

PCDS Meeting

February 26, 2025

Jon Jensen WECC

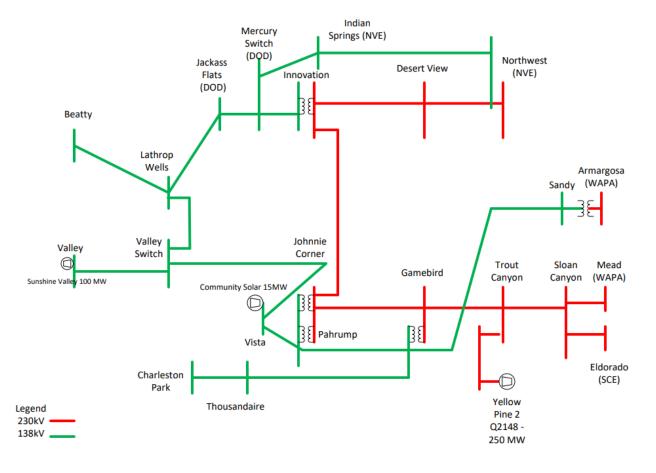
Updates

- Received NW change cases
- CAISO Approved VEA Updates: Permission to use as change case
- Alignment Updates, many DG, netted, ignore, aggregated, retired, or not sure
- PCM Capacity to match Summer/Winter max, or Nameplate for renewables where appropriate
- Updates to maintenance
 - Days, ex 86 days
 - some derated, and were not out

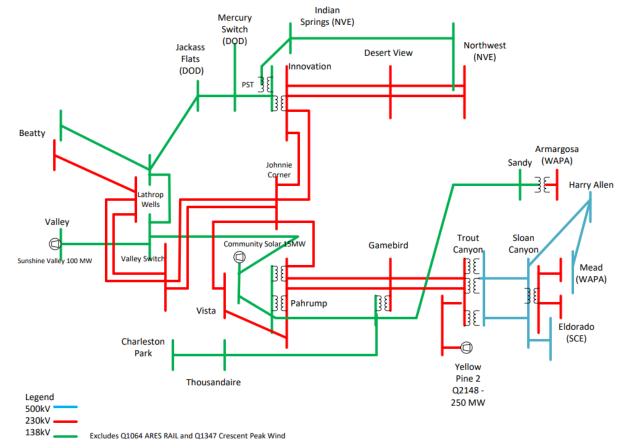


VEA Topology Changes

Existing System



Future 2027 System





2-21-2025 Case



2-21-2025 Case

- Alignment as of 2/21/2025
 - More to come
- Capacity Rule to match L&R (Summer/Winter) max
- Need to implement VarMarginRatio so PCM doesn't exceed PF



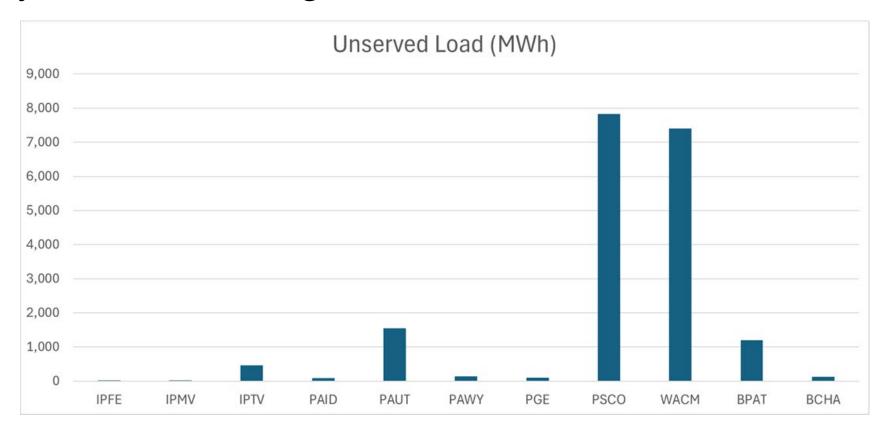
2-21-2025 Case

- List of changes since 1-10-2025 case:
 - Data Clean up
 - Regions, states, counties
 - Shape names updates
 - Thermal heat rate updates
 - Alignment updates to align better with pf
 - Fuel clean up updates
 - AESO Non- conforming load status update
 - Minor maintenance schedule updates
 - PCM Capacity to match Summer/Winter max, or Nameplate for renewables where appropriate



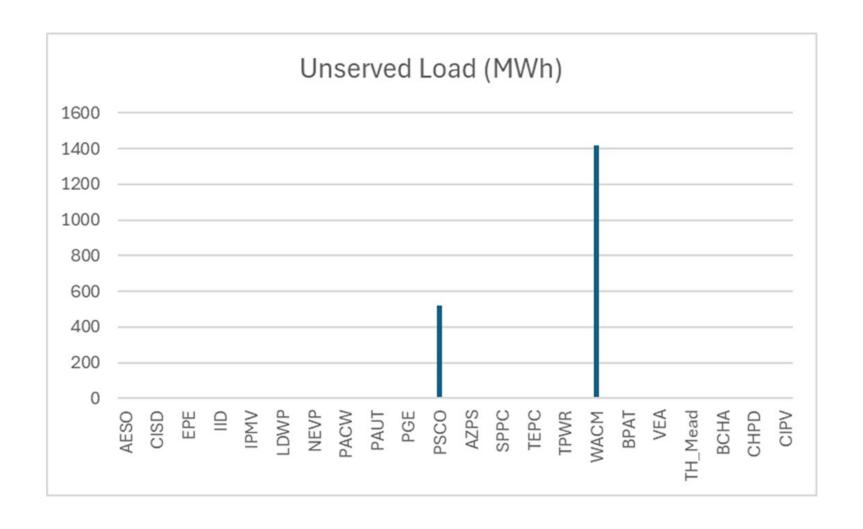
2-21-2025 Case Unserved Load

Capacity Rule, decreasing Pmax increased unserved load



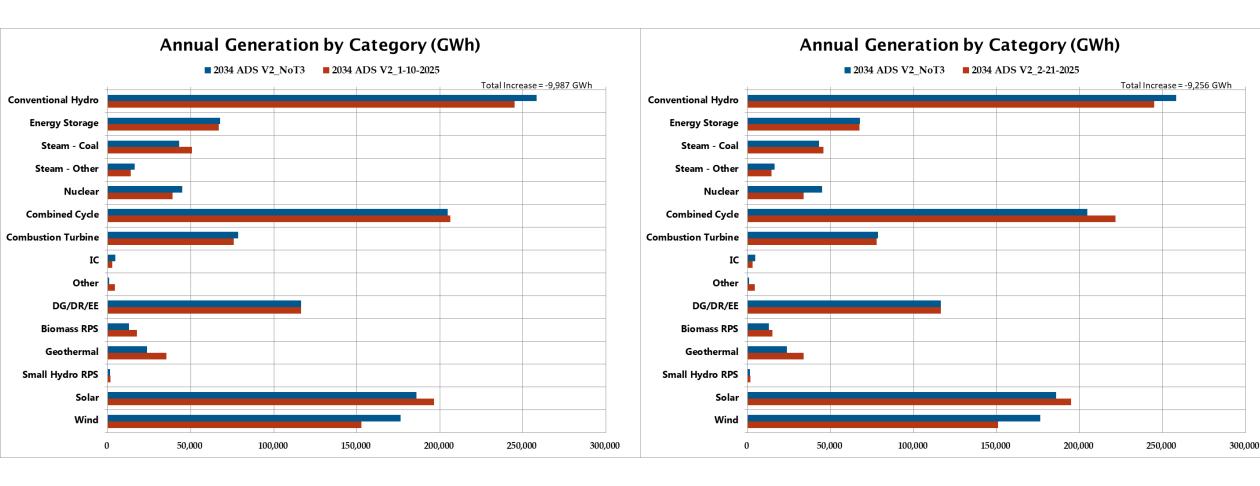


1-10-2025 Case Unserved Load



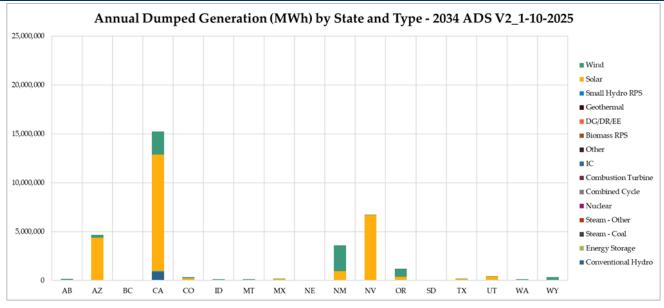


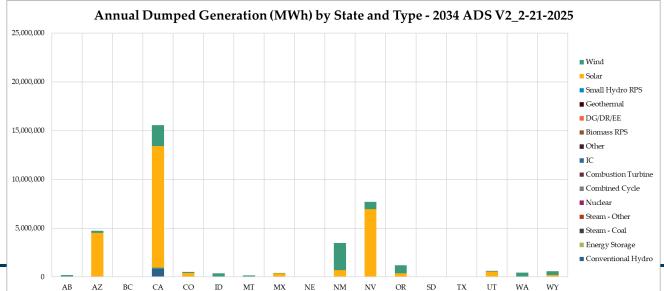
Annual Generation by Category





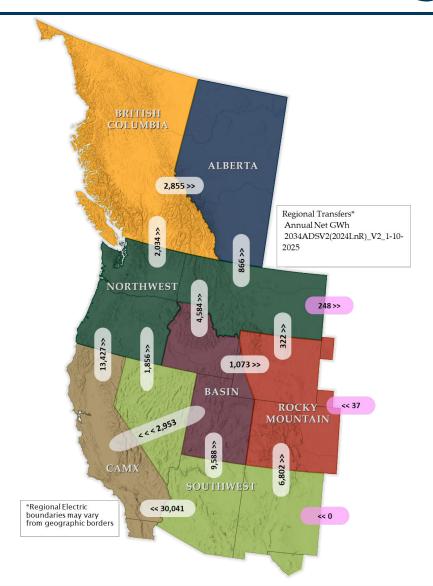
Annual Dumped Energy

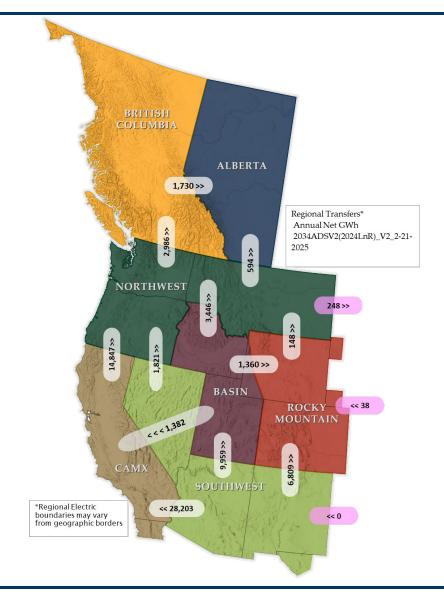






Annual Net Regional Transfers







To do

- Continue with alignment
 - Some data submitters had extensions
 - 2028/30 check
 - Add Retired units into PCM
- Capacity Rule PCM Max doesn't exceed PF (VAR Margin Ratio)
 - Check if more than 5% (mw change) change, need to review. Circle back with plant owners to check. Review list of units that seem out of sync.
- Redistribute unmapped units based on unaligned pf units (Update Placement Tool)



Capacity Rule 8-3-2022

Rules to adjust modeled PCM max capacity (Account for station service in calc):

- If PF Pmax ~ L&R max then no change
- If L&R max <> PF Pmax review for issues
 - Resolve data issue
 - If CC and L&R > PF review for duct firing capability
- Else (Not data issues found)
 - If L&R max > PF Pmax cap, limit PCM generation with the use of "VAR Margin Ratio" command in GridView
 - o Default = 1 a 5% derate of dispatch is 0.95
 - If L&R max < PF Pmax: Does not pose a PF issue leave as L&R max
 - o Thermal L&R max (Max of summer and winter)
 - Wind/Solar etc. L&R max, check (Max of summer and winter) if similar. If exceptions (summer winter don't make sense or blank)- use nameplate
- Compare what is available and denote any change WECC makes
- What are the threshold is based on size:
 - Address issue if the difference greater than the lesser of 5% or 25 MW and can ignore difference less or equal to 1 MW
 - Denote how WECC resolve any issue



Resource Placement Tool

- Updating Automated Resource Placement Tool
 - New/Existing units: Placing /rebalancing generation
 - Place generation where unmapped PF units are located according to subtype/areas
 - Aggregate to high bus/backbone if makes sense, Ex. Cholla
 - Not placing units on capacitor bank busses
 - Not placing units on 3-winding transformer midpoint busses
 - o Review/exclude subsystem, Ex. Create list of viable locations





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