

# Key Assumptions

RAAC Technical Committee  
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# Key Assumptions

- **Standby Resources**
- **Market Purchases**
  - In Region
  - Out of Region
- **Reserve Requirements**
- **Counting Resources**
- **Big Hanaford Uncertainty?**

## Standby Resources

- **Current Assumptions**
  - New DR (not in actual load records)
  - Not-counted-in-planning generators
  - Banks Lake (hydro)
  - Not included: backup generators
- **Proposed Change**
  - Include all DR (hypothesis: little effect on load forecast)

## Spot Market Purchases

- **Current Assumptions**
  - On-peak only
  - Winter 2,500 MW Max
  - Summer none available
- **Proposed Change**
  - Make spot market purchase available all hours
  - Reconsider summer assumption
  - Consider implementing as a random variable

## Purchase Ahead Imports

- **Current Assumptions**
  - Off-peak hours only
  - 3,000 MW Max, only if next day is short
  - Not used to swap out expensive NW resources
- **Proposed Changes**
  - Implement new logic: look ahead period, window (week) and day
  - Consider raising limit to S-to-N tie capacity
  - Consider implementing as a random variable
  - Consider swap-out option

## Reserve Requirements

- **Current Assumptions**
  - Contingency
    - WECC 5%/7% Hydro/Thermal
    - Failure to carry reserve counts as an outage
  - Within-hour balancing
    - Carried by federal hydro only for the BPA BA only
- **Proposed Changes**
  - Use WECC's new 3%/3% contingency reserve
  - Investigate ways to add within-hour reserves for the rest of the region

## Counting Resources

- **Current Assumptions**
  - Thermal: must be sited and licensed
  - Wind/solar: must be sited and licensed
  - EE: use 6<sup>th</sup> plan targets
- **Alternatives**
  - Thermal, wind and solar:  
Sited, licensed and under construction
  - Use RPS targets for wind and solar

## Detailed Assumptions For:

- New and standby resources
- Market supplies
- Within-hour balancing reserves

## New and Standby Resources

Assumptions	2017	2019
Thermal	Sited and licensed	Sited and licensed
Wind	Sited and licensed (e.g. not RPS)	Sited and licensed (e.g. not RPS)
Existing demand response	In load forecast	In load forecast
New demand response	In standby resources	In standby resources
Standby resources energy	83,000 MW-hours	40,800 MW-hours
Standby resources capacity	660/720 MW winter/summer, where winter = Oct-Mar, summer = Apr-Sep	623/833 winter/summer where winter = Oct-Mar, summer = Apr-Sep
Energy Efficiency magnitude	Council 6 <sup>th</sup> plan targets	Council 6 <sup>th</sup> plan targets
Energy Efficiency shape	Same as load	Same as load

## Market Supplies

Assumptions	2017	2019
NW market winter, where winter = Nov-May	3,451 MW (full IPP)	3,467 MW (full IPP)
NW market summer, where summer = Jun-Oct	1,000 MW	1,000 MW
BC market	0 MW	0 MW
Southern Idaho market	0 MW	0 MW
SW market winter on-peak	1,700 MW	2,500 MW
SW market winter off-peak	3,000 MW (purchase ahead)	3,000 MW (purchase ahead)
SW market summer on-peak	0 MW	0 MW
SW market summer off-peak	3,000 MW (purchase ahead)	3,000 MW (purchase ahead)
Maximum SW import limit	3,200 MW	3,400 MW

## Within-hour Balancing Reserves

Assumptions	2017	2019
Fed Hydro balancing reserves	900 MW INC 1100 MW DEC	900 MW INC 1100 MW DEC
Non-Fed Hydro reserves	Not modeled	Not modeled
Non-hydro balancing reserves	Not modeled	Not modeled
New balancing reserves	Not modeled	Not modeled
Energy Imbalance Market	Not modeled	Not modeled
Borrowed hydro	1000 MW-periods	1000 MW-periods