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Washington State Utility Resource Planning Progress Report for 2010

Analysis of Utility Progress toward Energy Resource Adequacy and Acquisition for the Washington State Legislature and Governor

December 2010
Report to the Legislature
Rogers Weed, Director

ACKNOWLEDGEMENTS

Per RCW 19-280, the Director of the Washington State Department of Commerce 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 every two years beyond the initial 2008 reporting date.

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Enabling Legislation

In 2006, the Washington State Legislature passed the Utility Planning Act (RCW Chapter 19.280). This enacted a process that would support the maintenance of a reliable electric system in the state of Washington. The essence of the Act is that all electric utilities are required to produce a resource plan and send their plan to the Department of Commerce (Commerce) with a cover sheet that numerically outlines that plan. Commerce is required to provide biennial reports to the legislature that summarize the utility plans and progress on a statewide basis. The reports include analysis regarding resource adequacy and intended resource acquisition. The act requires utilities to submit a progress report every two years and a full plan update every four years following the first reporting year (2008). This report summarizes the first progress reporting interval providing a look at how utilities' perspective of meeting future demand has transitioned since 2008.

Energy Independence Act and Utility Resource Planning Law: Separate but Equal

The Energy Independence Act (Initiative 937, RCW 19.285) requires Washington's largest electric utilities to meet renewable energy and conservation targets. The Utility Resource Planning Act sets no resource requirements but instead requires electric utilities to plan for their future needs. The Resource Planning law was not designed as a reporting or compliance mechanism for the Energy Independence Act. Compliance under I-937 is monitored separately. There is, of course, overlap between the two laws so we offer some of the information in this report in terms of the subcategories: I-937 utilities (utilities subject to the Act) Non I-937 utilities (utilities not subject to the Act). These subcategories are intended only to provide a basis for comparison and not to indicate progress toward specific goals.

Utilities Affected

There are 63 electric utilities in the state of Washington. Four of these serve primarily tribal customers or customers outside the state; the remaining 59 are subject to the Utility Planning Act. They serve as few as one customer to more than one million. Seventeen utilities serve more than 25,000 customers, are subject to I-937, and account for approximately 90 percent of all customers and 88 percent of the state's annual electric load. The number of customers has increased has increased 4.8 percent between 2005 and 2008.

Together, the 59 Washington utilities impacted by RCW 19.280 estimate a load of 10,621 average megawatt hours in the base year. It is estimated that the four utilities not subject to RCW 19.280 carry just under two average megawatts which is less than two hundredths of a percent of the total load summarized in this report. See Appendices A and C for tables and utility level detail relevant to reporting participation, load and resources.

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." *Table 1* describes the structure, size and ownership of the state's electric utilities.

Table 1. State Utilities by Size and Ownership

	IOUs	COUs	All	% of Electricity Load
All	3	56	59	>99%
Over 25,000 Cust.	3	14	17	88%
Under 25,000 Cust	0	42	42	12%
% of Electricity Load	41%	59%	>99%	
				Note: Represents Base Year 2010.Figures are rounded

UTILITY REPORTING

Introduction

In 2006, the Washington State Legislature passed the Utility Planning Act (RCW Chapter 19.280). 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.

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[1] 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 of any size, may complete an IRP, or, a shorter Resource Plan (RP).

The first reporting effort occurred in 2008 when utilities submitted their plans to the Department of Commerce (then known as Community Trade and Economic Development). Resource plans are fully updated on a four-year cycle, progress reporting occurs two years following each plan update. The law requires this 2010 progress report to include modifications to the plan "cover sheet" and a description of the conditions that precipitated changes.

The body of this report summarizes the mostly quantitative information provided by utilities via a cover sheet standardized to obtain data consistent with the legislation. The appendices contain this information by utility in the same format as it was collected, in cover sheet style (*Appendix C and D*). Additional items include summary tables indicating participation in reporting (Appendix A), IRP and RP Cover Sheet Templates and Instructions (*Appendix B*). The Utility Planning Act, RCW 19.280 (*Appendix E*) and a list of Acronyms (*Appendix F*) are also included.

Some utilities provided explanations for their choices for covering load growth and/or reasons for modifications. Providing this information is a requirement in the law and also specifies noting why a decision was made to choose resources other than renewable, conservation or efficiency, where applicable.

Utility Reporting Requirements: Detail on IRP and the RP

[1] "Full requirements customers" have contracts with the Bonneville Power Administration (BPA) which provide for 100 percent of their electricity supply needs.

Integrated Resource Plans are developed using a detailed analytical framework. This results in the analysis of multiple forecasts of loads the utility will need to meet, and provides a variety of generating or conservation resource mix solutions. IRPs 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:

1. All other utilities may elect to develop fully 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.

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 Commerce 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 Commerce.

Utility Participation

Of the 63 electric utilities in the state, 59 are required to submit resource plans. Four utilities were exempted from participation. Commerce determined that three of the four utilities did not need to report because their portion of Washington State customers was both a small fraction of their total customer base and represented a negligible amount of the state's electricity load..The fourth utility is comprised solely of tribal customers and is a relatively new utility with a small load. See *Appendix A* which documents utility participation and subsequent load information for 2010 reporting.

Utility participants submitted their information via spreadsheet "cover sheets" specified in the law and plan instructions. The cover sheet is a data collection tool designed in 2008, via a collaborative process between Commerce, utilities and utility groups. It ensures the collection of consistent information for resource plans. Two different cover sheet formats detail the reporting needs of IRPs and RPs. Both cover sheets commonly require loads, resources and include conservation, efficiency and demand response. IRP forms add the tracking of summer and winter peaks, thermal loads and imports. RP forms add the tracking of a variety of BPA products. For 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 and was the main focus for this progress reporting period. A few utilities did, however, submit narratives.

Turnaround time for data submission was improved over 2008. Over half of the utilities responded in August with nearly all of the rest responding by September 15. A few utilities responded in November. In many cases, utilities were able to draw on their previous resource planning experience and use their 2008 cover sheet as a reference. In general, the smaller the utility, the greater the challenge when it comes to participating in resource planning. This is partly due to the fact that a utility's size somewhat dictates its ability to tap the type of organizational resources and analysis suggested by a comprehensive resource planning effort.

The benefit of aggregating utility resource plans is that their sum offers a picture of the state's electricity load for the near and long term. The plans estimate loads from the base year forward at intervals of five and ten years. The base year is a snapshot of actual quantities and is used as a starting point for the later estimates.

In the first year of implementation of Resource Planning via RCW 19.280, utilities reported using a base year of 2008 which was specified in the law. For the 2010 progress reporting period the law did not indicate whether utilities should adjust their base or provide a new one. Also affecting base year selection was the fact that at the time the 2010 progress reporting process was implemented, some utilities had already begun the review effort and had selected a reporting cycle scenario.

To accommodate utilities already in progress and those in other situations (limited resources in short planning period; guidance from governing body specifying planning process), Commerce offered utilities the choice to select their preferred estimate cycle. This resulted in a pool of plans with base years ranging from 2008 to 2010. Some utilities chose to keep their 2008 plan in place with modifications as needed while others decided to submit a new plan with a base year of 2009 or 2010. The plans are presented in terms of the 10 year planning horizon made up of three intervals: Base Year, Five Year and Ten Year.

Table 2 presents the number of utilities reporting per the base year selected as a starting point. Utilities choosing to use the 2008 base year were typically smaller utilities that made minor modifications or kept their original 2008 figures. Most utilities using 2008 as their base year submitted 2010 cover sheets; two approved the use of their 2008 cover sheet/figures. One utility chose to not participate in the progress report (PUD No.1 Kittitas County, est. load: 29.9 MWa). For that utility, 2008 RP figures were used in the analysis and base year load was estimated because it was absent from the 2008 cover sheet. See *Appendix A* for participation detail.

Two utilities switched from reporting via RP to IRP in 2010: PUD No. 1 of Klickitat County and PUD No. 2 of Pacific County.

Table 2. Number of Utilities Reporting by Base Year Chosen to Start Planning Horizon

Number of Utilities	Selected Base Year
12	Base Year 2008
23	Base Year 2009
24	Base Year 2010

The base years used in 2010 reporting fall within a range of three years, with the bulk of plans using 2009 or 2010 as the starting point for their 15 year planning horizon. The variation in base years is considered somewhat insignificant in terms of the overall scope of picture provided by the aggregated data. To allow an approximate comparison between findings from 2008 and 2010 reporting and provide meaningful aggregation, we have grouped the information and charted it in terms of Base Year, Five Year Estimate, and Ten Year Estimate which is to say that the base year is the starting point, the Five Year Estimate is a snapshot 5 years later and the Ten Year Estimate is a snapshot 10 years later.

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.

In the following tables electric loads are represented in one of three categories. 1) Annual Energy MWa, 2) Winter Peak, MW and 3) 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 peaks are the highest electrical demand within a particular period of time. In this case, it is reported in megawatts of demand, 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 *Appendix D.*

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 their ability to generate the desired supply of energy over an entire year is limited by the water resources available. Many hydro-based utilities must plan to have other resources available for periods of time when water resources are limited.

Summary Reporting

As previously noted, for summary reporting we have developed two utility sub-categories. One sub-category includes utilities that are required to meet the conservation and renewable targets of the Energy Independence Act, RCW 19.285 (also referred to as I-937), and the other sub-category includes utilities that do not have to meet the requirements. The Act requires seventeen utilities with 25,000 or more customers to develop a plan by 2010 addressing conservation targets which will be tracked beginning in 2012. The I-937 utilities represent over 90 percent of electricity consumers in the state of Washington.

To better illustrate the utilities' evolving perspectives reflected through a comparison of 2008 versus 2010 plans, data is presented for both planning cycles.

Table 3, Utility Consumer Demographics

	# Consumers 2005	# Consumers 2008	% Change 2005-2008	% All Consumers (2008)
All	3,028,022	3,174,504	4.84%	100%
I-937	2,734,562	2,866,938	4.84%	90.3%
Non I-937	293,460	307,566	4.81%	9.7%

Source: EIA 2010

Load Resource Balance

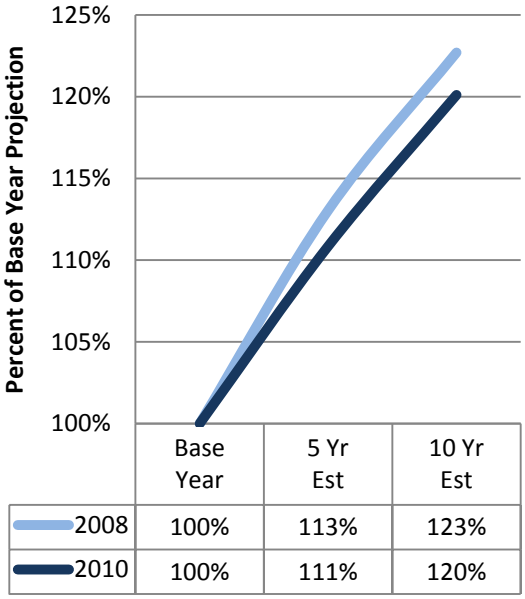
The sum of all reported utility resources compared to the estimated loads shows a surplus in annual energy of more than 11 percent in the base year. The gap narrows between resources and loads in the following forecasts, dropping by just over two and then three points by the 10-year forecast. In 2008, surplus stood at just over 14 percent in the base year and was maintained throughout the next two periods suggesting that in the time since the 2008 report resources are becoming scarcer, or planning more precise. See the summary in *Table 4, State Load Resource Balance*.

Table 4. State Load Resource Balance

Reporting Year	2008			2010		
	Base Year MWa	5 Yr Est MWa	10 Yr Est MWa	Base Year MWa	5 Yr Est MWa	10 Yr Est MWa
Loads	10,004.9	11,309.5	12,275.7	10,592.7	11,742.0	12,722.9
Resources	11,931.7	13,184.9	14,303.1	12,513.6	12,999.1	13,883.6
Load Resource Balance	1,435.8	1,587.6	1,769.5	1,203.3	1,056.2	1,019.4
Load Resource Balance/Loads	14.35%	14.04%	14.41%	11.36%	9.00%	8.01%

Load estimates are somewhat more modest this 2010 reporting cycle. Utilities estimate load to grow by approximately 10 percent during each five-year planning interval in the 2010 reports. In the 2008 report, the five year estimated load was 13 percent above the base year estimate and 10 percent above the base year estimate in the second interval. What seemed to be anticipated load growth in the middle of the cycle in plans of 2008 has dropped slightly in 2010. See Chart 1, below. In terms of average growth in annual electricity demand, 2008 planning revealed a growth rate that averaged 2.3 percent from the base year to the five year estimate and then dropped to 2.2 percent moving into the 10 year estimate. In 2010 reporting, the growth rate maintained a level 2.2 percent throughout the planning period. It is important to note that this report treats conservation as a resource so this view of load growth is estimated before accounting for conservation.

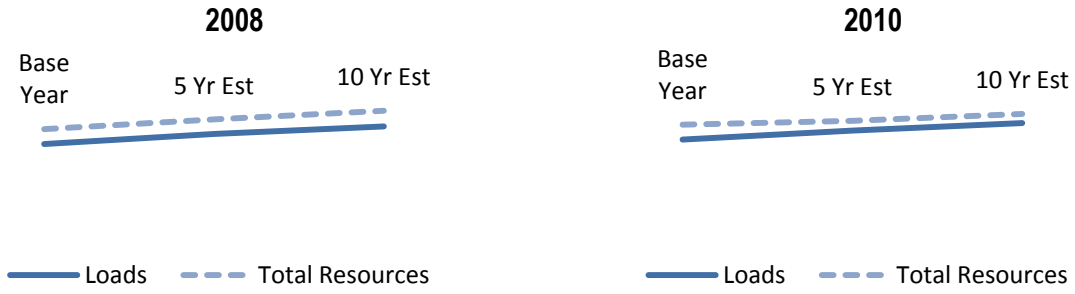
Chart 1. Load Growth Detail



	Base Year	5 Yr Est	10 Yr Est
2008	100%	113%	123%
2010	100%	111%	120%

Comparing the relationship of loads to resources over the ten year planning period, a convergence between loads and resources is observed in 2010 projections. The solid and dashed lines representing loads and resources respectively move closer together beginning at the base year and throughout the ten-year planning cycle. See Chart 2 below.

Chart 2. Tracking Loads and Resources across the Planning Horizon



This shows an average annual growth in annual energy demand of 2 percent through 2020 and an annual average resource growth of 2.1 percent through 2020. This is higher than what is estimated for the region (OR, WA, ID and part of MT) in the Northwest Power and Conservation Council's (NWPPC) 6th Power Plan published in 2010. The 6th Plan anticipates average annual growth at "about 1.2 percent" and "does not take into account reductions in energy from new conservation resources. To the extent conservation is used to meet demand growth, the forecast will decrease."2 The report goes on to offer a demand forecast range that takes into consideration price, population increase and other economic factors noting demand ranging from .8 to 1.5 percent between 2010 and 2020.

[2] Sixth Northwest Power Plan, February 2010, Northwest Power and Conservation Council

Comparing load growth forecasts from all of the regional power planning entities puts the aggregate estimate from Washington's resource plans right in the middle of the pack *(Table 5).* Washington's load is about one half of the larger total loads addressed by the regional entities. Load growth after conservation was not considered in this report but would provide a fuller representation of actual energy vs. reduced demand.

Table 5. Comparing Load Projections

Entity	Avg Annual Growth Rate
BPA	1.2%
NWPCC	1.2%
***Washington Electric Utilities**	**2.0%**
PNUCC	3.8%

*Sourced in this report.
Other Sources: NWPCC 2010, BPA 2010, Pacific Northwest Utilities Conference Committee (PNUCC) 2010

The 2010 BPA White Book forecasts loads and resources for the Pacific Northwest region. The summary document charts load estimates in two previous planning cycles (2007 and 2009) compared to 2010. As with Washington utilities, load estimates ranging over similar timeframes were noticeably higher than is observed in their 2010 reporting.[3] The same can be said of the forecasting documented by PNUCC (Pacific Northwest Utilities Conference Committee). Their report had this to say:

> *While the increasing Northwest population and our mushrooming dependence on high-tech devices continue to push electricity use up, it is worth noting that many utilities lowered their forecast of demand again this year.*[4]

The PNUCC report points to the poor economy and closure of small business as reasons for the drop in load forecasts. They also indicate that the losses and economy are considered as recoverable and suggest that this anticipation may be visible in planning

The same may be said of utilities represented in this report which are also decreasing estimates for load. Yet, while I-937 utilities are closing the gap between resources and loads by lowering estimates for demand (load) and cutting back on resources, non I-937 utilities are widening that gap as the planning cycle closes. See Charts 3 and 4. Non I-937 utilities are increasing estimates for resource acquisition, while, at the same time, lowering estimates for demand (load).

[3] BPA White Book 2010, Bonneville Power Administration, 2010;
http://www.bpa.gov/power/pgp/whitebook/2010/WhiteBook2010_TechnicalAppendix_Vol%201_Final.pdf

[4] Northwest Regional Forecast of Power Loads and Resources 2011 through 2020, PNUCC, 2010;
http://www.pnucc.org/documents/2010NRFFinal.pdf

In as much as the I-937 utilities represent the majority of the state's load, it is fair to say that as the state's surplus is beginning to narrow slightly.

Chart 3. Loads and Resources for I-937 Utilities

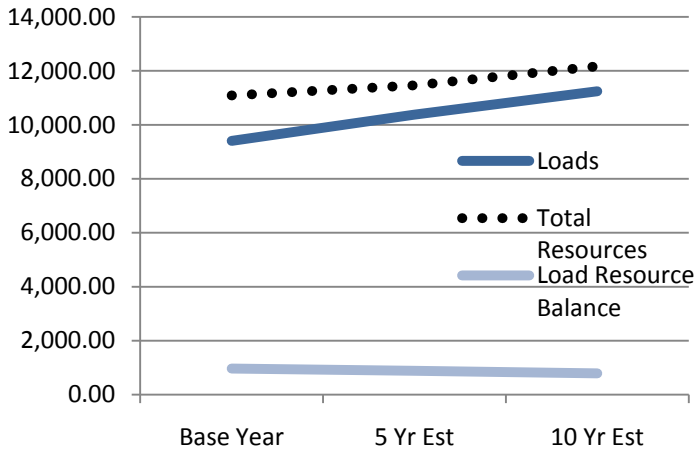
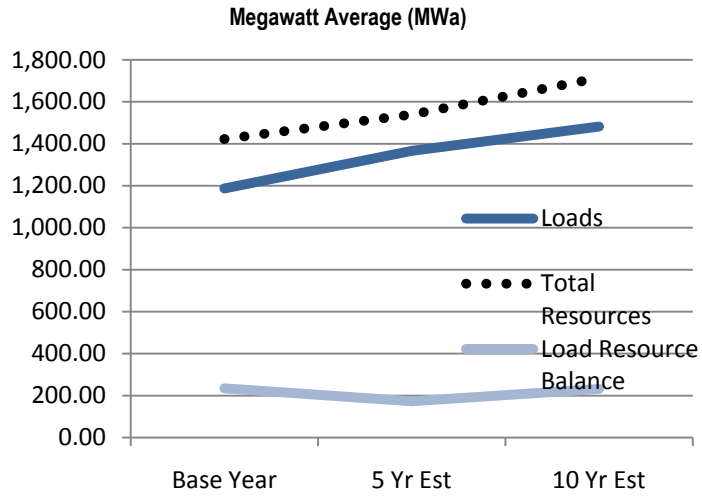


Chart 4. Loads and Resources for Non I-937 Utilities



Charts 3 and 4 show the detail of load resource balance presented in the charts above. Additional detail is in *Table 6*.

Table 6. I-937 and Non I-937 Utilities Load Resource Balance for 2010

2010	I-937 Utilities			Non I-937 Utilities		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	9,405.5	10,375.5	11,241.1	1,187.2	1,366.5	1,481.8
Total Resources	11,091.2	11,459.6	12,169.9	1,422.4	1,539.5	1,713.7
Load Resource Balance	968.1	883.2	787.5	235.2	173.0	231.9
Load Resource Balance/Load	10.29%	8.51%	7.01%	19.81%	12.66%	15.65%
Loads Compared to Base Year	100%	110%	120%	100%	115%	125%

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 resources up to the point of meeting their load estimates.

Conservation and Efficiency

Conservation and efficiency is reported as a resource in the planning process. The reporting format developed for the cover sheet excludes conservation as a resource in the base year. In subsequent years the utility was to report cumulative conservation acquired since the base year. Aggregate figures show a gradual increase in application of conservation and efficiency as a component of energy resources. Progress reporting for 2010 indicates that conservation will provide a resource equivalent to five percent of forecast load in the five year estimate and 8 percent in the ten year estimate. *See Table 7. Conservation and Efficiency: All Utilities*.

Table 7. Conservation and Efficiency: All Utilities

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	10,004.9	11,309.5	12,275.7	10,592.7	11,742.0	12,722.9
Conservation/Efficiency-All Utilities	-	413.0	743.9	54.5	588.7	1,021.1
As a Percent of Load	0.0%	3.7%	6.1%	0.5%	5.0%	8.0%

For a few reasons, conservation and efficiency are likely underreported in this study. Conservation and efficiency reported by some utilities for the five and ten year forecasts were cumulative figures, while other utilities reported single–year estimates. This is apparent when a utility maintains the same or declining figure from the five year estimate to the ten year estimate; the figure should, instead, increase with each passing year (assuming that conservation and efficiency increase at any level past the five year estimate). This reporting is apparent for 12

utilities, three of which are I-937 utilities and carry 7 percent of the state's load. This reporting issue will be addressed prior to the utility resource plan update of 2012 in order to minimize error.

Utilities that must comply with I-937, and serve the majority of the state's electricity load, have plans for more active conservation activities than utilities that do not have to comply with I-937. I-937 Utilities project that in ten years, conservation will meet 9 percent of load while Non I-937 Utilities report conservation/efficiency as serving just below one percent of load for the same timeframe. See the detail in *Table 8* below, *Conservation and Efficiency: Comparing I-937 and Non I-937 Utilities. See footnote regarding full requirements utilities.*[5]

Table 8. Conservation and Efficiency: I-937 and Non I-937 Utilities

2010	I-937 Utilities			Non I-937 Utilities		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	9,405.5	10,375.5	11,241.1	1,187.2	1,366.5	1,481.8
Conservation/Efficiency-	52.4	576.9	1,007.2	2.1	11.8	14.0
As a Percent of Load	0.0%	5.6%	9.0%	0.0%	0.9%	0.9%

Renewable Resources

Renewable resource accounted for in the utility plans increase over the planning period. Planning in 2008 showed a more accelerated increase throughout the ten year planning period than is observed in 2010. In 2008, the ten year estimate totals renewables at 9.6 percent of load, while in 2010 they are at 7.7 percent of the ten year estimate. See the related data summarized in *Table 9. Renewables: All Utilities.*

[5] *Most of the non-I937 utilities are full or nearly full-requirements customers of BPA, much of their conservation planning and accomplishments are through BPA programs. Over the years, their conservation acquisitions have been much higher than what is reported here. We suspect that the underestimate of conservation reflects their relationship with BPA.*

Table 9. Renewables: All Utilities

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	10,004.9	11,309.5	12,275.7	10,592.7	11,742.0	12,722.9
Wind	279.1	603.6	855.1	370.0	542.3	742.3
Other	21.1	174.2	323.5	57.5	86.0	237.3
Total Renewables	300.2	777.8	1,178.6	427.4	628.4	979.6
As a Percent of Load	3.0%	6.9%	9.6%	4.0%	5.4%	7.7%

I-937 targets for renewable energy generation are described in RCW 19.280:

> (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.

The combined renewable resource portfolio for I-937 utilities meets the 2012 targets in the base year. The five year combined estimate captures projections for 2013, 2014 and 2015 depending on the individual utilities' chosen base years, while the next I-937 target year is 2016. One would expect the resource plan five year estimate to be fairly close to the I-937 target, but in fact the I-937 utilities report renewables at 5.9 percent of load in that period, over three points under the I-937 target. The final, 2020 I-937 target is captured in the range of ten year estimates which date 2018, 2019 or 2020 depending on base year. Yet renewables are estimated to meet 8.6 percent of load for that period; short more than six points of the 15 percent I-937 standard. *See Table 1. Renewables – I-937 Utilities and Non-I-937 Utilities.*

Table 10. Renewables: I-937 and Non I-937 Utilities

2010	I-937 Utilities				Non I-937 Utilities		
	Base Year	5 Yr Est	10 Yr Est		Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa		MWa	MWa	MWa
Loads	9,405.5	10,375.5	11,241.1		1,187.2	1,366.5	1,481.8
Wind	357.1	528.7	728.6		12.8	13.6	13.6
Other	57.4	86.0	237.2		0.0	0.1	0.1
Total Renewables	414.6	614.7	965.9		12.9	13.7	13.7
As a Percent of Load	4.4%	5.9%	8.6%		1.1%	1.0%	0.9%

Not all of the I-937 utilities are reporting meeting the 2012 renewable energy target early. Only 11 of 17 utilities show renewable resources greater than 3 percent of the utility load in their base year. 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. Also, it is possible that some utilities may have calculated that they hit the I-937 cost cap and thus stall at the *less than fifteen percent* requirement.

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 declining from 1.1 percent in the base year to 0.9 percent in the ten year estimate. It should be noted that reports only cover renewables that utilities will acquire on their own; they do not account for those that will be added to BPA's resource portfolio which is all or a large part of most non I-937 utilities' generation.

Displacement of Thermal Energy Resources

The analysis of thermal loads is limited to the 17 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 decline in proportion to the load. The total thermal energy will fall from 27.4 percent of load to 21.7 percent of load. There is a prominent shift from coal to gas in the base year estimate, but this shift slows in the following planning periods. After that point, gas maintains a 15 to 16 percent portion of load throughout the planning cycle while coal drops from 11.6 to 5.5 percent of load as we come to the end of 2020. So, somewhere in the range of 4 to 5 percent of thermal energy is displaced elsewhere in among other resource categories. See *Table 11. Thermal Resources*.

Table 11. Thermal Resources

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	10,005	11,309	12,276	10,593	11,742	12,723
Thermal-Natural Gas	1,160	1,890	2,092	1,673	1,840	2,060
Thermal-Coal	1,876	1,699	1,659	1,229	748	706
Thermal (Gas +Coal)	3,036	3,589	3,751	2,903	2,588	2,766
Natural Gas as a percent of load	11.6%	16.7%	17.0%	15.8%	15.7%	16.2%
Coal as a percent of load	18.8%	15.0%	13.5%	11.6%	6.4%	5.5%
Thermal as a percent of load	30.3%	31.7%	30.6%	27.4%	22.0%	21.7%

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 than half the total hydro resources used in Washington.

From the base year of 2010, investment in Non Federal Hydro resources drops by nearly 7 percentage points. This is roughly the same rate and direction as was observed in the 2008 planning cycle. *See Table 12, Non Federal Hydro Resources.* The downward shift is attributed to a loss of Mid-C[6] contracts, especially the reduction of hydro as compared to the increase in overall load.

COUs reliance on hydro increases toward the end of the projection in overall numbers yet changes very little in terms of percent of load (.02 increase) while IOUs hydro estimates slope downward as a component of load with 30 percent of load devoted to hydro in the base year and 18 percent projected for ten years later; a difference of 22 percent). This is because Mid-Cs are recalling power currently contracted to others in order to meet their own load growth.

[6] Mid-C refers to three Mid-Columbia utilities: Chelan County PUD, Douglas County PUD and Chelan County PUD.

Table 12. Non-Federal Hydro Resources

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	10,004.9	11,309.5	12,275.7	10,592.7	11,742.0	12,722.9
COU (Public & Coop)	1,823.7	2,100.5	2,186.9	1,970.0	2,009.2	2,168.5
IOU	1,260.4	1,025.5	1,020.3	1,322.5	1,108.7	953.9
Total Non Federal Hydro	3,084.1	3,126.0	3,207.2	3,292.5	3,117.9	3,122.4
Total: As a Percent of Load	30.8%	27.6%	26.1%	31.1%	26.6%	24.5%
COUs: As a Percent of Load	29.4%	29.9%	29.1%	31.6%	28.9%	29.1%
IOUs: As a Percent of Load	33.1%	24.0%	21.5%	30.3%	23.2%	18.1%

Utility Use of Bonneville Power Administration Energy

BPA provides electric energy to the state's consumer-owned utilities. BPA may also sell electricity to the state's IOUs. 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 just over 30 percent of the reported electric energy used in Washington and over half of the annual electric energy consumed by COUs. BPA provides 97 percent of the energy used by utilities that are BPA full-requirements customers; this drops off further into the planning horizon stopping at 90 percent in the ten year estimate. The definition of a full requirements customer indicates that the utility purchases their entire load from BPA, yet, the reported figures do not reflect this. *See Tables 13 and 14* for BPA Energy detail. While demand for BPA Energy increases through the planning horizon for all utilities, it decreases as a portion of overall load.

Table 13. BPA Energy, All Consumer-Owned utilities

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	6,201.9	7,034.5	7,523.6	6,230.7	6,953.7	7,462.4
BPA Energy (COUs)	4,429.8	4,432.4	4,506.2	4,554.3	4,488.8	4,522.8
BPA Energy as a Percent of Load	71.4%	63.0%	59.9%	73.1%	64.6%	60.6%

Table 14. BPA Energy, Full-requirements

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	1,020.5	1,181.7	1,294.5	1,046.7	1,188.2	1,282.1
BPA Energy (Full Req)	982.5	1,108.3	1,166.1	1,015.1	1,110.8	1,149.5
BPA Energy as a Percent of Load	96.3%	93.8%	90.1%	97.0%	93.5%	89.7%

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.

Five utilities reported resources in this category. The spike in base year contracts is due to values reported by Puget Sound Energy; detail may be seen in their cover report in *Appendix C*. Excepting the base year, utility plans show a similar trajectory in use of Long Term Contracts as they did in the 2008 planning effort. *See Table 15. Net Long Term Contracts: Other*.

Table 15. Net Long Term Contracts: Other

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	10,004.9	11,309.5	12,275.7	10,621.6	11,703.3	12,722.9
Net Long Term Contracts	633.9	204.6	179.4	988.2	290.2	126.3
As a Percent of Load	6.3%	1.8%	1.5%	9.3%	2.5%	1.0%

Utilities reported decreased reliance on short term contracts as the planning cycle closes; down from 1.7 percent reported in 2008 to 0.4 percent in the 2010 ten year estimate, as a percent of overall load.

Table 16. Net Short Term Contracts

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	10,004.9	11,309.5	12,275.7	10,621.6	11,703.3	12,722.9
Net Short Term Contracts	5.5	101.4	211.8	105.7	56.8	52.0
As a Percent of Load	0.1%	0.9%	1.7%	1.0%	0.5%	0.4%

"Other" Resources

Other resources are reported in both the IRP and RP. This category is for resources not reported in the previous categories. Seven utilities reported resources in this category which accounts for some percent in the base year and occupies nearly 10 percent of the annual load in the five and ten year estimates. The negative sign in base year 2010 is due to a negative resource status reported by Puget Sound Energy in this category; possibly offered a placeholder for undesignated acquisition. Seven utilities reported resources in this category. The reason for the negative balance was not noted.

Table 17. Other Resources

Reporting Year	2008			2010		
	Base Year	5 Yr Est	10 Yr Est	Base Year	5 Yr Est	10 Yr Est
	MWa	MWa	MWa	MWa	MWa	MWa
Loads	10,004.9	11,309.5	12,275.7	10,621.6	11,703.3	12,722.9
Other Resources	179.1	211.3	203.6	(195.6)	1,089.3	1,152.2
As a Percent of Load	1.8%	1.9%	1.7%	-1.8%	9.3%	9.1%

Remaining Resources

The remaining resource categories are too small to warrant state wide analysis. This includes several categories rarely used in the RP. These values are in the utility-specific RPs in *Appendix D.*

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 are unique to IRPs and are in *Appendix C.*

APPENDIX A: WASHINGTON STATE UTILITIES PARTICIPATING IN RESOURCE PLANNING LAW 19-280 RCW

Utilities Subject to Resource Planning Law 19-280 RCW

Electric Utility	*Loads (MWa)	Percent of State Load	I-937 Reporting	Number of Consumers in 2008	Submitted 2010 Cover Sheet	Opted to Maintain 2008 Cover Sheet	Opted to Do Nothing
Alder Mutual Light Co, Inc	0.53	0.00%	No	279	x		
Avista Corp	1,148.00	10.81%	Yes	231,553	x		
Benton Rural Electric Assn	65.00	0.61%	No	14,200	x		
Big Bend Electric Coop, Inc	60.91	0.57%	No	8,380	x		
City of Blaine	8.48	0.08%	No	2,917	x		
City of Centralia	31.50	0.30%	No	9,849	x		
City of Cheney	15.68	0.15%	No	4,529	x		
City of Chewelah	2.81	0.03%	No	1,296		x	
City of Coulee Dam	2.20	0.02%	No	599	x		
City of Ellensburg	23.65	0.22%	No	9,172	x		
City of McCleary	4.26	0.04%	No	1,081	x		
City of Milton	7.41	0.07%	No	3,428	x		
City of Richland	101.60	0.96%	No	23,451	x		
City of Sumas	3.21	0.03%	No	676	x		
Columbia Rural Elec Assn, Inc	36.40	0.34%	No	4,330	x		
Elmhurst Mutual Power & Light Co	32.00	0.30%	No	13,756	x		
Inland Power & Light Company	102.60	0.97%	Yes	35,870	x		
Lakeview Light & Power	32.20	0.30%	No	11,509	x		
Modern Electric Water Company	25.70	0.24%	No	10,419	x		
Nespelem Valley Elec Coop, Inc	5.70	0.05%	No	1,512	x		
Ohop Mutual Light Company, Inc	10.06	0.09%	No	4,178	x		
Okanogan County Elec Coop, Inc	6.79	0.06%	No	3,407	x		
Orcas Power & Light Coop	24.16	0.23%	No	14,104	x		
PacifiCorp	514.85	4.85%	Yes	125,756	x		
Parkland Light & Water Company	14.13	0.13%	No	4,431	x		
Peninsula Light Company	69.34	0.65%	Yes	30,543	x		
Port Angeles City of	81.19	0.76%	No	10,613	x		
Port of Seattle	16.59	0.16%	No	1	x		
PUD No 1 of Asotin County	5.50	0.05%	No	3	x		
PUD No 1 of Benton County	195.00	1.84%	Yes	46,600	x		
PUD No 1 of Chelan County	184.53	1.74%	Yes	47,102	x		
PUD No 1 of Clallam County	72.31	0.68%	Yes	29,829	x		
PUD No 1 of Clark County	536.97	5.06%	Yes	186,021	x		
PUD No 1 of Cowlitz County	535.00	5.04%	Yes	48,279	x		
PUD No 1 of Douglas County	80.90	0.76%	No	18,031	x		

Utilities Subject to Resource Planning Law - RCW 19-280 (cont.)

Electric Utility	*Loads (MWa)	Percent of State Load	I-937 Reporting	Number of Consumers in 2008	Submitted 2010 Cover Sheet	Opted to Maintain 2008 Cover Sheet	Opted to Do Nothing
PUD No 1 of Ferry County	8.00	0.08%	No	3,340	x		
PUD No 1 of Franklin County	115.36	1.09%	No	22,249	x		
PUD No 1 of Grays Harbor Cnty	126.14	1.19%	Yes	41,725	x		
PUD No 1 of Kittitas County	28.86	0.00%	No	4,181			**x (load estimated)**
PUD No 1 of Klickitat County	38.84	0.37%	No	11,823	x		
PUD No 1 of Lewis County	112.55	1.06%	Yes	30,723	x		
PUD No 1 of Mason County	8.83	0.08%	No	5,322	x		
PUD No 1 of Okanogan County	77.70	0.73%	No	20,225	x		
PUD No 1 of Pend Oreille Cnty	111.63	1.05%	No	8,681	x		
PUD No 1 of Skamania County	15.70	0.15%	No	5,759	x		
PUD No 1 of Wahkiakum County	5.09	0.05%	No	2,406	x		
PUD No 1 of Whatcom County	27.03	0.25%	No	1	x		
PUD No 2 of Grant County	474.59	4.47%	Yes	44,837	x		
PUD No 2 of Pacific County	35.72	0.34%	No	17,020	x		
PUD No 3 of Mason County	85.70	0.81%	Yes	32,536	x		
Puget Sound Energy Inc	2,699.21	25.41%	Yes	1,063,927	x		
Seattle City of	1,143.00	10.76%	Yes	387,714	x		
Snohomish County PUD No 1	832.70	7.84%	Yes	317,612	x		
Tacoma City of	573.00	5.39%	Yes	166,311	x		
Tanner Electric Coop	8.32	0.08%	No	4,539	x		
Town of Eatonville	3.25	0.03%	No	1,185	x		
Town of Ruston	0.63	0.01%	No	427		x	
Town of Steilacoom	4.83	0.05%	No	2,757	x		
Vera Irrigation District #15	27.75	0.26%	No	9,677	x		
Totals	10621.6	100%		3,162,681	**56**	**2**	**1**

Utilities Not Subject to Resource Planning Law RCW 19-280

Electric Utility	Ownership Class	WA Customers (2008)	**Load Est (MWa)	
Clearwater Power Company	Coop	*932	1.2	
Kootenai Electric Coop Inc	Coop	*84	0.1	
Northern Lights, Inc	Coop	*14	0.02	
Yakama Power (tribal)	Coop	?	0.09	estimate
Total MWa			1.41	

*Represents a portion of total customers; some of which are out of state.
** Estimate of Load: multiplied number of customers by EIA estimate of average household consumption

APPENDIX B: TEMPLATES FOR COVER SHEETS AND INSTRUCTIONS

Integrated Resource Plan Instructions

Instructions for Submission of "Integrated Resource Plan Cover Sheets"

Washington State Utility Resource Plans, 19.280 RCW (2006 House Bill 1010)
Due September 1, 2010

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 Commerce (Commerce). To facilitate the required reporting COMMERCE has developed an website provided an electronic Cover Sheet in the form of an Excel Spreadsheet for submitting updated resource planning information.

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 2010.

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 2008, 2009 or 2010 depending on the base year your utility has chosen to use. (2012 will be the next Integrated Resource Plan Update.)

Five and Ten Year Reporting:

On the cover sheet, five and ten year reporting is for calendar years or federal fiscal year, (October – September).

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. COMMERCE 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 the five and ten year increments.

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)

Five and ten year increments, 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

	<<< Utility Name

Enter utility name & dates into boxes at left before moving on. Then enter data in red boxes.

Washington State Utility Resource Plan

Integrated Resource Plan Update Year	2010	
Base Year Start		(mm/dd/yy)
Base Year End		(mm/dd/yy)
Five Year Report Year		(yyyy)
Ten Year Report Year		(yyyy)

Report Years	Base Year			5 Year Increment			10 Year Increment		
Period	**Winter**	**Summer**	**Annual**	**Winter**	**Summer**	**Annual**	**Winter**	**Summer**	**Annual**
Units	**(MWh)**	**(MWh)**	**(MWa)**	**(MWh)**	**(MWh)**	**(MWa)**	**(MWh)**	**(MWh)**	**(MWa)**
Loads									
Exports									
Resources									
Conservation/Efficiency									
Demand Response									
Cogeneration									
Hydro									
Wind									
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									
Total Resources	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Load Resource Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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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 2010.

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 2008, 2009 or 2010 depending on the base year your utility has chosen to use. (2012 will be the next Resource Plan Update interval.)

Five and Ten Year Reporting:

On the cover sheet, five and ten year reporting is for calendar year or is based on the Federal Fiscal Year (October – September).

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. COMMERCE 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 the projected 5 and 10 year increments.

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. **Where you are not certain of which resource category to use, make your best selection and describe any issues in the area provided.**

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

"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 COMMERCE meet specific reporting objectives.

5 and 10 Year Increment 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.

Washington State Electric Utility Integrated Resource Plan Cover Sheet
2010

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

Resource Plan Year		**Base Year**	**20XX** (5 year increment)	**20XX** (10 year increment)
	From			
	To			
		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 C: UTILITY DATA – 2010 IRP COVER SHEETS

Avista Corporation (WA)

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/10
Base Year End:	12/31/10
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years		***Base Year***			***2015***			***2020***	
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	1,779.00	1,659.00	1,148.00	2,012.00	1,880.00	1,302.00	2,244.00	2,091.00	1,450.00
Exports	240.00	241.00	139.00	164.00	165.00	64.00	12.00	13.00	11.00
Resources									
Conservation/Efficiency				75.00	75.00	50.00	153.00	153.00	102.00
Demand Response									
Cogeneration									
Hydro	1,063.00	979.00	574.00	1,012.00	1,034.00	525.00	983.00	1,025.00	507.00
Wind			8.00						
Other Renewables	47.00	47.00	44.00	47.00	47.00	42.00	47.00	47.00	42.00
Thermal - Gas	817.00	772.00	682.00	821.00	776.00	695.00	821.00	776.00	697.00
Thermal - Coal	222.00	222.00	193.00	222.00	222.00	194.00	222.00	222.00	193.00
Long Term: BPA Base Year or Tier 1									
Net Long Term Contracts: Other	260.00	171.00	246.00	168.00	79.00	146.00	79.00	79.00	52.00
Net Short Term Contracts	75.00	75.00	75.00						
Other									
Imports									
Total Resources	2,484.00	2,266.00	1,822.00	2,345.00	2,233.00	1,652.00	2,305.00	2,302.00	1,593.00
Load Resource Balance	465.00	366.00	535.00	169.00	188.00	286.00	49.00	198.00	132.00

Okanogan County Elec Coop, Inc

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/09
Base Year End:	12/31/09
Five Year Report Year:	2014
Ten Year Report Year:	2019

Report Years	***Base Year***			***2014***			***2019***		
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads			6.79			6.67			7.06
Exports									
Resources									
Conservation/Efficiency									
Demand Response									
Cogeneration									
Hydro									
Wind									
Other Renewables									
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1			6.79			6.58			6.58
Net Long Term Contracts: Other						0.09			0.47
Net Short Term Contracts									
Other									
Imports									
Total Resources			6.79			6.67			7.06
Load Resource Balance									

Pacific Power And Light

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/10
Base Year End:	12/31/10
Five Year Report Year:	2014
Ten Year Report Year:	2019

Report Years		***Base Year***			***2014***			***2019***	
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads		826.32	514.85		865.24	539.12		910.06	567.72
Exports		95.13	42.84		75.87	18.55		58.02	10.89
Resources									
Conservation/Efficiency		10.90	8.08		33.77	25.11		55.41	41.53
Demand Response		59.36	(3.66)		67.34	2.05		67.53	1.75
Cogeneration		1.99	2.02		1.99	2.02		0.91	0.99
Hydro		78.00	31.63		77.85	28.70		77.64	27.41
Wind		17.09	38.24		17.00	44.37		17.83	56.59
Other Renewables		2.57	4.43		2.77	4.53		2.82	4.55
Thermal - Gas		179.39	161.17		194.52	166.85		281.01	247.43
Thermal - Coal		471.84	439.38		473.47	442.00		480.47	448.70
Long Term: BPA Base Year or Tier 1									
Net Long Term Contracts: Other		78.42	27.83		42.24	30.52		37.81	29.75
Net Short Term Contracts		34.05	0.38		92.57	26.70		60.10	17.34
Other		82.01	71.22		89.52	78.87		98.96	85.88
Imports		60.17	50.93		17.92	27.39		21.34	26.24
Total Resources		1,075.78	831.65		1,110.96	879.11		1,201.81	988.16
Load Resource Balance		154.32	273.96		169.84	321.45		233.74	409.55

Notes/Explanation for category choices : Please reference the 2008 IRP Update filed with the Washington commission on March 31, 2010 under docket UE-080826.
- The company plans on a system basis and was requested for this filing to provide "Washington Only" values, therefore the values calculated use a Washington percent of System load which is 7.5% and is applied to all system resources.
- "Other" category contains our planning reserve values and non-owned reserve values necessary in calculating PacifiCorp's Load and Resource balance.
- The company does not have any "Long Term: BPA Base Year or Tier 1" resources.
- PacifiCorp has incorporated significant changes since the prior submission and they are listed in the Executive Summary of the 2008 IRP.
- The 2008 IRP Chapter 5 "Resource Needs" and Chapter 5 "Portfolio Development" in the 2008 IRP Update provide additional details on the load and resource balance.

PUD No 1 of Benton County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/08
Base Year End:	12/31/08
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	360	195.00	354.00	415.00	200.00	366.00	428.00	210.00
Exports									
Resources									
Conservation/Efficiency				3.07	3.07	3.07	5.94	5.94	5.94
Demand Response									
Cogeneration									
Hydro	4.00	4.00	4.00	1.60	1.50	1.00	1.60	1.50	1.00
Wind	0.48	0.48	3.20	0.95	0.95	5.67	0.95	0.95	5.67
Other Renewables							18.00	18.00	18.00
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	318.50	361.50	248.27	284.47	330.47	196.56	284.47	330.47	196.56
Net Long Term Contracts: Other									
Net Short Term Contracts									
Other									
Imports									
Total Resources	372.98	415.98	277.96	340.08	385.98	228.80	360.96	406.86	249.67
Load Resource Balance	12.98	55.98	82.96	(13.92)	(29.02)	28.80	(5.04)	(21.14)	39.67

Notes/Explanation for category choices : 1) Wind peak was computed using 5% of name plate rating. 2) Public meeting and Commission action was held on August 24, 2010. 3) Base year data was revised to reflect actuals for 2008.

PUD No 1 of Chelan County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/09
Base Year End:	12/31/09
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years	***Base Year***			***2015***			***2020***		
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	407.31	219.28	184.53	455.00	243.00	200.90	490.00	261.00	216.50
Exports		50.00	2.08						
Resources									
Conservation/Efficiency				16.33	14.82	10.00	26.12	23.70	15.93
Demand Response									
Cogeneration									
Hydro	515.00	515.00	219.00	454.00	306.00	196.00	454.00	306.00	196.00
Wind	0.39	0.18	2.24	0.00	0.00	2.07	0.00	0.00	2.07
Other Renewables									
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1									
Net Long Term Contracts: Other	-18.00	-18.00	-28.00						
Net Short Term Contracts									
Other									
Imports			3.33						
Total Resources	497.39	497.18	196.57	470.33	320.82	208.07	480.12	329.70	214.00
Load Resource Balance	90.08	227.90	9.96	15.33	77.82	7.17	(9.88)	68.70	(2.50)

PUD No 1 of Clark County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/09
Base Year End:	12/31/09
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years		***Base Year***			***2015***			***2020***	
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	1114.73	823.81	536.97	1,073.33	781.71	615.19	1,188.17	872.74	684.69
Exports									
Resources									
Conservation/Efficiency				100.80		37.28	257.40		82.55
Demand Response									
Cogeneration									
Hydro									
Wind						19.78			19.78
Other Renewables									
Thermal - Gas	257.00	213.40	185.55	253.00	224.00	220.01	253.00	224.00	220.01
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	857.73	610.41	361.87	565.58	405.70	344.08	565.58	405.70	344.08
Net Long Term Contracts: Other									20.00
Net Short Term Contracts			33.30	153.95	152.01		112.19	243.04	
Other									
Imports									
Total Resources	1,114.73	823.81	580.71	1,073.33	781.71	621.14	1,188.17	872.74	686.42
Load Resource Balance	-	-	43.74	-	-	5.95	-	-	1.73

Notes/Explanation for category choices: Base Year loads include conservation. Base year short-term contracts are market energy purchases when the River Road Generating Plant (Thermal-Natural Gas) was shutdown for economic displacement (Apr and Jun) and unplanned maintenance outage (Sep). The 19.78 aMW of "Wind" shown in 2015 and 2020 is equal to the projected generation from the Combine Hills II project of which Clark PUD has purchased the entire output via a 20-year power purchase agreement with Eurus. Forecast LT contract shown in 2020 will most likely be from a renewable energy resource via a LT power purchase agreement. Since the resource will most likely be an intermittent renewable resource the contribution to meeting peak demand was assumed to be zero. Forecast ST contract capacity shown in 2015 and 2020 will be a combination of ST market purchases, hedge products and surplus Slice energy if available. The contribution from conservation to meeting 2015 and 2020 winter peak demands is consistent with Clark PUD's share of the regional demand savings forecast by the Council. 2015 and 2020 summer peaks would be served by some amount of conservation, but the amount was not estimated. Other details regarding progress: Clark PUD has updated its 2008 IRP and a final draft of the updated IRP will be provided in mid-September 2010.

PUD No 1 of Cowlitz County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/09
Base Year End:	12/31/09
Five Year Report Year:	2014
Ten Year Report Year:	2019

Report Years	***Base Year***			***2014***			***2019***		
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	796	607	535.00	895.00	675.00	609.00	921.00	697.00	627.00
Exports	1.00	0.00	28.00						
Resources									
Conservation/Efficiency				25.00	25.00	25.00	36.00	36.00	36.00
Demand Response									
Cogeneration									
Hydro	97.00	52.00	34.00	77.00	77.00	20.00	77.00	77.00	20.00
Wind	1.00	0.00	28.00	3.00	3.00	41.00	4.00	4.00	48.00
Other Renewables							5.00	5.00	5.00
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	672.00	528.00	478.00	820.00	785.00	538.00	820.00	785.00	538.00
Net Long Term Contracts: Other									
Net Short Term Contracts	27.00	27.00	23.00	25.00	25.00	25.00	25.00	25.00	25.00
Other									
Imports									
Total Resources	797.00	607.00	563.00	950.00	915.00	649.00	967.00	932.00	672.00
Load Resource Balance	-	-	-	55.00	240.00	40.00	46.00	235.00	45.00

PUD No 1 of Grays Harbor Cnty

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/09
Base Year End:	12/31/09
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years		***Base Year***			***2015***			***2020***	
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	230.02	126.29	126.14	250.62	137.60	137.44	259.63	142.55	142.38
Exports									
Resources									
Conservation/Efficiency				4.61	4.61	4.61	7.50	7.50	7.50
Demand Response				1.00	1.00	1.00	2.00	2.00	2.00
Cogeneration	22.00	22.00	22.00	11.00	11.00	11.00	11.00	11.00	11.00
Hydro									
Wind			6.00			8.00			8.00
Other Renewables				11.00	11.00	11.00	11.00	11.00	11.00
Thermal - Gas	67.00	67.00	33.00	67.00	67.00	33.00	67.00	67.00	33.00
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	149.55	150.05	129.00	174.43	129.43	129.43	174.43	129.43	129.43
Net Long Term Contracts: Other									
Net Short Term Contracts	(11.33)	(28.77)	(25.96)						
Other									
Imports									
Total Resources	227.21	210.28	164.04	269.04	224.04	198.04	272.94	227.94	201.94
Load Resource Balance	(2.81)	83.99	37.90	18.42	86.44	60.60	13.30	85.38	59.56

PUD No. 1 of Klickitat County
Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/08
Base Year End:	12/31/08
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			38.84			45.02			47.55
Exports									
Resources									
Conservation/Efficiency						0.03			0.06
Demand Response									
Cogeneration									
Hydro			4.20			4.20			4.20
Wind									
Other Renewables									
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1			34.64			36.59			36.59
Net Long Term Contracts: Other						2.10			3.35
Net Short Term Contracts						2.10			3.35
Other									
Imports									
Total Resources			38.84			45.02			47.55
Load Resource Balance									

Notes/Explanation for category choices : (1) In 2008 Klickitat PUD was a load following customer of BPA. After October 2011, Klickitat will be a BPA slice customer

PUD No 1 of Snohomish County

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/10
Base Year End:	12/31/10
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years	***Base Year***			***2015***			***2020***		
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	1,428.00	832.00	832.70	1,531.00	929.00	895.70	1,625.00	986.00	968.30
Exports	-	-	-	-	-	-	-	-	-
Resources									
Conservation/Efficiency				84.70		52.80	202.00		104.70
Demand Response	0.00		0.00	0.00		0.00	0.00		0.00
Cogeneration	26.00		37.00	26.00		37.00	0.00		0.00
Hydro	104.50		35.70	106.30		32.90	118.30		36.90
Wind	11.00		65.20	11.00		65.20	11.00		65.20
Other Renewables	3.00		3.00	7.20		9.60	55.70		62.90
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	1,179.00		706.00	1,278.40		792.00	1,239.30		772.00
Net Long Term Contracts: Other			0.00			0.00			0.00
Net Short Term Contracts	104.50		0.00	17.00					
Other									
Imports									
Total Resources	1,428.00	-	846.90	1,530.60	-	989.50	1,626.30	-	1,041.70
Load Resource Balance	-	(832.00)	14.20	(0.40)	(929.00)	93.80	1.30	(986.00)	73.40

Notes/Explanation for category choices : Snohomish PUD is a winter peaking utility and has not provided specific resource contribution to a summer peak on this chart or in the 2010 IRP. However, Snohomish PUD's peak loads under winter conditions was evaluated and has been included in the 2010 IRP. Winter peaks load and resource contributions are detailed in this chart.
The final 2010 IRP adopted on August 17, 2010 can be viewed at: http://www.snopud.com/PowerSupply/irp.ashx?p=1161

Other details regarding progress (or simply attach narrative or Resource Plan with e-mail submittal OR provide a link to where it is available online):
Snohomish PUD held several public information sessions on the development of the 2010 IRP. The first outreach was held at the PUD's Earth Day event on April 22, 2010 where the drivers and scenarios were presented alongside booths that showcased current and possible future energy resource options. On July 15, 2010, a presentation was given to an audience of the PUD's commercial and industrial customers on the proposed Preferred Plan. An evening meeting was held on July 27, 2010 where the proposed Preferred Plan was outlined along with presentations about new conservation programs and new renewable resources being developed by the PUD. The Draft 2010 IRP was posted to the external PUD website (www.SnoPUD.com) to solicit comments on the plan. The Final 2010 IRP was adopted by the Board of Commissioners on August 17, 2010, and posted on the external site on August 31, 2010.

Puget Sound Energy, Inc

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/10
Base Year End:	12/31/10
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years		***Base Year***			***2015***			***2020***	
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	4,922.00		2,699.21	5,340.00		2,947.11	5,824.00		3,242.84
Exports		300.00	222.16		300.00	47.22		300.00	47.14
Resources									
Conservation/Efficiency				500.80		246.55	916.50		409.53
Demand Response									
Cogeneration									
Hydro	1,183.83		716.89	855.89		555.03	813.68		419.52
Wind	23.00		156.25	38.00		282.14	73.00		406.89
Other Renewables							18.60		
Thermal - Gas	1,934.89		589.27	1,976.74		702.53	2,283.20		840.27
Thermal - Coal	612.36		596.96	612.36		112.23	334.67		63.92
Long Term: BPA Base Year or Tier 1									
Net Long Term Contracts: Other	483.90		703.36	82.14		83.52	0.14		(7.26)
Net Short Term Contracts									
Other			(342.36)			925.71			997.01
Imports	300.00		222.18	300.00		47.22	300.00		47.14
Total Resources	4,537.97	-	2,642.55	4,365.93	-	2,954.91	4,739.78	-	3,177.03
Load Resource Balance	(384.03)	(300.00)	(278.83)	(974.07)	(300.00)	(39.42)	(1,084.22)	(300.00)	(112.95)

Other details regarding progress (or simply attach narrative or Resource Plan with e-mail submittal OR provide a link to where it is available online):
http://www.pse.com/energyEnvironment/energysupply/Pages/pseIRPview.aspx

Seattle City Light

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/10
Base Year End:	12/31/10
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years		***Base Year***			***2015***			***2020***	
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads			1,143.00			1,271.00			1,365.00
Exports			36.00						
Resources									
Conservation/Efficiency			14.00			87.00			130.00
Demand Response									
Cogeneration			3.00			5.00			5.00
Hydro			703.00			739.00			765.00
Wind			44.00			47.00			103.00
Other Renewables			6.00			11.00			57.00
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1			581.00			535.00			534.00
Net Long Term Contracts: Other									
Net Short Term Contracts									
Other									
Imports			36.00						
Total Resources			1,387.00			1,424.00			1,594.00
Load Resource Balance			208.00			153.00			229.00

1.) Load is before conservation. 2.) Critical water year used for the plan is 1977. 3.) "Hydro" includes City Light-owned hydro resources and non-BPA hydro contracts. 4.) Long-Term: BPA Base Year or Tier 1 is estimated for new, combined Block and Slice contracts post 2011. 5.) A 36 aMW exchange with Idaho Power is listed in exports and imports for 2010.
Public Meetings on the City Light 2010 IRP were held on April 1, 2010 in Downtown Seattle; April 6, 2010 in North Seattle, and April 15, 2010 in South Seattle. Six IRP Stakeholder meetings were held. The Seattle City Council adopted the City Light 2010 IRP by vote on Resolution 21236 on August 9, 2010.

The IRP narrative is found in the Seattle City Light 2010 IRP Document: http://www.seattle.gov/light/news/issues/irp/

Tacoma Power

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	1/1/10
Base Year End:	12/31/10
Five Year Report Year:	2014
Ten Year Report Year:	2019

Report Years	***Base Year***			***2014***			***2019***		
Period	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***	***Winter***	***Summer***	***Annual***
Units	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***	***(MWh)***	***(MWh)***	***(MWa)***
Loads	1,003.00		573.00			626.00			674.00
Exports									
Resources									
Conservation/Efficiency			27.00			21.00			53.00
Demand Response									
Cogeneration									
Hydro	577.00		176.00			176.00			176.00
Wind									
Other Renewables									
Thermal - Gas									
Thermal - Coal									
Long Term: BPA Base Year or Tier 1	676.00		428.00			414.00			422.00
Net Long Term Contracts: Other	13.00		39.00			28.00			28.00
Net Short Term Contracts									
Other									
Imports									
Total Resources	1,266.00		670.00			639.00			679.00
Load Resource Balance	263.00		97.00			13.00			5.00

Notes

1. Totals may be off due to rounding.
2. Tacoma Power does not face capacity constraints during the summer months. Tacoma Power's load is lowest – see figure 2.6 in the IRP – and power supply highest during the summer months. Tacoma Power's peaks power supply during the summer because utility hydro project reservoirs are at their highest and because ot the additional electricity provided through a contract with the Grand Coulee Project Hydroelectric Authority (GCPHA only produces power during the summertime irrigation season). As a result, the IRP did not assess the utility's summertime capacity status.
3. Tacoma Power has a vigorous energy efficiency effort that is anticipated to achieve at least 5.4 MW of conservation by the end of 2010. However, this savings will not occur all at once. Instead, a multitude of programs will add to the savings over the year until the conservation target is achieved (or exceeded). Because of this "ramp up", Tacoma Power presumed that the aMW of conservation acquired at about one-half of the capacity savings, or 3 aMW.

4. The new “Slice” contract with BPA will provide Tacoma Power with a limited ability to determine the timing and magnitude of the power delivered to the utility. As a result, Tacoma Power should be able to direct power deliveries to periods of peak retail demand. This ability should improve Tacoma Power’s wintertime capacity adequacy. However, the extent of this flexibility is not yet fully defined. As a result, other than concluding that winter peaking supplies will likely improve, at this time the utility cannot assess its long-term winter capacity status. This is an area that Tacoma Power hopes to more thoroughly assess in the 2012 IRP once the flexibility associated with BPA’s power delivery is better defined.

APPENDIX D: UTILITY DATA – 2010 RP COVER SHEETS

Alder Mutual
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/1/2008
Base Year End	9/30/2009
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years Period Units	*Base Year Annual (MWa)*	*2014 Annual (MWa)*	*2019 Annual (MWa)*
Loads	0.53	0.64	0.69
Resources			
Conservation/Efficiency		0.01	0.01
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	0.53		
BPA Base Year EPP	0.02		
BPA Tier 1 Load Following		0.64	0.69
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	0.55	0.65	0.71
Load Resource Balance	0.02	0.01	0.01

Benton Rural Electric Assn
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/09
Base Year End	09/30/10
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years ***Period*** ***Units***	***Base Year*** ***Annual*** ***(MWa)***	***2014*** ***Annual*** ***(MWa)***	***2019*** ***Annual*** ***(MWa)***
Loads	65.00	71.41	78.96
Resources			
Conservation/Efficiency		0.21	0.26
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	65.00	66.70	66.70
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		4.50	12.00
Other			
Total Resources	65.00	71.41	78.96
Load Resource Balance	-	-	-

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	2010
Base Year Start	01/01/09
Base Year End	12/31/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years Period Units	***Base Year Annual (MWa)***	***2014 Annual (MWa)***	***2019 Annual (MWa)***
Loads	60.91	66.48	71.20
Resources			
Conservation/Efficiency		0.23	0.25
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF			
BPA Base Year EPP			
BPA Tier 1 Load Following	60.91	63.43	63.43
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		2.82	7.52
Other			
Total Resources	60.91	66.48	71.20
Load Resource Balance	-	-	-

Chewelah Light Department
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year End	12/31/07
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	-	-	-

City of Blaine
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year End	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years ***Period*** ***Units***	***Base Year*** ***Annual*** ***(MWa)***	***2014*** ***Annual*** ***(MWa)***	***2019*** ***Annual*** ***(MWa)***
Loads	8.48	8.83	9.32
Resources			
Conservation/Efficiency			
Demand Response		0.12	0.15
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	8.48		
BPA Base Year EPP	0.22		
BPA Tier 1 Load Following		8.83	9.32
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	8.70	8.95	9.47
Load Resource Balance	0.22	0.12	0.15

City of Centralia
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year End	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years ***Period*** ***Units***	***Base Year*** ***Annual*** ***(MWa)***	***2015*** ***Annual*** ***(MWa)***	***2020*** ***Annual*** ***(MWa)***
Loads	31.50	34.40	38.35
Resources			
Conservation/Efficiency		0.46	0.57
Demand Response			
Co-generation			
Hydro (critical water)	7.75	7.64	7.64
Wind			
Other Renewables			
BPA Base Year PF	23.75		
BPA Base Year EPP			
BPA Tier 1 Load Following		26.30	25.49
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		-	4.65
Other			
Total Resources	31.50	34.40	38.35
Load Resource Balance	-	-	-

Notes/Explanation for category choices: "Hydro" is our Yelm Hydroelectric Project. "BPA Tier 1 Load Following" used to show our BPA Tier 1 Purchases. "Non-BPA: Market Purchase" used to show expected Above High Water Mark loads.

Other details regarding progress (or simply attach narrative or Resource Plan with e-mail submittal OR provide a link to where it is available online): Our Submittal has passed the September 1, 2010 deadline, so that we could hold our public hearing. We were not able to have our Public Hearing till September 9, 2010 and our final approval at the City Council meeting September 14, 2010. See www.cityofcentralia.com/City Light Department/Resource Plan for full text of Plan.

City of Cheney
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year End	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years ***Period*** ***Units***	***Base Year*** ***Annual*** ***(MWa)***	***2015*** ***Annual*** ***(MWa)***	***2020*** ***Annual*** ***(MWa)***
Loads	15.68	16.21	17.02
Resources			
Conservation/Efficiency		0.10	0.10
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	15.63		
BPA Base Year EPP	0.05		
BPA Tier 1 Load Following		15.61	15.61
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		0.50	
Other			1.31
Total Resources	15.68	16.21	17.02
Load Resource Balance	-	-	-

As a member of Northwest Intergovernmental Energy Supply, we are currently working on our resource plan and we expect to have aquired resources other than market purchase that may have renewable attributes by the year 2020.

City of Eatonville
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year End	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years ***Period*** ***Units***	***Base Year*** ***Annual*** ***(MWa)***	***2014*** ***Annual*** ***(MWa)***	***2019*** ***Annual*** ***(MWa)***
Loads	3.25	3.69	4.02
Resources			
Conservation/Efficiency		0.05	0.07
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	3.25		
BPA Base Year EPP	0.16		
BPA Tier 1 Load Following		3.69	4.02
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	3.41	3.75	4.08
Load Resource Balance	0.16	0.05	0.07

Notes/Explanation for choices: \1 FY 2009 Actual load & FY 2019 loads before Conservation/Efficiency and Demand Response \2 Attribute Only - does not add to Total Resources \3 BPA Tier 1 amount estimated using Transition High Water Mark amount above HWM amounts < 1 aMW served as Tier 1 load shaping

City of Ellensburg
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year End	12/31/07
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	23.65	26.22	28.25
Resources			
Conservation/Efficiency		0.29	0.23
Demand Response			
Co-generation			
Hydro (critical water)			
Wind		0.02	0.02
Other Renewables		0.04	0.04
BPA Base Year PF	23.65	25.60	25.60
BPA Base Year EPP			
BPA Tier 1 Load Following			
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		0.75	3.50
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	23.65	26.70	29.39
Load Resource Balance	-	0.48	1.14

Other details regarding progress (or simply attach narrative or Resource Plan with e-mail submittal OR provide a link to where it is available online): Ellensburg is a full requirements customer of BPA. Because this is the contract high water mark year we will not know our Tier 1 and Tier 2 contract quantities until sometime in 2011. At this time the only thing we know for sure is we have selected the Short Term Rate as a product for Tier 2 loads.

City of Milton
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year End	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	7.41	7.85	8.34
Resources			
Conservation/Efficiency		0.12	0.16
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	7.41		
BPA Base Year EPP	0.35		
BPA Tier 1 Load Following		7.73	8.18
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	7.76	7.85	8.34
Load Resource Balance	0.35	-	-

Notes/Explanation for category choices :
\1 FY 2009 Actual load, FY 2014 & FY 2019 loads before Conservation/Efficiency and Demand Response
\2 Attribute Only - does not add to Total Resources
\3 BPA Tier 1 amount estimated using Transition High Water Mark amount
above HWM amounts < 1 aMW served as Tier 1 load shaping

City of Port Angeles
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year End	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	81.19	91.16	94.03
Resources			
Conservation/Efficiency	2.10	3.17	3.90
Demand Response			
Co-generation			
Hydro (critical water)	0.15	0.23	0.23
Wind			
Other Renewables			
BPA Base Year PF			
BPA Base Year EPP			
BPA Tier 1 Load Following	78.94	87.37	87.37
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		0.39	2.53
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	81.19	91.16	94.03
Load Resource Balance	-	-	-

Public hearings regarding the 2010 Resource Plan were conducted on August 3rd and August 17th, and provided the opportunity for consumers and the public to participate and comment on the 2010 Electric Utility Resource Plan. Resolution Number 16-10 of the City Council of the City of Port Angeles Washington approving the 2010 Electric Utility Resource Plan, along with an accompanying presentation, are attached with this Plan. These materials may also be found at http://www.cityofpa.us/pwEUtil.htm#PResourcePlan

City of Richland
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/10
Base Year End	12/31/10
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	101.60	114.37	128.48
Resources			
Conservation/Efficiency		0.29	0.29
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	101.44		
BPA Base Year EPP	0.16		
BPA Tier 1 Load Following		103.15	103.15
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		5.47	12.52
BPA Tier 2 Vintage Rate			
Non BPA Load Following		5.47	12.52
Non BPA: Market Purchase			
Other			
Total Resources	101.60	114.37	128.48
Load Resource Balance	-	0.00	0.00

City of Sumas
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/08
Base Year End	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	3.21	4.52	5.19
Resources			
Conservation/Efficiency		0.05	0.04
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	3.21		
BPA Base Year EPP	0.23		
BPA Tier 1 Load Following		4.46	4.01
BPA Tier 2 Load Growth Rate			1.14
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	3.44	4.52	5.19
Load Resource Balance	0.23	-	-

Notes/Explanation for category choices:

\1 FY 2009 Actual load, FY 2014 & FY 2019 loads before Conservation/Efficiency and Demand Response

\2 Attribute Only - does not add to Total Resources

\3 BPA Tier 1 amount estimated using Transition High Water Mark amount 4.009 above HWM amounts < 1 aMW served as Tier 1 load shaping

Columbia Rural Elec Assn, Inc
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year End	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	36.40	38.14	40.24
Resources			
Conservation/Efficiency		0.20	0.20
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	36.40		
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		4.94	7.04
Total Resources	36.40	38.14	40.24
Load Resource Balance	-	-	-

Notes/Explanation for category choices: Power purchases in excess of BPA Tier I and Conservation will be supplied through NESC.

Coulee Dam Light Department

Washington State Utility Integrated Resource Plan

Resource Plan Year:	2010
Base Year Start:	01/01/09
Base Year End:	12/31/09
Five Year Report Year:	2015
Ten Year Report Year:	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(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

Elmhurst Mutual Power & Light Co
Washington State Utility Resource Plan

Resource Plan Year	2010	
Base Year Start	10/01/08	
Base Year End	09/30/09	
Five Year Report Year	2014	FY
Ten Year Report Year	2019	FY

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	32.00	33.69	35.13
Resources			
Conservation/Efficiency		0.68	0.86
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	32.00		
BPA Base Year EPP	0.44		
BPA Tier 1 Load Following		33.49	33.13
BPA Tier 2 Load Growth Rate		-	1.80
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	32.44	34.17	35.79
Load Resource Balance	0.44	0.48	0.66

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

Notes/Explanation for category choices :

\1 FY 2009 Actual load, FY 2014 & FY 2019 loads before Conservation/Efficiency and Demand Response

\2 Attribute Only - does not add to Total Resources

above HWM amounts < 1 aMW served as Tier 1 load shaping

Inland Power & Light Company
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/07
Base Year	09/30/08
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	102.60	111.45	119.17
Resources			
Conservation/Efficiency	0.20	0.60	0.60
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables		1.60	9.80
BPA Base Year PF	100.60	109.78	109.78
BPA Base Year EPP	1.80		
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	102.60	111.98	120.18
Load Resource Balance	-	0.53	1.01

Notes/Explanation for category choices : BPA Base Year PF of 109.78 is placeholder Transitional HWM and is likely to be changed by BPA to a lower CHWM upon modification for actual 2010 loads as adjusted for weather normalization and conservation, plus changes in firm output of Federal Base System. 2014 planned Other Renewable is Distributed Generation as thus eligible for double environmental attributes. 2019 Other Renewables is 9% times average retail load in 2017-2018. Inland held a noticed public meeting on Oct 26 on its draft Conservation Potential Assesment and impact on resource planning.

Lakeview Light & Power
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	32.20	32.96	33.32
Resources		1.05	2.10
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	31.98		
BPA Base Year EPP	0.22		
BPA Tier 1 Load Following		31.91	31.22
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	32.20	31.91	31.22
Load Resource Balance	-	(1.05)	(2.10)

McCleary Light & Power
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/08
Base Year	12/31/08
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	4.26	4.48	4.59
Resources			
Conservation/Efficiency		0.07	0.07
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	4.26		
BPA Base Year EPP			
BPA Tier 1 Load Following		4.48	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	4.26	4.55	4.66
Load Resource Balance	-	0.07	0.07

Notes/Explanation for category choices : Using Option 2 of the 6th Plan Conservation Target Calculator

Modern Electric Water Company
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year	12/31/07
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	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		1.80	5.30
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	25.70	29.10	32.60
Load Resource Balance	-	-	-

Nespelem Valley Elec Coop, Inc
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year	12/01/07
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	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	-	0.30	-

Ohop Mutual Light Co.
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	10.06	11.36	12.67
Resources			
Conservation/Efficiency		0.18	0.24
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	10.06		
BPA Base Year EPP	0.08		
BPA Tier 1 Load Following		11.18	10.43
BPA Tier 2 Load Growth Rate		-	2.00
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	10.14	11.36	12.67
Load Resource Balance	0.08	-	-

Notes/Explanation for category choices :

\1 FY 2009 Actual load, FY 2014 & FY 2019 loads before Conservation/Efficiency and Demand Response

\2 Attribute Only - does not add to Total Resources

\3 BPA Tier 1 amount estimated using Transition High Water Mark amount 10.429 above HWM amounts < 1 aMW served as Tier 1 load shaping

Other details regarding progress:

Ohop feels that by purchasing 100% of our power supply needs from BPA along with our conservation efforts, has been and will continue to be our most cost-effective source of power supply. In 2008 Ohop signed a new 20-year power supply agreement with the BPA for both Tier 1 and Tier 2 (Load Growth) resources.

Orcas Power & Lgt Cooperative
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	24.16	29.01	31.76
Resources			
Conservation/Efficiency		1.12	2.52
Demand Response			
Co-generation			
Hydro (critical water)	0.00	0.00	0.00
Wind	0.00	0.00	0.00
Other Renewables	0.02	0.02	0.02
BPA Base Year PF			
BPA Base Year EPP	0.33		
BPA Tier 1 Load Following	23.80	27.86	27.15
BPA Tier 2 Load Growth Rate			2.06
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	24.16	29.01	31.76
Load Resource Balance			

Parkland Light & Water Company

Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	14.13	14.99	15.65
Resources			
Conservation/Efficiency		0.22	0.28
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	14.13		
BPA Base Year EPP	0.82		
BPA Tier 1 Load Following		14.77	15.37
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	14.95	14.99	15.65
Load Resource Balance	0.82	-	-

Peninsula Light Company
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year	09/30/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	69.34	80.74	90.05
Resources			
Conservation/Efficiency	-	0.74	0.77
Demand Response	-	-	-
Co-generation	-	-	-
Hydro (critical water)	-	-	-
Wind	-	-	-
Other Renewables	-	-	-
BPA Base Year PF	69.34		
BPA Base Year EPP			
BPA Tier 1 Load Following		73.28	73.28
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		3.36	8.00
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other		3.36	8.00
Total Resources	69.34	80.74	90.05
Load Resource Balance	-	-	-

Notes/Explanation for category choices:
1: Purchase from Northwest Energy Supply Cooperative. Purchase may be comprised of renewable and/or market purchase sources.

Port of Seattle
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/09
Base Year	09/30/10
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	16.59	18.42	17.74
Resources			
Conservation/Efficiency		1.44	0.50
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	15.77		
BPA Base Year EPP	0.82		
BPA Tier 1 Load Following		16.98	17.24
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	16.59	18.42	17.74
Load Resource Balance	-	-	-

PUD No 1 of Asotin County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(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	-	0.01	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	-	-	-

PUD No 1 of Clallam County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/08
Base Year	12/31/08
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	72.31	80.86	89.14
Resources			
Conservation/Efficiency		4.02	6.35
Demand Response			
Co-generation			
Hydro (critical water)	-	0.67	0.67
Wind			
Other Renewables	-	6.24	6.24
BPA Base Year PF	72.31		
BPA Base Year EPP			
BPA Tier 1 Load Following		69.93	75.88
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	72.31	80.86	89.14
Load Resource Balance	-	-	-

Notes/Explanation for category choices: (1) 2015 & 2020 load forecast was based on 2009 actual load applied to BPA's AARG of 1.9% (2) 2008 weather normalized loads

PUD No 1 of Douglas County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	80.90	99.10	115.40
Resources			
Conservation/Efficiency		1.20	1.30
Demand Response			
Co-generation			
Hydro (critical water)	94.30	106.80	213.70
Wind	2.70	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	22.80	23.60	-
Total Resources	119.80	134.70	218.10
Load Resource Balance	38.90	35.60	102.70

PUD No 1 of Ferry County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year	12/31/07
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	8.00	14.10	15.30
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		13.50	13.50
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		0.60	1.80
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	8.00	14.10	15.30
Load Resource Balance	-	-	-

Notes/Explanation for category choices : As a full-requirements customer of BPA, our options are limited. All of the conservation resources we acquire are trhrough BPA-funded projects, and are credited toward our HWM, so any conservation resources acquired would essentially 'disappear'.

PUD No 1 of Franklin County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	115.36	127.74	142.63
Resources			
Conservation/Efficiency		0.97	1.15
Demand Response			
Co-generation			
Hydro (critical water)		0.70	0.70
Wind	5.63	6.00	6.00
Other Renewables			
BPA Base Year PF	114.12		
BPA Base Year EPP			
BPA Tier 1 Load Following		116.00	116.00
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		1.00	1.00
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase	10.33		
Other	52.00	52.00	52.00
Total Resources	182.09	176.67	176.85
Load Resource Balance	66.73	48.93	34.22

Other Resources include District's 30 MW's of contract capacity of the 249 MW Frederickson CCCT with deemed heat rate of 7,100 BTU's and 22 MW's of the Districts share of the Franklin/Gray's CT 44 MW CT. BPA Tier 1 contract amount is the estimated Contract High Water Mark (CHWM). Hydro (Critical) is the District's share of the Packwood Hydro Facility

PUD No 1 of Kittitas County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year	12/31/07
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		38.70	51.90
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		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	-	38.70	51.90
Load Resource Balance	-	-	-

PUD No 1 of Lewis County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	112.55	114.78	121.20
Resources			
Conservation/Efficiency		4.38	6.53
Demand Response			
Co-generation			
Hydro (critical water)	0.24	1.24	1.23
Wind	1.62	8.05	8.03
Other Renewables			10.15
BPA Base Year PF	110.69		
BPA Base Year EPP			
BPA Tier 1 Load Following		112.45	112.45
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	112.55	126.12	138.40
Load Resource Balance	-	11.34	17.20

PUD No 1 of Mason County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	8.83	9.83	11.02
Resources			
Conservation/Efficiency		0.31	0.61
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	8.83		
BPA Base Year EPP			
BPA Tier 1 Load Following		9.52	10.40
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	8.83	9.83	11.01
Load Resource Balance	-	-	(0.01)

PUD No 1 of Okanogan County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	77.70	80.80	89.20
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)	25.60	25.60	37.95
Wind	4.50	4.50	4.50
Other Renewables			
BPA Base Year PF	57.80	51.25	51.25
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	87.90	81.35	93.70
Load Resource Balance	10.20	0.55	4.50

Notes/Explanation for category choices :LOADS: 2009 Based on Actual.- Forecast data @ 1.0% RESOURCES: 2009 "Other" based on Okanogan's current BPA Block/Slice Contract (34.2MWa Critical Slice + 23.6 MWa Block), 2015 & 2020 is based on what Okanogan's PROPOSED Slice/Block contract MAY look like
(New Contract is NOT finalized. (23.63 MWa Critical Slice + 27.62 MWa Block)

PUD No 1 of Pend Oreille Cnty

Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	111.63	123.81	120.28
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)	94.66	81.60	81.60
Wind			
Other Renewables			
BPA Base Year PF	32.77		
BPA Base Year EPP			
BPA Tier 1 Load Following		29.70	29.70
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	127.43	111.30	111.30
Load Resource Balance	15.80	(12.51)	(8.98)

Notes/Explanation for category choices : (1) loads reflect lower demand as reported from large industrial customer than last forecast, (2) actual hydro was used for base year, critical water used thereafter.

PUD No 1 of Skamania County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/08
Base Year	12/31/08
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	15.70	16.36	17.38
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	15.70	16.36	16.36
BPA Tier 2 Load Growth Rate		-	1.02
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	15.70	16.36	17.38
Load Resource Balance	-	-	-

Year 2013 and 2018 reflect updated BPA load estimates.

PUD No 1 of Wahkiakum County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/09
Base Year	12/31/09
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	5.09	5.19	5.70
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	5.09		
BPA Base Year EPP			
BPA Tier 1 Load Following		5.45	5.70
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	5.09	5.45	5.70
Load Resource Balance	0.00	0.26	(0.00)

PUD No 1 of Whatcom County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year	09/30/09
Five Year Report Year	FY 2014
Ten Year Report Year	FY2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	27.03	29.06	28.44
Resources			
Conservation/Efficiency		0.06	0.06
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	27.03		
BPA Base Year EPP	1.25		
BPA Tier 1 Load Following		27.43	28.38
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate			
BPA Tier 2 Vintage Rate		1.57	-
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	28.28	29.06	28.44
Load Resource Balance	1.25	-	-

Notes/Explanation for category choices : \1 FY 2009 Actual Load, FY 2014 & FY 2019 loads before Conservation/Efficiency and Demand Response. \2 Attribute Only - Does not add to Total Resources. \3 BPA Tier 1 amount estimated using Transition High Water Mark amount based on current forecast prior to the completion of FY 2010.

PUD No 3 of Mason County
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/09
Base Year	09/31/10
Five Year Report Year	2015
Ten Year Report Year	2020

Report Years	***Base Year***	***2015***	***2020***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	85.70	93.93	103.70
Resources			
Conservation/Efficiency		1.25	1.25
Demand Response			
Co-generation			
Hydro (critical water)			
Wind	1.00	2.00	2.00
Other Renewables			10.59
BPA Base Year PF	84.70		
BPA Base Year EPP			
BPA Tier 1 Load Following		87.11	87.11
BPA Tier 2 Load Growth Rate			
BPA Tier 2 Short-Term Rate		3.57	2.75
BPA Tier 2 Vintage Rate			
Non BPA Load Following			
Non BPA: Market Purchase			
Other			
Total Resources	85.70	93.93	103.70
Load Resource Balance	-	-	(0.00)

Tanner Electric Cooperative
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year	12/31/07
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	8.32	13.31	14.16
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	8.32	12.84	12.84
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		0.47	1.32
Other			
Total Resources	8.32	13.31	14.16
Load Resource Balance	-	0.00	-

Town of Ruston
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	01/01/07
Base Year End	12/31/07
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	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	-	-	-

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

Town of Steilacoom
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	4.83	5.08	5.36
Resources			
Conservation/Efficiency		0.02	0.02
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	4.83		
BPA Base Year EPP	-		
BPA Tier 1 Load Following		5.06	5.34
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	4.83	5.08	5.36
Load Resource Balance	-	-	-

Vera Irrigation District #15
Washington State Utility Resource Plan

Resource Plan Year	2010
Base Year Start	10/01/08
Base Year	09/30/09
Five Year Report Year	2014
Ten Year Report Year	2019

Report Years	***Base Year***	***2014***	***2019***
Period	***Annual***	***Annual***	***Annual***
Units	***(MWa)***	***(MWa)***	***(MWa)***
Loads	27.75	28.84	32.74
Resources			
Conservation/Efficiency			
Demand Response			
Co-generation			
Hydro (critical water)			
Wind			
Other Renewables			
BPA Base Year PF	27.75	26.63	26.63
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		2.21	6.11
Other			
Total Resources	27.75	28.84	32.74
Load Resource Balance	-	-	-

APPENDIX E: TEXT OF RCW 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 that results 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 thirty-three 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.

APPENDIX F: 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