Bonneville Power Administration

Revised PNUCC Reporting Protocols -- CAPACITY How to Report Hydro? How to Report Load?

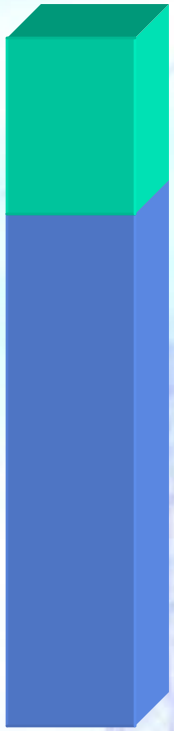
Eric King / Mary Johannis

PNW Resource Adequacy Technical Committee Meeting

October 20, 2006

Proposed Capacity Metric

- Surplus sustained peaking capacity
- over the expected peak load,
- over the peak load duration period,
- in units of percent, also referred to as the *Surplus Sustained Peaking Capability* or the *Planning Reserve Margin (PRM)*



Surplus Sustained Peaking Capacity over 50 hour Duration sufficient to meet Target

Expected Peak Load over 50 hour Duration

Bonneville Power Administration

Proposed Winter Capacity Target

Target: 25%

4% for Planning adjustment reserves

15% for Adverse temperature reserves

6% for Operating reserves

Bonneville Power Administration

Proposed Summer Capacity Target

Target: 19%

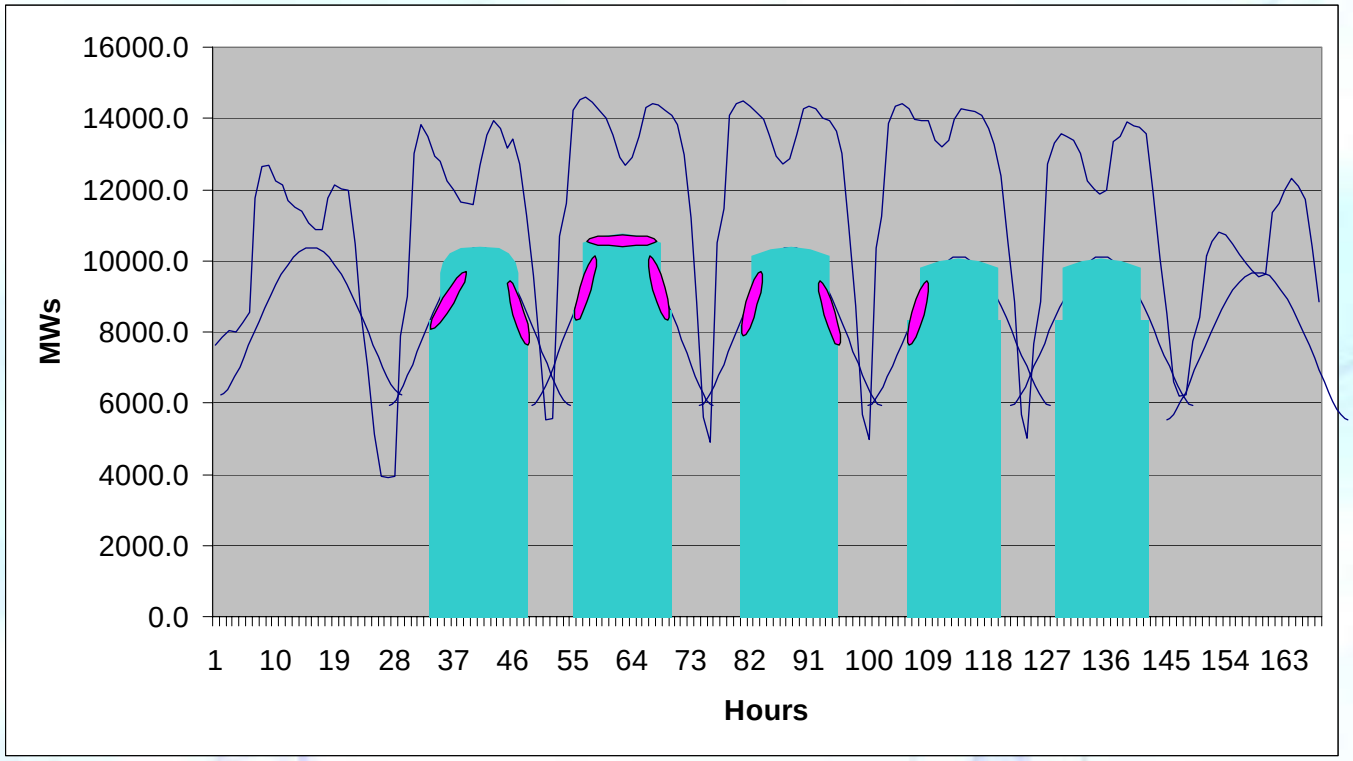
7% for Planning adjustment reserves

6% for Adverse temperature reserves

6% for Operating reserves

Bonneville Power Administration

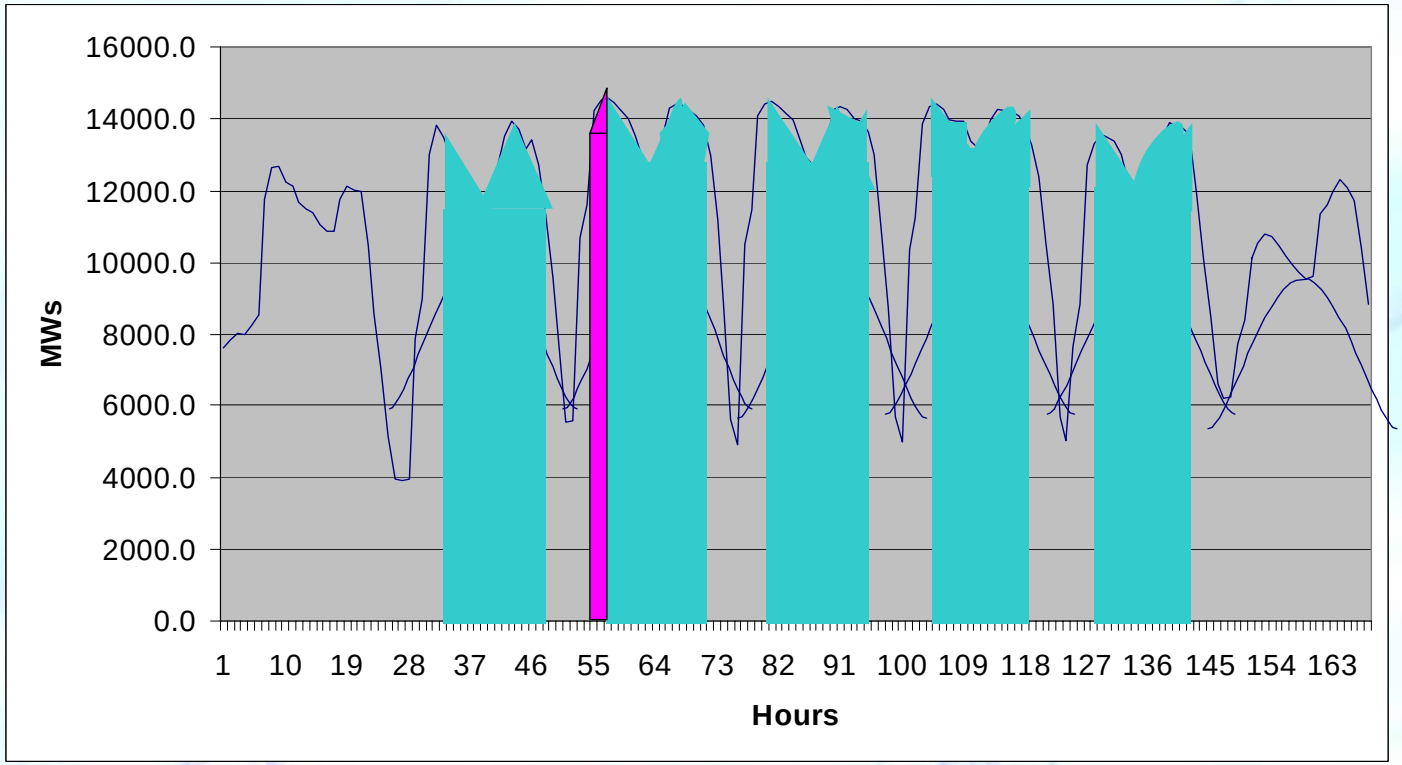
Hydro Capacity to meet 1 in 2, or expected, Loads



Expected Load = aMW for 50 hour duration

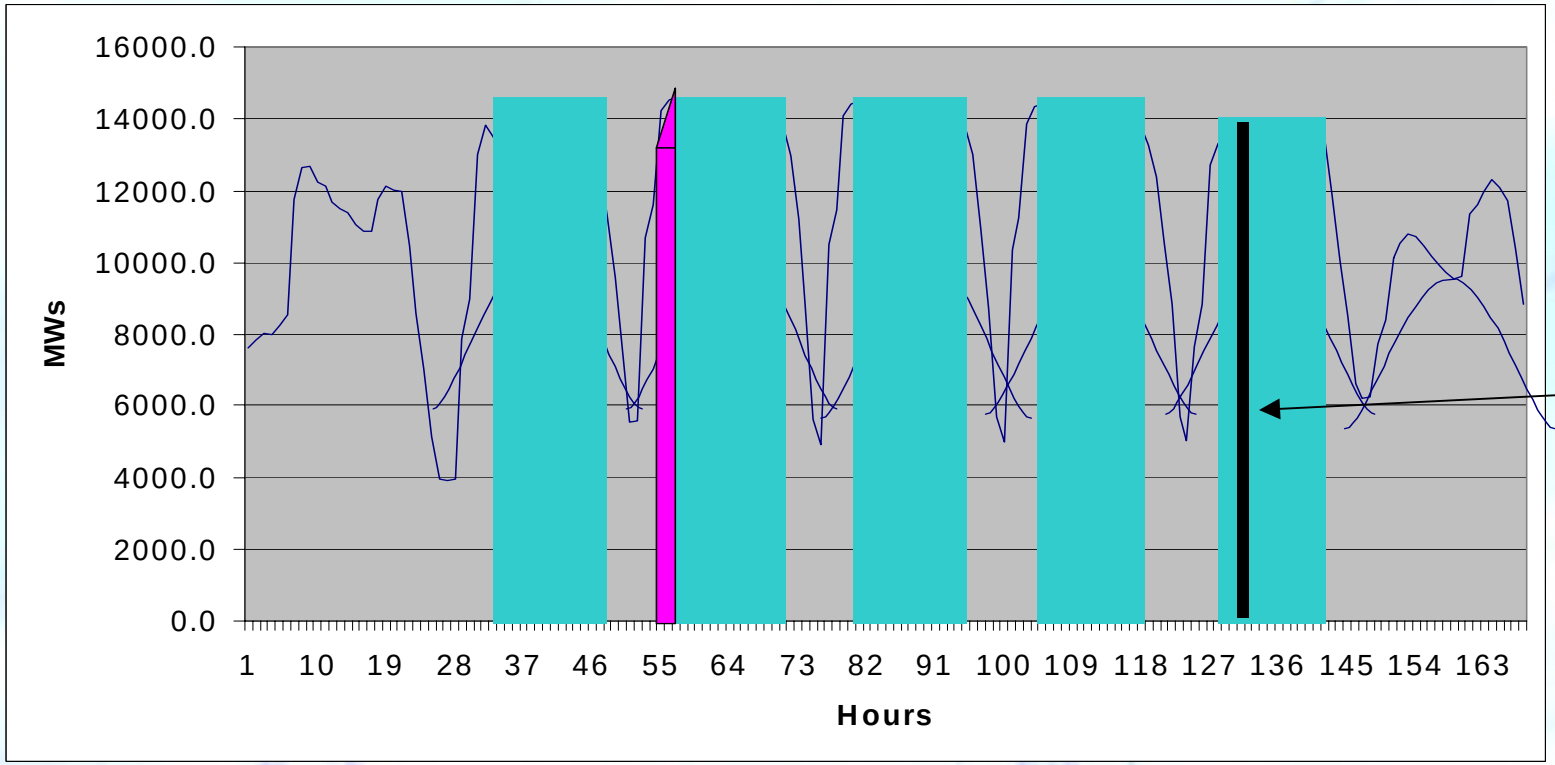
Bonneville Power Administration

Option 1: Sustained Hydro Peaking Capacity—Load Following over Cold Snap



Hydro Cap = aMW over 50 hour duration

Option 1: Sustained Hydro Peaking Capacity—Maximize Capability over Cold Snap



Option 1a: aMW over 50 hours

Option 1b: min Capacity during 50 hrs