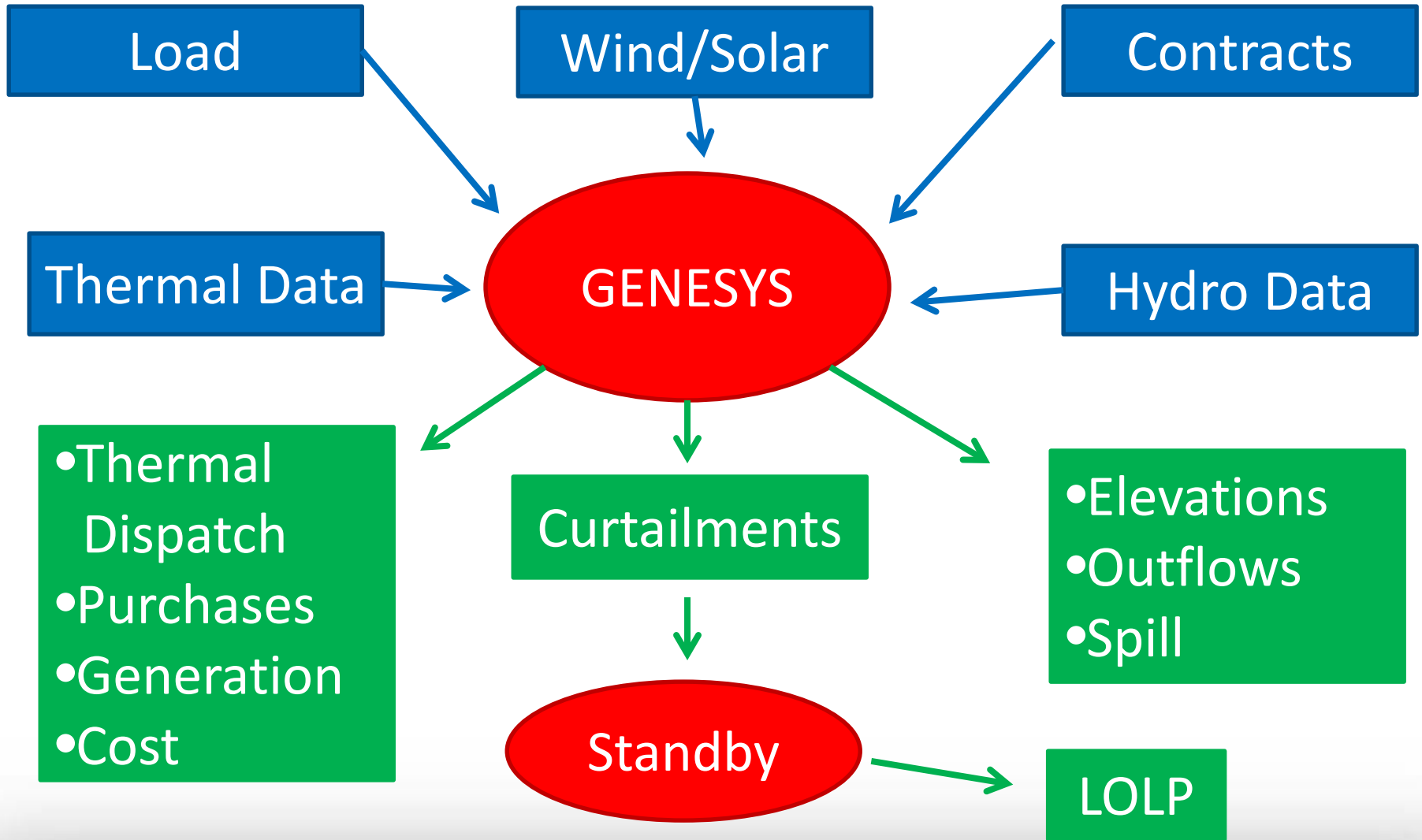


Assessing the Adequacy of the PNW Power Supply

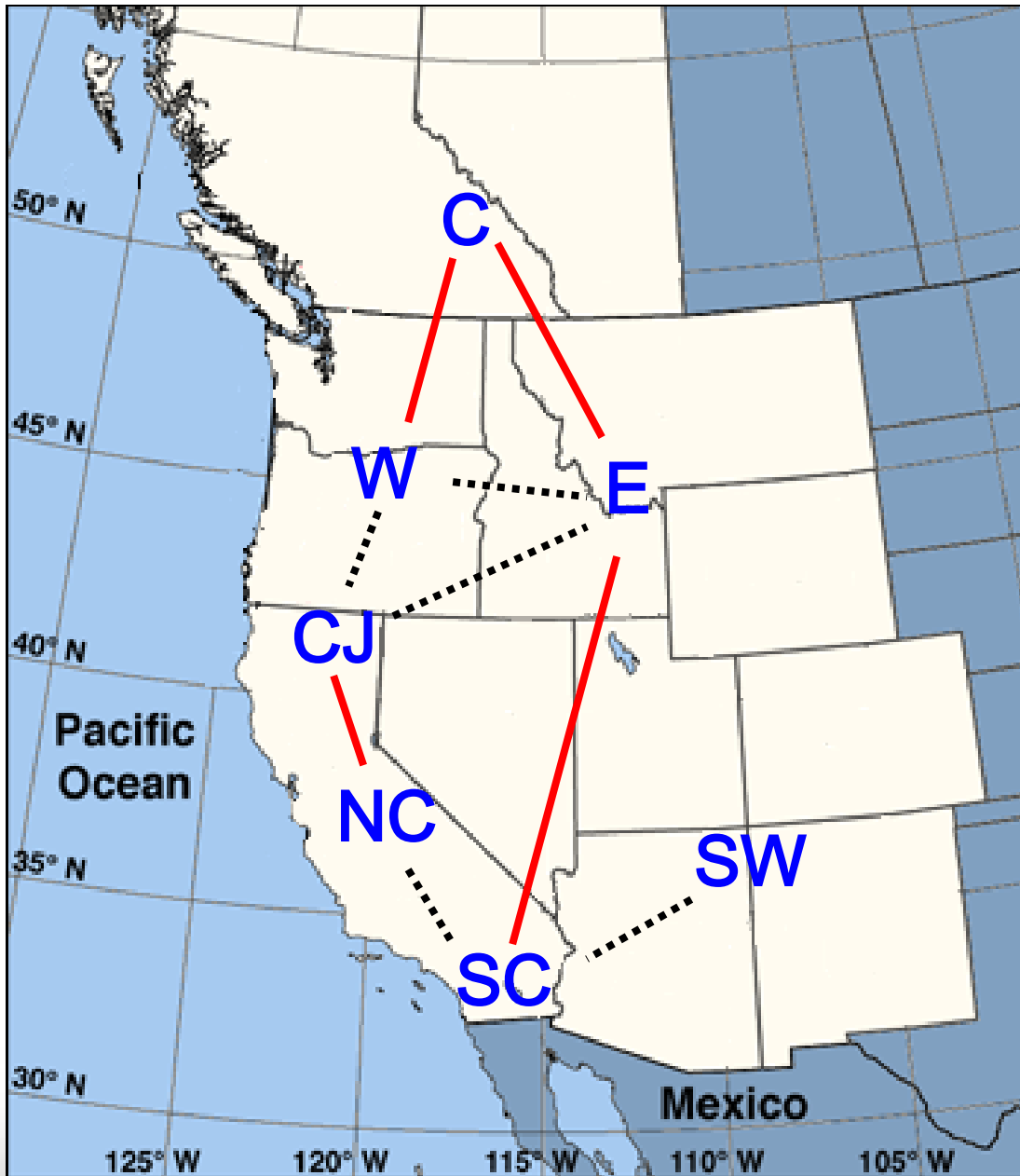
RAAC/DFAC Joint Meeting
November 1, 2016

GENESYS Flow Diagram

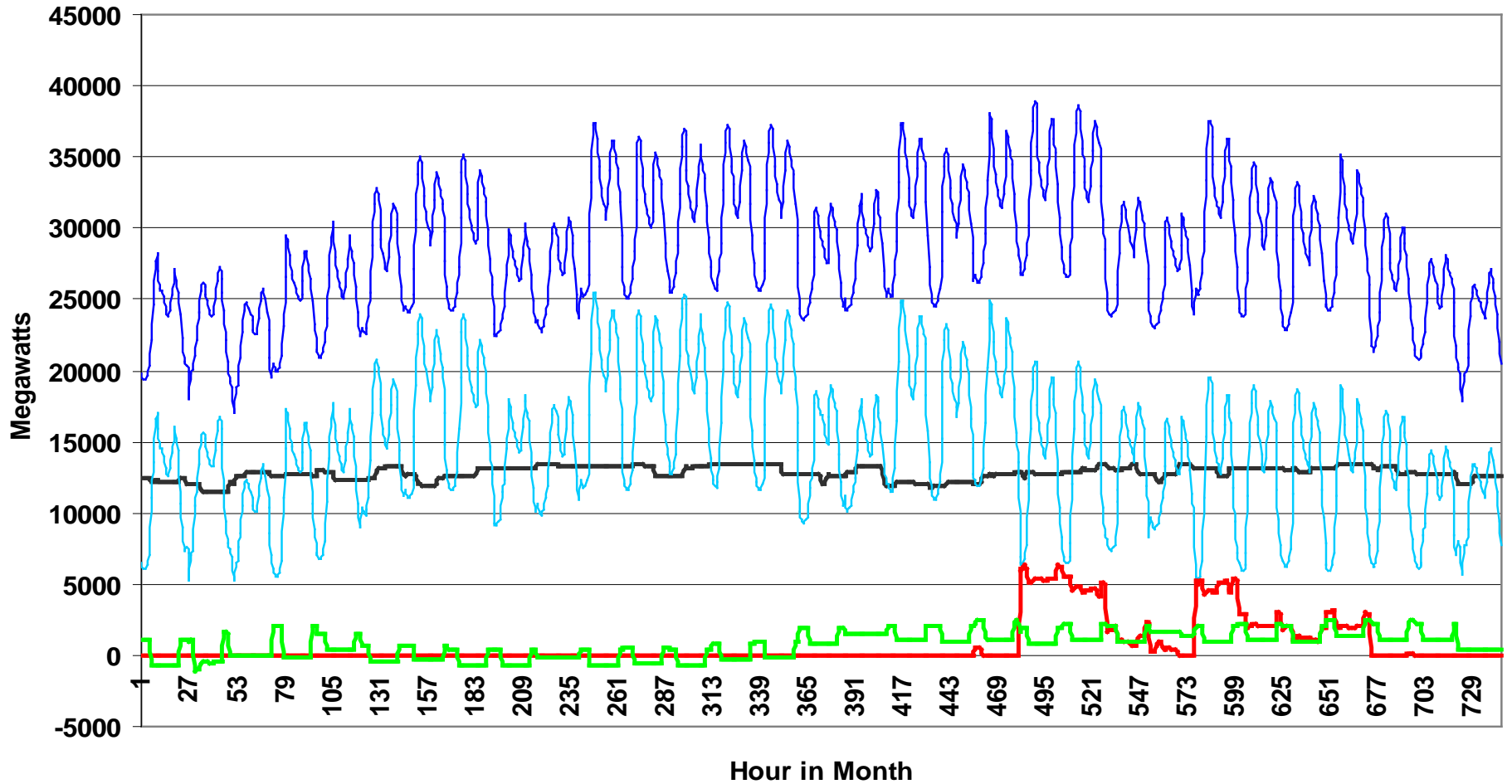


Transmission in GENESYS

- NW region includes:
 - East (E)
 - West (W)
- Solid lines indicate transmission into and out of the region
- Not a power-flow analysis
- East/west transmission capability varies based on BPA data
- Southern interties have fixed transfer capability
- SW modeled as import market only



Simulated Dispatch January

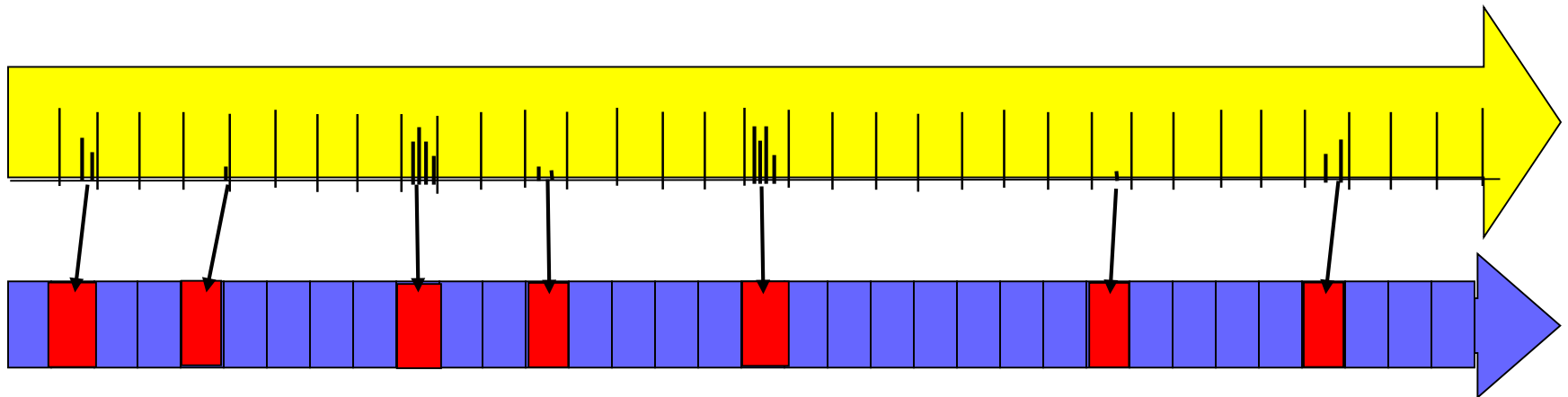


Assessing Adequacy

- Run every combination of temperature and streamflow (80 times 77 = 6,160)
- Count only existing resources or those that are sited and licensed
- EE is built into the load forecast
- Count the number of simulations (games) that have at least one curtailment

Loss of Load Probability

6160 Simulations



Out of 6160 simulations, 308 had curtailment events (**red bins**)

Loss of Load Probability (LOLP) = $308/6160 = 5$ percent

2021 Adequacy Results

(LOLP > 5% means inadequate)

Case → Loads ↓	No Boardman No Centralia 1	No Boardman No Centralia 1 No Colstrip 1 & 2
High Load	24 %	31 %
Med Load	10 %	13.2 %
Low Load	4 %	5.1 %