

## Northwest Region Requirements and Resources

Annual Energy (MWa)	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-10</u>	<u>2010-11</u>
<b>Requirements</b>					
Load	21,312	21,678	21,978	22,279	22,570
Exports	894	807	747	840	800
<b>Total</b>	<u>22,206</u>	<u>22,486</u>	<u>22,725</u>	<u>23,119</u>	<u>23,370</u>
<b>Resources</b>					
Hydro	11,825	11,827	11,836	11,836	11,836
Small Thermal & Miscellaneous	24	24	24	24	24
Combustion Turbines	1,218	1,395	1,412	1,393	1,404
Renewables	629	656	652	656	655
Cogeneration	1,212	1,212	1,229	1,224	1,218
Imports	2,108	1,685	1,520	1,209	1,004
Large Thermal	4,303	4,540	4,352	4,588	4,421
<b>Total</b>	<u>21,319</u>	<u>21,340</u>	<u>21,024</u>	<u>20,930</u>	<u>20,561</u>
<b>Resources Under Construction</b>					
Arrow Rock Wind Farm					
Hidden Hollow Landfill					
Horseshoe Bend Wind Park	3	3	3	3	3
Lowline Midway					
Port Westward	73	290	290	290	290
Sahko					
White Creek Wind		40	69	69	69
Wildhorse Wind Project	49	73	73	73	73
<b>Total</b>	<u>124</u>	<u>407</u>	<u>435</u>	<u>435</u>	<u>435</u>
<b>Surplus (Deficit)</b>	<b>(887)</b>	<b>(1,145)</b>	<b>(1,701)</b>	<b>(2,189)</b>	<b>(2,809)</b>
<b>Potentially Available Resources</b>					
Independent Power Producer Projects 1/	2,677	2,677	2,677	2,677	2,677
Hydro Generation - Average Water 2/	3,807	3,805	3,805	3,805	3,805

1/ Includes generation located within the Northwest that is not otherwise committed to regional load. Potential pur

2/ Additional hydro generation (above critical water) available in average water conditions from main hydro projec



## 2007 Data Request Northwest Regional Forecast

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This is a request for you to update your company's forecast of requirements and resources including your load forecast, generating resources, and contract information for use in regional documents and analysis done by PNUCC, BPA, the Northwest Power and Conservation Council and others. Your individual company's information is treated proprietarily and will be kept confidential.

The following describes the information being requested and suggests a format for providing the data. For your convenience, we have included a summary of your utility's information from last year's Northwest Regional Forecast in the Requirements and Resources Table. You will also find data sheets when applicable for individual generating resources, imports, exports, and contracts between regional utilities; and spreadsheets for hydro projects and small resources, and future resources for your review. For utilities with a significant amount of data we have included one electronic copy of your information on a CD. You can copy this information to your computer to make your changes and then return it by email. It will be helpful if you use a colored font for your changes to help us identify them.

Please update and return this information by **November 22, 2006** and send a copy of your information to:

**Lee Corum**  
PNUCC  
101 S.W. Main, Suite 1605  
Portland, Oregon 97204

(503) 294-1259  
lee@pnucc.org

# 1. Load Forecast

Provide a 10-year forecast of monthly peak and energy loads for your utility's retail load within the region. The operating year is August to July and all annual information is reported as such.

The forecast should:

- ◆ Include system average firm energy and peak load for each month of the period **January 2007 through July 2017**.
- ◆ Be adjusted to reflect peak and energy savings due to demand-side resource programs. (We are not reporting them specifically this year.)
- ◆ Include monthly peak loads, which are the highest expected 60-minute clock-hour average demand for each month assuming normal weather conditions.
- ◆ Include firm energy loads for normal weather conditions.
- ◆ Identify interruptible loads separate from firm loads. Please describe the terms and conditions of these interruptible loads.

Please forward your monthly load information as an Excel spreadsheet and/or provide us with a hard copy. The preferable format for this information is shown below. If you received a CD there is a load forecast template included with your data.

<b>Firm Loads</b>													
<u>Year</u>	<u>Annual Average</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>
2007-08 Peak	Energy												
.													
.													
.													
2016-17 Peak	Energy												

## 2. **Generating Resources**

### **Existing**

Please review and update your utility's existing generating resources information found in the Generating Resource and Hydro and Other Resources attachments. Existing resources include those resources in actual operation as of December 31, 2006. Capacity and energy data should account for scheduled maintenance, planned forced outages and other expected constraints. The firm and peak generation from major hydro projects is determined by the Corps of Engineers using a regional hydro simulation model and the Pacific Northwest Coordination Agreement (PNCA) operating criteria and data. Also in the Future Resources sheet identify any projects that were completed and operating as of December 2006 in the "Actually Installed" category.

### **Future**

Please review and update your potential future resources shown in the Future Resources sheet. We have placed future resources in the different categories of Under Construction, Planned, Prospective, and Under Consideration, to reflect the various stages of planning and development. The definitions of categories are:

#### ***Under Construction***

Resources *Under Construction* include those projects that are not complete as of December 31, 2006, but are currently being built. In this report resources Under Construction are tabulated along with existing resources when assessing the regional surplus or deficit.

#### ***Planned***

*Planned* resources include those projects not under construction as of December 31, 2006, but for which developers or utilities have made a firm commitment to construct or acquire and are at some stage in the site certificate process. For example, they have obtained all licenses for construction or acquisition, or are in the final stages of receiving their site certificate from the state.

#### ***Prospective***

*Prospective* resources include those projects that developers or utilities have made some commitment to construct or acquire and are in the initial stages of filing for site certificates and licenses for construction. However, not all licenses have been obtained, a commercial operation date has not necessarily been specified, or the specifics of the transaction have not been finalized.

#### ***Under Consideration***

*Resources Under Consideration* includes those projects that developers and utilities are considering for construction or acquisition. Planning for these resources has not progressed far enough to allow a potential sponsor to commit itself in terms of funding, size, or sharing of ownership.

### 3. **Contracts**

Please review and update your utility's attached contract information. Contracts are reflected in the Northwest Regional Forecast and other planning documents as Exports, Imports, Contracts Out and Contracts In. The information includes transfers: with utilities outside the Northwest Regional Forecast area; with utilities within the Northwest Regional Forecast area; and intra-company transfers with service areas outside the Northwest Regional Forecast area.

Any new contracts should include start/end dates of the contract, the description (seasonal exchange, capacity/energy exchange, etc.), and monthly values of all firm peak (MW) and energy (MWh) transfers **through July 2017**. Amounts supplied should be at the area border and include any transmission losses associated with these transfers. Please provide hard copy of any new information.

Please indicate if there are contracts that you would prefer reported in aggregate. These contracts will be shown as a total that is to or from "Other Entities".

## Generating Resource

### Resource Name

<b>Technology</b>	Combined-Cycle CT	<b>Owner</b>	Owner Utility
<b>Fuel</b>	Gas	<b>Utility Shares</b>	
<b>Location</b>	Portland, OR	Utility 1	10.0%
<b>Commercial Operation Date</b>	October 2006	Utility 2	20.0%
<b>Nameplate Rating (MW)</b>	249.3	Utility 3	30.0%
<b>Regional Availability (%)</b>	95.0%	Utility 4	35.0%
<b>Annual Energy (MWA)</b>	-		95.0%

Capacity (MW)	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>
2006-07	-	-	-	-	-	-	-	-	-	-	-	-
2007-08	-	-	-	-	-	-	-	-	-	-	-	-
2008-09	-	-	-	-	-	-	-	-	-	-	-	-
2009-10	-	-	-	-	-	-	-	-	-	-	-	-
2010-11	-	-	-	-	-	-	-	-	-	-	-	-
2011-12	-	-	-	-	-	-	-	-	-	-	-	-
2012-13	-	-	-	-	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-	-	-	-	-
2014-15	-	-	-	-	-	-	-	-	-	-	-	-
2015-16	-	-	-	-	-	-	-	-	-	-	-	-

Energy (MWa)	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Ave.</u>
2006-07	-	-	-	-	-	-	-	-	-	-	-	-	-
2007-08	-	-	-	-	-	-	-	-	-	-	-	-	-
2008-09	-	-	-	-	-	-	-	-	-	-	-	-	-
2009-10	-	-	-	-	-	-	-	-	-	-	-	-	-
2010-11	-	-	-	-	-	-	-	-	-	-	-	-	-
2011-12	-	-	-	-	-	-	-	-	-	-	-	-	-
2012-13	-	-	-	-	-	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-	-	-	-	-	-
2014-15	-	-	-	-	-	-	-	-	-	-	-	-	-
2015-16	-	-	-	-	-	-	-	-	-	-	-	-	-

Name	Location	FERC #	Comm. Operating Date	Fuel/ Tech.	# Units/ Capacity (MW)	Name-plate (MW)	Capacity (MW)	Annual Energy (MWa)	Owner/ Developer	Comments
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Company 1 to Company 2

Description Power Sale, Capacity Sale, Capacity/Energy Xchg etc.  
 Start Date  
 End Date

Capacity (MW)	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>
2006-07	-	-	-	-	-	-	-	-	-	-	-	-
2007-08	-	-	-	-	-	-	-	-	-	-	-	-
2008-09	-	-	-	-	-	-	-	-	-	-	-	-
2009-10	-	-	-	-	-	-	-	-	-	-	-	-
2010-11	-	-	-	-	-	-	-	-	-	-	-	-
2011-12	-	-	-	-	-	-	-	-	-	-	-	-
2012-13	-	-	-	-	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-	-	-	-	-
2014-15	-	-	-	-	-	-	-	-	-	-	-	-
2015-16	-	-	-	-	-	-	-	-	-	-	-	-

Energy (MWa)	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Ave</u>
2006-07	-	-	-	-	-	-	-	-	-	-	-	-	-
2007-08	-	-	-	-	-	-	-	-	-	-	-	-	-
2008-09	-	-	-	-	-	-	-	-	-	-	-	-	-
2009-10	-	-	-	-	-	-	-	-	-	-	-	-	-
2010-11	-	-	-	-	-	-	-	-	-	-	-	-	-
2011-12	-	-	-	-	-	-	-	-	-	-	-	-	-
2012-13	-	-	-	-	-	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-	-	-	-	-	-
2014-15	-	-	-	-	-	-	-	-	-	-	-	-	-
2015-16	-	-	-	-	-	-	-	-	-	-	-	-	-

# Template

# Future Resources

Please review and update. Please note whether a resource has changed planning status. If "newly installed" (began commercial operation or start of contractual agreements) in 2006, please move to that status and note actual commercial operation date.

Name	Location	FERC #	Comm. Operating Date	Fuel/Tech.	Nameplate Rating-MW	Capacity (MW)	Annual Energy (Mwa)	Owner/ Developer
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NEW GENERATING CAPACITY  
ACTUALLY INSTALLED - December 2006

UNDER CONSTRUCTION:

PLANNED RESOURCES:

PROSPECTIVE RESOURCES:

UNDER CONSIDERATION: