Overview

Geography

States covered: All or most of Washington, Oregon, Idaho, Utah, Nevada, Montana, Wyoming and part of California.

Reliability region: Northwest Power Pool Area (NWPP) sub-region of the Western Electric Coordinating Council (WECC).

Balancing authorities: See page 5.

Hubs: California-Oregon Border (COB), Mid-Columbia (Mid-C)

RTO/ISO

None

Generation/Supply

Marginal fuel type: Hydro and natural gas

Generating capacity (winter 2005): 57,120 MW

Capacity reserve (winter 2005): 16,822 MW

Reserve margin (winter 2005): 42%

When taken together, hydro, fossil fuels, nuclear energy, and renewable resources, were adequate to provide electricity in excess of in-region needs.
Demand

All time peak demand (2005): 40,298 MW
Peak demand growth: 1.5% (2004–2005)

Prices

Index Annual Average of Daily Bilateral Day Ahead On-Peak Prices:

Platts California-Oregon Border (COB) Hub:


Platts Mid-Columbia (Mid-C) Hub:

2004: $44.50/MWh  2005: $62.95/MWh  2006: $50.18/MWh  2007: $56.57/MWh

Physical and financial electricity products are traded through brokers using the Mid-Columbia (Mid-C) and California-Oregon Border (COB) hubs as pricing points.

Interconnections/Seams

The region relies on hydroelectric production for approximately two thirds of its electricity needs. In most years, Northwest sells surplus power into California and the Southwest.
Balancing Authorities in the Northwest Electric Market

<table>
<thead>
<tr>
<th>Balancing Authority</th>
<th>NERC Acronym</th>
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<tbody>
<tr>
<td>Alberta Electric System Operator</td>
<td>AESO</td>
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<tr>
<td>Avista Corp.</td>
<td>AVA</td>
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<tr>
<td>Bonneville Power Administration</td>
<td>BPAT</td>
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<tr>
<td>British Columbia Transmission Corporation</td>
<td>BCHA</td>
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<td>Idaho Power Company</td>
<td>IPCO</td>
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<td>NorthWestern Energy</td>
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<td>PacifiCorp-East</td>
<td>PACE</td>
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<td>PacifiCorp-West</td>
<td>PACW</td>
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<td>PGE</td>
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<td>PUD No. 1 of Douglas County</td>
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<td>Tacoma Power</td>
<td>TPWR</td>
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<tr>
<td>Western Area Power Administration - Upper Great Plains West</td>
<td>WAUW</td>
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</tbody>
</table>

Source: NERC (www.tsin.com)
Northwestern Daily Bilateral Day-Ahead On-Peak Prices

Source: Derived from Platts data.
Northwest Electric Market: Western Bilateral Prices

Western Daily Bilateral Day-Ahead On-Peak Prices

Source: Derived from Platts data.

Updated June 3, 2011
Implied Heat Rates at Western Trading Points Weekly Averages

Source: Derived from Platts on-peak electric and natural gas price data.

Updated June 3, 2011
Northwestern Daily Bilateral Day-Ahead On-Peak Prices

Source: Derived from Platts data.
Western Daily Bilateral Day-Ahead On-Peak Prices

Source: Derived from Platts data.
Western Daily Actual Peak Demand


Updated June 3, 2011
Weekly Electric Generation Output and Temperatures
Rocky Mountains Region

Source: Derived from EEI and NOAA data.
June 2011

Updated June 3, 2011
Weekly Electric Generation Output and Temperatures
Pacific Northwest Region

Source: Derived from EEI and NOAA data.
June 2011
Stream Flow at The Dalles Dam

Source: Derived from USACE data.
Data series are 7-day moving averages.

Updated June 3, 2011
Pacific Northwest Hydroelectric Production

Source: Derived from USACE data reflecting the output of the 24 largest facilities.

Note: Trend lines are 7-day moving averages.

Updated June 3, 2011

June 2011