

DOCKETED

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California Energy Commission

Title: Summer 2021 CEC Update

Presenter: Drew Bohan

Date: May 4, 2021



Joint Planning Roles

- CEC – Develops demand forecasts and conducts supporting analyses
- CPUC – Sets resource procurement requirements for CPUC-jurisdictional entities
- California ISO – Acts as the balancing authority responsible for maintaining wholesale electric reliability for 80% of the load in California





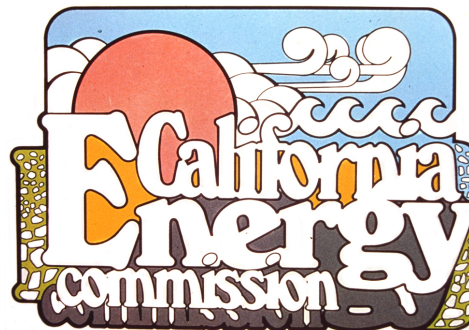
CEC Reliability Actions

- Enhance demand forecasts
- Launch new analytical products
 - Reliability assessments
 - DERs
- Plan for contingencies in collaboration with California ISO and CPUC
 - ESF-12 responsibilities
 - Summer 2021 contingencies
- Leverage additional CEC responsibilities
 - Siting
 - Research – EPIC



Enhance Demand Forecasts

CEC forecasts began in the 1970's





Enhance Demand Forecasts

- Included 1 in 30 peak forecast in 2020 IEPR (pursuant to Governor Newsom's request)
- Consider likelihood of extreme events
- Examine a longer forecast horizon – 15-year timeframe
- Expand hourly forecasts to examine a wider range of weather patterns



Reliability Assessments

- Near-term
- Mid-term
- Long-term





Reliability Assessments – Near Term

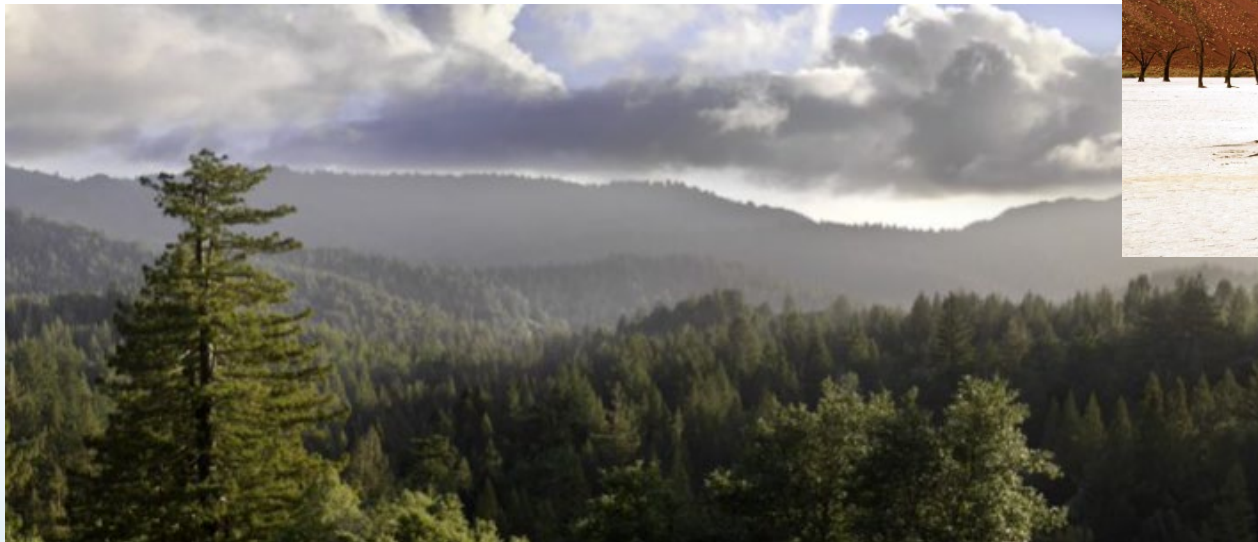
- Assess supply and demand under different weather conditions for the upcoming summer
 - Summer 2021 Reliability Hourly Stack Analysis





Reliability Assessments – Mid Term

- Model a range of possible conditions to evaluate reliability for 2021 – 2026





Reliability Assessments – Long Term

- Model various scenarios of renewables build-out
- Assess transmission needs





Distributed Energy Resources Assessments

- Assess DER performance
- Understand DER impacts on reliability
- Project future impacts
- Maximize DER benefits





Summer 2021 Contingency Planning

- Collaborate with CAISO and CPUC
- Collaborate with partners not under CPUC jurisdiction





Leveraging CEC Responsibilities - Siting

- Work with powerplants on efficiency improvements
 - Held workshop to identify add'l opportunities
 - Permitting add'l power now
 - 65 – 122 MW





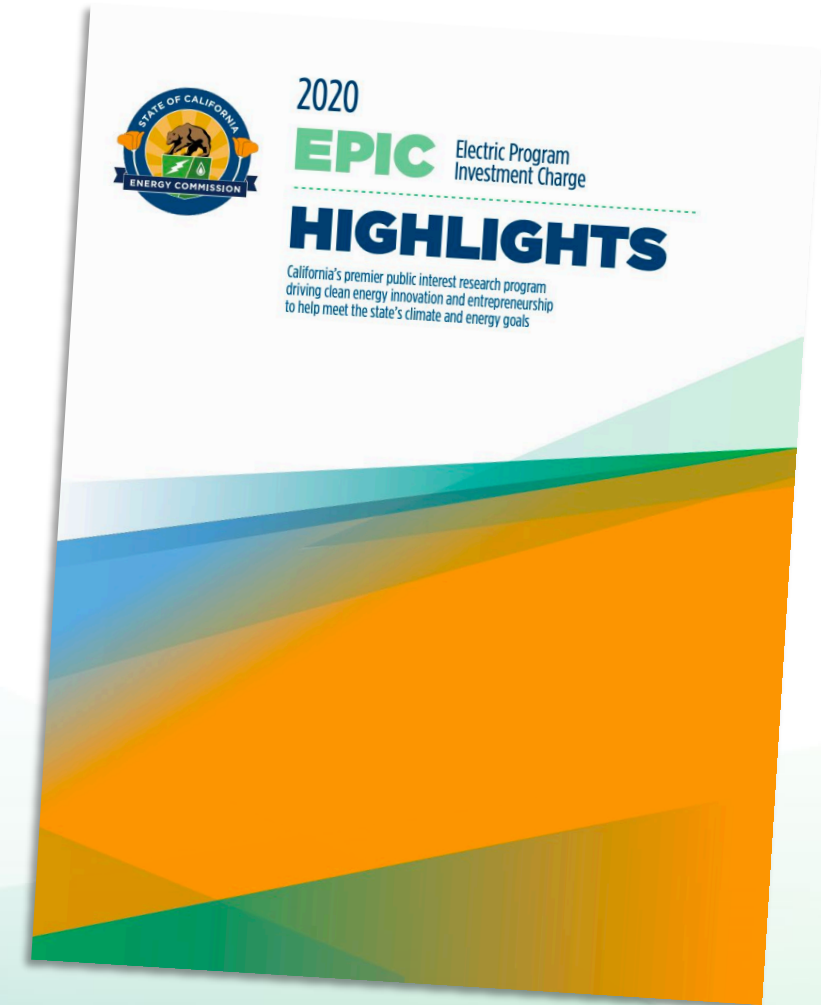
Leveraging CEC Responsibilities – Load Flexibility

- Hosted roundtable with multiple DR providers, in collaboration with CPUC and CAISO
- Planning to leverage Load Management Standards to assess potential load flexibility



Leveraging CEC Responsibilities – EPIC

Electric Program Investment Charge program





Leveraging CEC Responsibilities - EPIC

- Invested \$74M in demand flexible technologies to support load flexibility
- Load shifting anticipated this summer from recently approved projects:
 - 25 MW – grant to Ohm Connect
 - 18 MW – grants to Polaris Energy Services and Ag Monitor



Thank You!

