

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Reliable Electric Service in California in the Event of an Extreme Weather Event in 2021.

Rulemaking 20-11-003 (Filed November 19, 2020)

THE PROTECT OUR COMMUNITIES FOUNDATION'S RESPONSES TO ALJ STEVEN'S DECEMBER 11, 2020 RULING REGARDING PROPOSALS AND QUESTIONS REGARDING EMERGENCY CAPACITY PROCUREMENT BY THE SUMMER OF 2021 IN RULEMAKING 20-11-003

Bill Powers, P.E. - Technical Advisor Protect Our Communities Foundation 4452 Park Boulevard, #209 San Diego, CA 92116 Tel: (619) 917-2941 Email: <u>bpowers@powersengineering.com</u>

Dated: December 18, 2020

THE PROTECT OUR COMMUNITIES FOUNDATION'S RESPONSES TO ALJ STEVEN'S DECEMBER 11, 2020 RULING REGARDING PROPOSALS AND QUESTIONS REGARDING EMERGENCY CAPACITY PROCUREMENT BY THE SUMMER OF 2021 IN RULEMAKING 20-11-003

The Protect Our Communities Foundation ("PCF")¹ provides this response, pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure, to the request for responses to the ALJ's December 11, 2020 emailed *Proposals and Questions Regarding Emergency Capacity Procurement by the Summer of 2021 in Rulemaking 20-11-003*. These comments focus on addressing Questions 1, 4, 5, 10, 11, and 12 of the December 11, 2020 Ruling. The central focus of the Commission should be on crafting measures to avoid further financial burdens on California's ratepayers caused by the activities of wholesale sellers and traders in the markets administered by the California Independent System Operator (CAISO). The focus should not be on fast-tracking new gas-fired procurement for the summer of 2021, especially without a factual record that supports any new procurement.

I. PCF DISPUTES THE PRESUMPTION THAT NEW PROCUREMENT IS NECESSARY TO ASSURE RELIABILITY IN THE SUMMER OF 2021

CAISO Questions 1-11 in the ALJ's December 11, 2020 Proposals and Questions

Regarding Emergency Capacity Procurement by the Summer of 2021 presupposed the need for new fast-track procurement to assure reliability in the summer of 2021. PCF disputes this presumption. PCF's answers to Questions 1-11 emphasize that no new procurement, beyond what the Commission has already ordered into the procurement pipeline, scheduled to be online by the summer of 2021, is necessary to assure grid reliability in the summer of 2021.

¹ In light of evolving awareness of the import of acronyms, The Protect Our Communities Foundation changed its acronym from POC to PCF earlier this year. The Protect Our Communities Foundation respectfully requests that the parties and the Commission refer to it by its name or by the acronym PCF.

The Commission identified three opening comments from among forty-five submitted by the parties, most prominently by the entity – CAISO – responsible for the August 2020 blackouts, as the justification for the proposal(s). The Commission could just have readily selected three other opening comments, by TURN, CalAdvocates, and PCF, as justification for not considering any new procurement, especially fast-track gas-fired bilateral contracts, for the summer of 2021.

In the immediate wake of the blackouts on August 14-15, 2020, and prior to any investigation, CAISO identified inadequate supply as the primary cause of the blackouts and dismissed improper market activity as a contributing factor.² PCF reiterates here its comment at the December 15, 2020 pre-hearing conference for R.20-11-003, and in its opening and reply comments on the OIR for R.20-11-003, that there was adequate supply to meet demand on August 14-15, 2020, and inadequate management of that supply by CAISO. The "*Proposal and Questions Regarding the Authorization of Expedited Procurement for Summer 2021*" accepts CAISO's initial and erroneous claim of a supply shortage at face value. There is no physical supply shortage that must be addressed with additional fast-track bilateral gas contracts for the summer of 2021. The Commission should instead be focus on identifying and rectifying CAISO supply management deficiencies prior to the summer of 2021.

Shaken by the August blackouts, California has already taken steps to roll back environmental protections and enter into expensive longer-term forward contracts. The events of August and the state's reaction recapitulate precisely this well-known pattern from the 2000-01

² Sacramento Bee, *California power prices have skyrocketed. Is this normal — or more Enron-style 'manipulation'*?, August 19, 2020: <u>https://www.sacbee.com/news/california/article245048140.html</u>. "But top ISO officials have said they've seen no evidence of anything improper. They're convinced the heat wave is largely driving conditions on the grid . . . Berberich said the commission has failed to implement a strict "resource adequacy" regulation that would force the utilities to procure a greater share of their power in advance."

Energy Crisis.³ In preparing for summer 2021, the Commission and California should take every action within their power to avoid being herded into bad contracts once again.

The August 2020 Blackouts were accompanied by extremely profitable price gouging by sellers throughout the West. In proceedings at FERC initiated in October 2020, immediately after the publication of the October 6, 2020 Preliminary Root Cause Analysis, a large number of sellers have disclosed - and attempted to justify - prices during and after the blackout period that exceeded the \$1000/MWh soft cap in the Western Interconnect.⁴ All three large California utilities have intervened at FERC to request unwinding of these transactions and refunds.⁵ FERC has not yet acted.

The Department of Market Monitor at the CAISO (DMM) has intervened at FERC and requested that FERC provide guidance going forward on the use of non-generator costs to justify high bids (bilateral contract prices and published indices).⁶ FERC has not yet acted. Notably, neither the CAISO nor the DMM have addressed price gouging and the possibility of market manipulation for purposes of revenue and profit maximization in any of the preliminary reports or analyses to date. The Commission should address the pricing issues arising from the CAISO's

³ See generally, <u>Morgan Stanley Capital Group Inc. v. PUD Number 1 of Snohomish County</u>, 554 US 527 (2008); Snohomish v. FERC, 471 F.3d 1053 (9th Cir. 2006) and cases cited at 471 F.3d at 1067-68.

⁴ These dockets include: ConocoPhillips, Docket ER21-40; Tenaska Power Services, ER21-42; Exelon, ER21-43; Mercuria, ER21-46; Tucson Electric Power (Fortis), ER21-47; UNS Electric, Inc. (Fortis), ER21-48; BP Energy, ER21-51-001; Public Service Company of New Mexico, ER21-52; Mesquite Power (IIF), ER21-55; El Paso Electric (IIF), ER21-61-001; Guzman Energy, ER21-56; Shell Energy North America, ER21-57; TransAlta Energy Marketing , ER21-58; Brookfield Renewable Trading and Marketing, ER21-59; PacifiCorp, ER21-60; Uniper Global Commodities North America, ER21-62; Macquarie Energy, ER21-64; Tri-State Generation and Transmission Association, ER21-65; EDF, ER21-135.

⁵ Comments of SCE, FERC Docket No. ER21-40-000, October 28, 2020; Comments of PG&E, filed October 28, 2020; Motion to Intervene filed Out-of-Time by SDG&E, field November 2, 2020.

⁶ Comments of the CAISO DMM, FERC Docket No. ER21-40-000, October 28, 2020.

conduct of its markets and should examine the utilities' filings and evidence about price gouging before it potentially compounds the problem by ordering additional unneeded procurement.

PCF details how, with proper management by CAISO of available supply, and new supply additions scheduled to be online by the summer of 2021, CAISO will have up to 8,400 MW of additional supply in the summer of 2021 beyond what it had available on the afternoon of August 14, 2020. The composition of this 8,400 MW of additional supply is described below.

II. QUESTION 12, ADDITIONAL CONSIDERATIONS – CAISO HAS UP TO 8,400 MW OF ADDITIONAL SUPPLY AVAILABLE IN THE SUMMER OF 2021 WITHOUT NEW PROCUREMENT

A. CAISO's Curtailment of Exports Should Add At Least 3,500 MW of Supply

Ongoing investigation, summarized in the October 6, 2020 Preliminary Root Cause Analysis (PRCA), October 9, 2020 CAISO August Heatwave Update, and the November 24, 2020 DMM Report on System and Market Conditions, Issues and Performance: August and September 2020, does not support the initial CAISO conjecture on the cause of the blackouts. The PRCA indicates that a CAISO software error enabled at least 3,500 MW of power to be exported from CAISO to neighboring states as blackouts were called by CAISO in California.⁷ The DMM, the entity within CAISO whose role is to assure the market functions properly, claims to be unaware that CAISO would allow exports to continue under potentially tight CAISO supply conditions.⁸ However, in its FERC Comments, the DMM describes plausible scenarios

⁷ PCRA, Figure B.25: Total Exports by Category, p. 100.

⁸ CAISO DMM, *Report on system and market conditions, issues and performance: August and September 2020*, November 24, 2020, p. 71. "Prior to the August heat wave, the CAISO tariff and business practice manuals described day-ahead market exports not supported by specific generation being clearly prioritized below CAISO load in real-time.54 Therefore, it was DMM's understanding that CAISO already had such a carefully defined process in place. Now, it is DMM's understanding that CAISO may not have such a procedure and that its policy may not be aligned with export curtailment policies of other western balancing areas."

for "exports" chasing high prices throughout the West, including re-import into California through devices such as megawatt laundering and wash trades.⁹ Was it a software error, or a "market enhancement" intended to be exploited? These revelations do not inspire confidence that CAISO possesses or uses adequate internal market controls to manage exports or guard against price gouging.

Several parties to this proceeding, including PG&E, TURN, UCAN, and CEJA et al, have attributed the continued exporting of large amounts of power out-of-state as the primary cause of August 14-15, 2020 rolling blackouts.¹⁰ The DMM concurs and its December 18, 2020 presentation specifically finds that "Exports increased demand above levels that could be supported by physical generation."¹¹ The Commission should support the DMM's recommendation that "Further changes and clarifications in the rules and processes for limiting and curtailing exports should be discussed and pursued."¹²

The Commission (and the California Attorney General) should intervene at FERC to support the utilities' demands for refunds, to support the DMM's requests for the clear guidance sought by the DMM that prohibits self-referential cost justification for high bids, and a reduction of the caps from \$1,000/MWh to \$500/MWh, based on the SCE formula.¹³ The Commission

⁹ DMM, FERC Docket No. ER21-40-000, Comments of the Department of Market Monitoring of the California Independent System Operator Corporation, October 28, 2020, pp. 5-6, pp. 8-9.

¹⁰ PG&E Reply Comments, pp. 10-11; CEJA et al Reply Comments, p. 3; TURN Opening Comments, pp. 4-5; UCAN Opening Comments, pp. 1-2.

¹¹ CAISO DMM, *Report on System and Market Conditions, Issues and Performance: August and September 2020*, PowerPoint, December 18, 2020, p. 16. <u>http://www.caiso.com/Documents/Presentation-Report-MarketConditions-Issues-Performance-August-September2020-Dec18-2020.pdf</u>

¹² Ibid. p. 21.

¹³ SCE Comments to FERC, Docket No. ER21-40-000, October 28, 2020, footnote 14, p. 5. "During the August events, natural gas prices were in the range of \$13.50/mmBtu, GHG prices were less than \$18/ton,

should also direct the CAISO to develop clear scheduling and other market protocols for prioritizing retail service within California. PCF recommends that this proceeding incorporate an examination of the protocols needed to prioritize the needs of California customers and the adequacy of retail service in California, as Section 345.5(b)(5) requires.¹⁴

In the wake of the blackouts, the curtailment by CAISO of exports during peak hours enabled CAISO to meet without load shedding a significantly higher peak demand level on September 6, 2020 than the demand it experienced on August 14-15, 2020.

B. Properly Maintaining OTC Units Adds At Least 1,000 MW of Supply

CAISO claims no manipulation of supply sources contributed to the blackouts because, based on its (anecdotal) polling of generators, the generator outages that occurred were legitimate.¹⁵ However, over 1,400 MW of SoCal OTC capacity, nearly 40 percent of total SoCal OTC capacity, was unavailable when the 1,000 MW rolling blackout was initiated by CAISO on August 14th.¹⁶ In contrast, all of the SoCal OTC capacity was available to meet the substantially higher peak demand on September 6, 2020, increasing OTC supply by over 1,000 MW.

and data from Hitachi Powergrids Velocity Suite indicate no generation within the CAISO has an incremental heat rate above 30,000 Btu/kWh. Assuming a conversion factor of 0.0531148mtCO2e/mmBtu, then, conservatively, no generation within the CAISO had a marginal cost that exceeded \$440/MWh. (30 mmBtu/*13.5/mmBtu + 30*0.0531148mtCO2e/mmBtu*\$18/ton = \$433.68/MWh)."

¹⁴ Public Utility Code 345.5(b)(5). "Independent System Operator shall manage the transmission grid and related energy markets in a manner that is consistent with all of the following . . . Conducting internal operations in a manner that minimizes cost impact on ratepayers to the extent practicable and consistent with the provisions of this chapter."

¹⁵ CAISO DMM, *Report on System and Market Conditions, Issues and Performance: August and September 2020*, November 24, 2020, p. 22. "DMM has reviewed major outages which occurred on August 14 and 15. Based on data available to DMM *at this time*, there is no indication that on these days any outages were falsely declared at strategic times in order to allow generation owners to profit from higher prices."

¹⁶ PCF Reply Comments, p. 5.

California Public Utilities Code 761.3 requires generators to report the reasons for any unit curtailments.¹⁷ Yet CAISO has declined to provide the reasons for the outages of the SoCal OTC units that were unavailable on August 14-15, 2020.¹⁸ The Commission should reactivate its reporting and enforcement mechanisms and both demand and then publish monthly CAISO "after action" outage reports for all California-based generation.

The primary purpose of these OTC units is to provide additional supply during peak demand periods. A critical fact that the Commission must examine and understand involves why those plants could not perform on August 14-15 and why they could perform on September 6th. A 40% unavailability rate at the hour of critical need is clearly unacceptable. The efficacy of existing monetary penalties that are imposed on OTC units that cannot respond to dispatch orders must be reviewed and modified as necessary to ensure operators maintain these units in a highly reliable state. For these slow ramp-rate units, the Commission should develop enforceable procedures for ramping-up in anticipation of heat events for any of these OTC units to be counted for RA or any other procurement purpose or payment.

¹⁷ PUC § 761.3(e). "(The generator) shall provide a monthly report to the Independent System Operator that identifies any periods during the preceding month when the unit was unavailable to produce electricity or was available only at reduced capacity. The report shall identify the reasons for any such unscheduled unavailability or reduced capacity. The Independent System Operator shall immediately transmit the information to the Oversight Board and the commission."

¹⁸ R.19-11-009, CAISO, Response of the California Independent System Operator Corporation to Data Request Number PCF-CAISO-2020RA-02 by Protect Our Communities Foundation.

C. New Supply – Already in Development – Adds 2,400 MW by Summer 2021

There is no dispute that 2,100 MW of storage and hybrid storage resources and approximately 300 MW solar and wind resources, already under development by LSEs, will be online by the summer of 2021.¹⁹

The PRCA also indicates that the most likely focus of any new supply for the summer of 2021 will involve "demand side" resources such as demand response.²⁰ As noted in PCF's opening comments on the R.20-11-003 OIR, the Commission should reverse the attrition and loss of capacity in existing utility demand response programs that has occurred over the last eight years.²¹ Reversing that attrition would add nearly 1,000 MW of demand response available to meet peak demand.

D. Shedding Load at 3% Operating Reserve Margin Adds 1,500 MW of Supply

CAISO insists it must maintain 3,000 MW of reserves and initiate controlled load shedding if it drops below that reserve level.²² 3,000 MW of reserves is approximately 6% at a peak demand of 45,000 MW, the approximate peak loads on August 14th and 15th. The insistence on maintaining at least a 6% operating reserve margin contradicts CAISO's stated operating

¹⁹ PRCA, p. 64.

²⁰ Ibid, p. 65.

²¹ PCF Opening Comments, p. 6.

²² GreenTech Media, *California's Shift from Natural Gas to Solar Is Playing a Role in Rolling Blackouts*, August 17, 2020, p. 4. "For those who say we can rely on our reserves, you are wrong," Berberich said in response to criticism that CAISO called its emergencies while it still had reserve generation capacity available. CAISO must retain its roughly 3,000 megawatts of reserve capacity to prevent the possibility of an even more widespread grid collapse, which could occur if a power plant were to drop offline or a key transmission line were to be forced out of service, he said.

practice, that it will initiate controlled load shedding when operating reserves reach 3%.²³ The capacity difference between a 6 percent operating reserve margin and 3 percent operating reserve margin, at a demand of 45,000 MW, totals 1,500 MW, an amount of resources that would have clearly covered the 1,000 MW of rolling blackouts the CAISO called on August 14th and the 470 MW of rolling blackouts the CAISO called on August 15th.

E. 8,400 MW of Additional Supply Is Already Available to CAISO for Summer 2021

Curtailing exports (3,500 MW), accounting for new supply already in development for summer 2021 (2,400 MW), assuring all OTC units are available when needed (1,000 MW), and following established NERC and CAISO protocol on initiating controlled load shedding at a 3% operating reserve margin (1,500 MW) would collectively add 8,400 MW of supply to the supply-demand balanced faced by CAISO on the afternoon of August 14th. This 8,400 MW of additional supply can be obtained at no cost to ratepayers.

III. Blackouts Are Caused by Inadequate CAISO Grid Management, Not Supply Shortages

Inadequate CAISO grid management in SDG&E service territory has led to three major

blackouts in the last decade. These blackouts are summarized in Table 1.

Year	Impact	Cause
2010 April	250,000 customers lose power in San Diego	Improper action by CAISO operators, ordering SDG&E to shed 290 MW. Attributed by FERC to inadequate training and lack of documented operating procedure. ²⁴

 Table 1. Major blackouts in SDG&E service territory, 2010-2020

²³ PCF Opening Comments, p. 4.

²⁴ FERC, In re California Independent System Operator Corporation, Docket No. IN13-4-000, Order Approving Stipulation and Consent Agreement, December 14, 2012, p. 2. "The investigation examined possible violations of the NERC Reliability Standards by CAISO surrounding a Disturbance in the San

2011 Sept	Regional blackout: SDG&E, Imperial Irrigation District, Baja California	Insufficient local generation online on highest demand day of year. Largest OTC plant (1,000 MW) and combined cycle plant (600 MW) in San Diego area not producing power when major transmission line shut down, ²⁵ led to trip of San Onofre Nuclear Generating Station and regional blackout.
2020 August	Rolling blackouts at modest summer loads	CAISO orders blackout in SDG&E territory with demand less than 3,800 MW (all-time SDG&E peak = $4,890$ MW) ²⁶

Inadequate management of available supply has been the cause of these blackouts, not lack of supply. The focus of Commission efforts to minimize the potential for a repeat of the blackouts of 2020 must be on CAISO grid management practices, and not on simply adding more supply while largely ignoring the management/market issues.

IV. CONCLUSION

The central focus of the Commission should be on measures to avoid the further financial

burdens on California ratepayers caused by the activities of wholesale sellers and traders in

CAISO markets. The focus should not be on new gas-fired procurement for the summer of 2021.

Diego area of the state of California on March 31-April 1, 2010 (the Disturbance). CAISO admitted to the violations set forth below and agreed to pay a civil penalty of \$200,000 to the United States Treasury."

²⁵ NERC/FERC, *Arizona-Southern California Outages on September 8, 2011 – Causes and Recommendations*, April 27, 2012, p. 25, p. 33., and p. 50. "CAISO, the TOP for SDG&E and SCE, did not have any alarms specifically tied to the operation of the SONGS separation scheme either. CAISO only has alarms for when Path 44 exceeds its Path rating, but had no ability to monitor the SONGS separation scheme, set at 3,100 MW (8,000 amps). After the loss of H-NG, which caused Path 44 to exceed its Path rating, CAISO operators were primarily concerned with returning flows on Path 44 to below the Path rating of 2,500 MW, but believed they had 30 minutes to do so. Unlike Path ratings, the separation scheme would not allow CAISO operators 30 minutes to reduce flows on Path 44. CAISO did attempt to dispatch additional generation within SDG&E to reduce flows on Path 44. The other method to reduce flows would have been to manually shed load in SDG&E in time to prevent operation of the SONGS separation scheme. SDG&E estimates that it could have shed approximately 240 MW in between two and two-and-a-half minutes. However, SDG&E was never instructed to shed load and was unaware of the need to shed load."

²⁶ PCF Reply Comments, p. 4.

Respectfully submitted,

/s/ Bill Powers, P.E

Bill Powers, P.E. - Technical Advisor Protect Our Communities Foundation 4452 Park Boulevard, #209 San Diego, CA 92116 Tel: (619) 917-2941 Email: <u>bpowers@powersengineering.com</u>

Dated: December 18, 2020