	0.55%
Coke	0.28%
Geothermal	0.00%
Hydro	47.48%
Landfill Gases	0.15%
Natural Gas	12.40%
Nuclear	2.61%
Other	0.16%
Petroleum (heavy oil)	0.02%
Petroleum (light oil)	0.05%
SolarPhotovoltaic	0.00%
SolarThermal	0.00%
Waste	0.62%
Wind	0.00%
Total	100.00%

<sup>\*</sup>The net system mix is calculated for each fuel by deducting utility claims and plant use from reported generation. The percentages are used to calculate fuel amounts for each utility's market purchases.

# Washington State Electric Utilities Aggregate CO<sub>2</sub> Emissions by Fuel Type 2012

(tons of CO<sub>2</sub> emissions resulting from electricity sold to Washington residents)



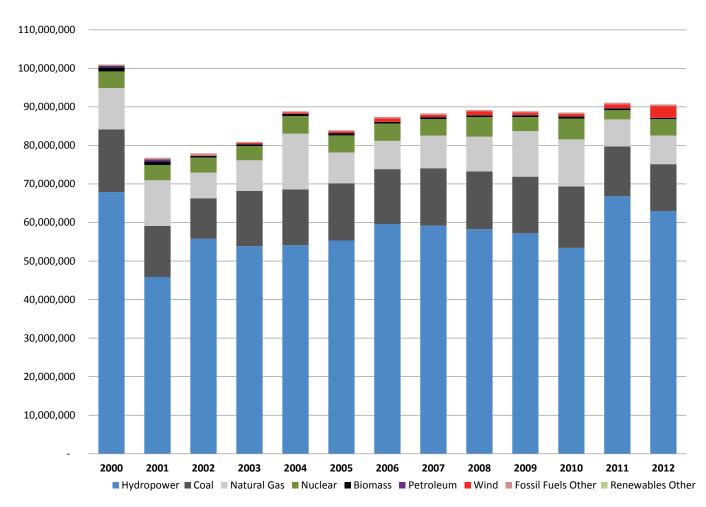
Fuel	Tons of CO <sub>2</sub>
Coal	13,315,348
Natural Gas	3,246,821
Waste	101,208
Petroleum	75,656
Landfill Gases	57,696
Total	16,796,730

Other Emissions	
SO <sub>2</sub> (tons)	11,445
NO <sub>x</sub> (tons)	17,187
HG (lbs)	487

#### Notes:

- CO<sub>2</sub>=carbon dioxide, SO<sub>2</sub>=sulfur dioxide, NO<sub>x</sub>=nitrogen oxides, Hg=mercury
- Emissions are allocated by amount and type of fuel purchased by electric utilities serving Washington State customers.
- Emission rate factors are obtained from the U.S. EPA EGRID database. Each fossil fuel has a unique emission factor. Estimated CO<sub>2</sub> emissions are calculate by multiplying MMBtu by the fuel-specific CO<sub>2</sub> Lbs/MMBtu rate. SO<sub>2</sub> tons NO<sub>x</sub> tons, and Hg Lbs are calculated using plant-specific Lbs/MMBtu rates. These rates are updated annually or using the most recent data available.
- Natural Gas includes cogeneration; mostly comprised of the heat energy produced by a plant heat engine or power station that simultaneously generates electricity and steam energy.
- Landfill Gases: electricity produced by a plant that uses waste gases produced by the decomposition of organic materials in landfills
- Figures are rounded upward

# Washington State Electric Utilities Aggregate Fuel Mix 2000-2012



#### Notes:

- "Natural Gas" includes cogeneration
- "Fossil Fuels Other" includes waste, landfill gases and other
- "Other" includes blast furnace gas, other biomass gas such as digester gas and methane, and purchased steam
- "Renewables Other" geothermal and solar

# Washington State Electric Utilities Aggregate Fuel Mix 2000-2012 Dataset

Fuel Source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hydropower	67,889,834	45,853,455	55,796,455	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
Coal	16,243,438	13,247,976	10,498,764	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
Cogeneration	5,428,455	5,908,568	3,971,751	3,590,493	-	2,660,660	2,766,515	2,157,302	1,635,296	1,867,355	1,731,728	1,319,055	486,609
Natural Gas	5,343,539	5,954,725	2,703,929	4,370,728	14,459,001	5,325,475	4,553,447	6,302,442	7,385,757	9,979,345	10,476,257	5,684,223	6,952,877
Nuclear	4,285,939	3,975,371	3,897,750	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
Biomass	1,100,469	937,515	401,339	434,700	536,643	587,085	392,712	460,983	415,226	445,076	492,371	446,890	310,812
Petroleum	401,383	489,650	23,112	34,957	53,046	44,233	62,232	69,267	69,937	94,360	81,372	68,539	67,580
Waste	159,888	236,666	24,503	139,056	102,864	150,955	331,963	288,528	276,669	296,180	332,719	336,948	303,066
Geothermal	143,024	158,779	-	-	-	-	14,399	11,189	16,866	19,237	17,376	18,107	17,003
Landfill Gases	68,978	70,807	220,805	75,125	134,122	80,500	57,858	49,041	23,043	16,058	18,787	49,209	83,665
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
Other			233,995	6,991	37,379	31,156	10,863	12,923	19,391	28,650	28,504	27,307	36,396
Solar													1,433
Total	101,064,948	76,857,334	77,935,538	80,885,507	88,851,774	83,918,558	87,425,313	88,293,846	89,207,239	88,875,541	88,544,303	91,106,257	90,643,771

**Note:** "Other" contains furnace gas, other biomass gas such as digester gas and methane, and purchased steam.

# Alder Mutual Light Co., Inc.

## **Fuel Mix Calendar Year 2012**

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

# Alder Mutual Light Co., Inc

### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	1.258	2.709	3.967	0.09%
Coal	74.003	0.000	74.003	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	98.636	3,970.226	4,068.862	88.03%
Landfill Gases	0.317	0.000	0.317	0.01%
Natural Gas	25.756	3.863	29.620	0.64%
Nuclear	5.429	436.712	442.141	9.57%
Other	0.326	0.000	0.326	0.01%
Petroleum	0.726	0.361	1.087	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	1.292	0.386	1.678	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	207.743	4,414.257	4,622.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# Alder Mutual Light Co, Inc

## Claims on BPA\* Calendar Year 2012

BPA Resource Mix	4,414.257
Biomass	2.709
Natural Gas	3.863
Nuclear	436.712
Petroleum (heavy oil)	0.361
Waste	0.386
Water	3,970.226

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the 'Market Purchases' table.

# Alder Mutual Light Co, Inc.

## **Market Purchases Calendar Year 2012**

Total Market Purchases	207.743	
	BPA Market Purchase*	207.743

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

## **Fuel Mix Calendar Year 2012**

Biomass	2.64%
Coal	19.09%
Cogeneration	0.24%
Geothermal	0.00%
Hydro	47.39%
Landfill Gases	0.11%
Natural Gas	26.03%
Nuclear	0.24%
Other	0.01%
Petroleum	0.05%
Solar	0.00%
Waste	3.56%
Wind	0.65%
Total	100.00%

### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	3,399.826	154,841.104	158,240.930	2.64%
Coal	200,027.164	945,414.144	1,145,441.309	19.09%
Cogeneration	0.000	14,207.529	14,207.529	0.24%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	266,610.470	2,577,238.000	2,843,848.470	47.39%
Landfill Gases	857.499	6,019.000	6,876.499	0.11%
Natural Gas	69,618.689	1,492,385.566	1,562,004.255	26.03%
Nuclear	14,675.254	0.000	14,675.254	0.24%
Other	880.308	0.000	880.308	0.01%
Petroleum	1,961.722	895.856	2,857.577	0.05%
Solar	0.000	0.000	0.000	0.00%
Waste	3,492.067	209,962.802	213,454.869	3.56%
Wind	0.000	38,793.000	38,793.000	0.65%
Total	561,523.000	5,439,757.000	6,001,280.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Noxon Rapids	Claim Type:	PIntMix	776,081.000
	Water		776,081.000
Little Falls	Claim Type:	PIntMix	127,511.000
	Water		127,511.000
Long Lake	Claim Type:	PlntMix	324,156.000
	Water		324,156.000
Meyers Falls	Claim Type:	PlntMix	7,033.000
	Water		7,033.000
Nine Mile	Claim Type:	PlntMix	45,209.000
	Water		45,209.000
Rocky Reach	Claim Type:	PIntMix	200,702.000
	Water		200,702.000
Wells	Claim Type:	PIntMix	235,052.000
	Water		235,052.000
Bulant Boulds	Claire Torres	Disabets.	200 570 000
Priest Rapids	Claim Type:	PIntMix	209,678.000
	Water		209,678.000
Sheep Creek Hydro Inc	Claim Type:	PIntMix	4,576.000
	Water		4,576.000

Upriver Dam Hydro Plant	Claim Type:	PlntMix	32,660.000
	Water		32,660.000
Potlatch Corp Idaho Pulp	Claim Type: Natural Gas Waste Wood	Cogen	<b>179,516.000</b> 14,207.529 121,391.802 43,916.669
Wheelabrator Spokane Inc	Claim Type:	PIntMix	88,571.000
	Waste		88,571.000
Kettle Falls	Claim Type:	PIntMix	89,047.000
	Natural Gas		459.566
	Wood		88,587.434
Plummer Sawmill	Claim Type:	Cogen	22,337.000
	Wood		22,337.000
Rathdrum Power LLC	Claim Type:	PIntMix	762,889.000
	Natural Gas		762,889.000
Palouse	Claim Type:	PlntMix	38,793.000
	Wind		38,793.000
Fighting Creek LFGTE Plant	Claim Type:	PlntMix	6,019.000
	Landfill Gase	es	6,019.000
Colstrip	Claim Type: Coal (bitumi Petroleum (l Petroleum (l	light oil)	<b>946,310.000</b> 945,414.144 415.725 480.131

Northeast	Claim Type:	PIntMix	114.000
	Natural Gas		114.000
Rathdrum	Claim Type:	PIntMix	4,383.000
	Natural Gas		4,383.000
Coyote Springs II	Claim Type:	PIntMix	721,019.000
	Natural Gas		721,019.000
Boulder Park	Claim Type:	PIntMix	3,521.000
	Natural Gas		3,521.000
Cabinet Gorge	Claim Type:	PIntMix	510,385.000
	Water		510,385.000
Post Falls	Claim Type:	PIntMix	35,320.000
	Water		35,320.000
Monroe Street	Claim Type:	PIntMix	43,490.000
	Water		43,490.000
Upper Falls	Claim Type:	PIntMix	25,385.000
	Water		25,385.000

## **Market Purchases Calendar Year 2012**

Total Market Purchases 561,523.000

Utility Market Purchase 561,523.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

## **Fuel Mix Calendar Year 2012**

Biomass	0.09%
Coal	2.10%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.43%
Landfill Gases	0.01%
Natural Gas	0.81%
Nuclear	9.46%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	208.647	336.792	545.439	0.09%
Coal	12,275.625	0.000	12,275.625	2.10%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	16,361.829	493,558.719	509,920.548	87.43%
Landfill Gases	52.625	0.000	52.625	0.01%
Natural Gas	4,272.484	480.264	4,752.748	0.81%
Nuclear	900.617	54,289.797	55,190.414	9.46%
Other	54.024	0.000	54.024	0.01%
Petroleum	120.390	44.846	165.237	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	214.307	48.032	262.340	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	34,460.549	548,758.451	583,219.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## Claims on BPA\* Calendar Year 2012

BPA Resource Mix		548,758.451
	Biomass	336.792
	Natural Gas	480.264
	Nuclear	54,289.797
	Petroleum (heavy oil)	44.846
	Waste	48.032
	Water	493,558.719

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

## **Market Purchases Calendar Year 2012**

Total Market Purchases		34,460.549
	BPA Market Purchase*	25,825.549
	Utility Market Purchase	8,635.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

## **Fuel Mix Calendar Year 2012**

Biomass	0.09%
Coal	2.03%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.52%
Landfill Gases	0.01%
Natural Gas	0.79%
Nuclear	9.48%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	180.095	302.004	482.099	0.09%
Coal	10,595.815	0.000	10,595.815	2.03%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	14,122.858	442,577.133	456,699.991	87.52%
Landfill Gases	45.423	0.000	45.423	0.01%
Natural Gas	3,687.833	430.655	4,118.488	0.79%
Nuclear	777.376	48,681.994	49,459.370	9.48%
Other	46.632	0.000	46.632	0.01%
Petroleum	103.916	40.214	144.130	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	184.981	43.071	228.052	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	29,744.929	492,075.071	521,820.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## Claims on BPA\* Calendar Year 2012

BPA Resource Mix		492,075.071
	Biomass	302.004
	Natural Gas	430.655
	Nuclear	48,681.994
	Petroleum (heavy oil)	40.214
	Waste	43.071
	Water	442,577.133

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

## **Market Purchases Calendar Year 2012**

Total Market Purchases		29,744.929
	BPA Market Purchase*	23,157.929
	Utility Market Purchase	6,587.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

## **Fuel Mix Calendar Year 2012**

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	6.214	13.385	19.600	0.09%
Coal	365.626	0.000	365.626	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	487.333	19,615.769	20,103.102	88.03%
Landfill Gases	1.567	0.000	1.567	0.01%
Natural Gas	127.255	19.087	146.342	0.64%
Nuclear	26.825	2,157.669	2,184.493	9.57%
Other	1.609	0.000	1.609	0.01%
Petroleum	3.586	1.782	5.368	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	6.383	1.909	8.292	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	1,026.399	21,809.601	22,836.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## Claims on BPA\* Calendar Year 2012

<b>BPA Resource Mix</b>		21,809.601
	Biomass	13.385
	Natural Gas	19.087
	Nuclear	2,157.669
	Petroleum (heavy oil)	1.782
	Waste	1.909
	Water	19,615.769

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

## **Market Purchases Calendar Year 2012**

Total Market Purchases 1,026.399

BPA Market Purchase\* 1,026.399

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **City of Blaine**

## **Fuel Mix Calendar Year 2012**

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

# **City of Blaine**

### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	21.637	46.604	68.241	0.09%
Coal	1,273.016	0.000	1,273.016	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	1,696.766	68,296.994	69,993.760	88.03%
Landfill Gases	5.457	0.000	5.457	0.01%
Natural Gas	443.068	66.457	509.526	0.64%
Nuclear	93.396	7,512.439	7,605.836	9.57%
Other	5.602	0.000	5.602	0.01%
Petroleum	12.485	6.206	18.690	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	22.224	6.647	28.871	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	3,573.653	75,935.347	79,509.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# **City of Blaine**

## Claims on BPA\* Calendar Year 2012

BPA Resource Mix		75,935.347
	Biomass	46.604
	Natural Gas	66.457
	Nuclear	7,512.439
	Petroleum (heavy oil)	6.206
	Waste	6.647
	Water	68,296.994

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **City of Blaine**

### **Market Purchases Calendar Year 2012**

Total Market Purchases 3,573.653

BPA Market Purchase\* 3,573.653

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **City of Centralia**

Biomass	0.07%
Coal	1.54%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	90.90%
Landfill Gases	0.01%
Natural Gas	0.60%
Nuclear	6.83%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.03%
Wind	0.00%
Total	100.00%

# **City of Centralia**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	Total	Percent
Biomass	71.857	114.273	186.129	0.07%
Coal	4,227.650	0.000	4,227.650	1.54%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	5,634.913	243,726.184	249,361.097	90.90%
Landfill Gases	18.124	0.000	18.124	0.01%
Natural Gas	1,471.417	162.952	1,634.369	0.60%
Nuclear	310.167	18,420.386	18,730.553	6.83%
Other	18.606	0.000	18.606	0.01%
Petroleum	41.462	15.216	56.678	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	73.806	16.297	90.103	0.03%
Wind	0.000	0.000	0.000	0.00%
Total	11,868.000	262,455.309	274,323.309	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

Calculations are based on power purchases for 2012 reported by the Utility to the Washington State Department of Commerce in 2013.

# **City of Centralia**

### **Claims on Plants Calendar Year 2012**

Yelm Claim Type: PlntMix 76,263.000

Water 76,263.000

# **City of Centralia**

BPA Resource Mix		186,192.309
	Biomass	114.273
	Natural Gas	162.952
	Nuclear	18,420.386
	Petroleum (heavy oil)	15.216
	Waste	16.297
	Water	167,463.184

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

# **City of Centralia**

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		11,868.000
	BPA Market Purchase*	8,762.541
	Utility Market Purchase	3,105.459

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	2.05%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.50%
Landfill Gases	0.01%
Natural Gas	0.80%
Nuclear	9.47%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. 0 ca.	Percent
Biomass	48.511	80.597	129.108	0.09%
Coal	2,854.139	0.000	2,854.139	2.05%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	3,804.200	118,112.079	121,916.280	87.50%
Landfill Gases	12.235	0.000	12.235	0.01%
Natural Gas	993.372	114.930	1,108.303	0.80%
Nuclear	209.398	12,991.931	13,201.329	9.47%
Other	12.561	0.000	12.561	0.01%
Petroleum	27.991	10.732	38.723	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	49.827	11.495	61.322	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	8,012.236	131,321.764	139,334.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		131,321.764
	Biomass	80.597
	Natural Gas	114.930
	Nuclear	12,991.931
	Petroleum (heavy oil)	10.732
	Waste	11.495
	Water	118,112.079

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		8,012.236
	BPA Market Purchase*	6,180.236
	Utility Market Purchase	1,832.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	56.758	122.251	179.009	0.09%
Coal	3,339.336	0.000	3,339.336	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	4,450.906	179,154.610	183,605.515	88.03%
Landfill Gases	14.315	0.000	14.315	0.01%
Natural Gas	1,162.243	174.329	1,336.572	0.64%
Nuclear	244.995	19,706.404	19,951.398	9.57%
Other	14.696	0.000	14.696	0.01%
Petroleum	32.750	16.278	49.028	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	58.298	17.435	75.733	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	9,374.297	199,191.307	208,565.604	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		199,191.307
	Biomass	122.251
	Natural Gas	174.329
	Nuclear	19,706.404
	Petroleum (heavy oil)	16.278
	Waste	17.435
	Water	179,154.610

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 9,374.297

BPA Market Purchase\* 9,374.297

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	16.055	34.580	50.635	0.09%
Coal	944.567	0.000	944.567	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	1,258.986	50,675.787	51,934.773	88.03%
Landfill Gases	4.049	0.000	4.049	0.01%
Natural Gas	328.753	49.311	378.064	0.64%
Nuclear	69.299	5,574.166	5,643.465	9.57%
Other	4.157	0.000	4.157	0.01%
Petroleum	9.264	4.605	13.868	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	16.490	4.932	21.422	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	2,651.620	56,343.380	58,995.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

<b>BPA Resource Mix</b>		56,343.380
	Biomass	34.580
	Natural Gas	49.311
	Nuclear	5,574.166
	Petroleum (heavy oil)	4.605
	Waste	4.932
	Water	50,675.787

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 2,651.620

BPA Market Purchase\* 2,651.620

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.64%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.00%
Landfill Gases	0.01%
Natural Gas	0.65%
Nuclear	9.55%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. Gta.	Percent
Biomass	203.414	427.848	631.261	0.09%
Coal	11,967.739	0.000	11,967.739	1.64%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	15,951.455	627,724.843	643,676.298	88.00%
Landfill Gases	51.305	0.000	51.305	0.01%
Natural Gas	4,165.326	610.108	4,775.433	0.65%
Nuclear	878.029	68,967.574	69,845.603	9.55%
Other	52.669	0.000	52.669	0.01%
Petroleum	117.371	56.971	174.342	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	208.932	61.019	269.951	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	33,596.239	697,848.361	731,444.600	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

Morse Creek Claim Type: PlntMix 727.700

Water 727.700

<b>BPA Resource Mix</b>		697,120.661
	Biomass	427.848
	Natural Gas	610.108
	Nuclear	68,967.574
	Petroleum (heavy oil)	56.971
	Waste	61.019
	Water	626,997.143

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases		33,596.239
	BPA Market Purchase*	32,807.739
	Utility Market Purchase	788.500

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	2.07%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.48%
Landfill Gases	0.01%
Natural Gas	0.80%
Nuclear	9.47%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	303.494	499.102	802.596	0.09%
Coal	17,855.944	0.000	17,855.944	2.07%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	23,799.676	731,417.603	755,217.279	87.48%
Landfill Gases	76.547	0.000	76.547	0.01%
Natural Gas	6,214.693	711.715	6,926.408	0.80%
Nuclear	1,310.025	80,453.473	81,763.498	9.47%
Other	78.583	0.000	78.583	0.01%
Petroleum	175.118	66.459	241.577	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	311.728	71.181	382.909	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	50,125.809	813,219.532	863,345.341	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix	813,219.532
Biomass	499.102
Natural Gas	711.715
Nuclear	80,453.473
Petroleum (heavy oil)	66.459
Waste	71.181
Water	731,417.603

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>	50,125.809	
	BPA Market Purchase*	38,271.559
	Utility Market Purchase	11,854.250

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

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<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. 5 (4)	Percent
Biomass	8.028	17.291	25.319	0.09%
Coal	472.307	0.000	472.307	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	629.525	25,339.182	25,968.707	88.03%
Landfill Gases	2.025	0.000	2.025	0.01%
Natural Gas	164.385	24.657	189.041	0.64%
Nuclear	34.651	2,787.225	2,821.876	9.57%
Other	2.079	0.000	2.079	0.01%
Petroleum	4.632	2.302	6.934	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	8.246	2.466	10.712	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	1,325.877	28,173.123	29,499.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		28,173.123
	Biomass	17.291
	Natural Gas	24.657
	Nuclear	2,787.225
	Petroleum (heavy oil)	2.302
	Waste	2.466
	Water	25,339.182

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 1,325.877

BPA Market Purchase\* 1,325.877

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	3.936	8.478	12.414	0.09%
Coal	231.586	0.000	231.586	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	308.674	12,424.525	12,733.199	88.03%
Landfill Gases	0.993	0.000	0.993	0.01%
Natural Gas	80.603	12.090	92.692	0.64%
Nuclear	16.991	1,366.656	1,383.646	9.57%
Other	1.019	0.000	1.019	0.01%
Petroleum	2.271	1.129	3.400	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	4.043	1.209	5.252	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	650.115	13,814.087	14,464.202	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix	13,814.087
Biomass	8.478
Natural Gas	12.090
Nuclear	1,366.656
Petroleum (heavy oil)	1.129
Waste	1.209
Water	12,424.525

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 650.115

BPA Market Purchase\* 650.115

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **Columbia Rural Electric Association, Inc**

Biomass	0.12%
Coal	3.69%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	85.55%
Landfill Gases	0.02%
Natural Gas	1.36%
Nuclear	9.14%
Other	0.02%
Petroleum	0.04%
Solar	0.00%
Waste	0.07%
Wind	0.00%
Total	100.00%

# **Columbia Rural Electric Association, Inc**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	10001	Percent
Biomass	198.659	174.384	373.042	0.12%
Coal	11,687.984	0.000	11,687.984	3.69%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	15,578.579	255,553.886	271,132.465	85.55%
Landfill Gases	50.105	0.000	50.105	0.02%
Natural Gas	4,067.958	248.670	4,316.628	1.36%
Nuclear	857.504	28,110.067	28,967.571	9.14%
Other	51.438	0.000	51.438	0.02%
Petroleum	114.627	23.220	137.848	0.04%
Solar	0.000	0.000	0.000	0.00%
Waste	204.048	24.870	228.919	0.07%
Wind	0.000	0.000	0.000	0.00%
Total	32,810.903	284,135.097	316,946.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# **Columbia Rural Electric Association, Inc**

BPA Resource Mix		284,135.097
	Biomass	174.384
	Natural Gas	248.670
	Nuclear	28,110.067
	Petroleum (heavy oil)	23.220
	Waste	24.870
	Water	255,553.886

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Columbia Rural Electric Association, Inc**

### **Market Purchases Calendar Year 2012**

Total Market Purchases		32,810.903
	BPA Market Purchase*	13,371.903
	Utility Market Purchase	19,439.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	4.788	10.314	15.102	0.09%
Coal	281.729	0.000	281.729	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	375.508	15,114.690	15,490.199	88.03%
Landfill Gases	1.208	0.000	1.208	0.01%
Natural Gas	98.055	14.708	112.762	0.64%
Nuclear	20.669	1,662.565	1,683.234	9.57%
Other	1.240	0.000	1.240	0.01%
Petroleum	2.763	1.373	4.136	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	4.918	1.471	6.389	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	790.879	16,805.121	17,596.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

<b>BPA Resource Mix</b>		16,805.121
	Biomass	10.314
	Natural Gas	14.708
	Nuclear	1,662.565
	Petroleum (heavy oil)	1.373
	Waste	1.471
	Water	15,114.690

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases		790.879	
	BPA Market Purchase*	790.879	

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	74.337	160.113	234.450	0.09%
Coal	4,373.571	0.000	4,373.571	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	5,829.407	234,641.050	240,470.457	88.03%
Landfill Gases	18.749	0.000	18.749	0.01%
Natural Gas	1,522.205	228.320	1,750.525	0.64%
Nuclear	320.873	25,809.725	26,130.598	9.57%
Other	19.248	0.000	19.248	0.01%
Petroleum	42.893	21.320	64.213	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	76.354	22.835	99.189	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	12,277.635	260,883.365	273,161.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

<b>BPA Resource Mix</b>		260,883.365
	Biomass	160.113
	Natural Gas	228.320
	Nuclear	25,809.725
	Petroleum (heavy oil)	21.320
	Waste	22.835
	Water	234,641.050

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 12,277.635

BPA Market Purchase\* 12,277.635

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.74%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.28%
Landfill Gases	0.01%
Natural Gas	0.69%
Nuclear	9.47%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.65%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	265.602	520.553	786.155	0.09%
Coal	15,626.580	0.000	15,626.580	1.74%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	20,828.220	762,853.779	783,681.999	87.28%
Landfill Gases	66.990	0.000	66.990	0.01%
Natural Gas	5,438.771	742.305	6,181.076	0.69%
Nuclear	1,146.464	83,911.347	85,057.811	9.47%
Other	68.772	0.000	68.772	0.01%
Petroleum	153.254	69.315	222.569	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	272.808	74.240	347.048	0.04%
Wind	0.000	5,822.000	5,822.000	0.65%
Total	43,867.462	853,993.538	897,861.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

StatelineWA (FPL Energy	Claim Type:	PIntMix	2,187.000
	Wind		2,187.000
Foote Creek I	Claim Type:	PlntMix	460.000
	Wind		460.000
Foote Creek II	Claim Type:	PlntMix	59.000
	Wind		59.000
Condon Windpower LLC	Claim Type:	PlntMix	1,135.000
	Wind		1,135.000
Klondike	Claim Type:	PlntMix	553.000
	Wind		553.000
Klondike Windpower III	Claim Type:	PlntMix	1,428.000
	Wind		1,428.000

BPA Resource Mix		848,171.538
	Biomass	520.553
	Natural Gas	742.305
	Nuclear	83,911.347
	Petroleum (heavy oil)	69.315
	Waste	74.240
	Water	762,853.779

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases		43,867.462
	BPA Market Purchase*	39,916.462
	Utility Market Purchase	3.951.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

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<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	74.291	160.015	234.307	0.09%
Coal	4,370.893	0.000	4,370.893	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	5,825.838	234,497.370	240,323.207	88.03%
Landfill Gases	18.738	0.000	18.738	0.01%
Natural Gas	1,521.272	228.181	1,749.453	0.64%
Nuclear	320.676	25,793.921	26,114.597	9.57%
Other	19.236	0.000	19.236	0.01%
Petroleum	42.867	21.307	64.174	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	76.307	22.821	99.128	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	12,270.117	260,723.615	272,993.732	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		260,723.615
	Biomass	160.015
	Natural Gas	228.181
	Nuclear	25,793.921
	Petroleum (heavy oil)	21.307
	Waste	22.821
	Water	234,497.370

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 12,270.117

BPA Market Purchase\* 12,270.117

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	8.515	18.340	26.855	0.09%
Coal	500.967	0.000	500.967	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	667.725	26,876.764	27,544.489	88.03%
Landfill Gases	2.148	0.000	2.148	0.01%
Natural Gas	174.360	26.153	200.512	0.64%
Nuclear	36.754	2,956.354	2,993.108	9.57%
Other	2.205	0.000	2.205	0.01%
Petroleum	4.913	2.442	7.355	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	8.746	2.616	11.361	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	1,406.332	29,882.668	31,289.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		29,882.668
	Biomass	18.340
	Natural Gas	26.153
	Nuclear	2,956.354
	Petroleum (heavy oil)	2.442
	Waste	2.616
	Water	26,876.764

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 1,406.332

BPA Market Purchase\* 1,406.332

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	60.002	129.237	189.238	0.09%
Coal	3,530.161	0.000	3,530.161	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	4,705.251	189,392.327	194,097.577	88.03%
Landfill Gases	15.133	0.000	15.133	0.01%
Natural Gas	1,228.659	184.291	1,412.950	0.64%
Nuclear	258.995	20,832.518	21,091.513	9.57%
Other	15.536	0.000	15.536	0.01%
Petroleum	34.621	17.209	51.830	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	61.629	18.431	80.061	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	9,909.988	210,574.012	220,484.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix	210,574.012
Biomass	129.237
Natural Gas	184.291
Nuclear	20,832.518
Petroleum (heavy oil)	17.209
Waste	18.431
Water	189,392.327

<sup>\*</sup>Includes that part of claims on BPA electricity products that correspond to the percentage of BPA's power that comes from specific generating facilities. That part of claims on BPA electricity products that correspond to the percentage of BPA's power that comes from market purchases is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 9,909.988

BPA Market Purchase\*

9,909.988

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	14.495	31.221	45.717	0.09%
Coal	852.824	0.000	852.824	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	1,136.705	45,753.807	46,890.511	88.03%
Landfill Gases	3.656	0.000	3.656	0.01%
Natural Gas	296.822	44.521	341.343	0.64%
Nuclear	62.569	5,032.765	5,095.333	9.57%
Other	3.753	0.000	3.753	0.01%
Petroleum	8.364	4.157	12.521	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	14.889	4.453	19.341	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	2,394.076	50,870.924	53,265.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

<b>BPA Resource Mix</b>		50,870.924
	Biomass	31.221
	Natural Gas	44.521
	Nuclear	5,032.765
	Petroleum (heavy oil)	4.157
	Waste	4.453
	Water	45,753.807

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 2,394.076

BPA Market Purchase\* 2,394.076

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# Northern Lights, Inc.

Biomass	0.08%
Coal	1.46%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	89.10%
Landfill Gases	0.01%
Natural Gas	0.58%
Nuclear	8.71%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.03%
Wind	0.00%
Total	100.00%

## Northern Lights, Inc.

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	0.030	0.064	0.094	0.08%
Coal	1.744	0.000	1.744	1.46%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	2.325	104.236	106.561	89.10%
Landfill Gases	0.007	0.000	0.007	0.01%
Natural Gas	0.607	0.091	0.698	0.58%
Nuclear	0.128	10.295	10.423	8.71%
Other	0.008	0.000	0.008	0.01%
Petroleum	0.017	0.009	0.026	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	0.030	0.009	0.040	0.03%
Wind	0.000	0.000	0.000	0.00%
Total	4.897	114.703	119.600	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

Calculations are based on power purchases for 2012 reported by the Utility to the Washington State Department of Commerce in 2013.

# Northern Lights, Inc.

### **Claims on Plants Calendar Year 2012**

Lake Creek Claim Type: PlntMix 10.644

Water 10.644

# Northern Lights, Inc.

BPA Slice	104.059
Biomass	0.064
Natural Gas	0.091
Nuclear	10.295
Petroleum (heavy oil)	0.009
Waste	0.009
Water	93.592

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### Northern Lights, Inc.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases	4.897	
	BPA Slice Wind w/o RECs**	4.897

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. 3 64.	Percent
Biomass	22.811	49.133	71.944	0.09%
Coal	1,342.091	0.000	1,342.091	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	1,788.835	72,002.867	73,791.702	88.03%
Landfill Gases	5.753	0.000	5.753	0.01%
Natural Gas	467.110	70.063	537.173	0.64%
Nuclear	98.464	7,920.073	8,018.537	9.57%
Other	5.906	0.000	5.906	0.01%
Petroleum	13.162	6.542	19.705	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	23.430	7.007	30.437	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	3,767.563	80,055.686	83,823.249	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### Claims on BPA\* Calendar Year 2012

<b>BPA Resource Mix</b>		80,055.686
	Biomass	49.133
	Natural Gas	70.063
	Nuclear	7,920.073
	Petroleum (heavy oil)	6.542
	Waste	7.007
	Water	72,002.867

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 3,767.563

BPA Market Purchase\* 3,767.563

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	14.761	31.794	46.555	0.09%
Coal	868.467	0.000	868.467	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	1,157.554	46,593.034	47,750.589	88.03%
Landfill Gases	3.723	0.000	3.723	0.01%
Natural Gas	302.267	45.338	347.604	0.64%
Nuclear	63.716	5,125.077	5,188.793	9.57%
Other	3.822	0.000	3.822	0.01%
Petroleum	8.517	4.234	12.751	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	15.162	4.534	19.696	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	2,437.989	51,804.011	54,242.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix	51,804.011
Biomass	31.794
Natural Gas	45.338
Nuclear	5,125.077
Petroleum (heavy oil)	4.234
Waste	4.534
Water	46,593.034

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 2,437.989

BPA Market Purchase\* 2,437.989

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.59%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.48%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.51%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.62%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	58.109	125.159	183.268	0.09%
Coal	3,418.790	0.000	3,418.790	1.59%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	4,556.807	183,417.297	187,974.104	87.48%
Landfill Gases	14.656	0.000	14.656	0.01%
Natural Gas	1,189.897	178.477	1,368.373	0.64%
Nuclear	250.824	20,175.285	20,426.109	9.51%
Other	15.046	0.000	15.046	0.01%
Petroleum	33.529	16.666	50.195	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	59.685	17.850	77.535	0.04%
Wind	0.000	1,337.000	1,337.000	0.62%
Total	9,597.343	205,267.734	214,865.077	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### **Claims on Plants Calendar Year 2012**

StatelineWA (FPL Energy	Claim Type:	PIntMix	502.000
	Wind		502.000
Foote Creek I	Claim Type:	PlntMix	103.000
	Wind		103.000
Foote Creek II	Claim Type:	PlntMix	17.000
	Wind		17.000
Condon Windpower LLC	Claim Type:	PIntMix	258.000
	Wind		258.000
Klondike	Claim Type:	PIntMix	125.000
	Wind		125.000
Klondike Windpower III	Claim Type:	PlntMix	332.000
	Wind		332.000

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		203,930.734
	Biomass	125.159
	Natural Gas	178.477
	Nuclear	20,175.285
	Petroleum (heavy oil)	16.666
	Waste	17.850
	Water	183,417.297

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 9,597.343

BPA Market Purchase\* 9,597.343

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **Pacific Power and Light**

Biomass	0.61%
Coal	35.62%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	47.48%
Landfill Gases	0.15%
Natural Gas	12.40%
Nuclear	2.61%
Other	0.16%
Petroleum	0.35%
Solar	0.00%
Waste	0.62%
Wind	0.00%
Total	100.00%

### **Pacific Power and Light**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	27,192.491	0.000	27,192.491	0.61%
Coal	1,599,857.530	0.000	1,599,857.530	35.62%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	2,132,404.215	0.000	2,132,404.215	47.48%
Landfill Gases	6,858.452	0.000	6,858.452	0.15%
Natural Gas	556,824.292	0.000	556,824.292	12.40%
Nuclear	117,375.635	0.000	117,375.635	2.61%
Other	7,040.883	0.000	7,040.883	0.16%
Petroleum	15,690.244	0.000	15,690.244	0.35%
Solar	0.000	0.000	0.000	0.00%
Waste	27,930.255	0.000	27,930.255	0.62%
Wind	0.000	0.000	0.000	0.00%
Total	4,491,174.000	0.000	4,491,174.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Pacific Power and Light**

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 4,491,174.000

Utility Market Purchase 4,491,174.000

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<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	32.753	70.547	103.301	0.09%
Coal	1,927.032	0.000	1,927.032	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	2,568.485	103,384.791	105,953.276	88.03%
Landfill Gases	8.261	0.000	8.261	0.01%
Natural Gas	670.696	100.600	771.296	0.64%
Nuclear	141.379	11,371.979	11,513.358	9.57%
Other	8.481	0.000	8.481	0.01%
Petroleum	18.899	9.394	28.293	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	33.642	10.061	43.703	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	5,409.628	114,947.372	120,357.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		114,947.372
	Biomass	70.547
	Natural Gas	100.600
	Nuclear	11,371.979
	Petroleum (heavy oil)	9.394
	Waste	10.061
	Water	103,384.791

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 5,409.628

BPA Market Purchase\* 5,409.628

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.79%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.80%
Landfill Gases	0.01%
Natural Gas	0.71%
Nuclear	9.53%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. Ota.	Percent
Biomass	185.095	353.875	538.970	0.09%
Coal	10,889.961	0.000	10,889.961	1.79%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	14,514.917	518,592.393	533,107.310	87.80%
Landfill Gases	46.684	0.000	46.684	0.01%
Natural Gas	3,790.209	504.623	4,294.832	0.71%
Nuclear	798.956	57,043.417	57,842.373	9.53%
Other	47.926	0.000	47.926	0.01%
Petroleum	106.801	47.121	153.922	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	190.117	50.469	240.585	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	30,570.667	576,591.897	607,162.564	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		576,591.897
	Biomass	353.875
	Natural Gas	504.623
	Nuclear	57,043.417
	Petroleum (heavy oil)	47.121
	Waste	50.469
	Water	518,592.393

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		30,570.667
	BPA Market Purchase*	27,135.441
	Utility Market Purchase	3,435.226

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	0.000	0.000	0.000	0.09%
Coal	0.005	0.000	0.005	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	0.007	0.265	0.271	88.03%
Landfill Gases	0.000	0.000	0.000	0.01%
Natural Gas	0.002	0.000	0.002	0.64%
Nuclear	0.000	0.029	0.029	9.57%
Other	0.000	0.000	0.000	0.01%
Petroleum	0.000	0.000	0.000	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	0.000	0.000	0.000	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	0.014	0.294	0.308	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		0.294
	Biomass	0.000
	Natural Gas	0.000
	Nuclear	0.029
	Petroleum (heavy oil)	0.000
	Waste	0.000
	Water	0.265

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>	0.014	
	BPA Market Purchase*	0.014

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.13%
Coal	4.72%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	79.91%
Landfill Gases	0.02%
Natural Gas	3.87%
Nuclear	8.34%
Other	0.02%
Petroleum	0.05%
Solar	0.00%
Waste	0.09%
Wind	2.85%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. 5 (3)	Percent
Biomass	1,364.350	842.826	2,207.177	0.13%
Coal	80,270.909	0.000	80,270.909	4.72%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	106,990.792	1,251,238.624	1,358,229.416	79.91%
Landfill Gases	344.115	0.000	344.115	0.02%
Natural Gas	27,937.983	37,766.248	65,704.230	3.87%
Nuclear	5,889.180	135,860.759	141,749.939	8.34%
Other	353.268	0.000	353.268	0.02%
Petroleum	787.239	112.228	899.467	0.05%
Solar	0.000	0.000	0.000	0.00%
Waste	1,401.367	120.202	1,521.568	0.09%
Wind	0.000	48,414.000	48,414.000	2.85%
Total	225,339.201	1,474,354.887	1,699,694.088	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### **Claims on Plants Calendar Year 2012**

Packwood	Claim Type:	PIntMix	16,103.000
	Water		16,103.000
Frederickson Power LP	Claim Type:	PlntMix	36,564.383
	Natural Gas		36,564.383
White Creek Wind Farm	Claim Type:	PlntMix	24,105.000
	Wind		24,105.000
Nine Canyon	Claim Type:	PIntMix	24,309.000
	Wind		24,309.000

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		778,036.230
	Biomass	477.508
	Natural Gas	680.924
	Nuclear	76,972.717
	Petroleum (heavy oil)	63.583
	Waste	68.101
	Water	699,773.397
BPA Slice		595,237.273
	Biomass	365.318
	Natural Gas	520.941
	Nuclear	58,888.042
	Petroleum (heavy oil)	48.644
	Waste	52.101
	Water	535,362.227

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		225,339.201
	BPA Market Purchase*	36,615.770
	BPA Slice Wind w/o RECs**	28,012.926
	Utility Market Purchase	160,710.506

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **PUD No 1 of Chelan County**

Biomass	0.10%
Coal	5.74%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	91.53%
Landfill Gases	0.02%
Natural Gas	2.00%
Nuclear	0.42%
Other	0.03%
Petroleum	0.06%
Solar	0.00%
Waste	0.10%
Wind	0.00%
Total	100.00%

### **PUD No 1 of Chelan County**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	1,510.599	0.000	1,510.599	0.10%
Coal	88,875.393	0.000	88,875.393	5.74%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	118,459.462	1,297,533.000	1,415,992.462	91.53%
Landfill Gases	381.001	0.000	381.001	0.02%
Natural Gas	30,932.741	0.000	30,932.741	2.00%
Nuclear	6,520.459	0.000	6,520.459	0.42%
Other	391.136	0.000	391.136	0.03%
Petroleum	871.625	29.000	900.625	0.06%
Solar	0.000	0.000	0.000	0.00%
Waste	1,551.583	0.000	1,551.583	0.10%
Wind	0.000	0.000	0.000	0.00%
Total	249,494.000	1,297,562.000	1,547,056.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# **PUD No 1 of Chelan County**

## **Claims on Plants Calendar Year 2012**

Rocky Reach	Claim Type:	PIntMix	404,470.000
	Water		404,470.000
Rock Island	Claim Type:	PlntMix	466,774.000
	Water		466,774.000
Chelan	Claim Type:	PIntMix	425,293.000
	Water		425,293.000
Stehekin Hydro	Claim Type:	PlntMix	996.000
	Water		996.000
Stehekin Diesel	Claim Type:	PlntMix	29.000
	Petroleum (	(light oil)	29.000

## **PUD No 1 of Chelan County**

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 249,494.000

Utility Market Purchase 249,494.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.08%
Coal	1.57%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.13%
Landfill Gases	0.01%
Natural Gas	0.63%
Nuclear	9.39%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.12%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	182.606	393.314	575.920	0.08%
Coal	10,743.549	0.000	10,743.549	1.57%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	14,319.768	588,252.871	602,572.639	88.13%
Landfill Gases	46.057	0.000	46.057	0.01%
Natural Gas	3,739.251	560.863	4,300.114	0.63%
Nuclear	788.214	63,400.835	64,189.049	9.39%
Other	47.282	0.000	47.282	0.01%
Petroleum	105.365	52.372	157.737	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	187.560	56.093	243.654	0.04%
Wind	0.000	847.000	847.000	0.12%
Total	30,159.652	653,563.348	683,723.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Packwood	Claim Type:	PlntMix	11,864.000
	Water		11,864.000
StatelineWA (FPL Energy	Claim Type:	PIntMix	376.000
	Wind		376.000
Condon Windpower LLC	Claim Type:	PlntMix	210.000
	Wind		210.000
Klondike	Claim Type:	PlntMix	76.000
	Wind		76.000
Klondike Windpower III	Claim Type:	PIntMix	185.000
	Wind		185.000

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		640,852.348
	Biomass	393.314
	Natural Gas	560.863
	Nuclear	63,400.835
	Petroleum (heavy oil)	52.372
	Waste	56.093
	Water	576,388.871

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 30,159.652

BPA Market Purchase\* 30,159.652

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.06%
Coal	1.17%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	76.44%
Landfill Gases	0.01%
Natural Gas	15.27%
Nuclear	7.01%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.03%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	910.589	1,961.309	2,871.898	0.06%
Coal	53,574.077	0.000	53,574.077	1.17%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	71,407.351	3,420,629.689	3,492,037.040	76.44%
Landfill Gases	229.667	0.000	229.667	0.01%
Natural Gas	18,646.253	678,747.813	697,394.066	15.27%
Nuclear	3,930.532	316,156.356	320,086.888	7.01%
Other	235.777	0.000	235.777	0.01%
Petroleum	525.416	261.161	786.577	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	935.294	279.717	1,215.011	0.03%
Wind	0.000	0.000	0.000	0.00%
Total	150,394.955	4,418,036.045	4,568,431.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Rocky Reach	Claim Type:	PIntMix	518,050.000
	Water		518,050.000
Priest Rapids	Claim Type:	PIntMix	7,600.000
	Water		7,600.000
Packwood	Claim Type:	PIntMix	20,743.000
	Water		20,743.000
River Road Gen Plant	Claim Type:	PIntMix	675,951.000
	Natural Gas	;	675,951.000

#### Claims on BPA\* Calendar Year 2012

BPA Slice		3,195,692.045
	Biomass	1,961.309
	Natural Gas	2,796.813
	Nuclear	316,156.356
	Petroleum (heavy oil)	261.161
	Waste	279.717
	Water	2,874,236.689

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 150,394.955

BPA Slice Wind w/o RECs\*\* 150,394.955

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	2.18%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	84.95%
Landfill Gases	0.01%
Natural Gas	0.84%
Nuclear	9.05%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.05%
Wind	2.78%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	1,932.084	2,871.281	4,803.365	0.09%
Coal	113,673.273	0.000	113,673.273	2.18%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	151,511.845	4,269,276.247	4,420,788.092	84.95%
Landfill Gases	487.308	0.000	487.308	0.01%
Natural Gas	39,563.548	4,094.427	43,657.975	0.84%
Nuclear	8,339.788	462,840.776	471,180.564	9.05%
Other	500.270	0.000	500.270	0.01%
Petroleum	1,114.825	382.329	1,497.155	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	1,984.504	409.495	2,393.999	0.05%
Wind	0.000	144,742.000	144,742.000	2.78%
Total	319,107.445	4,884,616.555	5,203,724.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Priest Rapids	Claim Type:	PlntMix	10,252.000
	Water		10,252.000
Wanapum	Claim Type:	PlntMix	11,106.000
	Water		11,106.000
StatelineWA (FPL Energy	Claim Type:	PlntMix	1,066.000
	Wind		1,066.000
Condon Windpower LLC	Claim Type:	PlntMix	718.000
	Wind		718.000
Klondike	Claim Type:	PlntMix	212.000
	Wind		212.000
Klondike Windpower III	Claim Type:	PIntMix	513.000
	Wind		513.000
White Creek Wind Farm	Claim Type:	PlntMix	107,152.000
	Wind		107,152.000
Harvest Wind Project	Claim Type:	PlntMix	29,932.000
	Wind		29,932.000
Swift 2	Claim Type:	PIntMix	40,146.000
	Water		40,146.000

Calculations are based on power purchases for 2012 reported by the Utility to the Washington State Department of Commerce in 2013.

# **PUD No 1 of Cowlitz County**

Nine Canyon Claim Type: PlntMix 5,149.000

Wind 5,149.000

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		2,145,821.807
	Biomass	1,316.967
	Natural Gas	1,877.985
	Nuclear	212,290.544
	Petroleum (heavy oil)	175.363
	Waste	187.822
	Water	1,929,973.126
BPA Slice		2,532,548.748
DI A Silice		2,332,340.740
	Biomass	1,554.314
	Natural Gas	2,216.442
	Nuclear	250,550.232
	Petroleum (heavy oil)	206.967
	Waste	221.672
	Water	2,277,799.121

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		319,107.445
	BPA Market Purchase*	100,986.193
	BPA Slice Wind w/o RECs**	119,186.252
	Utility Market Purchase	98,935.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **PUD No 1 of Douglas County**

Biomass	0.00%
Coal	0.00%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	100.00%
Landfill Gases	0.00%
Natural Gas	0.00%
Nuclear	0.00%
Other	0.00%
Petroleum	0.00%
Solar	0.00%
Waste	0.00%
Wind	0.00%
Total	100.00%

## **PUD No 1 of Douglas County**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	0.000	0.000	0.000	0.00%
Coal	0.000	0.000	0.000	0.00%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	0.000	724,663.000	724,663.000	100.00%
Landfill Gases	0.000	0.000	0.000	0.00%
Natural Gas	0.000	0.000	0.000	0.00%
Nuclear	0.000	0.000	0.000	0.00%
Other	0.000	0.000	0.000	0.00%
Petroleum	0.000	0.000	0.000	0.00%
Solar	0.000	0.000	0.000	0.00%
Waste	0.000	0.000	0.000	0.00%
Wind	0.000	0.000	0.000	0.00%
Total	0.000	724,663.000	724,663.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# **PUD No 1 of Douglas County**

### **Claims on Plants Calendar Year 2012**

Rocky Reach Claim Type: PlntMix 199,686.000

Water 199,686.000

Wells Claim Type: PlntMix 524,977.000

Water 524,977.000

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	28.897	62.242	91.139	0.09%
Coal	1,700.156	0.000	1,700.156	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	2,266.089	91,212.981	93,479.071	88.03%
Landfill Gases	7.288	0.000	7.288	0.01%
Natural Gas	591.733	88.756	680.489	0.64%
Nuclear	124.734	10,033.121	10,157.855	9.57%
Other	7.482	0.000	7.482	0.01%
Petroleum	16.674	8.288	24.962	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	29.681	8.877	38.558	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	4,772.736	101,414.264	106,187.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		101,414.264
	Biomass	62.242
	Natural Gas	88.756
	Nuclear	10,033.121
	Petroleum (heavy oil)	8.288
	Waste	8.877
	Water	91,212.981

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 4,772.736

BPA Market Purchase\* 4,772.736

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.12%
Coal	4.13%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	82.74%
Landfill Gases	0.02%
Natural Gas	2.60%
Nuclear	8.67%
Other	0.02%
Petroleum	0.05%
Solar	0.00%
Waste	0.08%
Wind	1.58%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	719.772	531.686	1,251.458	0.12%
Coal	42,347.445	0.000	42,347.445	4.13%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	56,443.695	791,254.330	847,698.025	82.74%
Landfill Gases	181.540	0.000	181.540	0.02%
Natural Gas	14,738.866	11,864.181	26,603.047	2.60%
Nuclear	3,106.876	85,706.002	88,812.878	8.67%
Other	186.369	0.000	186.369	0.02%
Petroleum	415.313	70.797	486.110	0.05%
Solar	0.000	0.000	0.000	0.00%
Waste	739.300	75.828	815.128	0.08%
Wind	0.000	16,157.000	16,157.000	1.58%
Total	118,879.176	905,659.824	1,024,539.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Packwood	Claim Type:	PIntMix	12,085.000
	Water		12,085.000
Frederickson Power LP	Claim Type:	PIntMix	11,106.000
	Natural Gas		11,106.000
White Creek Wind Farm	Claim Type:	PIntMix	7,694.000
	Wind		7,694.000
Nine Canyon	Claim Type:	PIntMix	8,463.000
	Wind		8,463.000

#### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		514,534.109
	Biomass	315.788
	Natural Gas	450.311
	Nuclear	50,903.913
	Petroleum (heavy oil)	42.049
	Waste	45.037
	Water	462,777.011
BPA Slice		351,777.715
	Biomass	215.898
	Natural Gas	307.870
	Nuclear	34,802.089
	Petroleum (heavy oil)	28.748
	Waste	30.791
	Water	316,392.318

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		118,879.176
	BPA Market Purchase*	24,214.891
	BPA Slice Wind w/o RECs**	16,555.285
	Utility Market Purchase	78,109.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	279.100	601.150	880.250	0.09%
Coal	16,420.700	0.000	16,420.700	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	21,886.680	880,966.717	902,853.398	88.03%
Landfill Gases	70.394	0.000	70.394	0.01%
Natural Gas	5,715.162	857.236	6,572.398	0.64%
Nuclear	1,204.726	96,903.372	98,108.098	9.57%
Other	72.267	0.000	72.267	0.01%
Petroleum	161.042	80.047	241.089	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	286.672	85.734	372.406	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	46,096.743	979,494.257	1,025,591.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on BPA\* Calendar Year 2012**

BPA Resource Mix		390,594.908
	Biomass	239.722
	Natural Gas	341.842
	Nuclear	38,642.354
	Petroleum (heavy oil)	31.921
	Waste	34.189
	Water	351,304.882
BPA Slice		588,899.349
		300,033.343
	Biomass	361.428
	Biomass Natural Gas	·
		361.428
	Natural Gas	361.428 515.394
	Natural Gas Nuclear	361.428 515.394 58,261.018

<sup>\*</sup>Includes that part of claims on BPA electricity products that correspond to the percentage of BPA's power that comes from specific generating facilities. That part of claims on BPA electricity products that correspond to the percentage of BPA's power that comes from market purchases is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases		46,096.743
	BPA Market Purchase*	18,382.092
	BPA Slice Wind w/o RECs**	27,714.651

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **PUD No 1 of Kittitas County**

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

## **PUD No 1 of Kittitas County**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	26.204	56.440	82.643	0.09%
Coal	1,541.680	0.000	1,541.680	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	2,054.861	82,710.753	84,765.614	88.03%
Landfill Gases	6.609	0.000	6.609	0.01%
Natural Gas	536.576	80.483	617.058	0.64%
Nuclear	113.107	9,097.904	9,211.012	9.57%
Other	6.785	0.000	6.785	0.01%
Petroleum	15.120	7.515	22.635	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	26.915	8.049	34.964	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	4,327.855	91,961.145	96,289.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# **PUD No 1 of Kittitas County**

BPA Resource Mix	91,961.145
Biomass	56.440
Natural Gas	80.483
Nuclear	9,097.904
Petroleum (heavy oil)	7.515
Waste	8.049
Water	82,710.753

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

## **PUD No 1 of Kittitas County**

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 4,327.855

BPA Market Purchase\* 4,327.855

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.10%
Coal	3.33%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	85.28%
Landfill Gases	0.01%
Natural Gas	1.22%
Nuclear	7.48%
Other	0.01%
Petroleum	0.04%
Solar	0.00%
Waste	0.06%
Wind	2.46%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. • • • • • • • • • • • • • • • • • • •	Percent
Biomass	205.262	162.773	368.036	0.10%
Coal	12,076.516	0.000	12,076.516	3.33%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	16,096.442	293,135.122	309,231.564	85.28%
Landfill Gases	51.771	0.000	51.771	0.01%
Natural Gas	4,203.185	232.114	4,435.299	1.22%
Nuclear	886.009	26,238.500	27,124.509	7.48%
Other	53.148	0.000	53.148	0.01%
Petroleum	118.438	21.674	140.112	0.04%
Solar	0.000	0.000	0.000	0.00%
Waste	210.831	23.214	234.046	0.06%
Wind	0.000	8,909.000	8,909.000	2.46%
Total	33,901.603	328,722.397	362,624.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

McNary	Claim Type:	PIntMix	54,596.000

Water 54,596.000

White Creek Wind Farm Claim Type: PlntMix 8,909.000

Wind 8,909.000

BPA Slice		265,217.397
	Biomass	162.773
	Natural Gas	232.114
	Nuclear	26,238.500
	Petroleum (heavy oil)	21.674
	Waste	23.214
	Water	238,539.122

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases		33,901.603
	BPA Slice Wind w/o RECs**	12,481.603
	Utility Market Purchase	21,420.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.11%
Coal	3.11%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	85.74%
Landfill Gases	0.01%
Natural Gas	1.16%
Nuclear	9.11%
Other	0.01%
Petroleum	0.04%
Solar	0.00%
Waste	0.06%
Wind	0.64%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	504.767	525.588	1,030.355	0.11%
Coal	29,697.735	0.000	29,697.735	3.11%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	39,583.260	778,281.855	817,865.115	85.74%
Landfill Gases	127.312	0.000	127.312	0.01%
Natural Gas	10,336.183	749.485	11,085.668	1.16%
Nuclear	2,178.813	84,722.976	86,901.789	9.11%
Other	130.698	0.000	130.698	0.01%
Petroleum	291.254	69.985	361.239	0.04%
Solar	0.000	0.000	0.000	0.00%
Waste	518.462	74.958	593.420	0.06%
Wind	0.000	6,132.000	6,132.000	0.64%
Total	83,368.484	870,556.847	953,925.331	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Packwood	Claim Type:	PlntMix	6,919.000
	Water		6,919.000
Foote Creek I	Claim Type:	PlntMix	482.000
	Wind		482.000
Foote Creek II	Claim Type:	PIntMix	55.000
	Wind		55.000
Condon Windpower LLC	Claim Type:	PlntMix	1,192.000
	Wind		1,192.000
Klondike	Claim Type:	PIntMix	584.000
	Wind		584.000
StatelineOR (FPL Energy	Claim Type:	PlntMix	2,312.000
	Wind		2,312.000
Klondike Windpower III	Claim Type:	PlntMix	1,507.000
	Wind		1,507.000
Mill Creek	Claim Type:	PlntMix	1,130.400
	Water		1,130.400

BPA Resource Mix		345,820.091
	Biomass	212.242
	Natural Gas	302.656
	Nuclear	34,212.690
	Petroleum (heavy oil)	28.261
	Waste	30.269
	Water	311,033.973
BPA Slice		510,555.356
	Biomass	313.346
	Natural Gas	446.829
	Nuclear	50,510.287
	Petroleum (heavy oil)	41.724
	Waste	44.689
	Water	459,198.482

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		83,368.484
	BPA Market Purchase*	16,274.909
	BPA Slice Wind w/o RECs**	24,027.644
	Utility Market Purchase	43,065.931

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	21.484	46.274	67.758	0.09%
Coal	1,264.002	0.000	1,264.002	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	1,684.751	67,813.386	69,498.137	88.03%
Landfill Gases	5.419	0.000	5.419	0.01%
Natural Gas	439.931	65.987	505.918	0.64%
Nuclear	92.735	7,459.244	7,551.979	9.57%
Other	5.563	0.000	5.563	0.01%
Petroleum	12.396	6.162	18.558	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	22.067	6.600	28.666	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	3,548.348	75,397.652	78,946.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		75,397.652
	Biomass	46.274
	Natural Gas	65.987
	Nuclear	7,459.244
	Petroleum (heavy oil)	6.162
	Waste	6.600
	Water	67,813.386

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 3,548.348

BPA Market Purchase\* 3,548.348

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	2.99%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	89.50%
Landfill Gases	0.01%
Natural Gas	1.09%
Nuclear	6.18%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.06%
Wind	0.03%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	313.813	228.702	542.516	0.09%
Coal	18,463.052	0.000	18,463.052	2.99%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	24,608.872	528,481.073	553,089.945	89.50%
Landfill Gases	79.150	0.000	79.150	0.01%
Natural Gas	6,425.995	326.128	6,752.123	1.09%
Nuclear	1,354.566	36,866.048	38,220.614	6.18%
Other	81.255	0.000	81.255	0.01%
Petroleum	181.072	30.453	211.525	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	322.327	32.617	354.944	0.06%
Wind	0.000	190.877	190.877	0.03%
Total	51,830.102	566,155.898	617,986.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

	Wells	Claim Type: Pl	IntMix	193,324.918
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Water 193,324.918

Nine Canyon Claim Type: PlntMix 190.877

Wind 190.877

BPA Resource Mix		197,533.712
	Biomass	121.233
	Natural Gas	172.878
	Nuclear	19,542.414
	Petroleum (heavy oil)	16.143
	Waste	17.290
	Water	177,663.753
BPA Slice		175,106.392
	Biomass	107.469
	Natural Gas	153.250
	Nuclear	17,323.634
	Petroleum (heavy oil)	14.310
	Waste	15.327
	Water	157,492.402

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases		51,830.102
	BPA Market Purchase*	9,296.288
	BPA Slice Wind w/o RECs**	8,240.818
	Utility Market Purchase	34,292.995

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.02%
Coal	0.30%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	97.79%
Landfill Gases	0.00%
Natural Gas	0.12%
Nuclear	1.76%
Other	0.00%
Petroleum	0.00%
Solar	0.00%
Waste	0.01%
Wind	0.00%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	50.957	109.755	160.711	0.02%
Coal	2,998.005	0.000	2,998.005	0.30%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	3,995.955	989,162.261	993,158.215	97.79%
Landfill Gases	12.852	0.000	12.852	0.00%
Natural Gas	1,043.444	156.510	1,199.954	0.12%
Nuclear	219.953	17,692.107	17,912.060	1.76%
Other	13.194	0.000	13.194	0.00%
Petroleum	29.402	14.615	44.017	0.00%
Solar	0.000	0.000	0.000	0.00%
Waste	52.339	15.653	67.992	0.01%
Wind	0.000	0.000	0.000	0.00%
Total	8,416.100	1,007,150.900	1,015,567.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Box Canyon Claim Type: PlntMix 459,036.000

Water 459,036.000

Boundary Claim Type: PlntMix 369,284.000

Water 369,284.000

BPA Resource Mix		126,070.880
	Biomass	77.374
	Natural Gas	110.335
	Nuclear	12,472.450
	Petroleum (heavy oil)	10.303
	Waste	11.035
	Water	113,389.383
BPA Slice		52,760.020
	Biomass	32.381
	Natural Gas	46.175
	Nuclear	5,219.657
	Petroleum (heavy oil)	4.312
	Waste	4.618
	Water	47,452.878

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases		8,416.100
	BPA Market Purchase*	5,933.120
	BPA Slice Wind w/o RECs**	2,482.980

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	36.173	77.913	114.086	0.09%
Coal	2,128.225	0.000	2,128.225	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	2,836.650	114,178.790	117,015.440	88.03%
Landfill Gases	9.124	0.000	9.124	0.01%
Natural Gas	740.721	111.103	851.824	0.64%
Nuclear	156.140	12,559.282	12,715.422	9.57%
Other	9.366	0.000	9.366	0.01%
Petroleum	20.872	10.375	31.247	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	37.154	11.112	48.266	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	5,974.426	126,948.574	132,923.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

<b>BPA Resource Mix</b>		126,948.574
	Biomass	77.913
	Natural Gas	111.103
	Nuclear	12,559.282
	Petroleum (heavy oil)	10.375
	Waste	11.112
	Water	114,178.790

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 5,974.426

BPA Market Purchase\* 5,974.426

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.21%
Coal	2.56%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	85.80%
Landfill Gases	0.08%
Natural Gas	0.96%
Nuclear	8.33%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.05%
Wind	1.95%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	2,956.964	11,502.443	14,459.406	0.21%
Coal	173,971.566	0.000	173,971.566	2.56%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	231,881.711	5,597,000.327	5,828,882.038	85.80%
Landfill Gases	745.801	4,838.000	5,583.801	0.08%
Natural Gas	60,550.138	4,894.640	65,444.778	0.96%
Nuclear	12,763.651	553,298.165	566,061.816	8.33%
Other	765.639	0.000	765.639	0.01%
Petroleum	1,706.187	457.052	2,163.239	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	3,037.189	489.526	3,526.715	0.05%
Wind	0.000	132,676.000	132,676.000	1.95%
Total	488,378.847	6,305,156.153	6,793,535.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

## **Claims on Plants Calendar Year 2012**

Packwood	Claim Type:	PIntMix	22,813.000
	Water		22,813.000
White Creek Wind Farm	Claim Type:	PIntMix	11,379.000
	Wind		11,379.000
Hay Canyon Wind Power LLC	Claim Type:	PlntMix	102,425.000
	Wind		102,425.000
Wheat Field Wind Power	Claim Type:	PIntMix	18,872.000
	Wind		18,872.000
H M Jackson	Claim Type:	PIntMix	520,254.000
	Water		520,254.000
Roosevelt Biogas 1	Claim Type:	PIntMix	4,838.000
	Landfill Gas	es	4,838.000
Hampton Lumber Mill	Claim Type:	PIntMix	8,070.000
	Wood		8,070.000
Woods Creek	Claim Type:	PIntMix	2,522.000
	Water		2,522.000
Youngs Creek	Claim Type:	PIntMix	21,274.000
	Water		21,274.000

BPA Resource Mix		3,288,519.423
	Biomass	2,018.280
	Natural Gas	2,878.054
	Nuclear	325,339.958
	Petroleum (heavy oil)	268.747
	Waste	287.842
	Water	2,957,726.541
BPA Slice		2,304,189.730
	Biomass	1,414.163
	Natural Gas	2,016.586
	Natural Gas Nuclear	2,016.586 227,958.207
		,
	Nuclear	227,958.207

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		488,378.847
	BPA Market Purchase*	154,763.577
	BPA Slice Wind w/o RECs**	108,439.270
	Utility Market Purchase	225,176.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **PUD No 1 of Wahkiakum County**

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

### **PUD No 1 of Wahkiakum County**

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	12.006	25.860	37.867	0.09%
Coal	706.388	0.000	706.388	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	941.524	37,897.535	38,839.059	88.03%
Landfill Gases	3.028	0.000	3.028	0.01%
Natural Gas	245.856	36.877	282.732	0.64%
Nuclear	51.825	4,168.601	4,220.426	9.57%
Other	3.109	0.000	3.109	0.01%
Petroleum	6.928	3.443	10.371	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	12.332	3.688	16.020	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	1,982.995	42,136.005	44,119.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# **PUD No 1 of Wahkiakum County**

### Claims on BPA\* Calendar Year 2012

<b>BPA Resource Mix</b>		42,136.005
	Biomass	25.860
	Natural Gas	36.877
	Nuclear	4,168.601
	Petroleum (heavy oil)	3.443
	Waste	3.688
	Water	37,897.535

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the 'Market Purchases' table.

### **PUD No 1 of Wahkiakum County**

### **Market Purchases Calendar Year 2012**

Total Market Purchases 1,982.995

BPA Market Purchase\* 1,982.995

<sup>\* &#</sup>x27;BPA Market Purchases' are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix -- as though it were a market purchase.

### **Fuel Mix Calendar Year 2012**

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. 5 (3)	Percent
Biomass	55.664	119.893	175.557	0.09%
Coal	3,274.947	0.000	3,274.947	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	4,365.082	175,700.115	180,065.197	88.03%
Landfill Gases	14.039	0.000	14.039	0.01%
Natural Gas	1,139.833	170.967	1,310.800	0.64%
Nuclear	240.271	19,326.421	19,566.692	9.57%
Other	14.413	0.000	14.413	0.01%
Petroleum	32.118	15.965	48.083	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	57.174	17.099	74.273	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	9,193.540	195,350.460	204,544.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		195,350.460
В	Biomass	119.893
N	Natural Gas	170.967
N	Nuclear	19,326.421
P	Petroleum (heavy oil)	15.965
V	Waste	17.099
v	Water	175,700.115

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 9,193.540

BPA Market Purchase\* 9,193.540

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

### **Fuel Mix Calendar Year 2012**

Biomass	0.20%
Coal	11.82%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	82.47%
Landfill Gases	0.05%
Natural Gas	4.11%
Nuclear	0.98%
Other	0.05%
Petroleum	0.12%
Solar	0.00%
Waste	0.21%
Wind	0.00%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	8,109.129	28.343	8,137.472	0.20%
Coal	477,096.843	0.000	477,096.843	11.82%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	635,908.698	2,694,077.334	3,329,986.032	82.47%
Landfill Gases	2,045.273	0.000	2,045.273	0.05%
Natural Gas	166,051.731	40.416	166,092.147	4.11%
Nuclear	35,002.832	4,568.747	39,571.579	0.98%
Other	2,099.676	0.000	2,099.676	0.05%
Petroleum	4,679.020	3.774	4,682.794	0.12%
Solar	0.000	0.000	0.000	0.00%
Waste	8,329.140	4.042	8,333.182	0.21%
Wind	0.000	0.000	0.000	0.00%
Total	1,339,322.344	2,698,722.656	4,038,045.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

Priest Rapids	Claim Type:	PIntMix	1,297,804.000
	Water		1,297,804.000
Wanapum	Claim Type:	PIntMix	1,307,722.000
	Water		1,307,722.000
Potholes East Canal 66.0	Claim Type:	PIntMix	19,229.000
	Water		19,229.000
Quincy Chute	Claim Type:	PIntMix	27,787.000
	Water		27,787.000

### Claims on BPA\* Calendar Year 2012

BPA Resource Mix	46,180.656
Biomass	28.343
Natural Gas	40.416
Nuclear	4,568.747
Petroleum (heavy oil)	3.774
Waste	4.042
Water	41,535.334

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the 'Market Purchases' table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases 1,339,322.344

BPA Market Purchase\* 2,173.344

Utility Market Purchase 1,337,149.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

### **Fuel Mix Calendar Year 2012**

Diamaga.	0.400/
Biomass	0.10%
Coal	2.44%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.04%
Landfill Gases	0.01%
Natural Gas	0.93%
Nuclear	9.40%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.05%
Wind	0.00%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	125.700	173.579	299.279	0.10%
Coal	7,395.523	0.000	7,395.523	2.44%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	9,857.281	254,374.500	264,231.781	87.04%
Landfill Gases	31.704	0.000	31.704	0.01%
Natural Gas	2,573.984	247.522	2,821.506	0.93%
Nuclear	542.582	27,980.338	28,522.921	9.40%
Other	32.547	0.000	32.547	0.01%
Petroleum	72.530	23.113	95.643	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	129.111	24.755	153.866	0.05%
Wind	0.000	0.000	0.000	0.00%
Total	20,760.963	282,823.808	303,584.771	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on BPA\* Calendar Year 2012**

BPA Resource Mix		135,911.751
	Biomass	83.414
	Natural Gas	118.948
	Nuclear	13,446.028
	Petroleum (heavy oil)	11.107
	Waste	11.896
	Water	122,240.359
BPA Slice		146,912.057
	Biomass	90.165
	Natural Gas	128.575
	Nuclear	14,534.311
	Petroleum (heavy oil)	12.006
	Waste	12.859
	Water	132,134.141

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		20,760.963
	BPA Market Purchase*	6,396.249
	BPA Slice Wind w/o RECs**	6,913.943
	Utility Market Purchase	7,450.771

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

### **Fuel Mix Calendar Year 2012**

Biomass	0.08%
Coal	1.57%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	87.21%
Landfill Gases	0.01%
Natural Gas	0.63%
Nuclear	9.39%
Other	0.01%
Petroleum	0.02%
Solar	0.03%
Waste	0.04%
Wind	1.01%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	Total	Percent
Biomass	186.978	402.730	589.707	0.08%
Coal	11,000.749	0.000	11,000.749	1.57%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	14,662.583	595,948.597	610,611.180	87.21%
Landfill Gases	47.159	0.000	47.159	0.01%
Natural Gas	3,828.769	574.290	4,403.058	0.63%
Nuclear	807.084	64,918.648	65,725.732	9.39%
Other	48.414	0.000	48.414	0.01%
Petroleum	107.887	53.626	161.513	0.02%
Solar	0.000	198.000	198.000	0.03%
Waste	192.051	57.436	249.487	0.04%
Wind	0.000	7,106.000	7,106.000	1.01%
Total	30,881.673	669,259.327	700,141.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

Packwood	Claim Type:	PlntMix	5,761.000
	Water		5,761.000
Nine Canyon	Claim Type:	PlntMix	7,106.000
	Wind		7,106.000
Johns Prairie Solar	Claim Type:	PlntMix	198.000
	SolarPhoto	ovoltaic	198.000

### Claims on BPA\* Calendar Year 2012

BPA Resource Mix	656,194.327
Biomass	402.730
Natural Gas	574.290
Nuclear	64,918.648
Petroleum (heavy oil)	53.626
Waste	57.436
Water	590,187.597

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 30,881.673

BPA Market Purchase\* 30,881.673

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

### **Fuel Mix Calendar Year 2012**

Biomass	0.23%
Coal	29.76%
Cogeneration	2.11%
Geothermal	0.00%
Hydro	42.16%
Landfill Gases	0.06%
Natural Gas	15.55%
Nuclear	1.28%
Other	0.06%
Petroleum	0.18%
Solar	0.00%
Waste	0.24%
Wind	8.36%
Total	100.00%

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	49,410.893	1,252.384	50,663.277	0.23%
Coal	2,907,066.800	3,752,382.317	6,659,449.117	29.76%
Cogeneration	0.000	472,401.567	472,401.567	2.11%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	3,874,745.957	5,559,402.177	9,434,148.133	42.16%
Landfill Gases	12,462.347	0.000	12,462.347	0.06%
Natural Gas	1,011,793.477	2,467,072.661	3,478,866.138	15.55%
Nuclear	213,280.749	73,695.774	286,976.524	1.28%
Other	12,793.838	0.000	12,793.838	0.06%
Petroleum	28,510.406	12,576.345	41,086.751	0.18%
Solar	0.000	879.015	879.015	0.00%
Waste	50,751.468	3,579.840	54,331.308	0.24%
Wind	0.000	1,870,768.985	1,870,768.985	8.36%
Total	8,160,815.935	14,214,011.065	22,374,827.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

Crystal Mountain	Claim Type:	PIntMix	294.000
	Petroleum(	light oil)	294.000
Electron	Claim Type:	PIntMix	48,886.000
	Water		48,886.000
Lower Baker	Claim Type:	PIntMix	344,360.000
	Water		344,360.000
Upper Baker	Claim Type:	PIntMix	344,804.000
	Water		344,804.000
Rocky Reach	Claim Type:	PIntMix	1,779,973.000
	Water		1,779,973.000
Wells	Claim Type:	PIntMix	966,126.000
	Water		966,126.000
Priest Rapids	Claim Type:	PIntMix	38,092.000
	Water		38,092.000
Wanapum	Claim Type:	PIntMix	39,869.000
	Water		39,869.000

Port Townsend Paper Corp	Claim Type:	PIntMix	1,454.000
	Petroleum (	heavy oil)	309.079
	Waste		766.638
	Water		76.078
	Wood		302.204
Twin Falls Hydro	Claim Type:	PlntMix	94,479.000
	Water		94,479.000
Koma Kulshan Associates	Claim Type:	PIntMix	41,921.000
	Water		41,921.000
March Point Cogeneration Co	Claim Type:	Cogen	363,996.000
•	Natural Gas	•	363,996.000
Weeks Falls	Claim Type:	PIntMix	16,873.000
	Water		16,873.000
Sumas Cogeneration Co LP	Claim Type:	PlntMix	220,603.000
	Natural Gas		220,603.000
Ferndale Cogeneration	Claim Type:	Cogen	1,584.000
	Natural Gas		1,584.000
Hutchinson Creek	Claim Type:	PIntMix	1,227.000
	Water		1,227.000
Black Coach	01-1	Distantis	44 000 000
Black Creek	Claim Type:	PIntMix	11,320.000
	Water		11,320.000

Goldendale Generating	Claim Type:	PlntMix	896,704.000
	Natural Gas		896,704.000
Mint Farm Generation LLC	Claim Type:	PIntMix	1,082,623.000
Willie Farm Generation 220	Natural Gas		1,082,623.000
	Natarai Gas		1,002,023.000
Frederickson Power LP	Claim Type:	PIntMix	172,713.000
	Natural Gas		172,713.000
Hopkins Ridge Wind	Claim Type:	PIntMix	424,582.000
	Wind		424,582.000
Wild Horse Wind	Claim Type:	PlntMix	618,956.000
Wild Holde Willia	SolarPhoto		724.015
		Svoitaic	
	Wind		618,231.985
Klondike Windpower III	Claim Type:	PIntMix	123,039.000
	Wind		123,039.000
Lower Snake River Wind	Claim Type:	PIntMix	704,729.000
	Wind		704,729.000
Manath Falls Disassers Facility	Claim Tomas	Distant.	403.000
Klamath Falls Bioenergy Facility	Claim Type:	PlntMix	493.000
	Wood		493.000
Fredonia	Claim Type:	PlntMix	41,954.000
	Petroleum (	light oil)	3,415.929
	Natural Gas		38,538.071

Colstrip	Claim Type: PIntMix Coal (bituminous) Petroleum (light oil) Petroleum (heavy oil)	<b>3,755,938.000</b> 3,752,382.317 1,650.026 1,905.657
Whitehorn	Claim Type: PlntMix Petroleum (light oil) Natural Gas	<b>28,866.000</b> 4,130.255 24,735.745
Rock Island	Claim Type: PlntMix Water	<b>1,115,695.000</b> 1,115,695.000
Skookumchuck	Claim Type: PlntMix Water	<b>6,332.000</b> 6,332.000
The Dalles Fishway	Claim Type: PlntMix Water	<b>37,689.000</b> 37,689.000
Smith Creek	Claim Type: PlntMix Water	<b>212.000</b> 212.000
Encogen	Claim Type: Cogen Petroleum (light oil) Natural Gas	<b>106,931.000</b> 109.433 106,821.567
Frederickson	Claim Type: PIntMix Petroleum (light oil) Natural Gas	<b>31,205.000</b> 701.090 30,503.910
Sygitowicz Creek	Claim Type: PlntMix Water	<b>1,457.000</b> 1,457.000
Island Community Solar	Claim Type: PlntMix SolarPhotovoltaic	<b>57.000</b> 57.000
3 Bar G Wind Turbine #3	Claim Type: PlntMix Wind	<b>187.000</b> 187.000

Smith Creek (Whatcom	Claim Type: Water	PIntMix	<b>29.000</b> 29.000
Bio Energy Washington	Claim Type: Waste	PlntMix	<b>2,748.000</b> 2,748.000
Cascade Community Solar	Claim Type: SolarPhoto	<b>PlntMix</b> ovoltaic	<b>3.000</b> 3.000
Lake Washington Finn Hill	Claim Type: SolarPhoto	PIntMix ovoltaic	<b>95.000</b> 95.000

### Claims on BPA\* Calendar Year 2012

<b>BPA Resource Mix</b>		744,913.065
	Biomass	457.179
	Natural Gas	651.935
	Nuclear	73,695.774
	Petroleum (heavy oil)	60.876
	Waste	65.202
	Water	669,982.099

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the 'Market Purchases' table.

### **Market Purchases Calendar Year 2012**

Total Market Purchases	8.160.815.935
Total Market Purchases	8.100.813.933

BPA Market Purchase\* 35,056.935 Utility Market Purchase 8,125,759.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

# **Ruston Electric Utility**

### **Fuel Mix Calendar Year 2012**

Biomass	0.08%
Coal	2.36%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	89.92%
Landfill Gases	0.01%
Natural Gas	0.88%
Nuclear	6.67%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.05%
Wind	0.00%
Total	100.00%

# **Ruston Electric Utility**

#### **Fuel Mix Calculations Calendar Year 2012**

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	2.494	2.505	4.999	0.08%
Coal	146.711	0.000	146.711	2.36%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	195.547	5,393.876	5,589.423	89.92%
Landfill Gases	0.629	0.000	0.629	0.01%
Natural Gas	51.062	3.572	54.634	0.88%
Nuclear	10.764	403.803	414.567	6.67%
Other	0.646	0.000	0.646	0.01%
Petroleum	1.439	0.334	1.772	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	2.561	0.357	2.919	0.05%
Wind	0.000	0.000	0.000	0.00%
Total	411.852	5,804.448	6,216.300	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

# Ruston Electric Utility Claims on Plants Calendar Year 2012

Priest Rapids	Claim Type:	PIntMix	17.783
	Water		17.783
Alder	Claim Type:	PlntMix	130.708
711001	Water	· incivity	130.708
Cushman 1	Claim Type:	PIntMix	51.794
	Water		51.794
Cushman 2	Claim Type:	PlntMix	72.813
Cusillian 2	Water	PIIILIVIIX	72.813
	water		72.813
LaGrande	Claim Type:	PIntMix	202.125
	Water		202.125
6.11		-1	
Mayfield	Claim Type:	PIntMix	430.639
	Water		430.639
Mossyrock	Claim Type:	PIntMix	675.221
	Water		675.221
Wynoochee	Claim Type:	PlntMix	18.160
	Water		18.160
Grand Coulee Project Hydro	Claim Type:	PlntMix	121.662
Grana coulee Project Hydro	Water	I IIICIVIIA	121.662
	vvalei		121.002

Calculations are based on power purchases for 2012 reported by the Utility to the Washington State Department of Commerce in 2013.

# **Ruston Electric Utility**

Hood Street Reservoir Claim Type: PlntMix 1.919

Water 1.919

# **Ruston Electric Utility**

### Claims on BPA\* Calendar Year 2012

BPA Resource Mix		1,865.330
	Biomass	1.145
	Natural Gas	1.633
	Nuclear	184.541
	Petroleum (heavy oil)	0.152
	Waste	0.163
	Water	1,677.696
BPA Slice		2,216.293
	Biomass	1.360
	Natural Gas	1.940
	Nuclear	219.262
	Petroleum (heavy oil)	0.181
	Waste	0.194

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

# **Ruston Electric Utility**

### **Market Purchases Calendar Year 2012**

<b>Total Market Purchases</b>		411.852
	BPA Market Purchase*	87.786
	BPA Slice Wind w/o RECs**	104.303
	Utility Market Purchase	219.764

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.32%
Coal	0.76%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	89.84%
Landfill Gases	0.50%
Natural Gas	0.30%
Nuclear	4.39%
Other	0.00%
Petroleum	0.01%
Solar	0.00%
Waste	0.02%
Wind	3.86%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	1,303.992	30,688.228	31,992.220	0.32%
Coal	76,719.743	0.000	76,719.743	0.76%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	102,257.545	8,927,112.683	9,029,370.228	89.84%
Landfill Gases	328.891	49,779.000	50,107.891	0.50%
Natural Gas	26,702.013	3,849.080	30,551.093	0.30%
Nuclear	5,628.644	435,106.383	440,735.027	4.39%
Other	337.639	134.000	471.639	0.00%
Petroleum	752.412	359.419	1,111.831	0.01%
Solar	0.000	0.000	0.000	0.00%
Waste	1,339.371	384.957	1,724.327	0.02%
Wind	0.000	388,168.000	388,168.000	3.86%
Total	215,370.249	9,835,581.751	10,050,952.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims on Plants Calendar Year 2012**

Priest Rapids	Claim Type:	PIntMix	25,201.000
	Water		25,201.000
West Point Treatment Plant	Claim Type:	Cogen	134.000
	Other		134.000
StatelineWA (FPL Energy	Claim Type:	PIntMix	222,750.000
	Wind		222,750.000
Condon Windpower LLC	Claim Type:	PIntMix	5,497.000
	Wind		5,497.000
Klondike	Claim Type:	PIntMix	2,697.000
	Wind		2,697.000
StatelineOR (FPL Energy	Claim Type:	PIntMix	150,274.000
	Wind		150,274.000
Sierra Pacific Burlington Faci	Claim Type:	PIntMix	27,989.000
	Wood		27,989.000
Klondike Windpower III	Claim Type:	PIntMix	6,950.000
	Wind		6,950.000
Columbia Ridge	Claim Type:	PIntMix	49,779.000
	Landfill Gas	es	49,779.000

Ross	Claim Type:	PIntMix	649,617.000
	Water		649,617.000
South Fork Tolt	Claim Type:	PIntMix	43,631.000
	Water		43,631.000
Cedar Falls	Claim Type:	PIntMix	84,586.000
	Water		84,586.000
Gorge	Claim Type:	PlntMix	748,112.000
	Water		748,112.000
Diablo	Claim Type:	PlntMix	648,105.000
	Water		648,105.000
Boundary	Claim Type:	PlntMix	2,373,261.000
	Water		2,373,261.000
Grand Coulee Project Hydro	Claim Type:	PIntMix	177,031.000
	Water		177,031.000
High Ross Treaty	Claim Type:	PlntMix	221,935.000
	Water		221,935.000

BPA Resource Mix		2,238,568.960
	Biomass	1,373.889
	Natural Gas	1,959.156
	Nuclear	221,466.210
	Petroleum (heavy oil)	182.942
	Waste	195.940
	Water	2,013,390.824
BPA Slice		2.159.463.791
BPA Slice	Name	2,159,463.791
BPA Slice	Biomass	<b>2,159,463.791</b> 1,325.339
BPA Slice	Biomass Natural Gas	
BPA Slice		1,325.339
BPA Slice	Natural Gas	1,325.339 1,889.924
BPA Slice	Natural Gas Nuclear	1,325.339 1,889.924 213,640.173

<sup>\*</sup>Includes that part of claims on BPA electricity products that correspond to the percentage of BPA's power that comes from specific generating facilities. That part of claims on BPA electricity products that correspond to the percentage of BPA's power that comes from market purchases is included in the 'Market Purchases' table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases		215,370.249
	BPA Market Purchase*	105,351.040
	BPA Slice Wind w/o RECs**	101,628.209
	Utility Market Purchase	8,391.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.08%
Coal	2.36%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	89.92%
Landfill Gases	0.01%
Natural Gas	0.88%
Nuclear	6.67%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.05%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	2,003.700	2,012.870	4,016.571	0.08%
Coal	117,886.772	0.000	117,886.772	2.36%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	157,127.897	4,334,137.115	4,491,265.012	89.92%
Landfill Gases	505.371	0.000	505.371	0.01%
Natural Gas	41,030.040	2,870.339	43,900.379	0.88%
Nuclear	8,648.917	324,467.858	333,116.775	6.67%
Other	518.813	0.000	518.813	0.01%
Petroleum	1,156.148	268.027	1,424.175	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	2,058.063	287.070	2,345.133	0.05%
Wind	0.000	0.000	0.000	0.00%
Total	330,935.721	4,664,043.279	4,994,979.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

### **Claims On Plants Calendar Year 2012**

Priest Rapids	Claim Type:	PIntMix	14,289.000
	Water		14,289.000
Alder	Claim Type:	PIntMix	105,028.000
	Water		105,028.000
Cushman 1	Claim Type:	PIntMix	41,618.000
	Water		41,618.000
Cushman 2	Claim Type:	PIntMix	58,507.000
	Water		58,507.000
LaGrande	Claim Type:	PIntMix	162,413.000
	Water		162,413.000
Mayfield	Claim Type:	PIntMix	346,031.000
	Water		346,031.000
Mossyrock	Claim Type:	PIntMix	542,560.000
	Water		542,560.000
Wynoochee	Claim Type:	PIntMix	14,592.000
	Water		14,592.000
<b>Grand Coulee Project Hydro</b>	Claim Type:	PIntMix	97,759.000
	Water		97,759.000

Calculations are based on power purchases for 2012 reported by the Utility to the Washington State Department of Commerce in 2013.

## **Tacoma Power**

**Hood Street Reservoir** 

Claim Type: PlntMix 1,542.000

Water 1,542.000

BPA Resource Mix		1,498,847.566
	Biomass	919.896
	Natural Gas	1,311.765
	Nuclear	148,284.058
	Petroleum (heavy oil)	122.490
	Waste	131.193
	Water	1,348,078.164
BPA Slice		1,780,856.713
BPA Slice	Biomass	<b>1,780,856.713</b> 1,092.975
BPA Slice	Biomass Natural Gas	, ,
BPA Slice		1,092.975
BPA Slice	Natural Gas	1,092.975 1,558.574
BPA Slice	Natural Gas Nuclear	1,092.975 1,558.574 176,183.800

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases		330,935.721
	BPA Market Purchase*	70,538.434
	BPA Slice Wind w/o RECs**	83,810.287
	Utility Market Purchase	176,587.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	26.016	56.036	82.052	0.09%
Coal	1,530.648	0.000	1,530.648	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	2,040.157	82,118.913	84,159.070	88.03%
Landfill Gases	6.562	0.000	6.562	0.01%
Natural Gas	532.736	79.907	612.643	0.64%
Nuclear	112.298	9,032.804	9,145.102	9.57%
Other	6.736	0.000	6.736	0.01%
Petroleum	15.011	7.462	22.473	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	26.722	7.992	34.714	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	4,296.887	91,303.113	95,600.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix	91,303.113
Biomass	56.036
Natural Gas	79.907
Nuclear	9,032.804
Petroleum (heavy oil)	7.462
Waste	7.992
Water	82,118.913

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 4,296.887

BPA Market Purchase\* 4,296.887

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*		Percent
Biomass	7.808	16.818	24.627	0.09%
Coal	459.403	0.000	459.403	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	612.325	24,646.841	25,259.165	88.03%
Landfill Gases	1.969	0.000	1.969	0.01%
Natural Gas	159.893	23.983	183.876	0.64%
Nuclear	33.705	2,711.069	2,744.774	9.57%
Other	2.022	0.000	2.022	0.01%
Petroleum	4.505	2.239	6.745	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	8.020	2.399	10.419	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	1,289.650	27,403.350	28,693.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		27,403.350
	Biomass	16.818
	Natural Gas	23.983
	Nuclear	2,711.069
	Petroleum (heavy oil)	2.239
	Waste	2.399
	Water	24,646.841

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 1,289.650

BPA Market Purchase\* 1,289.650

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<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.09%
Coal	1.60%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	88.03%
Landfill Gases	0.01%
Natural Gas	0.64%
Nuclear	9.57%
Other	0.01%
Petroleum	0.02%
Solar	0.00%
Waste	0.04%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	. 0 (0)	Percent
Biomass	11.251	24.233	35.484	0.09%
Coal	661.941	0.000	661.941	1.60%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	882.283	35,512.994	36,395.276	88.03%
Landfill Gases	2.838	0.000	2.838	0.01%
Natural Gas	230.386	34.556	264.943	0.64%
Nuclear	48.564	3,906.310	3,954.874	9.57%
Other	2.913	0.000	2.913	0.01%
Petroleum	6.492	3.227	9.719	0.02%
Solar	0.000	0.000	0.000	0.00%
Waste	11.556	3.456	15.012	0.04%
Wind	0.000	0.000	0.000	0.00%
Total	1,858.224	39,484.776	41,343.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		39,484.776
	Biomass	24.233
	Natural Gas	34.556
	Nuclear	3,906.310
	Petroleum (heavy oil)	3.227
	Waste	3.456
	Water	35,512.994

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases 1,858.224

BPA Market Purchase\* 1,858.224

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.

Biomass	0.10%
Coal	2.71%
Cogeneration	0.00%
Geothermal	0.00%
Hydro	86.71%
Landfill Gases	0.01%
Natural Gas	1.02%
Nuclear	9.34%
Other	0.01%
Petroleum	0.03%
Solar	0.00%
Waste	0.06%
Wind	0.00%
Total	100.00%

	MWh from	MWh from	Total	
Fuel	Market Purchases*	Claims on Resources*	rotar	Percent
Biomass	105.888	130.433	236.321	0.10%
Coal	6,229.878	0.000	6,229.878	2.71%
Cogeneration	0.000	0.000	0.000	0.00%
Geothermal	0.000	0.000	0.000	0.00%
Hydro	8,303.626	191,145.514	199,449.140	86.71%
Landfill Gases	26.707	0.000	26.707	0.01%
Natural Gas	2,168.285	185.997	2,354.282	1.02%
Nuclear	457.063	21,025.363	21,482.426	9.34%
Other	27.417	0.000	27.417	0.01%
Petroleum	61.098	17.368	78.466	0.03%
Solar	0.000	0.000	0.000	0.00%
Waste	108.761	18.602	127.363	0.06%
Wind	0.000	0.000	0.000	0.00%
Total	17,488.724	212,523.276	230,012.000	100.00%

<sup>\*</sup> Market Purchases include those made directly by utilities, as well as the fraction of delivered BPA power that can be attributed to BPA's purchases of market power. Claims on Resources include those made directly by utilities, as well as the fractions of delivered BPA power that can be attributed to specific plants.

BPA Resource Mix		212,523.276
	Biomass	130.433
	Natural Gas	185.997
	Nuclear	21,025.363
	Petroleum (heavy oil)	17.368
	Waste	18.602
	Water	191,145.514

<sup>\*</sup>The BPA Resource Mix includes only the fraction of delivered BPA power that can be attributed to specific plants. The fraction of BPA power that BPA purchased on the market is included in the "Market Purchases" table.

#### **Market Purchases Calendar Year 2012**

Total Market Purchases		17,488.724
	BPA Market Purchase*	10,001.724
	Utility Market Purchase	7,487.000

<sup>\* &</sup>quot;BPA Market Purchases" are the fraction of delivered BPA power that BPA purchased on the market.

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<sup>\*\*</sup>The BPA Slice product includes a small amount of wind power that is not bundled with the Renewable Energy Credits (REC) associated with that power. Such power is assigned the net system fuel mix – as though it were a market purchase.