

Sample Calculation for BPA Management of Federal Network Resources Methodology

Start with the monthly forecast of NT load to be served by federal resources.

Look at the amount of WNP-2 capacity which is NOT allocated to PTP or grandfathered contracts. (This amount available for service to NT load)

$$\left(\text{Federal NT Load} = 7000 \text{ MW} \quad \text{MINUS} \quad \text{WNP-2 Allocated to NT} = 600 \text{ MW} \right)$$

EQUALS

$$\text{NT Load served by federal hydro} = 6400 \text{ MW}$$

MINUS

$$\text{Western Oregon federal hydro} = 400 \text{ MW}$$

EQUALS

$$\text{Federal NT Load Served by "Big 10 Hydro"} = 6000 \text{ MW}$$

There are several federal hydro resources in western Oregon which are electrically near NT loads in that area which do not cross any internal constraints. Assume that these resources will be used to serve these loads at a seasonal minimum.

Federal NT Load – WNP-2 Allocated to NT = NT Load served by federal hydro



TBL SAMPLE CALCULATION



Big 10 Hydro Allocation

Based on 6000 MW per previous calculation

Project Name	H/K	Allocation (MW)
Bonneville	4.3	293
John Day	7.6	518
The Dalles	6.2	423
McNary	5.2	355
Ice Harbor	6.7	457
Lower Monumental	7	477
Lower Granite	7	477
Little Goose	7	477
Grand Coulee	25	1705
Chief Joseph	12	818
<i>Total H/K</i>	88	6000

$$\text{Allocation Formula} = \frac{(\text{Federal NT Load} \times \text{H/K})}{\text{Total H/K}}$$

The allocations at each of the Big 10 projects, along with the 600MW allocation for WNP-2, are then used in the same way as POR demands to compute the ATC impacts across the constrained paths.

