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ITEM 3
Final Root Cause Analysis of the Mid-August 2020 Extreme Heat Wave

Aleecia Gutierrez

February 19, 2021
Average Temperatures

Figure ES.1: July, August, and September Temperatures 1985 - 2020

Source: CEC Weather Data/CEC Analysis
Over 80 million people are within an Excessive Heat Watch/Warning or Heat Advisory today. Extreme heat will significantly increase the potential for heat related illnesses, particularly for those working or participating in outdoor activities. Remember to stay hydrated!
What happens in a supply shortage?

• Stages 2 emergency
  • All mitigation actions taken
  • CAISO unable to provide for expected energy requirements.

• Stage 3 emergency
  • CAISO unable to meet minimum contingency reserve
  • Load interruption imminent/in progress
  • Notice to utilities of interruptions
Root Causes for Shortage

• Increased demand above planning targets

• Planning targets have not resulted in sufficient resources to meet demand in early evening hours of extremely hot days

• Several practices in the energy markets exacerbated supply challenges under highly stressed conditions
Real Time Performance of Demand Response

Source: CAISO Department of Market Monitoring
Real Time Performance of Reliability Demand Response

Source: CAISO Department of Market Monitoring
### Actions Underway for Summer 2021

- Continue to track and approve projects currently under development to help ensure project completion by their target online dates
- CPUC Emergency Reliability rulemaking (R.20-11-003)
- CAISO expedited stakeholder process on market rules and practices
- CEC conducting probabilistic studies that evaluate the loss of load expectation on the California system
- CAISO, CEC, and CPUC improvements to future coordination, including communication protocols and development of a contingency plan

### Additional Actions for Summer 2021:

- CEC and CAISO to coordinate with non-CPUC-jurisdictional entities to encourage additional necessary procurement
- CAISO, CPUC, and CEC planning to enhance the efficacy of Flex Alerts
Thank you.