CTED | Community, Trade and Economic Development

2008 Washington State Utility Resource Plans

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ACKNOWLEDGEMENTS

Per RCW 19-280, the Director of the Washington State Department of Community, Trade and Economic Development is to report on the status of the Utility Planning Act to the Washington State Legislature and Office of the Governor by December 1 of each year.

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REPORT SUMMARY

In 2006, the Washington State Legislature passed the Utility Planning Act which is now codified as RCW Chapter 19-280. This act put in place a planning process that would support the maintenance of a reliable electric system in the State of Washington. The essence of the Law is that all utilities are required to produce a resource plan and send their plan to the Department of Community, Trade, and Economic Development (CTED) with a cover sheet that summarizes that plan. CTED is required to provide a report to the legislature that summarizes the utility plans on a state-wide basis and provides some analysis regarding resource adequacy and what resources the utilities are planning to acquire. This report is the first one produced under RCW 19-280 and fulfills CTED's responsibility under the law.

We are pleased to report that all utilities required to report have done so. Most completed the reporting on time. All the remaining reports were received by early November.

The sum of all utility planned resources compared to the estimated loads shows a surplus in annual electrical energy of more than 14 percent. The utility plans report that for 2013 and 2018 the surplus will be maintained into the future. Load estimates for 2013 are 13 percent greater than the base year. Load estimates for 2018 are 22 percent greater than the base year.

Utilities are planning to acquire additional conservation resources that are equivalent to more than 6 percent of the estimated 2018 loads.

Utilities are planning to triple their current amount of renewable resources by 2018. The base-year plan reports renewable resource of 3 percent, followed by nearly 7 percent for 2013 and almost 10 percent for 2018. Wind resources dominate the renewable portfolio.

According to utility plans, thermal generating resources which include coal and natural gas will continue to provide about 37 percent of the states annual energy requirements through the ten year planning horizon. Over that time period, utilities plan to reduce the use of coal resources and increase the use of natural gas.

For utilities owning their own, non-federal hydroelectric facilities, hydro resources are expected to increase by 4 percent over the 10-year planning horizon. However, this growth does not keep up with the load growth. In the 10-year planning horizon, the percent of load met with non-federal hydro declines from over 31 percent to 26 percent of the load.

Federal energy resources provided through the Bonneville Power Administration are 44 percent of the reported electric energy used in Washington. For consumer-owned utilities (PUDs, municipals, cooperatives) this provides for 71 percent of annual electric energy consumed. Utility plans indicate that they do not expect, on the whole, for BPA to meet their load growth. Although many small utilities will continue to purchase all of their power from BPA, by 2018 only 60 percent of the public power load will be served by BPA energy resources.

Based upon these first submittals, CTED will review the reporting process and determine if any changes need to be made. We will begin with an internal evaluation and then seek input from the utilities and other interested parties. This will be completed by mid 2009.

Introduction

In 2006, the Washington State Legislature passed the Utility Planning Act which is now codified as RCW Chapter 19-280. This act was passed to put in place a planning process that would support the long-term development of reliable electric system in the State of Washington. The legislative intent is detailed in the law as follows:

> "It is the intent of the legislature to encourage the development of new safe, clean, and reliable energy resources to meet demand in Washington for affordable and reliable electricity. To achieve this end, the legislature finds it essential that utilities in Washington develop comprehensive resource plans that explain the mix of generation and demand-side resources they plan to use to meet their customers' electricity needs in both the short term and the long term. The legislature intends that information obtained from integrated resource planning under this chapter will be used to assist in identifying and developing new energy generation, conservation and efficiency resources, and related infrastructure to meet the state's electricity needs."

There are currently sixty-four electric utilities in the State of Washington. They serve as few as one customer to more than one million. Seventeen utilities serve more than 25,000 customers and account for approximately 89 percent of the state annual electric load.

In addition to great diversity in size, electric utilities in the state of Washington have diverse organizational and ownership structures. Three are investor-owned utilities (IOUs) and the rest are consumer-owned. Consumer-owned utilities (COUs) include municipal utilities, public utility districts, irrigation districts, cooperatives and port districts. All distribute electricity to one or more retail electric customers in the state. Many of the state's utilities receive all of their electric resources from the Bonneville Power Administration. These utilities are called "full-requirements customers."

The utility planning and reporting requirements of RCW 19-280 vary by the number of customers served by the utility and whether or not they are a full-requirements customer. Utilities with more than 25,000 customers that are not full-requirements customers are required to complete a detailed Integrated Resource Plan (IRP). Utilities with fewer than 25,000 customers and full-requirements customers may complete an IRP or a shorter, Resource Plan (RP).

The first plans specified under RCW 19-280 were to be completed by September 1, 2008. The plans are to be updated at a minimum of every two years, with detailed revisions on a four-year cycle.

IRP are developed using a detailed analytical framework. This results in the analysis of a number of estimates on the future loads the utility will be need to meet, and provides a variety of generating or conservation resource mix solutions. IRP have been a widely accepted utility planning tool for many years and the structure is fairly well defined. The variation in the utility IRPs occur largely because of the supply and demand characteristics and needs of a specific utility. RCW 19-280 outlines the IRP process as follows:

(1) Utilities with more than 25,000 customers that are not full-requirements customers shall develop or update an integrated resource plan by September 1, 2008. At a minimum, progress reports reflecting changing conditions and the progress of the integrated resource plan must be produced every two years

thereafter. An updated integrated resource plan must be developed at least every four years subsequent to the 2008 integrated resource plan. The integrated resource plan, at a minimum, must include:

> (a) A range of forecasts, for at least the next ten years, of projected customer demand which takes into account econometric data and customer usage;
>
> (b) An assessment of commercially available conservation and efficiency resources. Such assessment may include, as appropriate, high efficiency cogeneration, demand response and load management programs, and currently employed and new policies and programs needed to obtain the conservation and efficiency resources;
>
> (c) An assessment of commercially available, utility scale renewable and nonrenewable generating technologies;
>
> (d) A comparative evaluation of renewable and nonrenewable generating resources, including transmission and distribution delivery costs, and conservation and efficiency resources using "lowest reasonable cost" as a criterion;
>
> (e) The integration of the demand forecasts and resource evaluations into a long-range assessment describing the mix of supply side generating resources and conservation and efficiency resources that will meet current and projected needs at the lowest reasonable cost and risk to the utility and its ratepayers; and
>
> (f) A short-term plan identifying the specific actions to be taken by the utility consistent with the long-range integrated resource plan.

For small or full-requirements utilities, RPs are required. They are expected to be simpler than IRPs. They typically describe a single scenario for annual electric loads and resources. Three different time periods should be represented, including an estimate for the base year (2007 or 2008), and five and ten year planning estimates. RCW 19-280 outlines Resource Planning as follows:

> (2) All other utilities may elect to develop a full integrated resource plan as set forth in subsection (1) of this section or, at a minimum, shall develop a resource plan that:
>
> (a) Estimates loads for the next 5 and 10 years;
> (b) Enumerates the resources that will be maintained and/or acquired to serve those loads; and
> (c) Explains why the resources in (b) of this subsection were chosen and, if the resources chosen are not renewable resources or conservation and efficiency resources, why such a decision was made.

For investor-owned utilities, the plans must be submitted to the Washington State Utility and Transportation Commission (UTC). The UTC may develop rules as necessary to implement this law. Plans submitted to the UTC were transmitted to CTED for summary reporting.

For consumer-owned utilities, the governing body of the consumer-owned utility that develops a plan under this chapter shall encourage participation of its consumers in development of the plans and progress reports and approve the plans and progress reports after it has provided public notice and hearing. The final plan shall be made publicly available. The plan shall also be submitted to CTED.

To assist in the reporting effort, we consulted with many utilities and utility organizations and developed a standardized cover sheet for all utility reports. We used cover sheet data to summarize the details of the utility plans in this report to the Washington State Legislature and Governor.

The body of this report contains the summary reporting of the utility plan covers sheets. Each cover sheet submitted by the utilities may be found in *Appendix 4, Utility Integrated Resource Plan Cover Sheets* or *Appendix 5, Utility Resource Plan Cover Sheets*. Additional appendices include a list of utilities, *Appendix 1, Washington Electric Utilities* and instructions for completing the cover sheets included as *Appendix 2, Resource Plan Instructions* and *Appendix 3, Integrate Resource Plan Instructions*. *Appendix 6* provides the reader with a copy of the Utility Planning Act (RCW 19-280).

We also want to note that few of the RP utilities provided explanations for their choice for covering load growth. The law and cover sheet instruction requested an explanation for covering load growth with generation rather than conservation or renewable resources. Few utilities provided this information.

Standardized Reporting: Cover Sheet

To facilitate standardized reporting. CTED developed two plan cover sheets - one for utility's completing RPs, and one for utilities completing IRPs. For the utilities completing IRPs the cover sheet is a summary document of the preferred planning scenario included in their detailed reporting. For many of the smaller utilities in the state, the cover sheet is the only documentation of the planning process.

The standardized cover sheet provides the bases for much of the summary data included in this report. More detailed evaluation of the planning efforts is available from the full plan documents submitted by utilities. Copies of the plan cover sheet instructions have been included as *Appendix 2, Resource Plan Instructions* and *Appendix 3, Integrated Resource Plan Instructions.*

CTED's principal responsibility under the law is to receive the resource plans and cover sheets from the utilities and summarize them in a report to the legislature. We started to develop the reporting process soon after the passage of the bill. Staff, with the help of utility association staff, developed two consultation groups: one for small utilities and one for large. These groups represented a diverse group of municipal utilities, co-ops and PUDs of various sizes and load and generation characteristics. The two groups began meeting in February of 2007. In addition to utility staff, staff from the Bonneville Power Administration, the Utilities and Transportation Commission, and the Northwest Power and Conservation Council attended as needed to facilitate coordination and cooperation with their own planning processes. The two utility consultation groups met three times in the winter and spring of 2007.

Prior to the start of the utility consultations, CTED staff met with staff of the Pacific Northwest Utility Conference Committee (PNUCC) to review how the PNUCC develops its annual Northwest Regional Forecast. We promised to do this when the legislation was being developed because we wanted to avoid duplication, to the extent possible, with the requests for information made by PNUCC and others. It turned out that a simplified version of a template that PNUCC used when surveying Northwest utilities could be used to start our discussions with Washington utilities. We presented this spreadsheet to the utilities at our first meetings with them. It was a useful beginning that over the year and a half of consultations evolved into the adopted electronic reporting form.

The development of standard reporting cover sheets for the plans was complicated by two factors. This includes the development of new rate structures for BPA customers, and the impacts of implementing Initiative 937, the Energy Independence Act (RCW 19-285). During the development of the cover sheets, BPA was consulted to assure that the RP included the most likely BPA rate structures. Resource categories for conservation and renewable resources were included to capture the impacts RCW 19-285 might have on utility plans.

Consultations resumed in the winter and spring of 2008, mostly by e-mail and telephone. The reporting templates were revised to reflect new information from BPA about their post-2011 products and final technical suggestions from utilities.

We worked with Northwest Public Power Association (NWPPA) to develop and present IRP training at their meeting on April 10, 2007. CTED and BPA staff also hosted a webinar in June 2008 to review the reporting process with utilities. Twenty-nine utility staff participated.

CTED contracted with the Washington State University (WSU) Extension Energy Program to develop the electronic reporting system for the cover sheets and a way to upload the plans to a web site. The Washington State University Energy Program used the reporting system for Fuel-Mix Disclosure as a model since it had worked well and Washington utilities were familiar with it. The reporting system was completed and available August 1, 2008. CTED provided a web-based training for utilities completing the resource plan on line. This training was attended by more than 30 participants.

Based upon these first submittals, we will review the reporting process and determine if any changes need to be made. CTED will begin with an internal evaluation and then seek input from the utilities and other interested parties. This will be completed by mid-2009.

Utility Participation

We are pleased to report that all utilities required to report have done so. Most completed the reporting on time. By the end of September all but five had reported. After several follow-ups all the remaining reports were received by early November.

In 2008, 47 utilities submitted cover sheets for RPs and 12 utilities submitted cover sheets for IRPs. Of the 17 utilities with more than 25,000 customers, five full-requirements utilities chose to submit the shorter RP rather than an IRP.

There are four utilities operating in the state that are not required to participate. This includes three consumer-owned utilities formed under Idaho statutes and one utility operated by a Native American tribe. Federal agencies and direct service industries that purchase power directly from the federal government are not utilities and are not required to participate in utility resource planning.

All of the utilities developing IRPs submitted a copy of their detailed plans along with the cover sheet, or provided a link to a web page where the IRP could be downloaded. Of the utilities submitting RPs, six provided additional reports with some level of detail and 11 submitted notes supporting the entries in their cover sheets. The cover sheet included the ability to enter additional notes on conservation and demand response. 16 utilities made such entries.

It is not clear if all the utilities conducted the public process described in the law. The law states that *"The governing body of a consumer-owned utility that develops a plan under this chapter shall encourage participation of its consumers in development of the plans and progress reports and approve the plans and progress reports after it has provided public notice and hearing."* The law does not specifically state that this information be transmitted to CTED. The utilities that developed IRPs have clear records of public process. A few of the utilities that developed RPs provided record of the public process. Many of the utilities that developed RPs did not provide documentation of a public process.

Not all reports were submitted using the standard definitions for resources or units of measure. We spent time with utilities refining the entries to meet the standardization criteria desired.

In particular, we believe conservation reporting does not represent the desired standard values. We think that some utilities reported the conservation acquisition target for the specific reporting year only. Other utilities describe the cumulative results of conservation efforts compared to the base year. The latter is desired.

Not all reporting was completed using the web based tool. Some small utilities found the reporting mechanism too difficult to use. CTED asked them to submit reports by fax.

Findings

This section provides a simple analysis of the data submitted in the cover sheets. When the cover sheets were developed they were intended to provide a standardized reporting method that could be summarized as statewide data. For the most part the effort has been successful. But some inaccuracies will occur because some of the utilities submitting the data did not use the standard definitions for the data cell entry. Clarifying this point will be an important part of the CTED process review noted above.

The two cover sheets (IRP and RP) requested different data from the utilities. In some categories there is overlap. In other areas, the data requested is unique. For example the RP does not request information on thermal energy generating sources. The IRP does. The RP includes BPA product classes only available to full-requirements customers. The IRP does not. Examples of the forms are included in Appendix 2, Resource Plan Instructions and Appendix 3, Integrated Resource Plan Instructions.

In the following tables electric loads are represented in one of three categories. Annual Energy MWa, Winter Peak, MW and Summer Peak, MW.

Megawatt average (MWa) is a measure of annual energy production. The following terms all report the same annual energy output.

MWa = 1 MWa = 1 MW x 8760 hours/year = 8,760 Mwh = 8,760,000 Kilowatt hours.

Summer and winter peak are the highest electrical demand within a particular period of time. In this case it is reported in Megawatts of capacity, MW. For this reporting summer and winter peaks detail the maximum load projected for a worst case hour in the summer or winter. Generating and

transmission resources available to meet the peak load are included to assess the state capacity. Many utilities in the state do not analyze their peak capacity. This is because they have abundant hydroelectric resources and rarely, if ever, face the possibility of not being able to meet their peak loads. Because of the limited data submitted for peak loads and capacity, these loads and resources should be viewed only in the context of the individual plans or summary cover sheets included in *Appendix4, Utility Integrated Resource Plan Cover Sheets*.

For most utilities in the state of Washington, determining how they will meet their annual electric energy needs (MWa) with adequate resources is the primary planning activity. While Washington has a mix of generating resources, annual energy supplies are dominated by hydro. Hydro resources can provide significant peak energy for a short period of time, but its ability to generate the desired supply of energy over an entire year is limited by the water resources available. Except for those that never use their full hydro capacity, utilities must plan to have other resources available for periods of time when water resources are limited.

SUMMARY OF PLANNING REPORTS

The Utility Planning Act directs CTED to provide a statewide summary of utility load forecasts, assess load/resource balance, and report utility plans for the development of thermal generation, renewable resources, and conservation and efficiency resources. The following section provides this analysis.

The following load and resource summary is based on data compiled from the IRPs and RPs received from the utilities. Much of the data presented in this report is a summary of the data rolled up to a state-wide level. When it is informative, the report also includes summaries of sub-sets of utility reporting. This includes analyses of utilities that completed the RP compared with those that completed the IRP as well as separate reporting of utilities that must comply with the conservation and renewable energy targets of the Energy Independence Act (I-937).

Utilities plan for load growth by making projections based on past experience and estimated changes in population and economic activity. They also analyze the expected deployment of energy efficiency technologies, variations in the weather and expected energy prices.

In the near term, resources listed are an inventory of resources currently owned by the utility or resources under contract. For future years, the utilities report the resources they expect to continue to own, plus the resources they plan to acquire through construction, contract renewal, or the initiation of new contracts. Utilities also plan to use conservation and demand control as a resource that offsets the load estimates. Many utilities plan for a range of load and resource scenarios. Utilities that planed for multiple scenarios were asked to report the “mid-range” forecast or equivalent scenario.

Reports summarize loads and resources for three time periods, base year, 2013 and 2018. The base year represents a 12-month planning year that occurs in 2007-2008. 2013 and 2018 represent the calendar year or the federal fiscal year for each data.

Load Resource Balance

The sum of all reported utility resources compared to the estimated loads shows a surplus in annual energy of more than 14 percent. The utility reporting noted for 2013 and 2018 reports that the surplus will be maintained into the future. This is summarized in *Table 1, State Load Resource Balance*.

Load estimates for 2013 are 13 percent greater than the base year. Load estimates for 2018 are 22 percent greater than the base year. *See Table 2, Load Growth.* This shows an average growth in annual energy demand of 2.6 percent for the five year plan and 2.2 percent for the 10 year plan. This is higher than the estimates used in the Northwest Power and Conservation Council's 5th power plan that was published in 2005. In the 5th plan, the average annual rate of growth is expected to be just less than 1 percent per year. It is also higher than two other regional forecasts, the BPA White Book[1] and the PNUCC Northwest Regional Forecast[2]. The analysis of these forecasts covers the entire Pacific Northwest power system. The sum of the loads covered by these reports is about twice that of Washington. Both show load growth estimates of about 1 percent to 1.3 percent per year which is about half of what is reported by Washington utilities in their resource plans.

Some utilities reported annual energy deficits. In a planning document, this may be used to indicate that the utility has not yet determined how it will secure the resources needed to meet future loads. Utilities with excess generating resources report a surplus. Most utilities simply reported a load resource balance.

Table 1, State Load Resource Balance

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads	10,004.91	11,270.76	12,223.79
Total Resources	11,931.67	13,184.88	14,303.11
Load Resource Balance	1,435.79	1,587.60	17,69.50
Load Resource Balance / Load	14.35%	14.09%	14.48%

Table 2, Load Growth

	Base Year	2013	2018
Loads Compared to Base Year	100%	113%	122%

Conservation / Efficiency

Conservation and efficiency is reported as a resource in the planning process. The standardized reporting format developed for the cover sheet excludes conservation as a resource in the base year. In subsequent years the cover sheet is to report cumulative conservation acquired since the base year.

For the summary reporting we have developed two utility sub-categories. This includes utilities that are required to meet the conservation targets of the Energy Independence Act, and utilities that do not have to meet the requirements. Under I-937, by 2010 seventeen utilities with 25,000 or more customers will have to develop a plan to acquire all cost-effective conservation and begin implementation to meet the 2012 share of their estimated conservation potential.

[1] BPA, 2007 Pacific Northwest Loads & Resources Study Operating Years 2008 through 2017, March 2007

[2] PNUCC, Northwest Regional Forecast of Power Loads and Resources August 2008 – July 2018

It is our opinion that the summary data of conservation somewhat under-reports the conservation activities that will occur in the state. It is our understanding that some utilities reported cumulative conservation and efficiency compared to the base year, and some utilities reported activities for the specific reporting year only. This will result in underreporting.

Full-requirements customers of BPA are also likely underreporting conservation. BPA is expected to have an energy efficiency credit as part of new rate structures currently under development. This is likely to provide an incentive for most all of BPA's customers in Washington to do at least some conservation. The exact amounts won't be known until the BPA program guidelines are completed in 2009.

For 2013, utility planning reports conservation will provide a resource equivalent to 3.7 percent of the load. For 2018, plans for conservation are 6.1 percent of the load. See *Table 3, Conservation / Efficiency – All Utilities.*

Utilities that must comply with I-937 have plans for more active conservation activities than utilities that do not have to comply with it. I-937 utility plans project that in 2013 and 2018 conservation and efficiency resources will be 4.1 percent and 6.9 percent of the load respectively. See *Table 4, Conservation / Efficiency – I-937 Utilities*. This is compared to the utilities not required to meet I-937 that are planning for conservation resources of less than 1 percent of load in 2013 and 2018. See *Table 4, Conservation / Efficiency – Non I-937 Utilities.*

It is worth noting that many utilities have a long history of active conservation and efficiency programs. These programs have been developed to meet the needs of the customers at the lowest cost. For some utilities current plans for conservation would likely exist regardless of the requirements to comply with I-937.

It is instructive to compare the estimates for conservation in the HB1010 reports with the 5th NW Power Plan and the Council's reports of recent conservation achievements. In the 5th NW Power Plan, Council recommended pursuing 700 average megawatts of cost-effective conservation acquisitions from 2005 through 2009. The power plan estimated that it would be reasonable to expect an acquisition of 130-150 MWa per year in the region as a whole. The Council recently reporting the one-year, energy-conservation achievement in 2007 amounts to reduced electricity use of 200 average megawatts. Since Washington is about one-half of the regional load, we would have expected 70 MWa/ year if Washington utilities followed the Council plan and 100 MWa/ year if Washington achieved its share of the recent annual actual acquisitions. The Washington utilities are reporting plans to acquire conservation of 70 MWa per year over the 10 year plan, which, if we are right about under-estimations about the future, puts them right in line with the Council's expectations.

Table 5, Conservation / Efficiency – All Utilities

	Report Years	Period	
	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads – All Utilities	10,004.91	11,270.76	12,223.79
Conservation/Efficiency- All Utilities	0.00	413.00	743.95
As Percent of Load		3.7%	6.1%

Table 6, Conservation / Efficiency – I-937 Utilities

	Report Years	Period	
	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads – All Utilities	8,835.56	9,909.22	10,735.52
Conservation/Efficiency- All Utilities	0.00	406.27	735.69
As Percent of Load		4.1%	6.9%

Table 7, Conservation / Efficiency – Non I-937 Utilities

	Report Years	Period	
	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads – All Utilities	1,169.35	1,361.54	1,488.27
Conservation/Efficiency- All Utilities	0.00	6.73	8.26
As Percent of Load		0.5%	0.6%

Renewable Resources

Renewable resource accounted for in the utility plans note an increase in resources over the planning period. Utilities are planning to triple their current amount of renewable resources by 2018. The base-year plan reports renewable resource of 3 percent, followed by nearly 7 percent for 2013 and almost 10 percent for 2018. Wind resources dominate the renewable portfolio. This is summarized in *Table 8, Renewables – All Utilities.*

For the summary reporting we have developed two utility sub-categories. This includes utilities that are required to meet the renewable energy targets of the Energy Independence Act, (I-937) and utilities that do not have to meet the requirements. Targets for renewable energy generation are described in RCW 19-280 are:

> (2)(a) Each qualifying utility shall use eligible renewable resources or acquire equivalent renewable energy credits, or a combination of both, to meet the following annual targets:
> (i) At least 3 percent of its load by January 1, 2012, and each year thereafter through December 31, 2015;
> (ii) At least 9 percent of its load by January 1, 2016, and each year thereafter through December 31, 2019; and
> (iii) At least 15 percent of its load by January 1, 2020, and each year thereafter.

Based on the summary reporting, the combined renewable resource portfolio for I-937 utilities meets the 2012 targets in the base year. By 2013 the resource plans are a bit short of the target values for 2016 at 7.6 percent. The 2018 utility planning efforts do not yet project the needed renewable resources for 2020. For 2018 the utilities only plan to have 10.7 percent of their load covered by renewable resources. *See Table 9, Renewables – I-937 Utilities.*

Not all of the I-937 utilities are reporting meeting early targets using renewable energy resources. Of the utilities, only 11 of 17 utilities show renewable resources greater than 3 percent of the utility load. It should be noted that compliance also allows the use of renewable energy credits and we know from talking to utility staff that some utilities are planning to use this compliance path. Renewable energy credits can be used to meet requirements, but would not show up in this resource reporting.

For utilities that are not required to meet I-937, the renewable portfolios are much smaller. *Table 10, Renewables – Non I-937 Utilities* notes renewable energy resources increasing from .7 percent in the base year to 2 percent in 2018. However, the reports only cover renewables utilities will acquire on their own but does not account for renewables that are part of BPA's resource portfolio. Wind and other non-hydro renewables make up between 1 and 2 percent of BPA's portfolio and each BPA customer can claim its proportionate share of BPA's renewable resources.

Table 11, Renewables – All Utilities

	Base Year Annual MWa	2013 Annual MWa	2018 Annual MWa
Loads	10,004.91	11,270.76	12,223.79
Wind	279.06	603.59	855.05
Other Renewables	21.11	174.20	323.51
total of Renewables	300.17	777.79	1,178.56
Renewables as percent of Load	3.0%	6.9%	9.6%

Table 12, Renewables – I-937 Utilities

	Base Year Annual MWa	2013 Annual MWa	2018 Annual MWa
Loads	8,835.56	9,909.22	10,735.52
Wind	270.66	586.36	834.42
Other Renewables	20.93	169.97	313.73
total of Renewables	291.60	756.33	1,148.15
Renewables as percent of Load	3.3%	7.6%	10.7%

Table 13, Renewables – Non I-937 Utilities

	Base Year Annual MWa	2013 Annual MWa	2018 Annual MWa
Loads	1,169.35	1,361.54	1,488.27
Wind	8.40	17.23	20.63
Other Renewables	0.17	4.23	9.78
total of Renewables	8.57	21.46	30.41
Renewables as percent of load	0.7%	1.6%	2.0%

Shift in Thermal Energy Resources

The analysis of thermal loads is limited to the twelve utilities that completed IRPs. Only the IRP provided specific data in these categories. It is worth noting that the RP utilities do use thermal energy resources including nuclear and a small amount of natural gas and coal. These resources are included in their federal contracts and are sometimes reported as "other" resources on the RP cover sheets.

For the group of utilities that completed the IRP, the annual energy estimated from thermal resources will remain about the same proportional to the load. The total thermal energy will continue to be 36 to 38 percent of the load. These utilities are planning a shift from coal to natural gas. In the ten year reporting period, coal resources decline in both total generation and as a percent of load. In the ten year planning period, the percent of generation from coal drops from 22 percent to 16 percent. Natural gas increases from almost 14 percent to over 20 percent of the load. See *Table 14, Thermal Resources*.

Table 15, Thermal Resources

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads	8,412.44	9,438.72	10,224.05
Thermal – Natural Gas	1,159.75	1,889.87	2,091.71
Thermal - Coal	1,875.94	1,699.40	1,659.41
Thermal (Gas + Coal)	3,035.69	3,589.27	3,751.13
Natural Gas as percent of load	13.8%	20.0%	20.5%
Coal as percent of load	22.3%	18.0%	16.2%
Thermal as percent of load	36.1%	38.0%	36.7%

Non-Federal Hydroelectric Resources

This analysis is limited to the hydroelectric resources owned or contracted directly to the utility. It does not include the hydro resources that are supplies in BPA federal contracts. That limits this analysis to less then half the total hydro resources used in Washington.

For utilities owning their own, non-federal hydro, hydro resources are expected to increase by 4 percent over the 10-year planning horizon. However, this growth does not keep up with the load growth. In the 10-year planning horizon, the percent of load met with non-federal hydro declines from over 31 percent to 26 percent of the load see *Table 16, Hydro Resources – All Utilities*

Table 17, Non-federal Hydro Resources – All Utilities

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads	10,004.91	11,270.76	12,223.79
Hydro	3,084.08	3,126.03	3,207.23
Hydro Percent of Load	30.83%	27.74%	26.24%
Hydro generation compared to base year		101.4%	104.0%

There is a shift in hydro resources from investor-owned utilities to consumer-owned utilities. We assume this is occurring because many IOU contracts for hydroelectricity from COU expire during the 10-year period and consumer-owned utilities that own hydro generation resources are choosing to use the resource to cover their load growth rather than selling contracts for the energy. The IOUs supply of hydro is reduced by 234 MWa between the base year and 2013. The consumer-owned utilities see an increase of 277 MWa in that same time period. See *Table 18, Hydro IOU* and *Table 19, Hydro Consumer-owned*.

Table 20, Non-federal Hydro IOU

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads	3,803.04	4,274.92	4,752.07
Hydro	1,260.36	1,025.54	1,020.32
Hydro Percent of Load	33.1%	24.0%	21.5%

Table 21, Non-federal Hydro COU

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads	6,201.87	6,995.84	7,471.72
Hydro	1,823.72	2,100.49	2,186.91
Hydro Percent of Load	29.4%	30.0%	29.3%

Utility use of Bonneville Power Administration Energy

BPA provides electric energy to the states consumer-owned utilities. BPA may also provide energy to the states IOUs through short term contracts. The contract power sold to the state IOUs is not specified as BPA power in the data set and will not be represented in this section.

For the base year, BPA provides 44 percent of the reported electric energy used in Washington. This is 71 percent of annual electric energy consumed by COUs. BPA provides 89 percent of the energy used by utilities that are BPA full-requirements customers. *See Table 22, BPA Energy, All consumer-owned utilities and Table 23, BPA Energy, Full-requirements Customers.*

Utilities anticipate that BPA resources will only provide a minor increase in energy resources. The reported totals show an increase of BPA resources of only 1.7 percent between the base year and 2018.

As the COU loads grow, the percent of total annual energy provided by BPA will decrease. BPA fraction of COU energy will be reduced from 71 percent in the base year to 60 percent in 2018. Full-requirements customers plans report a small shift in resources as BPA contracts.

Table 24, BPA Energy, All COU

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads	6,201.87	6,995.84	7,471.72
BPA Provided	4,429.83	4,432.37	4,506.22
Percent BPA	71.4%	63.4%	60.3%

Table 25, BPA Energy, Full-requirements Customers

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Loads	1,003.56	1,125.06	1,222.38
BPA Provided	982.52	1,108.27	1,166.09
Percent BPA	97.9%	98.5%	95.4%

Net Long Term Other and Short Term Contracts

The reporting categories "Net Long Term Contracts: Other" and Net Short Term Contracts were only reported by the twelve utilities completing IRPs.

"Net Long Term Contracts: Other" includes all other long term contracts, including BPA Tier 2, that are not tied to specific resources. An example of a resource that might fit this category includes, "system purchases" from power marketers that consist only of a contract to supply a certain amount of energy without specifying where that power comes from or how it is generated. "Net short-term contracts" are net purchases of energy for less than a year that are planned in order to meet load.

The planning process shows a marked decrease in reporting for Net Long Term Contracts: Other over the 10 year planning period. In the base year this category accounts for 6 percent of the state electric energy resources. In the 2018 reporting year, utility plans show a decline in the use of this type of resource to 1.5 percent, indicating a reluctance to depend on the market for long-term resources. *See Table 26, Net Long Term Contracts: Other.*

Net short-term contracts only provide a small fraction of the total resources. It is interesting to note that the reported short-term contracts increase from .05 percent of load to 1.73 percent of the load. *See Table 27, Net Short Term Contracts.*

Table 26, Net Long Term Contracts: Other

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Load	10,004.91	11,270.76	12,223.79
Net Long Term Contracts: Other	633.93	204.59	179.38
Percent Net Long Term Contracts: Other, Percent of Load	6.3%	1.8%	1.5%

Table 27, Net Short Term Contracts

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Load	10,004.91	11,270.76	12,223.79
Net Short Term Contracts	5.50	101.36	211.84
Net Short Term Contracts, Percent of Load	0.05%	0.90%	1.73%

"Other" Resources

Other resources are reported in both the IRP and RP. This category is for resources not reported in the previous categories. This category accounts for something less than 2 percent of the annual loads for all planning years.

Table 28, "Other Resources"

	Base Year	2013	2018
	Annual MWa	Annual MWa	Annual MWa
Load	10,004.91	11,270.76	12,223.79
"Other" Resources	179.12	211.28	203.65

"Other" Resources, Percent of Load	1.79%	1.87%	1.67%

Remaining Resource Summaries

The remaining resource categories are too small to warrant state wide analysis. This includes several categories rarely used in the RP. These values can be viewed in the utility-specific RP in *Appendix 5, Utility Resource Plan Cover Sheets.*

Import and Export Categories

Imports and exports have been included in the data collection primarily to account for seasonal exchanges. They are best viewed in the individual plan covers sheet as they apply to specific utilities. These values can be viewed in *Appendix 4, Utility Integrated Resource Plan Cover Sheets.*

APPENDIX 1: WASHINGTON STATE ELECTRIC UTILITIES

		Plan Type			
Utility	Number of Customers (2005)	Resource Plan	Integrated Resource Plan	Additional Documentation Submitted	Notes
Alder Mutual Light Co, Inc	271	x			
Asotin County, PUD No 1	3	x			
Avista Corp	220,271		x		
Benton County, PUD No 1	44,389		x	x	
Benton Rural Electric Assn	14,183	x			
Big Bend Electric Coop, Inc	7,900	x		x	
Blaine, City of	2,761	x			
Cashmere, City of	1,168				1
Centralia, City of	9,580	x		x	
Chelan County, PUD No 1	43,705		x	x	
Cheney, City of	4,256	x			
Chewelah, City of	1,265	x			
Clallam County, PUD No 1	28,444	x			
Clark County, PUD No 1	173,548		x	x	
Clearwater Power Company	878				2
Columbia Rural Elec. Assn, Inc	3,909	x			
Coulee Dam, City of	603				
Cowlitz County, PUD No 1	46,702		x	x	
Douglas County, PUD No 1	16,931	x		x	
Eatonville, City of	1,582	x			
Ellensburg, City of	8,422	x			
Elmhurst Mutual Power & Light	13,286	x			
Ferry County, PUD No 1	3,221	x			
Franklin County, PUD No 1	23,703	x		x	
Grant County, PUD No 2	41,722		x		
Grays Harbor Cnty, PUD No 1	41,059		x		
Inland Power & Light Company	33,210	x		x	
Kittitas County, PUD No 1	3,690	x			
Klickitat County, PUD No 1	11,156	x			
Kootenai Electric Coop Inc	71				2
Lakeview Light & Power	9,689	x		x	
Lewis County, PUD No 1	28,837	x		x	
Mason County, PUD No 1	4,931	x			
Mason County, PUD No 3	30,830	x		x	
McCleary, City of	1,016	x			
Milton, City of	3,332	x			
Modern Electric Water Co.	9,940	x			
Nespelem Valley Elec. Coop	1,820	x			
Northern Lights, Inc	17				2
Ohop Mutual Light Co., Inc	3,974	x			
Okanogan County Elec. Coop	3,115		x		

		Plan Type			
Utility	Number of Customers (2005)	Resource Plan	Integrated Resource Plan	Additional Documentation Submitted	Notes
Okanogan County, PUD No 1	19,382	x			
Orcas Power & Light Coop	12,768	x		x	
Pacific County, PUD No 2	16,487	x		x	
PacifiCorp	122,227		x	x	2
Parkland Light & Water Co.	4,344	x			
Pend Oreille County, PUD No 1	8,249	x		x	
Peninsula Light Company	29,147	x		x	
Port Angeles, City of	10,443	x		x	
Seattle, Port of	1	x			
Puget Sound Energy Inc	1,011,457		x		
Richland, City of	21,020	x			
Ruston, Town of	418	x			
Seattle City of	375,869		x		
Skamania County, PUD No 1	5,548	x		x	
Snohomish County PUD No 1	300,176		x		
Steilacoom, Town of	2,803	x			
Sumas, City of	595	x			
Tacoma City of	162,969		x		
Tanner Electric Coop	4,251	x			
Vera Irrigation District #15	9,193	x			
Wahkiakum County, PUD No 1	2,262	x		x	
Whatcom County, PUD No 1	1	x		x	
Yakima Power	No Data				3

Notes:

1. The City of Cashmere is in the process of selling the electric utility to #1 PUD of Chelan County. The loads are accounted for in the integrated resource plan prepared by Chelan.

2. Idaho Utility. Consumer-owned utilities formed under the laws of Idaho are not required to report.

3. Yakima Power is a tribal utility and is not required to report.

APPENDIX 2: RESOURCE PLAN INSTRUCTIONS

Instructions for Submission of "Resource Plan Cover Sheets"

Washington State Utility Resource Plans, RCW 19.280 (2006 House Bill 1010)
Due September 1, 2008

The following documentation has been prepared to assist Washington State electric utilities as they submit Resource Plan Cover Sheets to Washington State Department of Community Trade and Economic Development (CTED). To facilitate the required reporting CTED has developed a website. The website includes a method for submitting a cover sheet and an opportunity to submit a resource plan document to be published on the CTED web site.

The web address is http://irp.cted.wa.gov

This set of instructions includes three sections:
1. How to use the website
2. Reporting Details
3. A blank copy of the Cover Sheet

Resource Plan or Integrated Resource Plan?
Before you proceed, make sure you are using the correct set of instructions. There are two plan types. This includes a Resource Plan and an Integrated Resource Plan.

This set of instructions is specific to the Resource Plan reporting requirements. Utilities reporting using the Resource Plan and the Integrated Resource Plan are described as follows.

Resource Plan: This cover sheet may be used by all full-requirements customers (BPA or other) and utilities with fewer than 25,000 customers.

The following definition of "full-requirements customer" is included in 19.280 RCW.

> "Full-requirements customer" means an electric utility that relies on the Bonneville power administration for all power needed to supply its total load requirement other than that served by nondispatchable generating resources totaling no more than six megawatts or renewable resources.

Integrated Resource Plan: This Cover Sheet should be used by all utilities with more than 25,000 customers that are not full-requirements customers of BPA and may be used by utilities with less than 25,000 customers that follow their own loads.

If you are submitting an Integrated Resource Plan, you will want to pick up the other set of instructions.

Reporting Details

Resource Plan (RP) Year

The RP summarized in this cover sheet is completed in either 2007 or 2008.

Base Year

On the cover sheet, define the base year, start month/day/year to end month/day/year. All of the months will fall in either 2007 or 2008.

Five and Ten Year Reporting, 2013 and 2018:

On the cover sheet, five and ten year reporting is for calendar year or is based on the Federal Fiscal Year (October – September). For consistency, all utilities should report 2013 and 2018 RP data.

Federal fiscal year has been added as an option to simplify reporting for BPA customers who have contracts based on the fiscal year.

Reporting Units

Reporting units are Annual Energy, Average Megawatt (MWa).

Loads

Loads include retail sales + line losses + utility needs.

If the utility develops a range of forecasts they should report the data from their "preferred alternative" or equivalent scenario or their "mid-range" forecast or equivalent scenario. Otherwise they should simply report their current and estimated loads and resources.

Base Year Load: On the cover sheet the utility may record the actual base year load, a weather adjusted load, or an alternative method. The method used to calculate the base year load should be well documented in the RP. CTED recommends that utilities report a weather adjusted load for the base year. This will provide more consistent reporting between the base year, five year and ten year estimates. This will also provide more consistent reporting across the state.

Five and Ten Year Loads: On the cover sheet record the weather adjusted loads for 2013 and 2018.

All loads are before estimated reductions from conservation programs or demand reduction program estimates. Conservation and demand response is treated as a resource to meet load. The Base year does not include conservation or demand reduction as a load or resource.

Resources (General)

On the cover sheet, record the quantity of each resource.

Use the most specific resource description. There may be times when a resource will fit into more than one definition. Select the most specific resource description. Make sure there is no double counting.

For small and full-requirements utilities, most of the resource will be BPA supplied energy. Other resource acquisitions, if any, will be a minor part of the over all resource mix. Power purchases that are linked to a specific resource or type of resource should be included in the row for that specific resource type. Unspecified resources should be included in the "Other" row. It is expected that utilities will leave many of the rows blank.

Conservation and Efficiency

RCW 19.280.020 defines conservation and efficiency resources as "any reduction in electric power consumption that results from increases in the efficiency of energy use, production, transmission or distribution." This line will summarize the expected energy savings from all planned or forecasted conservation and efficiency measures.

Base year conservation should be blank.

Demand Response

Demand response is temporary reductions or shifts in the timing of some uses of electricity. Demand response is used for peak load control, and does not result in significant annual energy savings. This row is expected to be blank on most if not all Resource Plan cover sheets. A discussion of demand response in the RP may be applicable to some utilities.

Base year demand response should be blank.

Co-generation

RCW 19.280.020 defines Co-generation as 'the sequential production of electricity and useful thermal energy from a common fuel source." In the 5th Northwest Power plan Co-generation is defined as "Cogeneration is the joint production of electricity and useful thermal or mechanical energy for industrial process, space conditioning or hot water loads." For the purposes of this report co-generation can either result in a reduction in load at a specific customer's site—e.g. a pulp mill—in which as it can be counted as conservation, or the utility can purchase the output from the industrial customer and use it meet other loads, in which case it can be reported as a resource.

Hydro (critical water)

It is assumed that "critical water" will be used. Utilities should specify if something else is used in the RP. The critical water year should also be specified in the RP.

Wind

Base year wind data for energy may reflect actual experience, if available. Five and ten year wind can be estimated on anticipated wind sites and/or best available generic studies such as the Northwest Wind Integration Plan or the Northwest Resource Adequacy Forum. As with all other resources, whatever is included in the RP should be reported here.

Other Renewables:

" …(c) solar energy, (d) geothermal energy, (e) landfill gas, (f) biomass energy utilizing animal waste, solid organic fuels from wood, forest or field residues or dedicated energy crops that do not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic; (g) by-products of pulping or wood manufacturing processes, including but not limited to bark, wood chips, sawdust, and lignin in spent pulping liquors; (h) ocean thermal, wave or tidal power; and (i) gas from sewage treatment facilities."

Note: This definition, from 19.280.020 RCW (HB1010), varies in specific details from the definition of renewables in the Energy Independence Act (I-937 / 19.285 RCW). If a utility must comply with the Energy Independence Act, they should use that definition.

BPA and other contracts

Base Year Reporting, 2007-2008 only

"BPA Base Year PF" For base year reporting only, record all Priority Firm purchases from BPA.

"BPA Base Year EPP": For base year reporting only, record all Environmentally Preferred Power purchases from BPA. This is a subset of the "PF" rate above, but should be broken out to help CTED meet specific reporting objectives.

2013 and 2018 reporting:

Since all utilities filling out this form will buy most of their electricity from BPA, the form needs to reflect the kinds of products BPA will offer. The following is based on the latest information from BPA about the products BPA is likely to offer starting in 2011. This includes Tier 1 and at least two Tier 2 options.

"BPA Tier 1 Load Following" is what has historically been called "requirements power" and will be by far the largest purchases that smaller utilities will make. For those utilities that have not reached their high water mark, it may be their only purchase and their only resource, besides conservation, that will need to be reported.

"BPA Tier 2 Load Growth Rate": The Tier 2 Load Growth Rate is available to customers electing the BPA Load Following product. A customer choosing this alternative is electing BPA as its primary service provider for most, if not all, of its future load service and is committed to purchase at the Load Growth Tier 2 Rate for the duration of the CHWM contract. BPA will manage resource acquisitions to meet the above-RHWM loads of these customers and melds into the Tier 2 Load Growth Rate the costs of such acquisitions over time.

"BPA Tier 2 Short-Term Rate" The Tier 2 Short-Term Rate is available to all customers. This rate requires two year's notice for service in the first purchase period (three year's duration). Thereafter, service at the Tier 2 Short-Term Rate will require three-year notice and a five-year commitment (except for the last purchase period, which is four years in duration). Due to the short-term nature of these commitments from customers, BPA does not intend to permanently assign the costs of longer-term resources to this cost pool. It may be the case that some longer-term resource costs will be allocated temporarily (i.e., for a rate period or two) to this cost pool, until those costs are allocated to a longer purchase period rate pool.
"BPA Tier 2 Vintage Rate" Tier 2 Vintage Rates are intended to be based on costs of specific resources or groups of resources for customers that need power to be based on specific resource types (e.g., renewable) or that want to know more about resource costs before they make a long-term commitment. If BPA has been able to secure a resource in accordance with a prospectus offered to eligible customers, and if those customers agree to transfer load service from the Tier 2 Short-Term Rate to the new Tier 2 Vintage Rate, then that Tier 2 Vintage Rate will be developed (based on the specific resource and other costs, as appropriate) and proposed in the next general power rate case.

"Non BPA Load Following" are resources that non-load following utilities would purchase if they choose to contract with an entity other than BPA to provide load-following and capacity services. This would be where those few utilities that are full-requirements customers of providers other than BPA would enter their resource purchases.

"Non BPA: Market Purchase" is the net energy or capacity that are obtained from entities other than BPA under agreements one year in length or longer and are not tied to specific resources.

"Other" includes net short-term contracts that are net purchases of capacity or energy for less than a year that are planned in order to meet load.

Explanation for resources other than conservation or renewables

The Resource Planning Law assumes that conservation and renewables are the lowest cost, least risk resources and they will be the first choice of all utilities. The Law specifically requires that utilities that do not do IRPs and choose resources other than conservation and renewables must explain their decision in their RP. The cover sheet provides a place to reference that part of the RP.

Additional considerations

Utilities may include monthly load and resource with their RP.

Seasonal exchanges need not be reported on the cover sheet but would be expected to be discussed in the RP.

Questions

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CTED Energy Policy Division
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Washington State Electric Utility Integrated Resource Plan Cover Sheet
2008

Utility Name	-
Prepared By	-
Address	-
City	-
State	-
Zip	-
Phone	-
Email	-

Resource Plan Year				
		Base Year		
	From			
	To		2013	2018
		Annual Energy (MWa)	Annual Energy (MWa)	Annual Energy (MWa)
Loads				
Resources				
Conservation/Efficiency				
Demand Response				
Co-generation				
Hydro (critical water)				
Wind				
Other Renewables				
BPA Base Year PF				
BPA Base Year EPP				
BPA Tier 1 Load Following				
BPA Tier 2 Load Growth Rate				
BPA Tier 2 Short-Term Rate				
BPA Tier 2 Vintage Rate				
Non BPA Load Following				
Non BPA: Market Purchase				
Other				
Total Resources				
Load Resource Balance				

Explanation for resources other than conservation or renewables	

APPENDIX 3: INTEGRATED RESOURCE PLAN INSTRUCTIONS

Instructions for Submission of "Integrated Resource Plan Cover Sheets"

Washington State Utility Resource Plans, RCW 19.280 (2006 House Bill 1010)
Due September 1, 2008

The following documentation has been prepared to assist Washington State electric utilities as they submit Integrated Resource Plan Cover Sheets to Washington State Department of Community Trade and Economic Development (CTED). To facilitate the required reporting CTED has developed a website. The website includes a method for submitting a cover sheet and an opportunity to submit a resource plan document to be published on the CTED web site.

The web address is http://irp.cted.wa.gov

This set of instructions includes three sections:

1. How to use the website
2. Reporting Details
3. A blank copy of the Cover Sheet

Resource Plan or Integrated Resource Plan?
Before you proceed, make sure you are using the correct set of instructions. There are two plan types. This includes a Resource Plan and an Integrated Resource Plan.

This set of instructions is specific to the Integrated Resource Plan reporting requirements. Utilities reporting using the Resource Plan and the Integrated Resource Plan are described as follows.

Resource Plan: This cover sheet may be used by all full-requirements customers (BPA or other) and utilities with fewer than 25,000 customers.

The following definition of "full-requirements customer" is included in 19.280 RCW.

> "Full-requirements customer" means an electric utility that relies on the Bonneville power administration for all power needed to supply its total load requirement other than that served by nondispatchable generating resources totaling no more than six megawatts or renewable resources.

Integrated Resource Plan: This Cover Sheet should be used by all utilities with more than 25,000 customers that are not full-requirements customers of BPA and may be used by utilities with less than 25,000 customers that follow their own loads.

If you are submitting a Resource Plan you will want to use the other instructions.

Reporting Details

Resource Plan Year

The IRP summarized in this cover sheet is completed in either 2007 or 2008.

Base Year

On the cover sheet, define the base year, start month/day/year to end month/day/year. The base year in the IRP will only include months occurring in 2007 and 2008.

Five and Ten Year Reporting, 2013 and 2018:

On the cover sheet, five and ten year reporting is for calendar years or federal fiscal year, (October – September). For consistency, all utilities should report 2013 and 2018 IRP data.

Federal fiscal year has been added as an option to accommodate utilities that create plans consistent with federal power contract terms.

Reporting Units

Summer Peak One-Hour Demand, Megawatt (MW)
Winter Peak One-Hour Demand, Megawatt (MW)
Annual Energy, Average Megawatt (MWa)

Requirements

Loads

19.280 RCW says that the IRP should include "a range of forecasts….of projected customer demand….." For purposes of this cover sheet, utilities should report the data from their "preferred alternative" or equivalent scenario or their "mid-range" forecast or equivalent scenario.

Average Energy

Retail sales + line losses + utility needs
Adjusted for normal weather

Peak Energy

Highest estimated one-hour load for summer and winter, normalized for weather. In the IRP, detail the assumptions of the peak event. It is expected that utilities will use different assumptions. It is important the IRP provide enough detail to support aggregated reporting for all state utilities.

Base Year Load

On the cover sheet the utility may record the actual base year load, a weather adjusted load, or an alternative method. The method used to calculate the base year load should be documented in the IRP. CTED recommends that utilities report a weather adjusted loads for the base year. This will provide more consistent reporting between the base year, five year and ten year estimates. This will also provide more consistent reporting across the state.

Five and Ten Year Loads

On the cover sheet record the weather adjusted loads for 2013 and 2018.

All loads are before estimated reductions from conservation programs or demand reduction program estimates. Conservation and demand response is treated as a resource to meet load.

The Base Year does not include conservation or demand reduction as a load or resource.

Exports

Exports have been included primarily to account for seasonal exchanges. Imports are listed as a resource below. Exports and imports should be detailed in the IRP.

Resources (General)

Power purchases that are linked to a specific resource or type of resource should be included in the row for that specific resource type. Unspecified resources should be included in Contracts (see below)

2013 and 2018 expected energy or capacity to be applied to load as estimated in the IRP.

Conservation and Efficiency

19.280.020 RCW defines conservation and efficiency resources as "any reduction in electric power consumption that results from increases in the efficiency of energy use, production, transmission or distribution." This line will summarize the expected energy savings from all planned or forecasted conservation and efficiency measures.

"Base year" conservation should be blank

Demand Response

"Demand Response" means temporary reductions in demand from customers who agree in advance to reduce their loads when called upon by the utility. It is directed not at average costs and loads, but at peak and near-peak costs and loads. Savings from current and forecast demand response programs should be listed in the peak load columns.

"Base year" demand response should be blank.

Co-generation

19.280.020 RCW defines Co-generation as 'the sequential production of electricity and useful thermal energy from a common fuel source." In the 5th Northwest Power plan Co-generation is defined as "Cogeneration is the joint production of electricity and useful thermal or mechanical energy for industrial process, space conditioning or hot water loads." For the purposes of this report co-generation can either result in a reduction in load at a specific customer's site—e.g. a pulp mill—in which as it can be counted as conservation, or the utility can purchase the output from the industrial customer and use it meet other loads, in which case it can be reported as a resource.

Utilities reporting cogeneration as defined under the Energy Independence Act, (I-937) may categorize the resource differently. During the first year, if the energy is used by the generating facility, it may be categorized as conservation. If the cogeneration facility uses qualifying fuel types, it may be categorized as a renewable. For those utilities subject to the Energy Independence Act, if the IRP is to be consistent with the act, definitions in the act should be used.

Hydro (critical)

It is assumed that "critical water" will be used. Utilities should specify if something else is used. The critical water year should also be specified in the IRP.

Wind

Base year wind data for capacity and energy may reflect actual experience, if available. Five and Ten year entries can be estimated on anticipated wind sites and/or best available generic studies such as the Northwest Wind Integration Plan or the Northwest Resource Adequacy Forum. As with all other resources, whatever is included in the IRP should be reported here.

Other Renewables

RCW 19-280 list renewable resources as follows. " …(c) solar energy, (d) geothermal energy, (e) landfill gas, (f) biomass energy utilizing animal waste, solid organic fuels from wood, forest or field residues or dedicated energy crops that do not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic; (g) by-products of pulping or wood manufacturing processes, including but not limited to bark, wood chips, sawdust, and lignin in spent pulping liquors; (h) ocean thermal, wave or tidal power; and (i) gas from sewage treatment facilities."

Note: This definition, from 19.280 RCW, varies in specific details from the definition of renewables in the Energy Independence Act (I-937).

Thermal: Gas

Includes all gas generated resource including utility owned and long term contract purchases.

Thermal: Coal

Includes all coal generated resource including utility owned and long term contract purchases.

Contracts

Net long term contracts (system purchases and sales) are the net energy or capacity that are resources that are obtained under agreements one year in length or longer and are not tied to specific resources. The energy or capacity for specific resources acquired under long-term contracts should be included under those resources in the rows above.

There are rows for two kinds of long term purchases:

- "Long Term: BPA Base Year or Tier 1" which would be the utilities requirements purchases for the base year and estimated Tier 1 for subsequent years.
- "Net Long Term Contracts: Other" includes all other long term contracts, including BPA Tier 2, that are not tied to specific resources.

"Net short-term contracts" are net purchases of capacity or energy for less than a year that are planned in order to meet load.

"Other" resources should be recorded here, and detailed in the IRP.

Imports

Imports have been included primarily to account for seasonal exchanges. Imports should be detailed in the IRP.

Other Considerations

Utilities may include monthly load and resource in the IRP.

Load Resource Balance

The load resource balance is loads minus resources. This row will show a load deficit or surplus.

APPENDIX 4: UTILITY INTEGRATED RESOURCE PLAN COVER SHEETS

Avista Corporation (WA)

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	1,279.35	1,189.80	863.11	1,447.40	1,244.70	954.95	1,588.11	1,365.78	1,036.38
Exports									
Resources									
Conservation/Efficiency			0.00	10.42	16.00	10.42	27.36	42.00	27.36
Demand Response			0.00						
Cogeneration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydro	743.90	803.41	351.76	715.24	772.46	332.87	715.24	772.46	328.96
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.09
Other Renewables	0.00	0.00	0.00	18.89	18.89	17.59	22.15	22.15	20.84
Thermal - Gas	337.43	330.68	276.85	516.56	506.23	457.93	565.42	554.11	486.60
Thermal - Coal	149.82	149.82	129.63	149.82	149.82	121.16	149.82	149.82	122.46
Long Term: BPA Base Year or Tier 1									
Net Long Term Contracts: Other	112.04	88.51	152.43	37.78	29.85	68.40	135.49	107.04	68.40
Net Short Term Contracts									
Other	32.57	32.57	30.62	32.57	32.57	30.62	32.57	32.57	30.62
Imports									
Total Resources	1,375.76	1,404.99	941.29	1,481.28	1,525.82	1,038.99	1,648.05	1,680.15	1,152.33
Load Resource Balance	96.41	215.19	78.18	33.88	281.12	84.04	59.94	314.37	115.95

PUD No 1 of Benton County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	360.00	360.00	195.00	403.00	403.00	219.00	420.00	420.00	229.00
Exports									
Resources									
Conservation/Efficiency				2.42	2.42	2.42	6.76	6.76	6.76
Demand Response									
Cogeneration									
Hydro	4.00	4.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00
Wind	0.30	0.30	2.00	0.91	0.91	6.00	0.91	0.91	6.00
Other Renewables	1.00	1.00	1.00	26.00	26.00	23.50	26.00	26.00	23.50
Thermal - Gas	50.00	50.00	22.50	50.00	50.00	22.50	50.00	50.00	22.50
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	311.97	311.97	184.87	313.97	313.97	196.00	313.97	313.97	196.00
Net Long Term Contracts: Other									
Net Short Term Contracts									
Other									
Imports									
Total Resources	367.27	367.27	214.37	394.30	394.30	251.42	398.64	398.64	255.76
Load Resource Balance	7.27	7.27	19.37	-8.70	-8.70	32.42	-21.36	-21.36	26.76

*Note: Wind Peak was computed using 5% of the nameplate value.

PUD No 1 of Chelan County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2007
Base Year End:	12/31/2007
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	404.80	222.81	181.28	532.00	245.00	202.80	585.00	268.00	222.70
Exports	18.00	68.00	30.08						
Resources									
Conservation/Efficiency				5.70	6.06	4.92	10.45	11.11	9.02
Demand Response									
Cogeneration									
Hydro	512.00	512.00	220.00	846.00	561.00	359.00	842.00	556.00	357.00
Wind	0.01	0.37	2.30		0.01	2.08		0.01	2.08
Other Renewables									
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1									
Net Long Term Contracts: Other									
Net Short Term Contracts									
Other									
Imports			3.33						
Total Resources	512.01	512.37	225.63	851.70	567.07	366.00	852.45	567.12	368.10
Load Resource Balance	89.21	221.56	14.27	319.70	322.07	163.20	267.45	299.12	145.40

PUD No 1 of Clark County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2007
Base Year End:	12/31/2007
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	994.80	733.05	538.17	1,021.20	805.96	586.53	1,099.84	869.14	631.00
Exports									
Resources									
Conservation/Efficiency				1.04	0.94	20.25	2.08	1.89	41.45
Demand Response									
Cogeneration									
Hydro									
Wind	0.00	0.00	0.00	16.99	16.99	16.99	53.06	53.06	53.06
Other Renewables									
Thermal - Gas	263.12	224.25	173.67	252.00	224.00	220.00	252.00	224.00	220.00
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	616.00	351.00	382.14	530.00	391.00	332.16	530.00	391.00	332.16
Net Long Term Contracts: Other	115.68	157.80		221.24	173.03	0.00	262.70	199.19	0.00
Net Short Term Contracts			43.84						
Other									
Imports									
Total Resources	994.80	733.05	599.65	1,021.27	805.96	589.40	1,099.84	869.14	646.67
Load Resource Balance	0.00	0.00	61.48	0.07	0.00	2.87	0.00	0.00	15.67

PUD No 1 of Cowlitz County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2027
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	764.00	595.00	563.74	822.00	635.00	588.77	855.00	656.00	601.35
Exports									
Resources									
Conservation/Efficiency				7.50	7.50	7.50	7.50	7.50	7.50
Demand Response									
Cogeneration				12.50	12.50	10.00	43.75	43.75	35.00
Hydro	67.00	20.00	19.80	67.00	20.00	19.80	67.00	20.00	19.80
Wind	0.00	0.00	32.40	0.00	0.00	40.40	0.00	0.00	46.40
Other Renewables				25.00	25.00	20.00	25.00	25.00	20.00
Thermal - Gas				6.00	6.00	3.00	6.00	6.00	3.00
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	697.00	575.00	543.94	755.00	615.00	568.97	788.00	636.00	581.55
Net Long Term Contracts: Other									
Net Short Term Contracts									
Other									
Imports									
Total Resources	764.00	595.00	596.14	873.00	686.00	669.67	937.25	738.25	713.25
Load Resource Balance	0.00	0.00	32.40	51.00	51.00	80.90	82.25	82.25	111.90

PUD No 2 of Grant County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	581.00	622.00	426.00	821.00	878.00	623.00	857.00	915.00	650.00
Exports	260.00	163.00	222.00	89.00	88.00	73.00	89.00	88.00	78.00
Resources									
Conservation/Efficiency						2.00			3.00
Demand Response									
Cogeneration									
Hydro	751.00	763.00	381.00	857.00	853.00	509.00	857.00	853.00	516.00
Wind			3.40			3.40			3.40
Other Renewables									
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	176.00	276.00	196.00	15.00	7.00	9.00	16.00	8.00	11.00
Net Long Term Contracts: Other									
Net Short Term Contracts	41.00	53.00	89.00	54.00	70.00	118.00	65.00	84.00	140.00
Other									
Imports									
Total Resources	968.00	1,092.00	669.40	926.00	930.00	641.40	938.00	945.00	673.40
Load Resource Balance	127.00	307.00	21.40	16.00	-36.00	-54.60	-8.00	-58.00	-54.60

PUD No 1 of Grays Harbor County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2007
Base Year End:	12/31/2007
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	239.00	146.00	126.00	252.00	170.00	146.00	270.00	182.00	157.00
Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Resources									
Conservation/Efficiency				4.00	4.00	4.00	8.00	8.00	8.00
Demand Response				1.00	1.00	1.00	1.00	1.00	2.00
Cogeneration	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Hydro	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Wind	6.00	0.00	2.00	0.00	0.00	6.00	0.00	0.00	6.00
Other Renewables	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00
Thermal - Gas	45.00	64.00	24.00	67.00	67.00	33.00	67.00	67.00	33.00
Thermal - Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long Term: BPA Base Year or Tier 1	222.00	181.00	152.00	188.00	138.00	138.00	188.00	188.00	138.00
Net Long Term Contracts: Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Short Term Contracts	75.00	55.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Resources	358.00	300.00	178.00	262.00	212.00	184.00	266.00	266.00	197.00
Load Resource Balance	119.00	154.00	52.00	10.00	42.00	38.00	-4.00	84.00	40.00

Okanogan County Electric Coop, Inc

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2007
Base Year End:	12/31/2007
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	18.20	7.45	6.71	23.10	9.44	8.50	28.00	11.47	10.33
Exports									
Resources									
Conservation/Efficiency									
Demand Response									
Cogeneration									
Hydro			5.71						
Wind			0.00						
Other Renewables			0.01						
Thermal - Gas			0.09						
Thermal - Coal			0.22						
Long Term: BPA Base Year or Tier 1				22.15	8.49	7.55	25.22	8.69	7.55
Net Long Term Contracts: Other				0.95	0.95	0.95	2.78	2.78	2.78
Net Short Term Contracts									
Other			0.68						
Imports									
Total Resources	0.00	0.00	6.71	23.10	9.44	8.50	28.00	11.47	10.33
Load Resource Balance	-18.20	-7.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PacifiCorp

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	0.00	730.98	516.28	0.00	806.76	553.27	0.00	884.6	592.3
Exports	0.00	251.46	139.74	0.00	222.56	99.37	0.00	171.6	77.7
Resources									
Conservation/Efficiency				0.00	38.23	23.03	0.00	69.44	41.83
Demand Response				0.00	11.00	0.00	0.00	11.00	0.00
Cogeneration	0.00	7.53	6.49	0.00	7.54	6.62	0.00	2.69	1.96
Hydro	0.00	249.33	126.34	0.00	247.47	121.72	0.00	268.40	124.28
Wind	0.00	42.56	53.16	0.00	70.79	134.85	0.00	77.67	147.09
Other Renewables	0.00	14.84	13.93	0.00	22.63	19.74	0.00	22.83	20.30
Thermal - Gas	0.00	411.01	185.41	0.00	658.95	333.26	0.00	699.93	429.21
Thermal - Coal	0.00	1,369.15	1,164.45	0.00	1,416.00	1,014.03	0.00	1,428.57	959.85
Long Term: BPA Base Year or Tier 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Long Term Contracts: Other	0.00	201.91	110.96	0.00	82.96	79.52	0.00	81.19	78.20
Net Short Term Contracts	0.00	121.83	-130.14	0.00	242.24	-16.64	0.00	378.44	71.84
Other	0.00	46.96	2.50	0.00	72.76	2.01	0.00	73.41	2.16
Imports	0.00	206.62	117.91	0.00	113.53	112.12	0.00	107.71	109.21
Total Resources	0.00	2,671.74	1,651.01	0.00	2,984.08	1,830.26	0.00	3,221.28	1,985.93
Load Resource Balance	0.00	1,689.30	994.98	0.00	1,954.76	1,177.62	0.00	2,165.04	1,315.97

Note that the data included is not intended to indicate how PacifiCorp conducts resource planning for Washington. As stated in the Company's 2007 IRP, resource plans are developed on a system basis. This is an alternate version of PacifiCoRPs 2008 HB 1010 IRP filing that shows resources adjusted to approximate Washington-only shares using a "percent of total system load" approach.

Puget Sound Energy, Inc

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	4,991.13		2,423.65	5,351.80		2,766.70	5,848.02		3,123.40
Exports		300.00	47.15		300.00	47.15		300.00	47.15
Resources									
Conservation/Efficiency				230.71		189.98	409.69		340.02
Demand Response				101.87			111.38		
Cogeneration									
Hydro	1,542.98		782.26	1,097.35		570.95	1,089.27		567.08
Wind	75.42		126.29	128.73		251.78	172.32		354.60
Other Renewables				26.04		22.14	47.34		40.23
Thermal - Gas	1,860.07		477.23	2,862.99		820.18	3,072.56		897.40
Thermal - Coal	666.00		581.64	666.00		564.21	666.00		577.10
Long Term: BPA Base Year or Tier 1									
Net Long Term Contracts: Other	320.96		292.54	52.29		25.72	0.00		0.00
Net Short Term Contracts									
Other									
Imports	300.00		47.00	300.00		47.00	300.00		47.00
Total Resources	4,765.43	0.00	2,306.96	5,465.98	0.00	2,491.96	5,868.56	0.00	2,823.43
Load Resource Balance	-225.70	-300.00	-163.84	114.18	-300.00	-321.89	20.54	-300.00	-347.12

Seattle, City of

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads			1,164.00			1,250.00			1,340.00
Exports			50.00			105.00			105.00
Resources									
Conservation/Efficiency						84.00			146.00
Demand Response									
Cogeneration									
Hydro			657.00			657.00			657.00
Wind			43.00			43.00			43.00
Other Renewables						56.00			106.00
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1			563.00			563.00			563.00
Net Long Term Contracts: Other			2.00			2.00			2.00
Net Short Term Contracts									
Other									
Imports			50.00			105.00			105.00
Total Resources	0.00	0.00	1,315.00	0.00	0.00	1,510.00	0.00	0.00	1,622.00
Load Resource Balance	0.00	0.00	101.00	0.00	0.00	155.00	0.00	0.00	177.00

PUD No 1 of Snohomish County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	1,442.00		818.50	1,566.00		912.20	1,659.00		983.60
Exports	0.00		0.00	0.00		0.00	0.00		0.00
Resources									
Conservation/Efficiency				73.40		43.00	137.80		80.60
Demand Response				0.00		0.00	0.00		0.00
Cogeneration	38.00		38.00	38.00		38.00	0.00		0.00
Hydro	98.00		29.50	102.00		33.50	112.00		36.50
Wind	0.00		5.00	8.80		63.00	8.80		63.00
Other Renewables	5.00		5.00	10.00		10.00	72.00		72.00
Thermal - Gas	0.00		0.00	0.00		0.00	0.00		0.00
Thermal - Coal	0.00		0.00	0.00		0.00	0.00		0.00
Long Term: BPA Base Year or Tier 1	1,192.40		706.00	1,232.70		760.00	1,208.90		741.10
Net Long Term Contracts: Other	25.00		25.00	0.00		0.00	0.00		0.00
Net Short Term Contracts	71.20		2.80	101.10			119.50		
Other	12.40		7.20						
Imports									
Total Resources	1,442.00	0.00	818.50	1,566.00	0.00	947.50	1,659.00	0.00	993.20
Load Resource Balance	0.00	0.00	0.00	0.00	0.00	35.30	0.00	0.00	9.60

Tacoma Power

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2008
Base Year End:	12/31/2008
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years	*Base Year*			*2013*			*2018*		
Period	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*	*Winter*	*Summer*	*Annual*
Units	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*	*(MWh)*	*(MWh)*	*(MWa)*
Loads	987.00	645.00	590.00	1,023.00	670.00	627.00	1,048.00	684.00	647.00
Exports			2.00			2.00			2.00
Resources									
Conservation/Efficiency						5.00			5.00
Demand Response									
Cogeneration									
Hydro			176.00			176.00			176.00
Wind									
Other Renewables									
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1			429.00			440.00			440.00
Net Long Term Contracts: Other			51.00			28.00			28.00
Net Short Term Contracts									
Other									
Imports									
Total Resources	0.00	0.00	656.00	0.00	0.00	649.00	0.00	0.00	649.00
Load Resource Balance	-987.00	-645.00	64.00	-1,023.00	-670.00	20.00	-1,048.00	-684.00	0.00

APPENDIX 5: UTILITY RESOURCE PLAN COVER SHEETS

Alder Mutual

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	0.50	0.67	0.80
Resources			
Conservation/Efficiency		0.00	0.00
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	0.50		
BPA Base Year EPP	0.02		
BPA Tier 1 Load Following		0.67	0.80
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	0.52	0.67	0.80
Load Resource Balance	0.02	0.01	0.00

Explanation: BPA Tier 2 not available for less than 1 MW amount

Asotin County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	5.50	6.00	6.50
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)	4.71	5.14	5.56
Wind			
Other Renewables	0.00	0.01	0.01
BPA Base Year PF			
BPA Base Year EPP			
BPA Tier 1 Load Following			
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other	0.79	0.85	0.93
Total Resources	5.50	6.00	6.50
Load Resource Balance	0.00	0.00	0.00

Explanation: Coal, Natural Gas, Nuclear, and Petroleum

Benton Rural Electric Assn

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	10/1/2007
Base Year End	9/30/2008
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	62.50	70.80	76.60
Resources			
Conservation/Efficiency		0.21	0.26
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	62.45		
BPA Base Year EPP	0.05		
BPA Tier 1 Load Following		65.82	65.82
BPA Tier 2 Load Growth Rate		4.77	10.52
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	62.50	70.80	76.60
Load Resource Balance	0.00	0.00	0.00

Explanation: Benton REA is a full-requirements customer of BPA through the current contract period (Sept 30, 2011). Although the Board of Trustees has not made a final decision on future tier 2 power supply, and probably will not until November, 2009, BPA's Tier 2 product may be the selected option.

Big Bend Electric Coop, Inc

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	10/1/2006
Base Year End	9/30/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	58.36	64.61	71.57
Resources			
Conservation/Efficiency		0.24	0.26
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables		1.61	3.57
BPA Base Year PF	58.36		0
BPA Base Year EPP			
BPA Tier 1 Load Following		60.97	60.97
BPA Tier 2 Load Growth Rate		1.79	6.77
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	58.36	64.61	71.57
Load Resource Balance	0	0	0

Blaine, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	8.53	10.03	11.24
Resources			
Conservation/Efficiency		0.08	0.05
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables	0.15		
BPA Base Year PF	8.38		
BPA Base Year EPP			
BPA Tier 1 Load Following		9.15	9.15
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other		0.80	2.04
Total Resources	8.53	10.03	11.24
Load Resource Balance	0.00	0.00	0.00

Centralia, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	30.16	34.78	39.30
Resources			
Conservation/Efficiency		0.26	0.20
Demand Response			
Co-generation			
Hydro (critical water)	7.04	7.53	7.53
Wind			
Other Renewables			
BPA Base Year PF	23.12		
BPA Base Year EPP			
BPA Tier 1 Load Following		24.57	24.57
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		2.42	7.00
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	30.16	34.78	39.30
Load Resource Balance	0.00	0.00	0.00

Explanation: Hydroelectric source is City's Yelm Hydroelectric Plant.

Cheney, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	13.90	14.90	15.60
Resources			
Conservation/Efficiency		0.20	0.25
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	13.90		
BPA Base Year EPP			
BPA Tier 1 Load Following		14.90	15.60
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	13.90	15.10	15.85
Load Resource Balance	0.00	0.20	0.25

Explanation: We hope to achieve more conservation in the future, with a relative growth of about 1%. No current plans to acquire our own generation resource.

Chewelah Light Department

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	2.81	2.97	2.97
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	2.81		
BPA Base Year EPP			
BPA Tier 1 Load Following		2.97	2.97
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	2.81	2.97	2.97
Load Resource Balance	0.00	0.00	0.00

Clallam County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	71.57	77.58	81.14
Resources			
Conservation/Efficiency		0.86	1.84
Demand Response			
Co-generation			
Hydro (critical water)			
Wind	0.00	1.22	5.70
Other Renewables	1.00	1.00	1.00
BPA Base Year PF	70.57		
BPA Base Year EPP			
BPA Tier 1 Load Following		74.50	72.60
BPA Tier 2 Load Growth Rate		0.00	0.00
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	71.57	77.58	81.14
Load Resource Balance	0.00	0.00	0.00

Columbia Rural Electric Assn, Inc

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	33.56	37.79	39.84
Resources			
Conservation/Efficiency		0.10	0.10
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	33.56		
BPA Base Year EPP			
BPA Tier 1 Load Following		33.00	33.00
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other		4.69	6.74
Total Resources	33.56	37.79	39.84
Load Resource Balance	0.00	0.00	0.00

Coulee Dam Light Department

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2008
Base Year Start:	1/1/2007
Base Year End:	12/31/2007
Five Year Report Year:	2013
Ten Year Report Year:	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	2.20	2.20	2.20
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)	100.00	100.00	100.00
Wind			
Other Renewables			
BPA Base Year PF	2.20		
BPA Base Year EPP			
BPA Tier 1 Load Following		2.20	2.20
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	102.20	102.20	102.20
Load Resource Balance	100.00	100.00	100.00

Douglas County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	72.90	112.80	128.90
Resources			
Conservation/Efficiency		1.20	1.30
Demand Response			
Co-generation			
Hydro (critical water)	92.00	104.20	162.20
Wind	2.90	3.10	3.10
Other Renewables			
BPA Base Year PF			
BPA Base Year EPP			
BPA Tier 1 Load Following			
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other	18.30	18.90	0.00
Total Resources	113.20	127.40	166.60
Load Resource Balance	40.30	14.60	37.70

Explanation: Pre-existing long-term firm power exchange agreement dated October 1, 2000.

Eatonville, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years	*Base Year*	*2013*	*2018*
Period	*Annual*	*Annual*	*Annual*
Units	*(MWa)*	*(MWa)*	*(MWa)*
Loads	3.33	4.74	5.68
Resources			
Conservation/Efficiency		0.03	0.02
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	3.92		
BPA Base Year EPP	0.166		
BPA Tier 1 Load Following		4.12	4.12
BPA Tier 2 Load Growth Rate		0.59	
BPA Tier 2 Short-Term Rate	0.00		1.54
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	4.09	4.74	5.68
Load Resource Balance	0.76	0.00	0.00

Ellensburg, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	23.65	26.63	29.40
Resources			
Conservation/Efficiency		0.29	0.23
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	23.65		
BPA Base Year EPP			
BPA Tier 1 Load Following		25.60	25.60
BPA Tier 2 Load Growth Rate		0.75	3.58
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	23.65	26.63	29.40
Load Resource Balance	0.00	0.00	0.00

Elmhurst Mutual Power & Light Co.

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	31.42	37.11	39.35
Resources			
Conservation/Efficiency		0.27	0.20
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	31.42		
BPA Base Year EPP	0.26		
BPA Tier 1 Load Following		35.49	35.49
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		1.34	3.66
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	31.68	37.10	39.35
Load Resource Balance	0.26	0.00	0.00

Explanation: BPA Tier 2 not available for less than 1 MW amount

Ferry County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	8.00	8.70	9.40
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	8.00		
BPA Base Year EPP			
BPA Tier 1 Load Following		8.70	9.40
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	8.00	8.70	9.40
Load Resource Balance	0.00	0.00	0.00

Explanation: BPA Load following is our sole source.

Franklin County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	106.00	126.00	136.00
Resources			
Conservation/Efficiency		0.25	0.25
Demand Response			
Co-generation			
Hydro (critical water)			
Wind	1.00	6.00	6.00
Other Renewables			2.00
BPA Base Year PF			
BPA Base Year EPP	0.75		
BPA Tier 1 Load Following			
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		6.00	14.00
BPA Tier 2 Vintage Rate		0.00	0.00
Non BPA Load Following			
Non BPA: Market Purchase			
Other	112.20	136.70	136.70
Total Resources	113.95	148.95	158.95
Load Resource Balance	7.95	22.95	22.95

Explanation: Other Resources include the following: (1) BPA Slice/Block; (2) 50% Ownership of Pasco/Grays CT; (3) Long term contract for generation from Frederickson CT plant. Base year Slice/Block calculated at critical water. Future Slice/Block based upon expected contracted high-water mark.

Inland Power & Light Company

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	101.70	116.10	132.50
Resources			
Conservation/Efficiency		2.00	5.00
Demand Response			
Co-generation			
Hydro (critical water)			
Wind		4.00	12.00
Other Renewables			
BPA Base Year PF	99.80		
BPA Base Year EPP	1.90		
BPA Tier 1 Load Following		107.20	107.20
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		1.90	4.30
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase		1.00	4.00
Other			
Total Resources	101.70	116.10	132.50
Load Resource Balance	0.00	0.00	0.00

Explanation: Conservation resources for 2013 and 2018 are placeholders pending completion of Inland's conservation potential assessment in 2009. In addition to renewable energy in BPA Tier 1 and Wind resources, BPA Tier 2 Short-Term Rate and Non BPA Market Purchase provide flexibility to acquire cost-effective renewables and other resources.

Kittitas County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads			
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF			
BPA Base Year EPP			
BPA Tier 1 Load Following		30.70	30.70
BPA Tier 2 Load Growth Rate		8.00	21.20
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	0.00	38.70	51.90
Load Resource Balance	0.00	38.70	51.90

Klickitat County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	35.70	40.91	44.34
Resources			
Conservation/Efficiency		0.03	0.06
Demand Response			
Co-generation			
Hydro (critical water)	4.20	4.20	4.20
Wind		2.00	5.40
Other Renewables			
BPA Base Year PF	31.50		
BPA Base Year EPP			
BPA Tier 1 Load Following		34.68	34.68
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	35.70	40.91	44.34
Load Resource Balance	0.00	0.00	0.00

Lakeview Light & Power

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	31.30	32.00	32.70
Resources			
Conservation/Efficiency		0.60	1.10
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	30.40		
BPA Base Year EPP	0.90		
BPA Tier 1 Load Following		31.40	31.60
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	31.30	32.00	32.70
Load Resource Balance	0.00	0.00	0.00

Lewis County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	110.80	119.70	125.80
Resources			
Conservation/Efficiency		2.30	4.70
Demand Response			
Co-generation			
Hydro (critical water)	0.30	0.30	0.30
Wind	0.30	8.10	10.90
Other Renewables			
BPA Base Year PF	110.20		
BPA Base Year EPP			
BPA Tier 1 Load Following		115.30	115.30
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	110.80	126.00	131.20
Load Resource Balance	0.00	6.30	5.40

Mason County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2018
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	8.87	10.00	10.79
Resources			
Conservation/Efficiency		0.36	0.66
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	8.87		
BPA Base Year EPP			
BPA Tier 1 Load Following		9.48	9.48
BPA Tier 2 Load Growth Rate		0.16	0.65
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	8.87	10.00	10.79
Load Resource Balance	0.00	0.00	0.00

Mason County PUD No 3

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	78.50	88.70	96.60
Resources			
Conservation/Efficiency		4.00	7.00
Demand Response			
Co-generation			
Hydro (critical water)	0.00	0.00	0.00
Wind	0.81	2.50	8.10
Other Renewables	0.00	0.00	0.00
BPA Base Year PF	77.70		
BPA Base Year EPP			
BPA Tier 1 Load Following		82.20	81.50
BPA Tier 2 Load Growth Rate		0.00	0.00
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	78.51	88.70	96.60
Load Resource Balance	0.01	0.00	0.00

McCleary Light & Power

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	3.94	4.38	4.59
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	3.94		
BPA Base Year EPP			
BPA Tier 1 Load Following		4.38	4.59
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	3.94	4.38	4.59
Load Resource Balance	0.00	0.00	0.00

Milton, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	7.30	8.39	9.28
Resources			
Conservation/Efficiency		0.06	0.05
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	7.30		
BPA Base Year EPP			
BPA Tier 1 Load Following		8.33	7.81
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			1.43
Total Resources	7.30	8.39	9.28
Load Resource Balance	0.00	0.00	0.00

Modern Electric Water Company

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	25.70	29.10	32.60
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	25.70		
BPA Base Year EPP			
BPA Tier 1 Load Following		27.30	27.30
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate		1.80	5.30
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	25.70	29.10	32.60
Load Resource Balance	0.00	0.00	0.00

Nespelem Valley Electric Coop, Inc

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/1/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	5.70	6.10	6.50
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	5.70		
BPA Base Year EPP			
BPA Tier 1 Load Following		6.40	6.40
BPA Tier 2 Load Growth Rate			0.10
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	5.70	6.40	6.50
Load Resource Balance	0.00	0.30	0.00

Ohop Mutual Light Co.

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	9.70	12.65	14.43
Resources			
Conservation/Efficiency		0.08	0.06
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	9.70		
BPA Base Year EPP	0.05		
BPA Tier 1 Load Following		11.49	11.49
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		1.08	2.88
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	9.74	12.65	14.43
Load Resource Balance	0.05	0.00	0.00

Okanogan County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	75.70	92.80	109.70
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)	25.60	25.60	45.60
Wind	4.50	4.50	4.50
Other Renewables			
BPA Base Year PF	56.80		
BPA Base Year EPP			
BPA Tier 1 Load Following		54.30	54.30
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	86.90	84.40	104.40
Load Resource Balance	11.20	-8.40	-5.30

Explanation: LOADS: 2007 Based on Actual.- Forecast data @ 3.4% (4 year average growth rate)
RESOURCES: 2007 "Other" based on Okanogan's current BPA Block/Slice Contract (33.1MWa Critical Slice + 23.7 MWa Block), 2013 & 2018 is based on what Okanogan's PROPOSED Slice/Block contract MAY look like (New Contract is NOT finalized. (32.6 MWa Critical Slice + 21.7 MWa Block)

Orcas Power & Light Cooperative

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	24.65	26.26	28.52
Resources			
Conservation/Efficiency		0.54	0.99
Demand Response			
Co-generation			
Hydro (critical water)	0.00	0.00	0.00
Wind	0.00	0.00	0.00
Other Renewables	0.01	0.01	0.01
BPA Base Year PF	24.30		
BPA Base Year EPP	0.33		
BPA Tier 1 Load Following		25.71	25.04
BPA Tier 2 Load Growth Rate		0.00	2.47
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	24.64	26.26	28.51
Load Resource Balance	-0.01	0.00	-0.01

Pacific County PUD No 2

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	35.74	44.00	47.00
Resources			
Conservation/Efficiency		0.32	0.21
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	35.09		
BPA Base Year EPP	0.65		
BPA Tier 1 Load Following		42.00	42.00
BPA Tier 2 Load Growth Rate		1.68	4.79
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	35.74	44.00	47.00
Load Resource Balance	0.00	0.00	0.00

Parkland Light & Water Company

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	13.99	16.98	17.77
Resources			
Conservation/Efficiency			
Demand Response		0.13	0.10
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	13.76		
BPA Base Year EPP	0.23		
BPA Tier 1 Load Following		16.85	16.46
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		0.00	1.21
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	13.99	16.98	17.77
Load Resource Balance	0.00	0.00	0.00

Pend Oreille County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	138.89	147.55	150.45
Resources			
Conservation/Efficiency		0.08	0.08
Demand Response			
Co-generation			
Hydro (critical water)	96.64	97.00	97.00
Wind			
Other Renewables			
BPA Base Year PF	35.51		
BPA Base Year EPP			
BPA Tier 1 Load Following		34.40	34.40
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other	6.74	16.15	19.05
Total Resources	138.89	147.63	150.53
Load Resource Balance	0.00	0.08	0.08

Explanation: Pend Oreille used BPA Tier 1 Load Following in lieu of BPA Tier 1 Slice/Block.

Peninsula Light Company

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	67.26	76.92	85.76
Resources			
Conservation/Efficiency		0.59	0.61
Demand Response	0.00	0.00	
Co-generation	0.00	0.00	0.00
Hydro (critical water)	0.00	0.00	0.00
Wind	0.00	3.04	6.00
Other Renewables	0.00	0.00	1.86
BPA Base Year PF	66.06		
BPA Base Year EPP	1.20		
BPA Tier 1 Load Following		72.29	72.29
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		1.00	3.00
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			2.00
Other			
Total Resources	67.26	76.92	85.76
Load Resource Balance	0.00	0.00	0.00

Explanation: Peninsula Light Co. expects to purchase BPA Tier 2 Short-Term Rate power and power from non-federal entities for its needs above the amounts mandated by I-937. Purchasing the BPA Tier 2 Short-Term allows for the purchase of the BPA Vintage Renewable Rate. Peninsula Light Co. will conduct an analysis in 2009 to fully understand the conservation potential in its service territory.

Port Angeles, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	7/1/2007
Base Year End	6/30/2008
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	82.35	82.03	83.04
Resources			
Conservation/Efficiency		0.73	0.78
Demand Response			
Co-generation			
Hydro (critical water)	0.22	0.22	0.22
Wind			
Other Renewables			
BPA Base Year PF	82.04		
BPA Base Year EPP			
BPA Tier 1 Load Following		77.61	77.61
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		3.39	4.35
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other	0.09	0.08	0.08
Total Resources	82.35	82.03	83.04
Load Resource Balance	0.00	0.00	0.00

Explanation: The City has been and will likely continue as a "full-requirements" BPA customer. The City also has a wheeling agreement with its neighboring PUD that will likely continue.

Port of Seattle

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	10/1/2007
Base Year	9/30/2008
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	16.91	17.91	20.17
Resources			
Conservation/Efficiency		0.19	0.78
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	16.09		
BPA Base Year EPP	0.82		
BPA Tier 1 Load Following		17.72	17.86
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			1.53
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	16.91	17.91	20.17
Load Resource Balance	0.00	0.00	0.00

Explanation: Coal, Natural Gas, Nuclear, and Petroleum

Richland, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	95.30	113.80	129.40
Resources			
Conservation/Efficiency		0.30	0.30
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	94.50		
BPA Base Year EPP	0.80		
BPA Tier 1 Load Following		103.10	103.10
BPA Tier 2 Load Growth Rate		5.20	11.10
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following		5.20	11.00
Non BPA: Market Purchase			
Other			3.90
Total Resources	95.30	113.80	129.40
Load Resource Balance	0.00	0.00	0.00

Ruston, Town of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	0.63	2.12	2.90
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF			
BPA Base Year EPP			
BPA Tier 1 Load Following			
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following	0.63	2.12	2.90
Non BPA: Market Purchase			
Other			
Total Resources	0.63	2.12	2.90
Load Resource Balance	0.00	0.00	0.00

Explanation: Town of Ruston purchases power from Tacoma Power at 12.5kv out of Tacoma's distribution line

Skamania County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	15.70	16.60	19.90
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	15.70		
BPA Base Year EPP			
BPA Tier 1 Load Following		16.00	16.00
BPA Tier 2 Load Growth Rate		0.60	3.90
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	15.70	16.60	19.90
Load Resource Balance	0.00	0.00	0.00

Steilacoom, Town of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	4.80	5.52	6.07
Resources			
Conservation/Efficiency		0.04	0.03
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	4.80		
BPA Base Year EPP	0.00		
BPA Tier 1 Load Following		5.15	5.15
BPA Tier 2 Load Growth Rate		0.33	0.89
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other	0.00	0.00	
Total Resources	4.80	5.52	6.07
Load Resource Balance	0.00	0.00	0.00

Explanation: For a small municipal utility with preference rights and limited staff resources like Steilacoom, purchasing 100% of our power supply needs from the Bonneville Power Administration (BPA) along with our conservation efforts, has been and will continue to be our most cost-effective source of power supply. 86% of the power Steilacoom purchases from BPA comes from emissions-free hydro generation. When it becomes available, the Town is planning to sign a new 20-year power supply agreement with the BPA for both Tier I and Tier 2 resources.

Sumas, City of

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year End	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	3.47	4.63	5.49
Resources			
Conservation/Efficiency		0.03	0.01
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	3.30		
BPA Base Year EPP	0.17		
BPA Tier 1 Load Following		4.06	4.06
BPA Tier 2 Load Growth Rate		0.53	
BPA Tier 2 Short-Term Rate			1.42
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	3.47	4.63	5.50
Load Resource Balance	0.00	0.00	0.00

Explanation: BPA Tier 2 not available for less than 1 MW amount

Tanner Electric Cooperative

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	8.32	12.46	13.97
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	8.32		
BPA Base Year EPP			
BPA Tier 1 Load Following		12.46	13.97
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	8.32	12.46	13.97
Load Resource Balance	0.00	0.00	0.00

Vera Irrigation District #15

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2008
Base Year	12/31/2008
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	26.69	29.90	33.80
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	26.69		
BPA Base Year EPP			
BPA Tier 1 Load Following		27.80	27.80
BPA Tier 2 Load Growth Rate		2.10	6.00
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	26.69	29.90	33.80
Load Resource Balance	0.00	0.00	0.00

Wahkiakum County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	4.92	5.73	6.47
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	4.92		
BPA Base Year EPP			
BPA Tier 1 Load Following		5.26	5.25
BPA Tier 2 Load Growth Rate			1.23
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other		0.48	
Total Resources	4.92	5.74	6.47
Load Resource Balance	0.00	0.01	0.00

Whatcom County PUD No 1

Washington State Utility Resource Plan

Resource Plan Year	2008
Base Year Start	1/1/2007
Base Year	12/31/2007
Five Year Report Year	2013
Ten Year Report Year	2018

Report Years *Period* *Units*	*Base Year* *Annual* *(MWa)*	*2013* *Annual* *(MWa)*	*2018* *Annual* *(MWa)*
Loads	23.06	30.50	32.70
Resources			
Conservation/Efficiency		0.24	0.03
Demand Response			
Co-generation			
Hydro (critical water)			
Wind		1.63	1.63
Other Renewables		2.60	4.19
BPA Base Year PF	22.57		
BPA Base Year EPP	0.49		
BPA Tier 1 Load Following		24.67	24.67
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		1.36	2.18
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	23.06	30.50	32.70
Load Resource Balance	0.00	0.00	0.00

Explanation: High Efficiency Cogeneration resources will be considered to cover new un-anticipated large loads (> 10 MWa).

APPENDIX 6: RCW CHAPTER 19.280

Electric utility resource plans

19.280.010
Intent — Finding.
It is the intent of the legislature to encourage the development of new safe, clean, and reliable energy resources to meet demand in Washington for affordable and reliable electricity. To achieve this end, the legislature finds it essential that electric utilities in Washington develop comprehensive resource plans that explain the mix of generation and demand-side resources they plan to use to meet their customers' electricity needs in both the short term and the long term. The legislature intends that information obtained from integrated resource planning under this chapter will be used to assist in identifying and developing new energy generation, conservation and efficiency resources, and related infrastructure to meet the state's electricity needs.

19.280.020
Definitions.
The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Commission" means the utilities and transportation commission.

(2) "Conservation and efficiency resources" means any reduction in electric power consumption resulting from increases in the efficiency of energy use, production, transmission, or distribution.

(3) "Consumer-owned utility" includes a municipal electric utility formed under Title 35 RCW, a public utility district formed under Title 54 RCW, an irrigation district formed under chapter 87.03 RCW, a cooperative formed under chapter 23.86 RCW, a mutual corporation or association formed under chapter 24.06 RCW, a port district formed under Title 53 RCW, or a water-sewer district formed under Title 57 RCW, that is engaged in the business of distributing electricity to one or more retail electric customers in the state.

(4) "Department" means the department of community, trade, and economic development.

(5) "Electric utility" means a consumer-owned or investor-owned utility.

(6) "Full-requirements customer" means an electric utility that relies on the Bonneville power administration for all power needed to supply its total load requirement other than that served by nondispatchable generating resources totaling no more than six megawatts or renewable resources.

(7) "Governing body" means the elected board of directors, city council, commissioners, or board of any consumer-owned utility.

(8) "High efficiency cogeneration" means the sequential production of electricity and useful thermal energy from a common fuel source, where, under normal operating conditions, the facility has a useful thermal energy output of no less than 33 percent of the total energy output.

(9) "Integrated resource plan" means an analysis describing the mix of generating resources and conservation and efficiency resources that will meet current and projected needs at the lowest reasonable cost to the utility and its ratepayers and that complies with the requirements specified in RCW 19.280.030(1).

(10) "Investor-owned utility" means a corporation owned by investors that meets the definition in RCW 80.04.010 and is engaged in distributing electricity to more than one retail electric customer in the state.

(11) "Lowest reasonable cost" means the lowest cost mix of generating resources and conservation and efficiency resources determined through a detailed and consistent analysis of a wide range of commercially available resources. At a minimum, this analysis must consider resource cost, market-volatility risks, demand-side resource uncertainties, resource dispatchability, resource effect on system operation, the risks imposed on the utility and its ratepayers, public policies regarding resource preference adopted by Washington state or the federal government, and the cost of risks associated with environmental effects including emissions of carbon dioxide.

(12) "Plan" means either an "integrated resource plan" or a "resource plan."

(13) "Renewable resources" means electricity generation facilities fueled by: (a) Water; (b) wind; (c) solar energy; (d) geothermal energy; (e) landfill gas; (f) biomass energy utilizing animal waste, solid organic fuels from wood, forest, or field residues or dedicated energy crops that do not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic; (g) byproducts of pulping or wood manufacturing processes, including but not limited to bark, wood chips, sawdust, and lignin in spent pulping liquors; (h) ocean thermal, wave, or tidal power; or (i) gas from sewage treatment facilities.

(14) "Resource plan" means an assessment that estimates electricity loads and resources over a defined period of time and complies with the requirements in RCW 19.280.030(2).

19.280.030
Development of a resource plan — Requirements of a resource plan.
Each electric utility must develop a plan consistent with this section.

(1) Utilities with more than twenty-five thousand customers that are not full-requirements customers shall develop or update an integrated resource plan by September 1, 2008. At a minimum, progress reports reflecting changing conditions and the progress of the integrated resource plan must be produced every two years thereafter. An updated integrated resource plan

must be developed at least every four years subsequent to the 2008 integrated resource plan. The integrated resource plan, at a minimum, must include:

(a) A range of forecasts, for at least the next ten years, of projected customer demand which takes into account econometric data and customer usage;

(b) An assessment of commercially available conservation and efficiency resources. Such assessment may include, as appropriate, high efficiency cogeneration, demand response and load management programs, and currently employed and new policies and programs needed to obtain the conservation and efficiency resources;

(c) An assessment of commercially available, utility scale renewable and nonrenewable generating technologies;

(d) A comparative evaluation of renewable and nonrenewable generating resources, including transmission and distribution delivery costs, and conservation and efficiency resources using "lowest reasonable cost" as a criterion;

(e) The integration of the demand forecasts and resource evaluations into a long-range assessment describing the mix of supply side generating resources and conservation and efficiency resources that will meet current and projected needs at the lowest reasonable cost and risk to the utility and its ratepayers; and

(f) A short-term plan identifying the specific actions to be taken by the utility consistent with the long-range integrated resource plan.

(2) All other utilities may elect to develop a full integrated resource plan as set forth in subsection (1) of this section or, at a minimum, shall develop a resource plan that:

(a) Estimates loads for the next five and ten years;

(b) Enumerates the resources that will be maintained and/or acquired to serve those loads; and

(c) Explains why the resources in (b) of this subsection were chosen and, if the resources chosen are not renewable resources or conservation and efficiency resources, why such a decision was made.

(3) An electric utility that is required to develop a resource plan under this section must complete its initial plan by September 1, 2008.

(4) Resource plans developed under this section must be updated on a regular basis, at a minimum on intervals of two years.

(5) Plans shall not be a basis to bring legal action against electric utilities.

(6) Each electric utility shall publish its final plan either as part of an annual report or as a separate document available to the public. The report may be in an electronic form.

19.280.040
Investor-owned utilities submit integrated resource plans to the commission — Rules.
(1) Investor-owned utilities shall submit integrated resource plans to the commission. The commission shall establish by rule the requirements for preparation and submission of integrated resource plans.

(2) The commission may adopt additional rules as necessary to clarify the requirements of RCW 19.280.030 as they apply to investor-owned utilities.

19.280.050
Consumer-owned utilities.
(1) The governing body of a consumer-owned utility that develops a plan under this chapter shall encourage participation of its consumers in development of the plans and progress reports and approve the plans and progress reports after it has provided public notice and hearing.

(2) Each consumer-owned utility shall transmit a copy of its plan to the department by September 1, 2008, and transmit subsequent progress reports or plans to the department at least every two years thereafter. The department shall develop, in consultation with utilities, a common cover sheet that summarizes the essential data in their plans or progress reports.

(3) Consumer-owned utilities may develop plans of a similar type jointly with other consumer-owned utilities. Data and assessments included in joint reports must be identifiable to each individual utility.

(4) To minimize duplication of effort and maximize efficient use of utility resources, in developing their plans under RCW 19.280.030, consumer-owned utilities are encouraged to use resource planning concepts, techniques, and information provided to and by organizations such as the United States department of energy, the Northwest planning and conservation council, Pacific Northwest utility conference committee, and other state, regional, national, and international entities, and, for the 2008 plan, as appropriate, are encouraged to use and be consistent with relevant determinations required under Title XII - Electricity; Subtitle E, Sections 1251 - 1254 of the federal energy policy act of 2005.

19.280.060
Department's duties — Report to the legislature.
The department shall review the plans of consumer-owned utilities and investor-owned utilities, and data available from other state, regional, and national sources, and prepare an electronic report to the legislature aggregating the data and assessing the overall adequacy of Washington's electricity supply. The report shall include a statewide summary of utility load forecasts, load/resource balance, and utility plans for the development of thermal generation, renewable resources, and conservation and efficiency resources. The commission shall provide the department with data summarizing the plans of investor-owned utilities for use in the

department's statewide summary. The department may submit its report within the biennial report required under RCW 43.21F.045.

List of Acronyms

RP - Resource Plan
IRP - Integrated Resource Plan
BPA - Bonneville Power Administration
CTED - Washington State Department of Community Trade and Economic Development
UTC - Washington State Utilities and Transportation Commission
RCW - Revised Code of Washington
I-937 - Initiative 937, the Energy Independence Act (19-285 RCW)
PNUCC - Pacific Northwest Utility Conference Committee
PUD - Public Utility District
WSU - Washington State University
URP - Utility Resource Plans
COU - Consumer-owned Utilities