BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes.

Rulemaking 20-05-003 (Filed May 7, 2020)

COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ON EMAIL RULING INVITING COMMENTS ON NATURAL GAS ISSUES

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I. Introduction

The California Independent System Operator Corporation (CAISO) submits comments pursuant to Administrative Law Judge Fitch's October 13, 2021 *Email Ruling Inviting Comments on Natural Gas Issues*. The CAISO provides comments on the Commission's staff paper Considering Gas Capacity Upgrades to Address Reliability Risk in Integrated Resource Planning (Staff Paper).

II. Discussion

The CAISO urges the Commission to take action as soon as possible to address the risk of significant natural gas-fired resource retirement that could undermine the Commission's resource planning. This includes taking action to ensure natural-gas facilities are re-contracted, repowered, refurbished, or replaced in an orderly manner so that the CAISO does not have to rely on its backstop authority. The Commission should take these actions because the 38 million metric ton core portfolio (38 MMT Core Portfolio) provides only a small capacity margin in 2026 above the level necessary to maintain acceptable loss of load expectations. This means the system will not be able to absorb a significant increase in resource retirements. The Commission should not rely on the CAISO's backstop authority to prevent every retirement scenario. The CAISO recommends the Commission fully consider how best to optimize the role of the existing natural gas-fired resource fleet to meet future state policy goals.

A. The Commission Should Plan to Maintain Reliability in the Event of Higher Natural Gas Resource Retirements.

The CAISO is concerned the Commission's planning analysis continues to assume the vast majority of natural gas-fired resources will remain online through both the mid- and long-term assessment periods without establishing a framework for gas retention or retirement. With this assumption, the RESOLVE portfolios cannot accurately account for generation needed to repower or replace existing resources. Similarly, the CAISO's transmission planning process cannot fully address reliability and transmission needs without additional information regarding future generation retirements.

The 38 MMT Core Portfolio only assumes the planned retirement of once-through cooling (OTC) resources and approximately 950 MW of combined heat and power (CHP) and peaker nameplate capacity, *i.e.*, those resources 40 years or older, between now and December 31, 2026.¹² The Administrative Law Judge's (ALJ) ruling on the Preferred System Plan admits that "[w]ith the exception of planned retirements, the gas fleet has remained unchanged in IRP modeling, which is likely an unrealistic assumption in the absence of some amount of procurement for re-contracting, repowering, and refurbishment."³ The Staff Paper cautions that "even more units may seek retirement due to economics, age, ongoing maintenance or capital expenses, or – for CHP units – the loss of a thermal host and/or expiring long-term QF [qualifying facility] contract."⁴ The CAISO agrees that natural gas-fired generation capacity factors are expected to fall, potentially putting financial risk on the remaining fleet and further increasing pressure on the ability to maintain the resource. The Staff Paper further notes that "in the near- and mid-term, analysis shows that nearly all of the gas fleet is retained to meet system reliability needs. Future analysis may need to further consider and quantify the risk of early retirement to better inform decision-making regarding system reliability."⁵

¹ California Public Utilities Commission (CPUC), Integrated Resource Planning Proposed Preferred System Plan Analysis Workshop, p. 133. The analysis considers the Mid-Term Reliability Decision with aligned assumptions, including thermal retirements.

² CPUC, Decision Requiring Procurement to Address Mid-Term Reliability (2023-2026), D. 21-06-035, June 24, 2021, Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes, R.20-05-003.

³ CPUC, Administrative Law Judge's Ruling Seeking Comments on Proposed Preferred System Plan, R.20-05-003, August 17, 2021, p. 38.

⁴ CPUC, Considering Gas Capacity Upgrades to Address Reliability Risk in Integrated Resource Planning Staff Paper, October 2021, p. 15. (Staff Paper)

⁵ Staff Paper, p. 16.

The CAISO agrees with the risks identified in the ALJ Ruling and the Staff Paper. Compared with the 950 MW of modeled CHP and peaker retirements through 2026, the CAISO is already preventing over 400 MW of natural gas-fired resources from retiring through exercise of its backstop procurement authority. This is not sustainable and reliance on backstop cannot be consider an acceptable "plan" for retaining needed resources. The CAISO urges the Commission to act as soon as possible to facilitate re-contracting with, or replacement of, natural gas-fired resources in an orderly manner before procurement falls to the CAISO's backstop authority. The Commission should take these actions because there is only a small capacity margin in 2026 to absorb a significant increase in retirements, and the CAISO's backstop authority cannot prevent retirement in every situation.

As noted in opening comments on the preferred system plan ruling,⁶ the CAISO's stochastic analysis found only a small 500 MW effective capacity margin above the level necessary to maintain a 0.1 loss of load expectation (LOLE) in 2026.⁷ That analysis assumed all existing resources in the baseline—less the OTC units and 950 MW of assumed retirements—remain operational, and new resources come online in the expected timeframe. As the Staff Paper pointed out, if all of the natural gas-fired fleet is needed, there is no margin for any additional retirement. Currently there are approximately 2,300 MW of net qualifying capacity of natural gas-fired resources that are 30 years old or older.⁸ Based on age alone, these resources are at heightened risk of retirement in the coming years.

Furthermore, the Commission should not rely on the CAISO's reliability must run (RMR) backstop process to retain all existing natural gas capacity. As noted in previous comments, the RMR designation should be a last resort mechanism to retain resources at risk of retirement that fail to secure a resource adequacy contract.⁹ Since 2020, the CAISO has increasingly used its RMR designation process to retain capacity to ensure system or local reliability, while load serving entities simultaneously failed to fully meet aggregate resource adequacy requirements. As noted above, the CAISO has designated over 400 MW of capacity as RMR resources.¹⁰

⁶ CAISO, Opening Comments on the Proposed Preferred System Plan, September 27, 2021. (CAISO Opening Comments)

⁷ *Id.*, pp. 5-6.

⁸ Excludes OTC units.

⁹ CAISO Opening Comments, p. 3.

¹⁰ *Id.*, p. 8.

Despite the recent reliance on the RMR process to secure otherwise retiring resources necessary to remain reliability, the CAISO emphasizes that this process has technical and contractual limitations that make it unsuitable as a primary option to secure needed resources. For example, RMR designations cannot prevent older generating units from experiencing major technical or mechanical failure that could prevent a return to service. Also, RMR is not an option if the unit does not have a participating generator agreement with the CAISO. Moreover, relying on RMR is undesirable for economic and policy reasons because units at risk of retirement tend to be older and less efficient, potentially requiring significant capital investments to keep them running.

B. The Commission Should Ensure Alignment with State Policy Goals.

It is unclear how retaining the vast majority of the natural gas-fired fleet and potentially relying on CAISO's RMR authority comports with state policy goals. If the Commission does not assess and develop natural gas-fired resource retirement scenarios,¹¹ the CAISO transmission planning process cannot adequately and effectively consider transmission alternatives to serve the future generation fleet.

To ensure alignment with state policy goals, the CAISO encourages the Commission to work with the California Energy Commission (CEC) and the California Air Resources Board, both of which have existing processes in place to consider appropriate actions to meet the requirements of Senate Bill (SB) 100. The result of the collaborative SB 100 processes can then inform IRP and other important Commission proceedings, *e.g.*, the investigation into the continued use of the Aliso Canyon gas storage facility¹² and the long-term safe and reliability use of the gas system in California.¹³

¹¹ Parties, such as Hydrostor, have also advocated for the Commission to plan for a future where there is thermal generation retirement. *See*: Hydrostor, Reply Comments on the Proposed Preferred System Plan, p. 4.

¹² Order Instituting Investigation pursuant to Senate Bill 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility located in the County of Los Angeles while still maintaining energy and electric reliability for the region, I. 17-02-002.

¹³ Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and perform Long-Term Gas System Planning, R. 20-01-007.

III. Conclusion

The CAISO appreciates the opportunity to provide comments.

Respectfully submitted,

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