



California Public Utilities Commission



Aliso Canyon Proceeding I.17-02-002: Summary of Phase 3 Report

The California Public Utilities Commission (CPUC) opened the Aliso Canyon proceeding, Investigation (I.) 17-02-002, as directed by Senate Bill 380 (Pavley, 2016), on February 9, 2017. The purpose of this proceeding is to determine the feasibility of minimizing or eliminating the use of the Southern California Gas Company's Aliso Canyon Natural Gas Storage Facility (Aliso Canyon) while maintaining gas and electric reliability at just and reasonable rates. On November 18, 2019, Governor Gavin Newsom wrote a letter requesting that the CPUC "engage an independent third-party expert to identify viable alternatives to the facility and scenarios that can inform a shorter path to closure." The CPUC engaged FTI Consulting, Inc. (FTI) to assess infrastructure investment options to retire Aliso Canyon by 2027 or 2035 without reducing gas and electric reliability and the costs and benefits of those investments. FTI has completed this analysis and produced the *Aliso Canyon I.17-02-002 Phase 3 Report* (Phase 3 Report).

The Phase 3 Report concludes that any of the combinations of gas infrastructure, building electrification, energy efficiency, renewable energy and storage, and electricity transmission that it assessed could successfully fill the energy shortfall left by closing Aliso Canyon by 2027 or 2035. FTI identified this shortfall as 395 million cubic feet per day (MMcfd) in 2027 (323 MMcfd in 2035), representing about 7 to 9 percent of demand on a peak day for gas usage.¹ FTI then defined portfolios which could fill that demand and modeled their energy market impacts with costs recovered over 20 years. This cost-benefit analysis concluded that most of the portfolios would produce combined gas and electric system benefits, including greenhouse gas (GHG) reduction benefits, greater than their costs. Annualized costs of these portfolios range from approximately \$60 million to \$650 million, while annualized benefits range from zero to \$900 million. All portfolios except gas infrastructure and one of the electric transmission portfolios (4b) would entail net costs for electric ratepayers and net benefits for gas ratepayers due to investment in electricity-based approaches and the resulting reductions in gas prices.

The Phase 3 Report reflects a system-level analysis under conditions expected once every 10 years. This study does not examine local reliability or siting considerations or events where multiple systems fail. The Phase 3 Report also does not estimate customer bill impacts or how costs and benefits would be distributed among different types of ratepayers. The Phase 3 Report compares approaches to replace

¹ For a discussion of the shortfall, see "2027 and 2035 Shortfall Memo (revised)" at <https://www.cpuc.ca.gov/regulatory-services/safety/pipeline-safety/aliso-canyon-well-failure/aliso-canyon-well-failure-order-instituting-investigation>.



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Aliso Canyon and does not include community health impacts, worker impacts, or costs and benefits related to potential shutdown activities at the Aliso Canyon facility itself.

2027 Portfolios

For portfolios implemented by 2027, all portfolios modeled except new gas infrastructure resulted in net benefits and net GHG reductions. In addition to gas infrastructure (portfolios 1a and 1b), these portfolios include: building electrification at the level envisioned in the AB 3232 report's "moderate electrification" scenario² plus energy efficiency and commercial and industrial (C&I) gas demand response (portfolio 2); increased renewable energy procurement (portfolio 3); and three combinations of portfolios 2 and 3 (portfolios 5a, 5b and 5c). These combination portfolios envision substantial building electrification and electric energy efficiency in tandem with a new demand response program for noncore gas customers. Portfolio 5a has the lowest costs except for the gas infrastructure portfolio and produces the highest net benefits of all 2027 portfolios. Portfolios completed by 2027 showed higher GHG benefits than 2035 portfolios due to anticipated increases in renewable energy generation and decreases in electricity and gas demand.

2035 Portfolios

For 2035, some portfolios produced net benefits while others had net costs. In portfolio 2, building electrification was modeled at a much higher level than in 2027, consistent with scenarios from the CEC's AB 3232 report, and therefore the portfolio did not need gas demand response to fill the shortfall. New renewable energy generation (portfolio 3) showed the highest net benefits of any portfolio and the highest GHG reductions of the 2035 portfolios. New electricity transmission (portfolios 4a and 4b) showed net benefits, although it includes significant uncertainty, and the use of out-of-state electricity could result in net GHG increases. Portfolios 5d, 5e and 5f combined various levels of building electrification achievement with new electric transmission.

Next Steps

The CPUC will consider this report in conjunction with other information sources in this proceeding before issuing a proposed decision, which is expected by the fourth quarter of 2022. On December 3, 2021, the CPUC held a status conference regarding schedule and next steps, including the potential for additional modeling by the California Independent System Operator on local capacity requirements in the

² California Energy Commission, "California Building Decarbonization Assessment," <https://www.energy.ca.gov/publications/2021/california-building-decarbonization-assessment>, August 2021.



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Los Angeles basin. Utilities have also filed cost information related to these portfolios. Parties are requested to comment on the Phase 3 Report by February 16.

The CPUC's decision in this proceeding will determine whether Aliso Canyon should be permanently closed. If so, the CPUC will need to address what portfolio of resources will be ordered to replace Aliso Canyon, how to procure the necessary resources or strategies, what the closure process and timeline will look like, and how to coordinate among the CAISO and relevant stakeholders and with related proceedings.

The Phase 3 Report and supporting documentation are available on the proceeding's webpage, <https://www.cpuc.ca.gov/regulatory-services/safety/pipeline-safety/aliso-canyon-well-failure/aliso-canyon-well-failure-order-instituting-investigation>.