Proposed Decision in R.20-11-003 Directing PG&E, SCE, and SDG&E to Take Actions to Prepare for Potential Extreme Weather in Summers 2022 and 2023

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On October 29, 2021, the assigned Administrative Law Judge issued a proposed decision (with Attachments 1 and 2) directing Pacific Gas & Electric Company (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E), collectively the investor-owned utilities (IOUs) to take multiple actions to prepare for potential extreme weather in summers 2022 and 2023.

Summary of Proposed Decision (PD)

The PD contains proposals to address the risk of electricity outages during extreme weather events similar to the west-wide heat waves of 2020 and 2021. The proposals would create new programs and modify existing programs to reduce energy demand and increase energy supply during critical hours of the day in summers 2022 and 2023.

The PD finds that a range of 2,000 to 3,000 megawatts (MW) of new supply- and demand-side resources would help address grid reliability concerns under the most extreme circumstances in 2022 and 2023. These additional resources, if achieved, would amount to an effective planning reserve margin of 20%–22.5% at system peak, and an effective planning reserve margin of 15%–17.5% at net peak, for 2022 and 2023.

In light of this finding, the PD directs the IOUs to take the following actions:

1. **Procure additional incremental resources from new or existing facilities** in excess of the otherwise applicable Resource Adequacy (RA) requirements (RA requirements already provide a 15% planning reserve margin), with the following key parameters:
   - IOUs are responsible for engaging in procurement in excess of existing planning standards. All CPUC jurisdictional entities receive reliability benefits, so they all bear the cost of new procurement.
   - Eligible resources must provide energy at net peak (4 PM – 9 PM) during the months of concern (June through October); examples of eligible resources include incremental energy storage, incremental capacity through efficiency upgrades at existing natural gas power plants, and firm energy imports.
   - Supply resources that are not fully integrated into the CAISO market under Resource Adequacy resource requirements can qualify toward these incremental procurement targets if they provide the grid energy during emergencies.
   - An IOU Central Procurement Entity, as previously established via the Resource Adequacy proceeding to undertake procurement in transmission constrained local areas subject to market power, may procure resources for other load serving entities in supply-constrained local areas to insure against procurement failures or delays.
   - IOUs are encouraged to bring supply resources online in advance of their required online date.

2. **Expand and modify the existing** Emergency Load Reduction Program **(ELRP) adopted in Phase 1 of this proceeding**, with the following key enhancements:

- Doubles the ELRP compensation rate for voluntary reductions in energy consumption achieved by customers during times of grid stress to $2 per kilowatt hour, or $2,000 per megawatt hour.
- Creates several new options, as well as enhances existing options, for participation in ELRP: directly enrolled residential customers, aggregators of non-residential customers, virtual power plants, and electric vehicle-to-grid managed charging and discharge to support the grid.
- Restricts the use of diesel backup generators located in disadvantaged communities until after other options have been exhausted (if still needed to address a critical grid need).

3. **Implement a new ELRP pilot option for directly enrolled residential customers**, allowing residential customers to receive payment for voluntarily reducing their electric usage in response to Flex Alerts during times of grid stress. IOUs are required to conduct focused outreach to customers in disadvantaged communities and customers enrolled in the CPUC's California Alternate Rates for Energy program.

4. **Create a new ELRP option for aggregators to manage electric vehicle-to-grid charging and discharging** to support the grid, allowing customers to earn $60 to $120 per year per kilowatt of energy demand reduction capacity.

5. **Modify existing IOU-administered demand response (DR) programs** and directs the IOUs to procure additional DR resources from third-party DR providers. DR programs allow customers to reduce their electricity usage when needed for grid reliability.

6. **Develop a new smart thermostat incentive program** that will provide $22.5 million in total incentives to install smart thermostats that assist customers in reducing air conditioning usage a few degrees during critical times—if the customers are enrolled in a DR program. Low-income customers that qualify for the CPUC's Energy Savings Assistance Program may receive fully subsidized smart thermostats and are not required to participate in a DR program to receive the subsidy.

7. **Create two dynamic rates pilot programs** to test the effectiveness of customer response to electricity rates that change rapidly during grid emergencies. One pilot will shift agricultural water pumping to off-peak times in response to price signals, whereas the other pilot will test how dynamic rates affect customer end-uses such as behind-the-meter batteries and electric vehicle charging.

8. **Continue and extend the Flex Alert media campaign** to focus on the new Residential ELRP pilot and continue existing activities into 2022 and 2023.

Background

- In August 2020, a majority of the western United States encountered a prolonged extreme heat event. As a result, the CAISO initiated rotating outages to prevent wide-spread service interruptions in two incidents; each incident included 500-1,000 MW of load disruption for about 2 hours. The final Root Cause Analysis of the event was released in January 2021 and is available at California ISO - 2021 Summer Readiness (caiso.com).
- In November 2020, the CPUC opened Rulemaking (R.) 20-11-003 to help ensure reliable electric service in California in the event of an extreme weather event in 2021.

- In February and March 2021, the CPUC issued its Phase 1 decisions in this proceeding (D.21-02-028 and D.21-03-056) to provide additional resources in summers 2021 and 2022 in an extreme weather event.
    - The CPUC ordered the IOUs to procure additional incremental resources of 1,000-1,500 MW, effectively increasing the planning reserve margins available to about 17.5%.
    - The CPUC ordered the IOUs to create a new Emergency Load Reduction Program pilot to pay as-available energy resources during grid emergencies; program rules ensure that the payments to customers are based on performance and additional to any existing demand response actions.
- In July 2021, Governor Newsom issued an Emergency Proclamation urging all state energy agencies to ensure there is adequate electricity to meet the needs of Californians in 2022.
- In August 2021, the CPUC opened a new phase of this proceeding to focus on summers 2022 and 2023.
- Despite extreme weather events in summer 2021, the state was able to avoid systemwide rolling outages like the ones experienced in August 2020, in part due to actions taken during Phase 1. However, the acceleration of climate change continues to create extreme heat events, droughts, and wildfires across the West.
- The CPUC has ordered 14,800 MW of new resources come online between 2021-2026 through the Integrated Resource Planning proceeding (R.20-05-003) procurement orders. IRP Procurement Track (ca.gov)

Next Steps

Parties may file comments on this PD before the CPUC votes on it. Comments are due November 10, 2021, and reply comments are due November 16, 2021. The first opportunity for the CPUC to vote on this PD is at the Voting Meeting on December 2, 2021.

Acronyms and Definitions

Acronym	Definition
CAISO	California Independent System Operator
CPUC	California Public Utilities Commission
DR	Remand Response
ELRP	Emergency Load Reduction Program
MW	megawatt
IOU	Investor-owned Utility
PD	Proposed Decision
RA	Resource Adequacy

More Information

- More information is available at: https://www.cpuc.ca.gov/summerreadiness/