



Item 9: Revised 2023 Additional Achievable Fuel Substitution (AAFS) Hourly Results of the California Energy Demand 2023-2040 Forecast

July 10, 2024 Business Meeting

Nicholas Janusch, Ph.D., Program and Project Supervisor
Energy Assessments Division, Advanced Electrification Analysis Branch



Benefits & Purpose

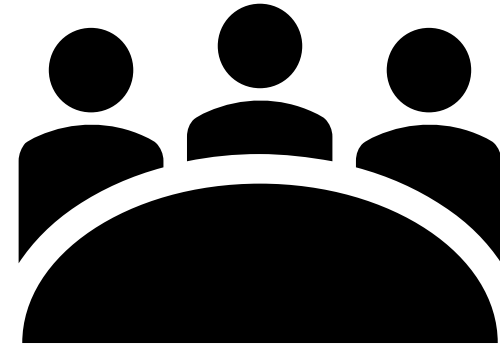
Fix an error that assigned cooling load shapes to heating load.

Impacted Hourly Results	Adoption Date
AAFS Scenarios	February 2024
Planning Forecast & Local Reliability Scenario	February 2024
2023 Gradual Transformation AAFS Scenario	May 2024



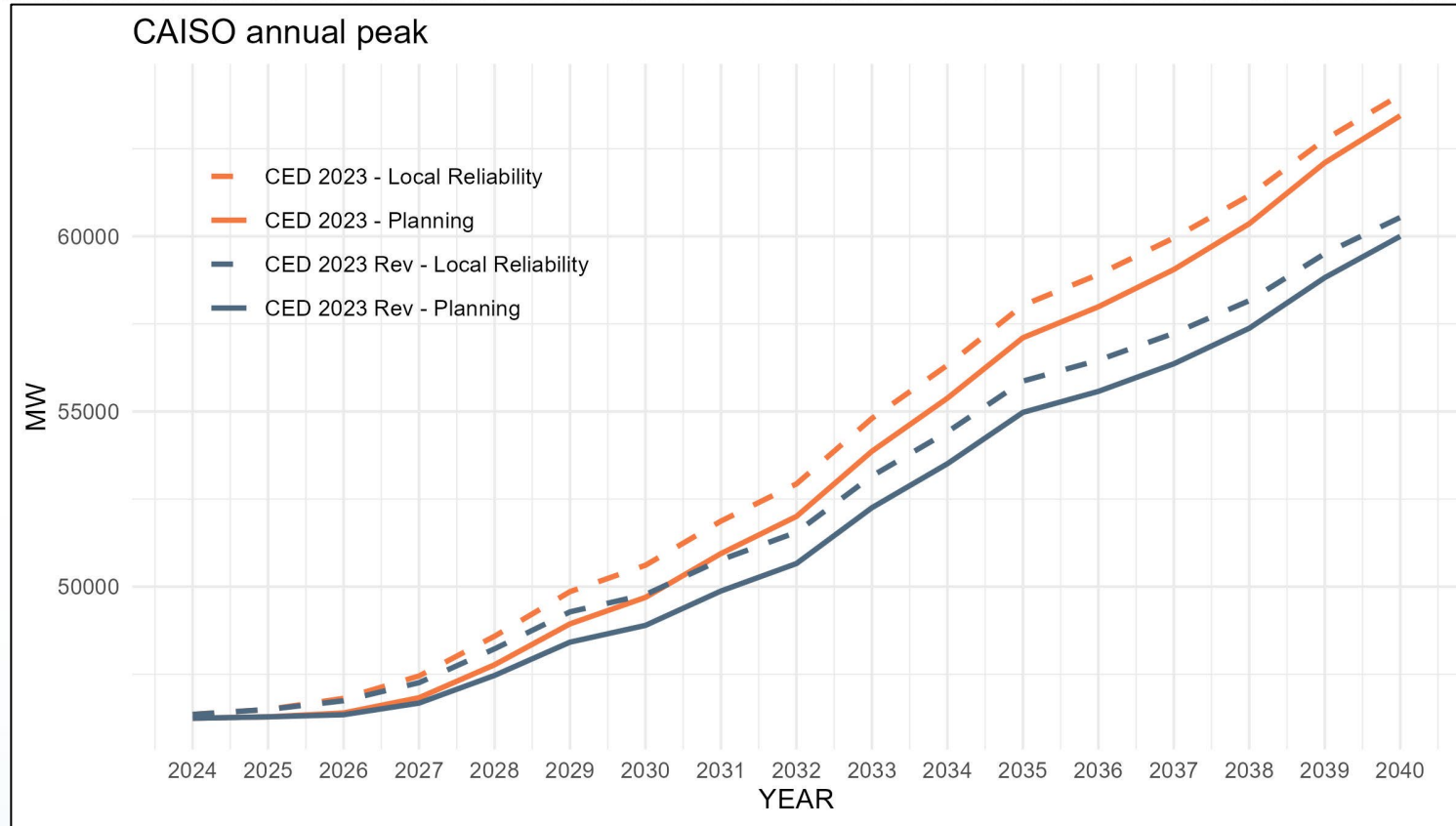
Stakeholder Process

- Met and shared revised files with:
 - CARB, CPUC, and CAISO
 - IOUs (PG&E, SCE, SDG&E, and SCG)
 - June 12, 2024 Public Demand Analysis Working Group (DAWG) Meeting





Revision Impact to CAISO Annual Peak

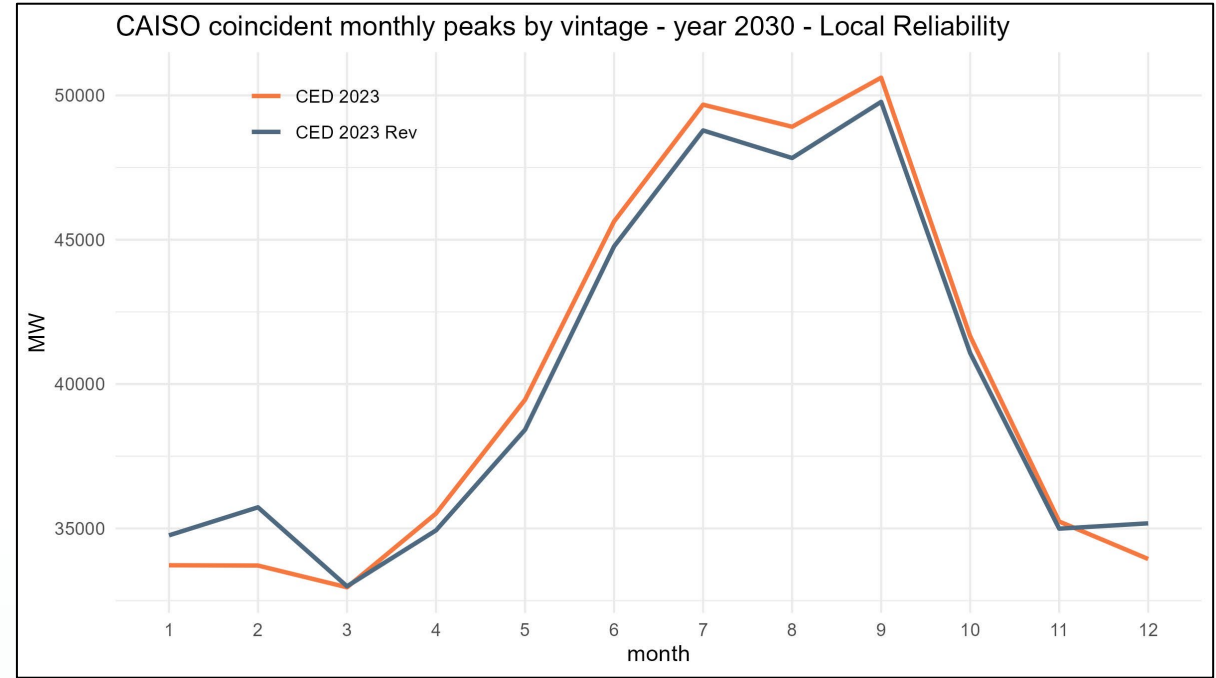
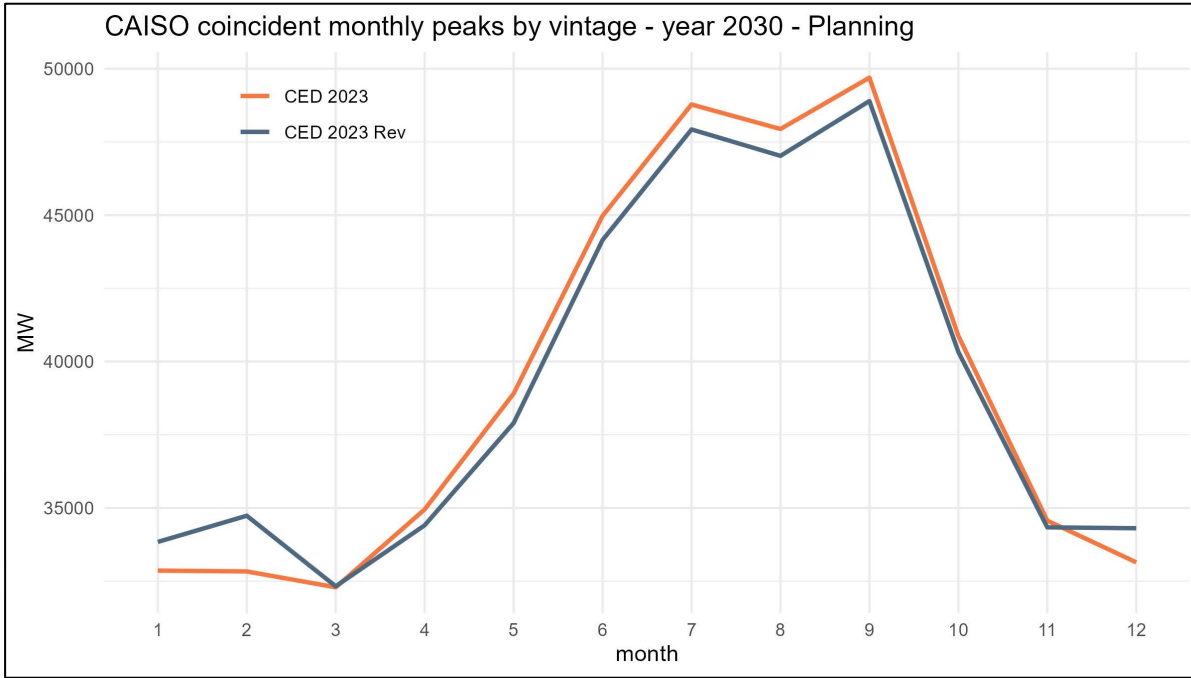


Source: CEC Staff

- Minor near-term impacts to annual peaks
- Noticeable lower growth in annual peaks in the longer term



Revision Impact to CAISO Monthly Peak - 2030

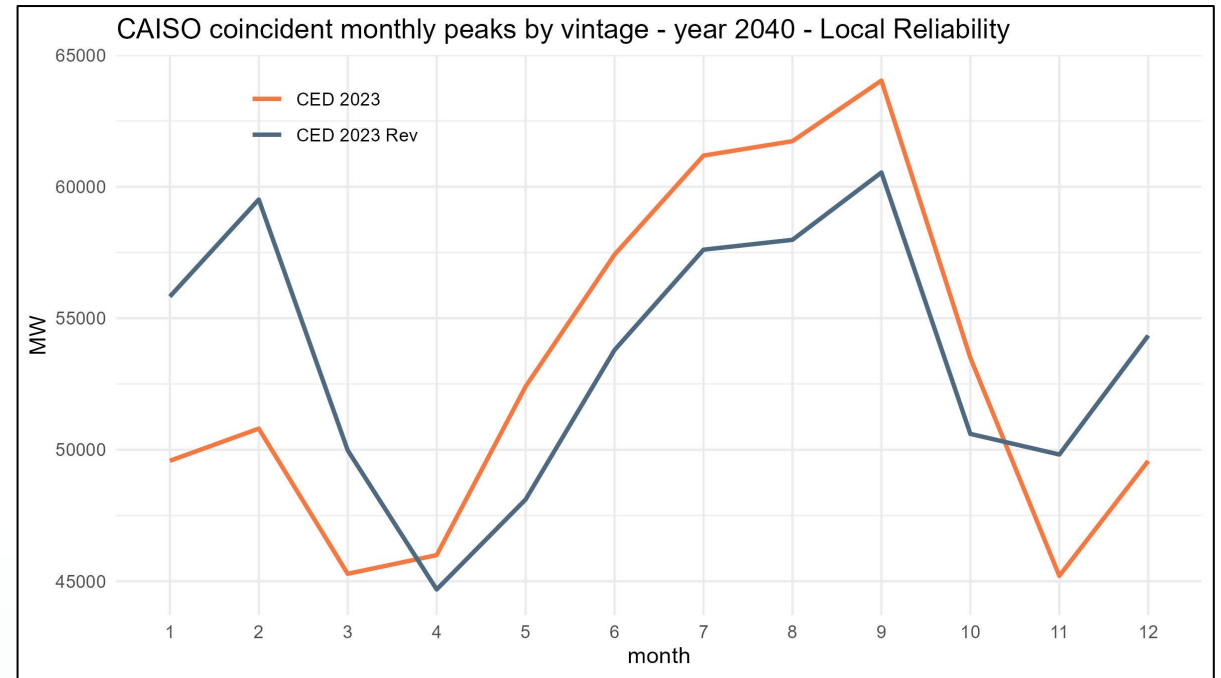
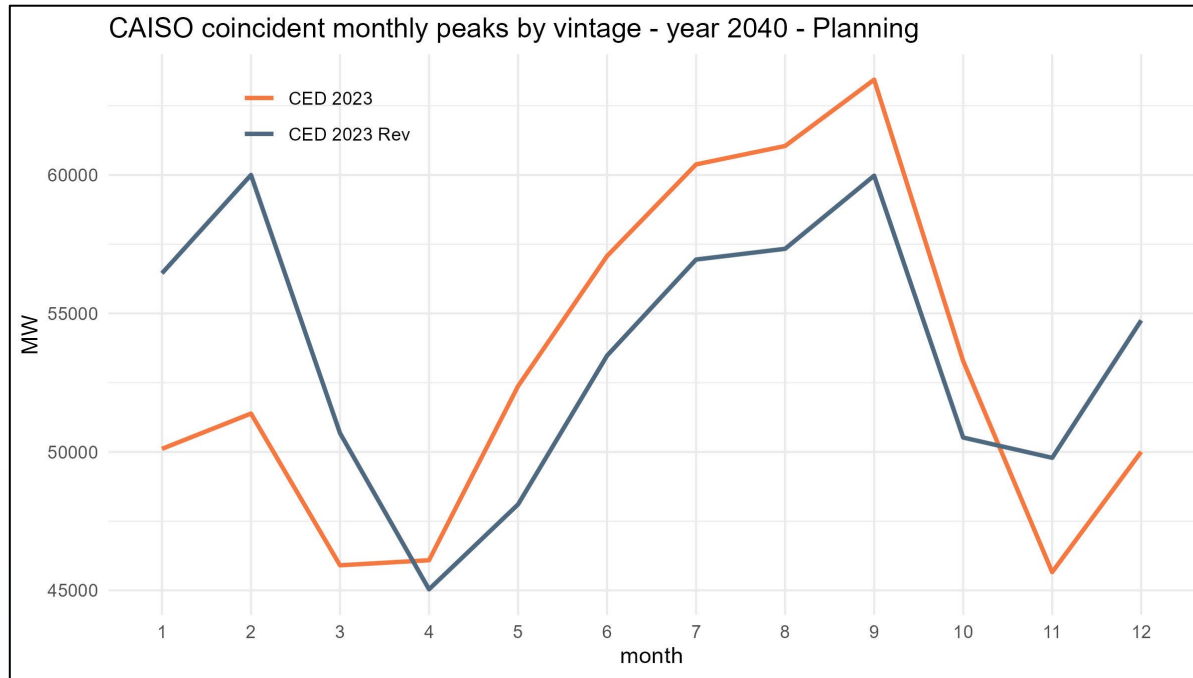


Source: CEC Staff

- Monthly peaks increase in winter and decrease in summer
- Largest change occurs for February



Revision Impact to CAISO Monthly Peak - 2040



Source: CEC Staff

- Monthly peaks noticeably increase in winter (~8,700 MW) and decrease (~3,500 MW) in summer
 - Planning Scenario: February peak surpasses September peak
 - Local Reliability Scenario: February peak is just shy (~1,000 MW) of September peak



Staff Recommendation

- Adopt the Revised 2023 Additional Achievable Fuel Substitution (AAFS) Hourly Results of the California Energy Demand 2023-2040 Forecast