

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System) Docket No. ER21-____-000
Operator Corporation)**

**PETITION FOR LIMITED TARIFF WAIVER OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION AND
REQUEST FOR SHORTENED COMMENT PERIOD AND EXPEDITED
COMMISSION APPROVAL**

The California Independent System Operator Corporation (“CAISO”) respectfully requests a limited waiver of Section 25.1 of its tariff so it can immediately interconnect two emergency generating units.¹ Interconnecting these units will help the CAISO address potential capacity shortfalls and maintain reliability. The CAISO proposes to sunset the interconnection rights after three years, and, until these resources obtain their necessary air permits, the CAISO would only dispatch them to prevent an imminent or threatened emergency. Based on the CAISO’s analyses, the generating units’ interconnection will not adversely affect any current interconnection customers, including those customers in the CAISO’s generator interconnection queue. The CAISO’s petition meets all four of the Commission’s waiver criteria, and it will aid the CAISO in maintaining reliability. As such, good cause exists for the Commission to grant the CAISO’s petition.

To ensure these generating units can help mitigate potential capacity shortfalls, outages, and contingencies the CAISO may face due to extreme weather, fires, and low

¹ The CAISO petitions for waiver pursuant to Rules 207(a)(5) and 212 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.207(a)(5), 385.212 (2021).

hydro levels, the State of California, through an emergency procurement undertaken by the California Department of Water Resources (“CDWR”), seeks to interconnect the generating units on September 15, 2021. As such, the CAISO respectfully requests the Commission provide for a shortened comment period of no more than five days and issue an order granting this petition as soon as possible thereafter. These actions will help the CAISO address the exigent circumstances it faces.

I. Background

A. Capacity Needs and Governor’s Emergency Proclamation

The CAISO needs additional generating capacity. The CAISO’s 2021 Summer Loads and Resources Assessment provides:

The ISO anticipates supply conditions in 2021 to be better than 2020, but continues to see potential challenges in meeting demand during extreme heat waves. Such scenarios that affect a substantial portion of the Western Interconnection and cause simultaneously high loads across the West would reduce the availability of imports into the ISO balancing authority area. Improvements to supply conditions in 2021 are largely driven by the addition of new resources coming online as early as this summer. However, while forecasted load levels remain virtually unchanged under normal conditions, a second year of significantly lower-than-normal hydro conditions and an increased possibility of extreme weather events indicate the ISO may still face challenges in meeting load this summer. Recent data from NOAA, for example, confirms that conditions in the West are getting hotter and drier.

Capacity shortfalls this summer may be mitigated by additional extraordinary measures accessed under extreme or emergency conditions to limit the risk of actual firm load shedding. Since September 2020, the ISO has been working to enhance its operational procedures to operate reliably this summer, including the ability to access these extraordinary measures. The ISO will continue to find and act on such opportunities as available and necessary, but is guardedly optimistic regarding its operations this summer given the measures already taken, including greater coordination with the State and regional entities. Conservation during extreme events will again be critical to avoid shedding load. The ISO and State entities have taken significant measures to inform

consumers in a timely manner through the Flex Alert campaign to conserve energy when requested to avoid outages.²

Consistent with this assessment, on July 30, 2021, California Governor Gavin Newsom issued an emergency proclamation authorizing various measures to mitigate the “significant demand and strain on California's energy grid.”³ These measures enabled the California Energy Commission (“CEC”) and CDWR to begin deploying a number of mobile, modular General Electric TM2500 aeroderivative gas turbine generators. Each unit has a generating capacity of 30 MW, and CDWR can install them in as few as 11 days at existing generation sites.⁴ The units can start in five minutes and ramp to full capacity within half an hour.⁵

CDWR contacted site owners and worked diligently with the CAISO and its participating transmission owners to find potential sites where these units could interconnect in time to help mitigate potential grid issues this summer. With hydro water levels decreasing each day,⁶ all parties worked rapidly to identify, study, and model the potential interconnections determined feasible for implementation in September 2021. Ultimately, CDWR, in consultation with the CAISO, identified two potential sites located within Pacific Gas and Electric Company (“PG&E”) and the Balancing Authority of Northern California (“BANC”) that were viable for this summer. CDWR approached the site owner, Calpine Corporation (“Calpine”), to discuss the potential short-term

² <http://www.caiso.com/Documents/2021-Summer-Loads-and-Resources-Assessment.pdf>.

³ <https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf>.

⁴ <https://www.ge.com/gas-power/products/gas-turbines/tm2500>.

⁵ *Id.*

⁶ <https://fox40.com/news/local-news/lake-orovilles-hydroelectric-powerplant-goes-offline/>;
<https://www.npr.org/2021/07/13/1015754901/hover-and-glenn-canyon-dams-are-low-on-water-threatening-power-production>.

interconnections of these emergency generating units. Calpine agreed that working expeditiously to interconnect these resources to help maintain reliability was paramount to any other concern. The CAISO, PG&E, and Calpine intend to amend their existing generator interconnection agreement (“GIA”) and market agreements to reflect these unique interconnections once the Commission has ruled on this petition.

B. Viable Sites

CDWR plans to install generating units at two sites in the CAISO balancing authority area (“BAA”) and one site in the BANC BAA.⁷ This petition pertains to the two interconnections in the CAISO BAA. CDWR plans to install two of the General Electric (“GE”) generating units at the former Greenleaf 1 energy center in Yuba City, California. The Greenleaf site is ideal because the cogeneration qualifying facilities there are currently mothballed, awaiting repowering or conversion to other technologies, yet still connected to the CAISO controlled grid. As such, CDWR and Calpine can use the existing available interconnection capacity of 49.2 MW to accommodate most of the temporary generating capacity. Calpine will submit a repowering request to the CAISO to account for the new generating units.⁸ Because the previous generating units were gas-fired and the new generating units will be gas-fired, there is no substantial change to electrical characteristics. However, the temporary generating units will comprise 60 MW of net-to-grid generating capacity, and the CAISO will not model or dispatch generating units above their interconnection capacity. To capture the full value of these

⁷ Because the third site is in BANC, outside of the CAISO BAA, it is not part of this petition. Generating units interconnecting there will do so pursuant to the relevant tariff.

⁸ Section 25.5.2 of the CAISO tariff.

generating units, the CAISO and PG&E would need to increase the interconnection service capacity by 10.8 MW.⁹ Based on the CAISO and PG&E's analyses, the grid and the Greenleaf site can accommodate the additional 10.8 MW without the need for network upgrades.¹⁰

II. Petition for Limited Waiver

Good cause exists for the Commission to grant a limited waiver of Section 25.1 of the CAISO tariff. Section 25.1 would require an interconnection request for the addition of 10.8 MW at Greenleaf. However, neither an independent study interconnection request nor a cluster study interconnection request could accommodate this interconnection in time to aid the CAISO during the late summer and early fall periods of high demand and low hydro levels.¹¹ Granting the CAISO's requested waiver would allow CDWR to interconnect these generating units in time to help mitigate potential capacity shortfalls, while still ensuring safety and reliability. As discussed below, the CAISO and PG&E have already analyzed this site to ensure the generating units can interconnect.

⁹ Safety and reliability are paramount. The CAISO ensures that its studies have not taken any shortcuts or otherwise relaxed technical standards.

¹⁰ Obviously minor modifications may be required to interconnect the new units, including telemetry and metering. Neither the CAISO nor PG&E expect any upgrades that would take time or incur substantial costs. California funds available from the Governor's Proclamation will cover the costs of interconnection facilities, which are expected to be *de minimis*. As described herein, the parties selected these sites because they could accommodate the new generating units. The increase in interconnection service capacity will receive Energy Only deliverability. The interconnection customer will not receive an increase its existing Net Qualifying Capacity. As such, the interconnection customer, online generators, and queued interconnection customers will maintain their *status quo* for deliverability and resource adequacy capacity.

¹¹ Likewise, the CAISO's fast track interconnection process limits increases to 5 MW. Interconnection customers cannot combine fast track interconnection requests to circumvent the 5 MW limit.

The Commission previously has granted requests or tariff waivers where: (1) the applicant acted in good faith; (2) the waiver was of limited scope; (3) the waiver addressed a concrete problem; and (4) the waiver did not have undesirable consequences, such as harming third parties.¹² This waiver petition meets all four conditions.

The CAISO has acted in good faith because these projects resulted from the Governor's proclamation, issued only weeks ago. The CAISO, PG&E, CDWR, the CEC, and Calpine have worked expeditiously to ensure these units can be interconnected safely and reliability in time to address potential capacity shortfalls this year.

The waiver is of limited scope because it will only apply to these generating units and only for three years. Interconnections generally have a lifetime of 30 years, and often extend indefinitely. As such, three years represents a very short period for an interconnection. Based on current system capacity, projected demand, the CAISO's interconnection queue, the number of generators under reliability must-run agreements, and the number of generators planning to retire imminently, the CAISO believes three years is the minimum period the CAISO may need to rely on these units and the increased interconnection capacity. If the interconnection customers seek to retain the increased interconnection capacity at these sites beyond three years, they must obtain it pursuant to the CAISO tariff.¹³ The forthcoming GIA amendments will memorialize this

¹² See, e.g., *Cal. Indep. Sys. Operator Corp.*, 173 FERC ¶ 61,185, at P 6 (2020); *Cal. Indep. Sys. Operator Corp.*, 158 FERC ¶ 61,072, at P 5 (2017); *N.Y. Indep. Sys. Operator, Inc.*, 146 FERC ¶ 61,061, at P 19 (2014); *PJM Interconnection, L.L.C.*, 146 FERC ¶ 61,041, at P 5 (2014); *ISO New England, Inc.*, 134 FERC ¶ 61,182, at P 8 (2011).

¹³ If they do not, the parties would amend the GIAs to reflect the return to the previous interconnection service capacity.

limitation. Moreover, the CAISO understands that, until generating unit owners complete necessary permitting requirements, these units will not operate or deliver energy without a directive from the Department of Energy under Federal Power Act Section 202(c).¹⁴ If it becomes clear that a directive from the Department of Energy is unobtainable, the CAISO will withdraw this petition or request that the Commission rescind any order granting this petition.

The waiver addresses a concrete problem in the form of the CAISO's capacity needs this year and in coming years. Although the CAISO is interconnecting new generating units and energy storage resources every month, the CAISO still faces potential capacity shortfalls due to generator retirements, historically low hydro levels, and increasing demand due to extreme weather. The CAISO also faces unexpected outages and contingencies due to forest fires, high winds, and high temperatures. Interconnecting these generating units on a temporary basis will help the CAISO avoid reliability issues until sufficient generating capacity has come online.

Finally, the waiver will not have undesirable consequences. The CAISO and PG&E have already performed the reliability studies required for these generating units, and can confirm that neither online generating facilities nor interconnection customers in queue are affected adversely by this waiver. Interconnection customers coming online before the waiver expires will not face any increased costs, delays, or decrease in service due to these interconnections. Studies for interconnection customers coming online after the waiver expires will not include the increases in interconnection capacity,

¹⁴ 16 U.S.C. § 824a(c).

thereby ensuring the waiver will not affect the interconnection customers in queue.¹⁵

Moreover, the CAISO is not allocating any deliverability capacity or otherwise increasing the net qualifying capacities of these generating facilities to account for the higher generating capacity. These measures ensure online generators and currently queued interconnection customers maintain their *status quo* in actual circumstances and potential opportunities.¹⁶

Likewise, these generating units can interconnect without the need for additional interconnection facilities or network upgrades that would present substantial costs to ratepayers.¹⁷ The parties selected this site precisely because it can already accommodate the generating units, avoiding any construction delays or costs.

Finally, granting this waiver does not result in any technology or developer preference. The CAISO only worked with CDWR and the CEC to identify potential sites that could interconnect the generating units presented to the CAISO. The CAISO did not have any influence on selecting the generating units themselves. Likewise, the CAISO will not play any role in their procurement contract or operation of the units beyond the CAISO's normal market administration and dispatch.

¹⁵ This measure ensures the waiver will not result in queue jumping.

¹⁶ The CAISO also notes that granting this petition will not constitute retroactive ratemaking. This petition does not address the failure of the CAISO or the interconnection customer to comply with an existing tariff provision. To the contrary, this petition addresses the lack of tariff provisions that could accommodate an emergency or temporary interconnection (or, as in this case, both). For example, had Calpine submitted an interconnection request in Cluster 14 for this interconnection, the tariff processes would not have been fast enough to study and operationalize the units in time to mitigate issues this year. Nor does the CAISO have *pro forma* GIA provisions that would sunset interconnection rights.

¹⁷ Standard metering, telemetry, and telecommunications networking will be required.

III. Request for Shortened Comment Period and Expedited Order

To ensure these generating units can help mitigate the potential capacity shortfalls, outages, and contingencies the CAISO may face imminently due to extreme weather, fires, and low hydro levels, CDWR plans to interconnect the generating units in mid-September. As such, the CAISO respectfully requests FERC establish a shortened comment period of no more than five days and issue an order granting this petition as soon as possible thereafter. These actions will help the CAISO address the exigent circumstances it now faces.

IV. Service

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, and all parties with scheduling coordinator agreements under the CAISO tariff. In addition, the CAISO has posted a copy of this filing on the CAISO website.

V. Conclusion

For the foregoing reasons, the CAISO respectfully requests that the Commission grant a waiver of Section 25.1 of the CAISO tariff.

Respectfully submitted,

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