



PCDS Meeting

April 16, 2025

Jon Jensen

WECC

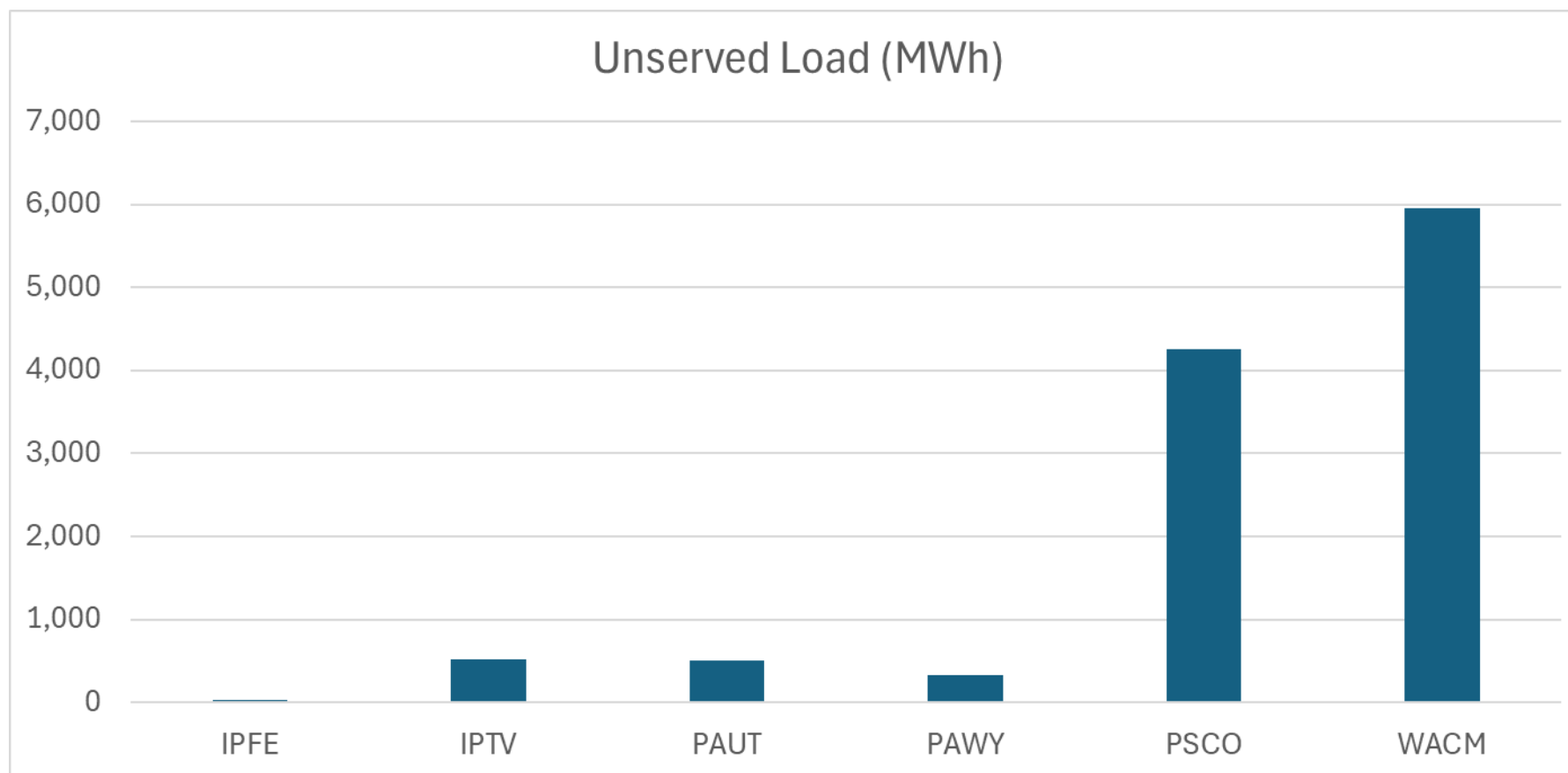
4-10-2025 Case Updates

- Adjust (correction) loads to include DG-BTM Energy
- Updated SPPC load adder (1,000aMW) to the load profile
 - To account for non-conforming load that were previously not included
- Adjustments to BCH hydro generation to serve net load
 - Updated hydro operating ranges to serve BC load
 - Kemano smelter load adder (690 aMW) to the load profile with generation to match (included load and generation)
- DG-BTM profiles
- Alignments to power flow
- A few generator were having issues: Deleted in this run will add back in (Hydro, Solar, Energy Storage) (Change Case ready, but not applied)
- Northwest Changes
- Other minor fixes
- Run time 20 hours (last section)

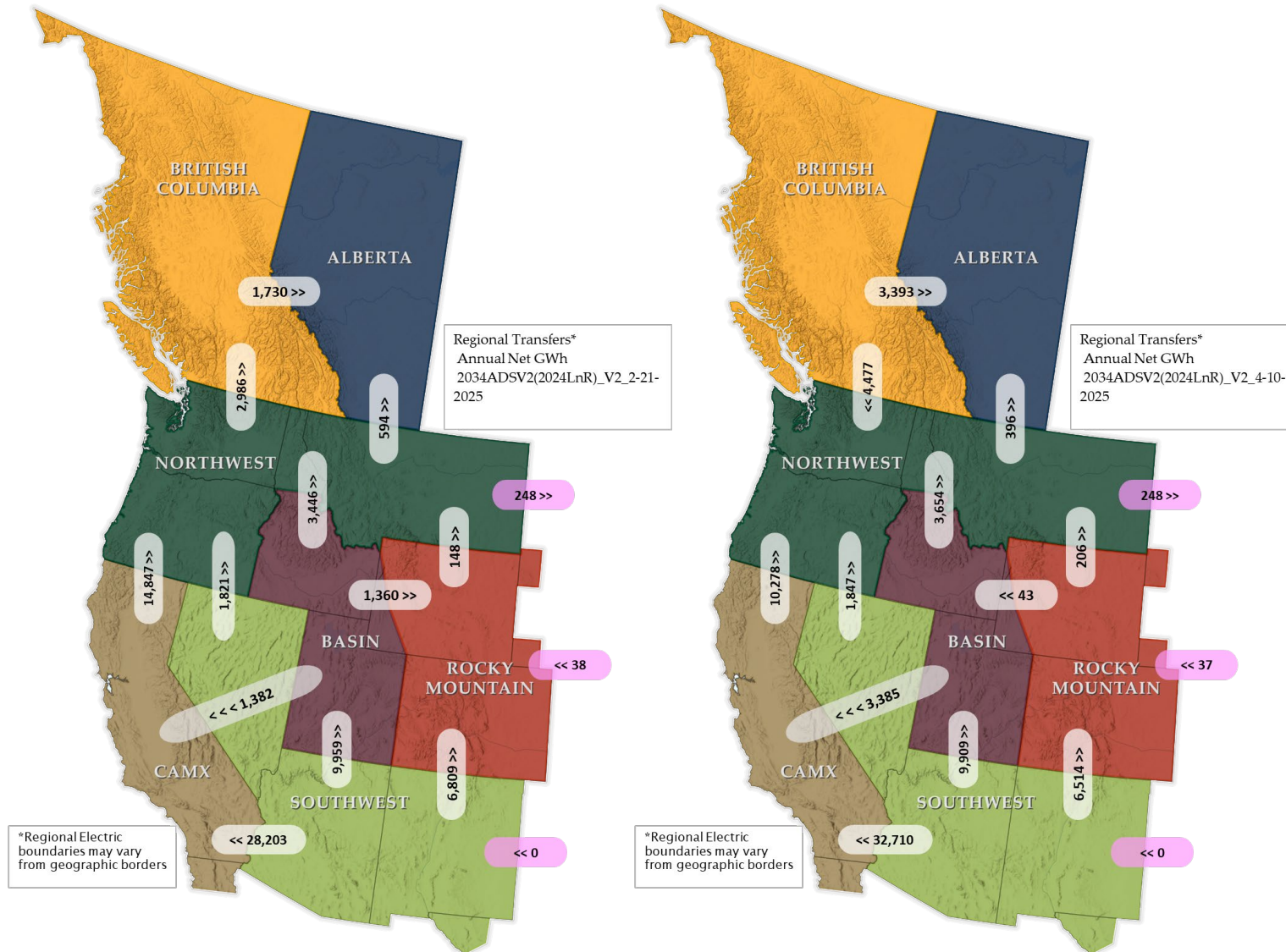
4-10-2025 Case Updates

- In 4-10 case:
 - BC Hydro Aggregation
 - Multipliers update
 - Duplicates, turned off netted units from L&R
 - ICE, ES aggregations
 - Aggregated hydro using curves where applicable
- To do
 - Griffith duplicate fix – Change case done
 - Big creek aggregation fix – Change case done
 - AB Cogen aggregate – Change case done
 - Updated Maintenance – Change case done
 - Temporary deleted units added back in – Change case done
 - US hydro aggregation
 - Thermal heat rate update
 - CO2 – Geo/Bio check – Emission rate to 0

4-10-2025 Case



Regional Net Transfers

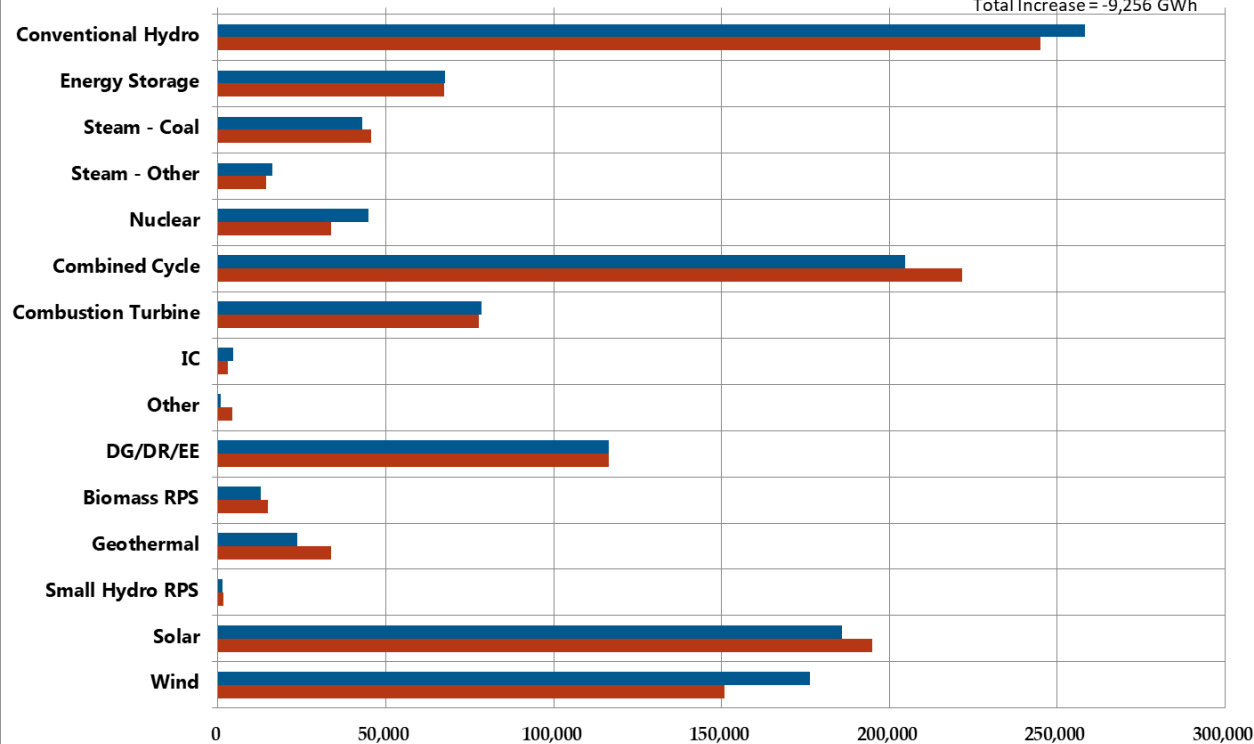


Annual Energy

Annual Generation by Category (GWh)

■ 2034 ADS V2_NoT3 ■ 2034 ADS V2_2-21-2025

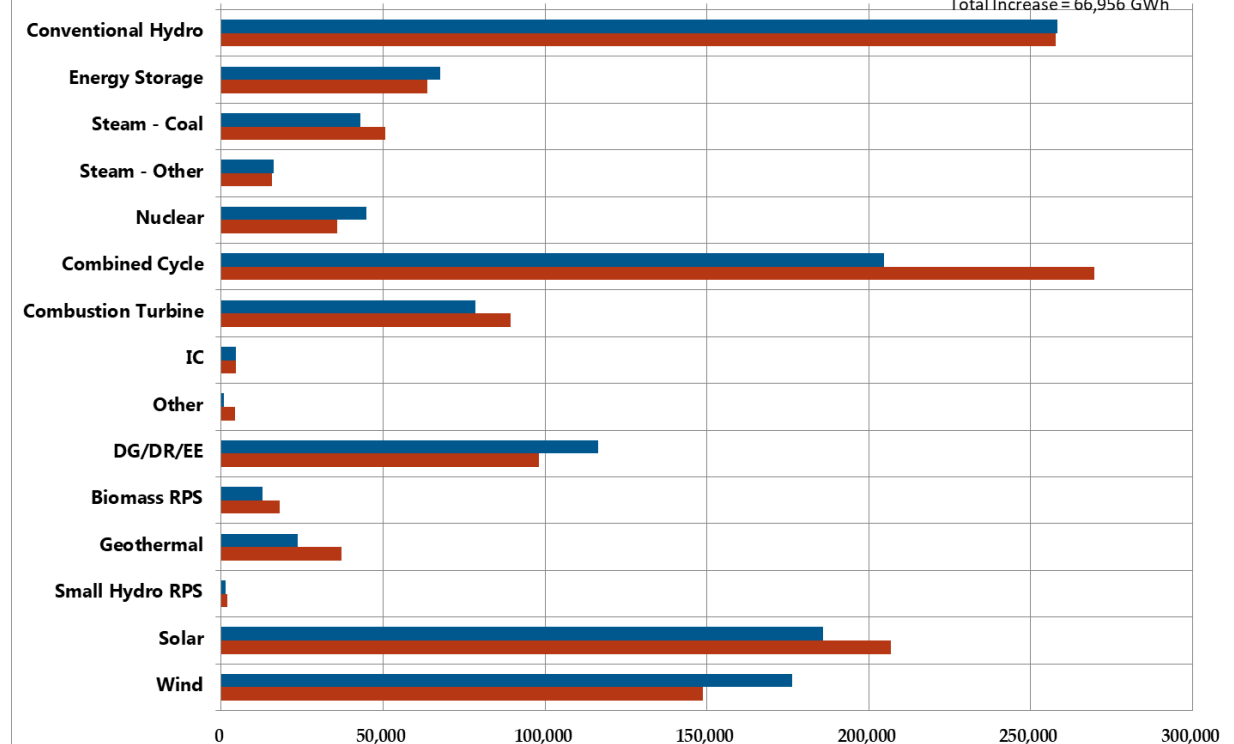
Total Increase = -9,256 GWh



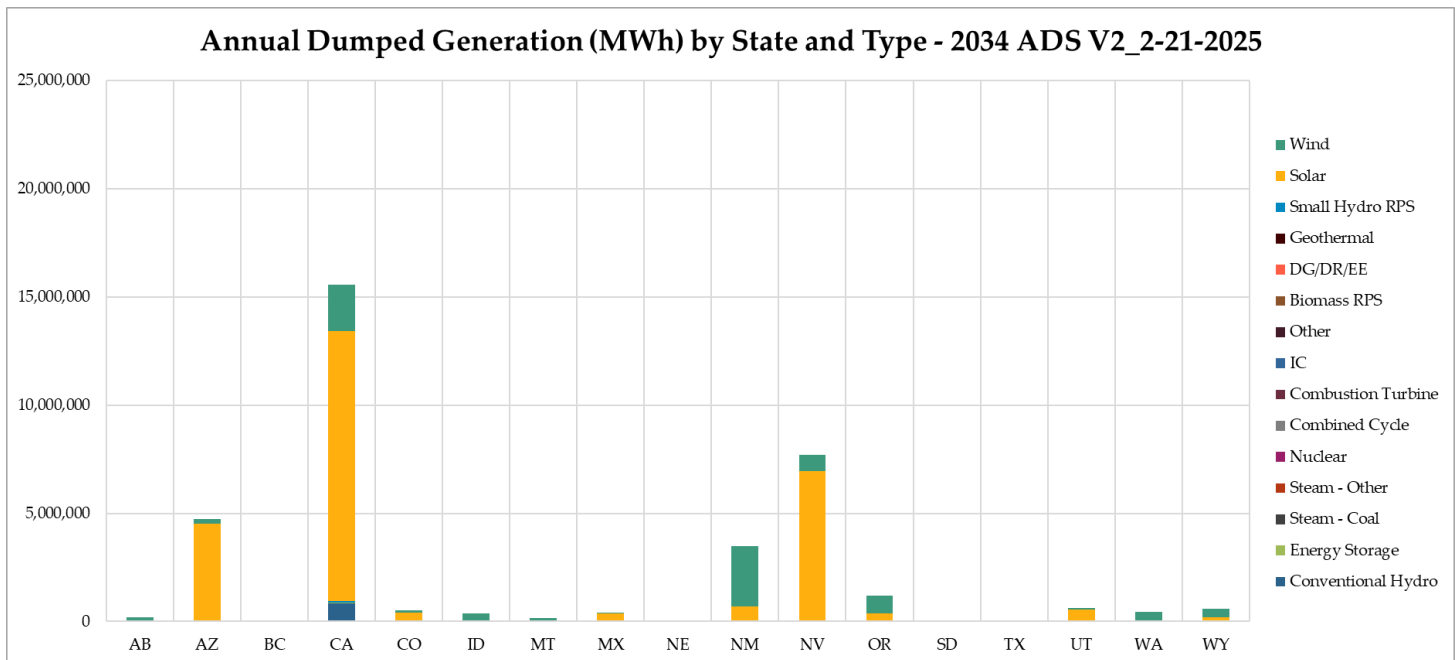
Annual Generation by Category (GWh)

■ 2034 ADS V2_NoT3 ■ 2034 ADS V2_4-10-2025

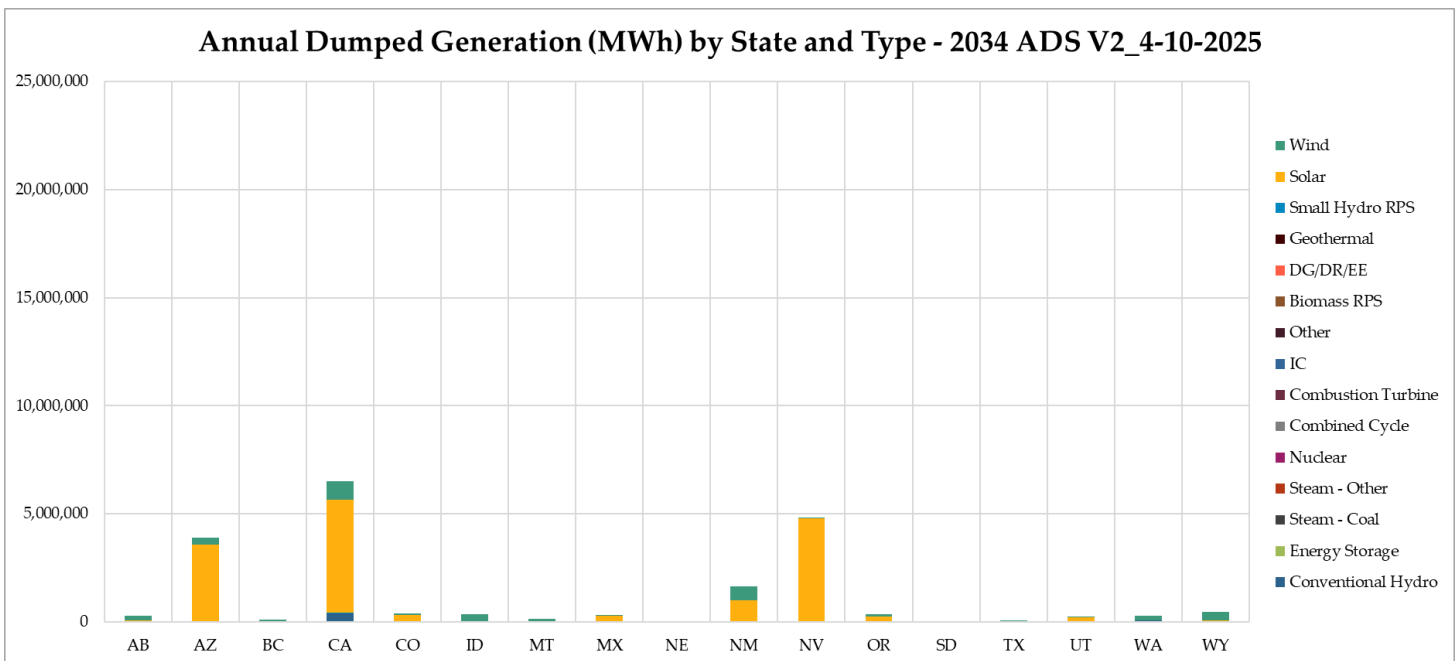
Total Increase = 66,956 GWh



≈ 36,000 GWh



≈ 20,000 GWh



Generator Realignment

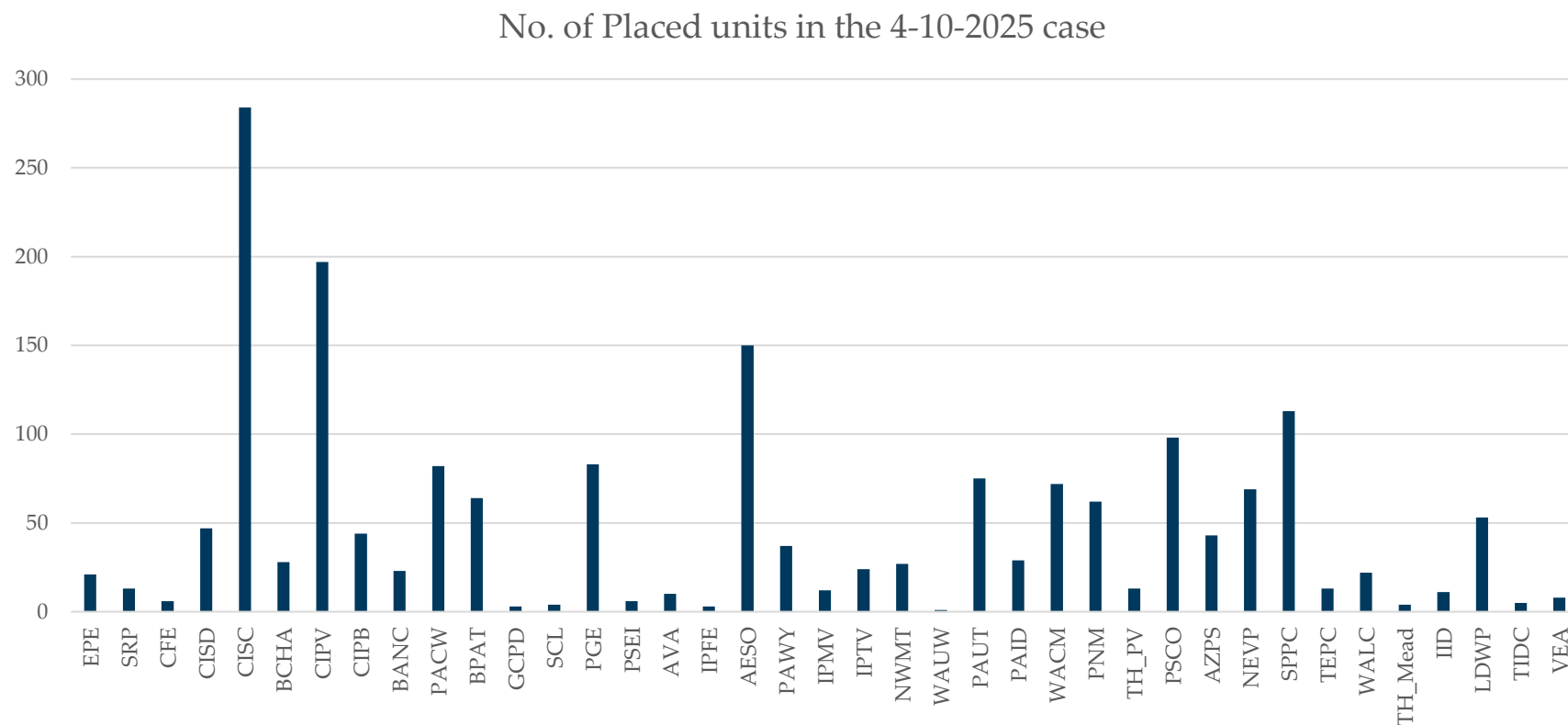
- Includes updates from PNNL, WECC and feedback from some of the BAs (SRP, AESO, PGE, PAC, CAISO, BPA, PSEI).
- Bus locations, unit IDs, Service Statuses, Pmax, Names updated for just over 1800 generators.
- 82 generators had their names updated (e.g., 'Mps 4-4 GT' renamed to 'Montana 4 LMS', Shasta 1,2 and 3 renamed to Wheelabrator Shasta 1, 2 and 3).
- 190 units had their Pmax updated. Majority of these were aggregations of smaller units into one single unit (e.g., La Joya WT in PNM), which also resulted in turning off the smaller units. The aggregations of these units is included in the Generator Distribution table.
- 229 generators turned off (majority of them resulting from the aggregations).

Generator Realignment

- 1359 new generators aligned/mapped between the PCM case and the 2034 Heavy Summer PF case.
- 1859 generators to be placed (unit ID starting with X) in PCM. 1908 unmapped generators in the 2034 HS1 power flow case.
- 174 generators with Y in their unit IDs (most of these are aggregated and included in the Gen distribution table).

Generator Realignment

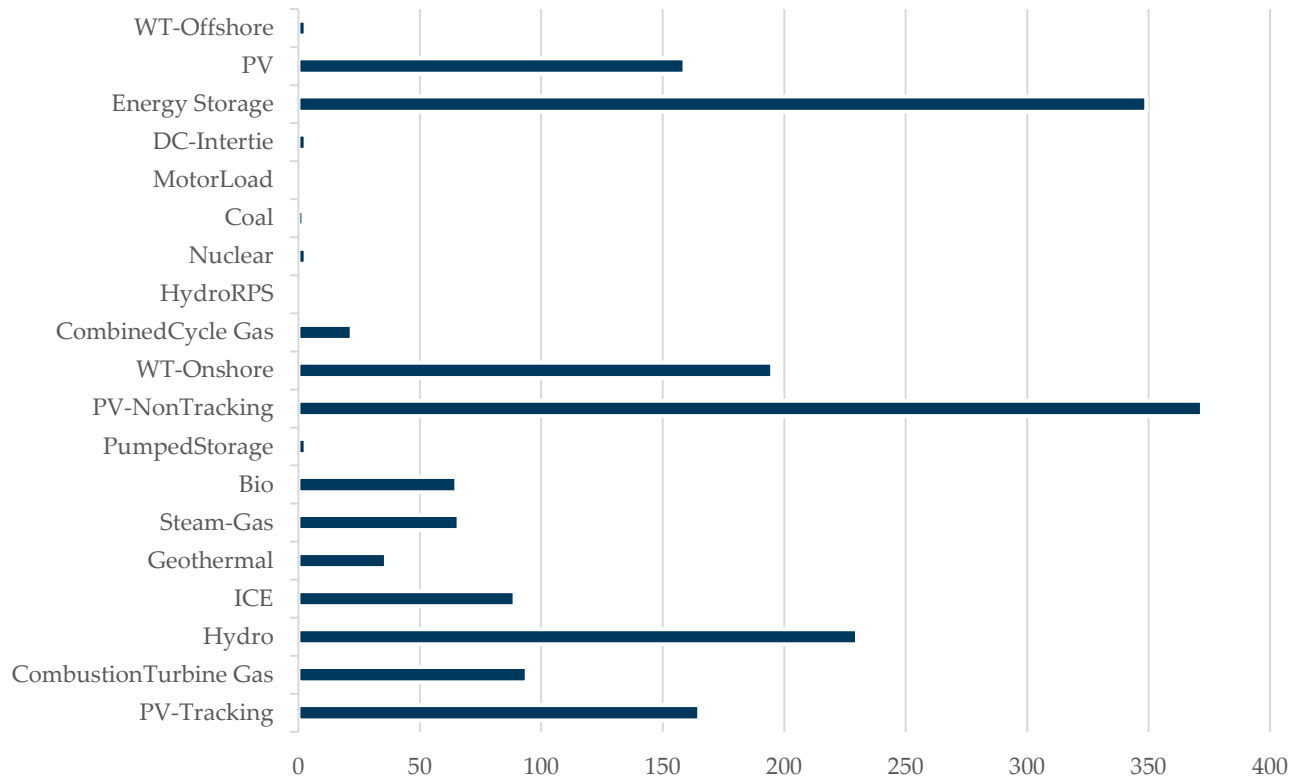
- Share of the “placed” units in the PCM across BAs



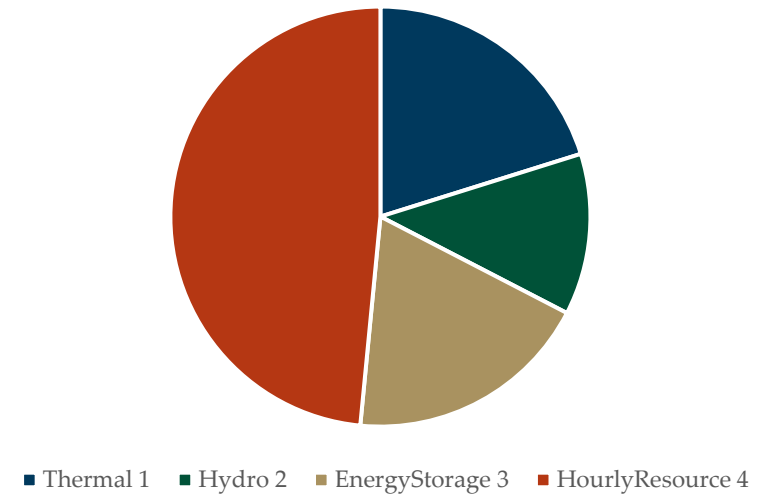
Generator Realignment

- Share of the “placed” units across GridView subtypes and GenTypes

No. of placed units in the 4-10-2025 case by subtype



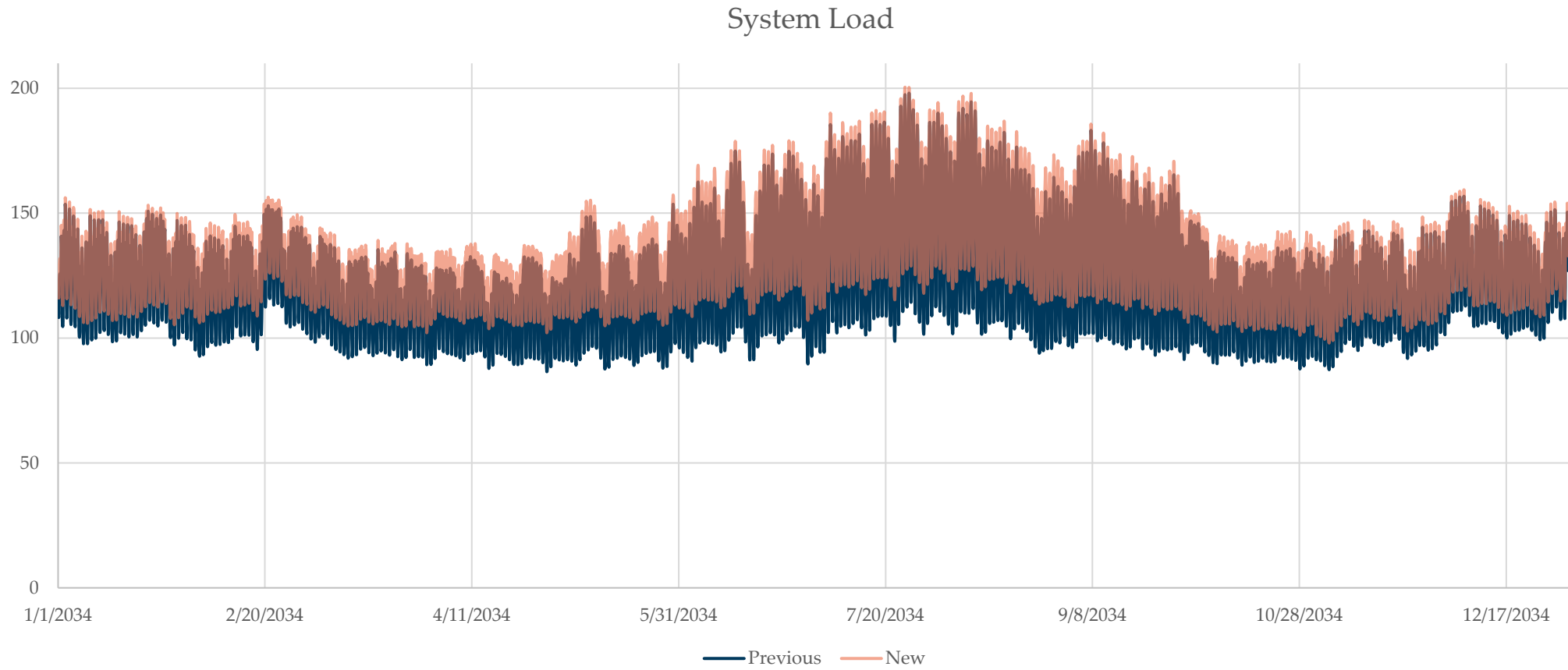
Placed units in the 4-10-2025 case by GenType



Next Steps

- Use the updated Placement tool to map the “placed” units in PCM to the “unmapped” units in the Power Flow case.
- Export the updated PCM case to create a matching power flow case (2034 HS1a_ADS) for the C-Page tool.

Loads



Loads

- ~81 TWh increase in system load (7.3%)
- ~2.4 GW increase in peak (1.2%)

