

*PUD No. 1 of Chelan County
Wenatchee, Washington*



Business Practice 01

Subject: Treatment of Variable Generation imported from BPA's Balancing Authority

Summary

Variable generation located within BPA's Balancing Authority Area (BAA) is currently tagged with a "Firm" product code. All generators in the BPA BAA are subject to curtailment of tags at all times for system reliability and other reasons as described in BPA's Curtailment and Redispatch Business Practice (see link below). Given the potential for curtailment under BPA's Oversupply Management Protocol (OMP) (see link below), Chelan PUD (Chelan) will carry reserves in the amount of 100% of these variable generation imports which sink in Chelan's BAA.

Policy

Chelan will carry 100% reserves on all variable generation imports subject to OMP that sink in Chelan's BAA. For example, for a 50 MW variable generation product subject to OMP sinking in Chelan's BAA, Chelan as the sink BAA would carry additional reserves in amount equal to 100% of the 50 MW schedule or 50 MW. The amount of additional reserves carried by Chelan for variable generation subject to OMP will be tracked separately.

Detailed Discussion and background

Chelan has developed this Business Practice for the following reasons:

1. Ensure that Chelan meets all reliability standards for reserves,
2. Ensure that Chelan, as a member of the NWPP RSG, is operating within the rules agreed to in writing by members of the NWPP RSG (see link below).
3. Address a vulnerability of not having adequate reserves if OMP is implemented and Firm schedules sinking in Chelan's BAA are curtailed in-hour.

BPA implemented OMP to maintain system reliability when wind variability exhausts the incremental and decremental balancing reserve capacity established for load and wind in the BPA BAA. When unscheduled reductions in wind generation exceed BPA's balancing reserve, the BPA system operators will curtail wind schedules down to reflect the lower wind output levels. This variable generation, which is subject to curtailment under OMP, is tagged with a product code of G-F, which is Generator Firm. See link below to the wind generators subject to OMP.

BAL-002-WECC-2a R3 (see link below) requires the following:

R3. Each Sink Balancing Authority and each sink Reserve Sharing Group shall maintain an amount of Operating Reserve, in addition to the minimum Contingency Reserve in Requirement R1, equal to the amount of Operating Reserve–Supplemental for any Interchange Transaction designated as part of the Source Balancing Authority's Operating Reserve–Supplemental or source Reserve Sharing Group's Operating Reserve–Supplemental, except within the first sixty minutes following an event requiring the activation of Contingency Reserve.

The NWPP RSG has confirmed that the curtailment of Firm imports is not a qualifying event for requesting Contingency Reserve from the NWPP RSG.

Business Practice Revision

Chelan PUD reserves the right to revise this business practice.

Approval by:

Owner: 

Janet Jaspers
Energy Planning and Trading Manager

Approved By: 

Chris McDarment
System Operations & Coordination Manager

Owner	Rev. Date	Ver.	Section/Items Changed	Approved By
Jaspers	5/13/2011	0	Original Document	Hudson and Carrington
Jaspers	12/14/2012	1	Updated Exhibit A Table with latest from BPA	Hudson and Carrington
Jaspers	12/6/2016	2	Updated Exhibit A Table with latest from BPA	Hudson and Carrington
Jaspers	8/6/2018	3	Updated Exhibit A Table with latest from BPA	Hudson and Carrington
Jaspers	5/24/2019	4	To implement numbering system for Business Practices; remove interim status; change for BPA's policy changes; change for NWPP RSG policy language changes; provide links to related documents; change approvers	McDarment

Links to related documents:

BPA Curtailment and Redispatch Business Practice:

<https://www.bpa.gov/transmission/Doing%20Business/bp/tbp/Redispatch-Curtailment-BP-V12.pdf>

BPA Oversupply Management Protocol (OMP):

<https://www.bpa.gov/transmission/Doing%20Business/bp/tbp/Oversupply-Management-Protocol-BP-V07.pdf>

BPA BAA wind generators subject to OMP:

https://transmission.bpa.gov/business/operations/wind/WIND_InstalledCapacity_LIST.pdf

NWPP Reserve Sharing Program Documentation:

https://www.nwpp.org/private-media/documents/NWPP_RSG_Program_Documentation_-_RSG_Approved_2019_0214_CMIk22b.pdf

WECC Standard BAL-003-WECC-2a – Contingency Reserve:

<https://www.wecc.org/Reliability/BAL-002-WECC-2a%20-%20Effective%201-24-2017.pdf>