



Department of Energy

Washington, DC 20585

Order No. 202-22-1

Pursuant to the authority vested in the Secretary of Energy by section 202(c) of the Federal Power Act (FPA), 16 U.S.C. § 824a(c), and section 301(b) of the Department of Energy Organization Act, 42 U.S.C. § 7151(b), and delegated to the Deputy Secretary of Energy by paragraph 1.12(A) of Delegation Order No. S1-DEL-S2-2022 (Mar. 14, 2022), and further delegated by the Deputy Secretary by email correspondence (Sept. 2, 2022), and for the reasons set forth below, I hereby determine that an emergency exists in California due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of this Order will meet the emergency and serve the public interest.

Emergency Situation

On September 1, 2022, the California Independent System Operator Corporation (CAISO), the Independent System Operator whose service territory includes most of California and a portion of Nevada, filed a *Request for Emergency Order Pursuant to Section 202(c) of the Federal Power Act* (Application) with the United States Department of Energy (Department) “to preserve the reliability of the bulk electric power system in California.”

California has experienced several periods of extreme heat, drought conditions, and threat of wildfires. Such conditions are expected to occur over the next several days and threaten the reliable operation of the bulk electric power system in California. Application at 2-3.

On August 31, 2022, California Governor Gavin Newsom issued a proclamation declaring a state of emergency regarding electricity from September 2 through September 7, 2022. In declaring a statutory emergency, the proclamation cited a number of factors and observations, including the following:

- A significant heat wave will bring temperatures “in excess of 100 degrees throughout the State and is forecast to bring record temperatures 10–20 degrees above normal throughout the State, exceeding 110 degrees in some areas”
- The extreme heat will put a significant demand and strain on California’s energy grid and is forecast to be a “West-wide event” meaning that energy demand will be high across the region and “California will have limited ability to import energy from [out of state]”
- The CAISO issued a Heat Bulletin forecasting high electric demand during the extreme heat event that will “stress the energy grid, with peak load for electricity projected to reach its highest level of the year, exceeding 48,000 megawatts on September 5, 2022”

- The CAISO is forecasting supply deficiencies of “over 3,000 megawatts during evening hours from September 4, 2022, through September 6, 2022” and advised that emergency interventions would allow energy customers to make contingency plans ahead of the Labor Day holiday weekend.

The proclamation authorizes several measures aimed at mitigating the emergency and avoiding jeopardizing public health or safety, including directing the California Air Resources Board (CARB) to “implement its State-funded Climate Heat Impact Response Program (CHIRP) to mitigate emissions from any operation pursuant to this Proclamation.” The proclamation also directs the California Energy Commission (CEC) to “provide information requested by [CARB] to assist with its implementation” of CHIRP.

The Application includes a statement that the CAISO prepared its request in consultation with both CEC and CARB. Application at 2. Furthermore, the CAISO states that both state entities have informed the CAISO they will support any reporting DOE may require under an emergency order. *Id.*

Description of Mitigation Measures

In its Application, the CAISO described actions it has taken in order to alleviate the generation shortfall, including: 1) utilizing its day-ahead market to ensure it has secured sufficient supply to meet its demand for the next operating day and its real-time market to increase incremental supply to meet changes in the day-ahead demand forecast; 2) directing generators to produce more megawatts than their interconnection capacity for specific hours and day(s) during the emergency event if reliability studies find the transmission system can support their increased output; 3) denying requests of generating facilities that notified the CAISO of their intent to mothball or retire and designating those facilities as Reliability Must-Run units to run as cost-of-service units under the terms of the CAISO tariff; and 4) working with the owner of Midway Sunset Cogeneration under its Reliability Must Run agreement to deploy emission controls at one of its units and make an additional 80 megawatts available to the CAISO system. *Id.* at 4-5. In addition, the Application explains that the California Department of Water Resources (CDWR) has “deployed [four] mobile, modular General Electric TM2500 aero-derivative gas turbine generators at existing generating facility sites.” *Id.* at 4.

California is also engaged in long-term efforts to mitigate the supply shortfall and address the reliability of the bulk electric power system in California in response to increasing climate change-induced heat waves and drought conditions. The California Public Utilities Commission (CPUC) has issued an order directing its jurisdictional load serving entities to procure 11,500 megawatts of new electricity resources to come online between the years 2023 and 2026. *Id.*; see also CPUC Decision No. 21-06-035, Decision Requiring Procurement To Address Mid-Term Reliability (2023-2026), June 30, 2021. Additionally, California enacted Assembly Bill 205 this year, which adopts various measures to enhance electric grid reliability, including the creation of a strategic reserve for use to meet electric demand in extreme events, such as heatwaves. Application at 4–5.

The Application describes emergency procedures the CAISO can use to meet insufficient supply in the day-ahead market, such as “restricting transmission and generator maintenance activities, calling for voluntary conservation, requesting additional supply bids to meet expected energy and reserve requirements, seeking emergency assistance from neighboring balancing authorities, and deploying emergency demand response.” *Id.* at 5. The CAISO plans to “direct generators to produce more MW than their interconnection capacity for specific hours and day(s) during the emergency event if reliability studies find the transmission system can support their increased output.” *Id.* However, the CAISO Application indicates “that these measures may be insufficient to avoid load curtailments in the coming days” and issuing an emergency Order will “provide another tool for the CAISO to help mitigate this risk.” *Id.*

Request for Order

The CAISO “requests that the Secretary issue the requested emergency order by Friday, September 2, 2022, or a[s] soon as possible thereafter, authorizing specific electric generating resources (Covered Resources) located within California to operate at their maximum generation output levels between 2:00 p.m. and 10:00 p.m., when directed to do so by the CAISO, notwithstanding air quality or other permit limitations.” *Id.* at 1. The Covered Resources that this Order pertains to are the three natural gas-fired electric generating facilities listed below and more fully described in Application Exhibit A – List of Covered Resources:

- The Alamitos Energy Center in Long Beach, California;
- The Huntington Beach Energy Project in Huntington Beach, California;
- The Walnut Creek Energy Park in the City of Industry, California;

The CAISO indicates that “the owners of the Covered Resources cannot make additional identified capacity available absent an order from the Secretary under FPA [section] 202(c).” *Id.* at 5. The CAISO noted that the electric generating units identified in its Application “have de-rated their facilities based on conditions set forth in their permits regarding nitrogen oxide emissions, heat output, and fuel throughput.” *Id.* Accordingly, the CAISO anticipates that, if the Covered Resources are dispatched in exceedance of their permit limits pursuant to the emergency order it has requested, there will be an increase in nitrogen oxide, ammonia, and carbon monoxide emissions that “may result in exceedance of National Ambient Air Quality Standards (NAAQS) under the Clean Air Act.” *Id.* The CAISO expects that, in the absence of an order under FPA section 202(c), these constraints will collectively preclude CAISO dispatch of approximately 28 megawatts of available generating capacity. *Id.* “Authorizing these facilities to operate, notwithstanding permit and other limitations, would help mitigate shortages of expected energy and reserve requirements.” *Id.*

ORDER

Given the emergency nature of the expected load stress and generation shortfall, the responsibility of the CAISO to ensure maximum reliability on its system, and the ability of the CAISO to identify and dispatch generation necessary to meet additional load if an order is issued, I have determined that additional dispatch of the Covered Resources is necessary to best meet the emergency and serve the public interest for purposes of FPA section 202(c). These factors, including as declared in the Governor’s August 31 emergency proclamation and as described in the Application, have led to my determination that an emergency exists in California due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of this Order will meet the emergency and serve the public interest. In line with the emergency proclamation’s anticipation of near-term energy shortages, this Order is limited to a 7-day period. Because the additional generation may result in a conflict with environmental standards and requirements, I am authorizing only the necessary additional generation, under the conditions and with reporting requirements as described below.

FPA section 202(c)(2) requires the Secretary of Energy to ensure that any order that may result in a conflict with a requirement of any environmental law be limited to the “hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable,” be consistent with any applicable environmental law and minimize any adverse environmental impacts. The CAISO anticipates that this Order may result in exceedance of NAAQS under the Clean Air Act and other conflicts with environmental law. Based on the CAISO Application, while all three Covered Resources are located in Southern California—two in Los Angeles County and one in Orange County—no two Covered Resources are located in the same community. This will limit the cumulative burden of the Order on any one community. *See Id.* at 6. To minimize adverse environmental impacts, this Order limits operation of dispatched units to the times and within the parameters determined by the CAISO for reliability purposes, and subject to the conditions set forth in this Order.

Based on my determination of an emergency set forth above, I hereby order:

- A. From September 2, 2022, to September 8, 2022, in the event that the CAISO determines that generation from the Covered Resources is necessary to preserve the reliability of the bulk electric power system in California, I direct the CAISO to dispatch such unit or units and to order their operation solely under the following conditions:
 - i. the issuance and continuation of an Energy Emergency Alert Level 2¹ condition or greater between the hours of 14:00 Pacific Daylight Time and 22:00 Pacific Daylight Time after exhausting all reasonably and practically available resources; or,

¹ For the purposes of this Order, “Energy Emergency Alert Level 2” has the meaning set forth in Section 3.6.3 of the California ISO System Emergency Operating Procedure, Procedure No. 4420, Version 14.0, Effective Date May 1, 2022 (CAISO Emergency Operating Procedure).

- ii. a transmission emergency² that requires operation of the Covered Resource to prevent or mitigate load curtailment during any operating hour.
- B. Consistent with good utility practice, the CAISO shall exhaust all reasonably and practically available resources, including demand response and identified behind-the-meter generation resources to the extent that such resources provide support to maintain grid reliability, prior to dispatching the Covered Resources.
- C. All operation of the Covered Resources must comply with applicable environmental requirements, including but not limited to monitoring, reporting, and recordkeeping requirements, to the maximum extent feasible while operating consistent with the emergency conditions. This Order does not provide relief from any obligation to purchase offsets or allowances for emissions that occur during the emergency condition or to use other geographic or temporal flexibilities available to generators. Covered Resources must comply with the requirements of the CARB MRR and California’s Cap-and-Trade regulation, to the extent applicable.
- D. The CAISO shall provide such additional information regarding the environmental impacts of this Order and its compliance with the conditions of this Order, in each case as requested by the Department from time to time. By October 10, 2022, the CAISO shall report source-specific data for all dates between September 2, 2022, and September 8, 2022, on which the Covered Resources were operated, including, for each unit, (1) the hours of operation, as well as the hours in which any permit limit was exceeded, and (2) a preliminary description of each permit term that was exceeded and the manner in which such exceedance occurred. The CAISO shall also submit a final report by November 14, 2022, with any revisions to the information reported on December 12, 2022. The environmental information submitted in the final report shall also include the following information:
- i. Emissions data in pounds per hour for each Covered Resource unit, for each hour of the operational scenario, for CO, NO_x, PM_{2.5}, PM₁₀, volatile organic compounds (VOC), and SO₂;
 - ii. Emissions data must include the actual emissions (lbs/hr), permitted operating/emission limits, and the actual incremental emissions above the permit limits, except that for emissions units not equipped with continuous emission monitoring systems, actual emissions shall be calculated using source test data;
 - iii. Stack parameters for each Covered Resource unit: stack height, exit diameter, exit gas temperature, and exit velocity (or volumetric flow

² For the purposes of this Order, “transmission emergency” has the meaning set forth in Section 3.5 of the CAISO Emergency Operating Procedure.

- rate). Temperature and velocity must be the values applicable to the operations above permit limits;
- iv. The actual hours that each Covered Resource unit operated in excess of permit limits or operated without otherwise-required permits;
 - v. Information provided to the CARB in response to the CARB's development and implementation of the plan to mitigate the effects of additional emissions authorized by the August 31, 2022 proclamation;
 - vi. Additional information requested by DOE as it performs any environmental review relating to the issuance of this Order; and
 - vii. Information provided by Covered Resources describing how these requirements were met by the Covered Resources while operating under the provisions of this Order.
- E. The CAISO shall inform all affected communities where all Covered Resources operate that the CAISO has been issued this Order, in a manner that ensures that as many members of the community as possible are aware of the Order, and explains clearly what the Order allows the CAISO to do. The CAISO shall describe the actions taken to comply with this paragraph in the reports delivered to the Department pursuant to paragraph D above.
- F. This Order shall not preclude the need for any Covered Resource to comply with applicable state, local, or Federal law or regulations following the expiration of this Order.
- G. The CAISO shall be responsible for the reasonable third-party costs of performing analysis of the environmental and environmental justice impacts of this Order, including any analysis conducted pursuant to the National Environmental Policy Act.
- H. This Order shall be effective upon its issuance, and shall expire at 23:59 Pacific Daylight Time on September 8, 2022, with the exceptions of paragraphs F and G and the reporting and analysis requirements in paragraphs D and E. Renewal or amendment of this Order, should it be needed, must be requested before this Order expires.

Issued in Washington, D.C. at 16:00 Eastern Time on this 2nd day of September, 2022.



Kathleen Hogan
Acting Under Secretary for
Infrastructure