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PROPOSED DECISION

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Ratesetting

12/19/2024 Item #73

Decision **PROPOSED DECISION OF ALJ ZHANG** (Mailed 11/13/2024)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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.

Investigation 17-02-002

DECISION ADOPTING BIENNIAL ASSESSMENT PROCESS

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Attachment A – Biennial Assessment Report Inputs and Methods

DECISION ADOPTING BIENNIAL ASSESSMENT PROCESS

Summary

In this proceeding, the California Public Utilities Commission (Commission) has evaluated the feasibility of reducing or eliminating reliance on the Aliso Canyon Natural Gas Storage Facility (Aliso Canyon) while maintaining natural gas and electric reliability for the region and preserving the benefits to ratepayers provided by the facility. While the Commission finds that Aliso Canyon is currently a necessary part of California's energy infrastructure, the Commission leaves Aliso Canyon inventory at twenty percent below pre-2015 levels and sets a concrete path to consider reducing and eliminating reliance on Aliso Canyon.

This decision finds that Aliso Canyon is necessary for natural gas and electric reliability and cost containment until the peak day natural gas demand forecast drops below 4,121 million metric cubic feet per day. Gas demand in California is on a downward trajectory due to California's climate goals, state policies, and proceedings at the Commission, including procurements for historic amounts of clean energy. To track and evaluate our progress toward this natural gas demand threshold and create a concrete pathway for possible incremental reductions in Aliso Canyon inventory levels as natural gas demand declines, this decision adopts the following process beginning in 2025:

- (1) The Commission's Energy Division will conduct biennial assessments of the progress toward the 4,121 million cubic feet per day natural gas demand target, natural gas reliability, and natural gas prices.
- (2) The biennial assessments may include a recommendation to change the maximum storage limit at Aliso Canyon.
- (3) If the biennial assessment recommends no change to the storage limit or the reliability and economic analyses, then

Energy Division will follow an informal process which includes a workshop and opportunities to comment.

If the biennial assessment recommends changes to the storage limit (such as a decrease) or changes to the reliability and economic analyses, then a formal proceeding process will be triggered, and Southern California Gas Company shall file an application within 90 days of such biennial assessment and request the Commission to review the recommended actions as set forth in the biennial assessment.

- (4) Consistent with California's carbon neutrality goals, this decision adopts the Energy Division's proposed portfolio mix of carbon neutral resources – renewable generation and storage, building electrification, and energy efficiency – that can replace the services currently provided by Aliso Canyon as part of the tracking and evaluation process set forth above, with procurement to take place in other Commission proceedings.

When the peak day demand forecast for two years out decreases to 4,121 million metric cubic feet per day and the biennial review process shows that Aliso Canyon could be closed without jeopardy to reliability or just and reasonable rates, then the Commission will open an Order Instituting Investigation proceeding to review the conclusions of the biennial assessment, consider issuing any related orders and address any relevant issues related to permanent closure and decommissioning.

This proceeding is closed.

1. Background

1.1. Factual Background

The Aliso Canyon Natural Gas Storage Facility (Aliso Canyon) is operated by Southern California Gas Company (SoCalGas). Aliso Canyon is an underground natural gas storage facility where natural gas is injected and withdrawn based upon market conditions and gas demand. On October 23,

2015, natural gas began to leak from a well at Aliso Canyon. Residents within a certain radius were temporarily relocated from their homes while SoCalGas undertook efforts to abate the leak. On January 6, 2016, Governor Jerry Brown declared the gas leak an emergency. On February 12, 2016, SoCalGas stopped the leak. Three days later, SoCalGas sealed the well responsible for the leak. Before the leak, Aliso Canyon had a storage capacity of 86 billion cubic feet (Bcf). After the leak, the California Geologic Energy Management Division (CalGEM)¹ determined in 2017 that Aliso Canyon was safe to operate at a reduced pressure that was calculated to correspond to an inventory of 68.6 Bcf, a roughly 20 percent decrease from the field's maximum inventory.

The California Public Utilities Commission (Commission) opened this instant proceeding with a forward-looking approach to assess the continued operation or closure of Aliso Canyon. The instant proceeding does not address the leak itself or issues of culpability and cost responsibility.² Particular issues such as air quality concerns and public health concerns associated with the well failure are addressed in other proceedings or venues.³

1.2. Procedural Background

Senate Bill (SB) 380 (Statutes of 2016, Chapter 14)⁴ tasked the Commission to determine “the feasibility of minimizing or eliminating the use of the Aliso

¹ Previously named the Department of Conservation's Division of Oil, Gas, and Geothermal Resources, or DOGGR.

² Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge, June 20, 2017, at 6. Investigation (I.) 19-06-016 examined issues of safety compliance and penalties.

³ Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge, June 20, 2017, at 11 – 12.

⁴ SB 380 was memorialized in the Public Utilities (Pub. Util.) Code Sections 714 and 715. Sections 714 and 715 stated that they “shall remain in effect only until January 1 2021, and as of

Footnote continued on next page.

Canyon natural gas storage facility located in the County of Los Angeles while still maintaining energy and electric reliability for the region.”⁵ SB 380 also tasked the Commission with evaluating the range of working gas necessary at Aliso Canyon “to ensure safety and reliability for the region at just and reasonable rates.”⁶

The Commission opened Investigation (I.) 17-02-002 on February 9, 2017. In March 2017, the following parties filed responses: the Imperial Irrigation District, California Energy Storage Alliance, Southwest Gas Corporation (Southwest Gas), Public Advocates Office at the California Public Utilities Commission (Cal Advocates), Shell Energy North America, L.P., the Alliance for Retail Energy Markets, Consumer Watchdog, Food & Water Watch, Southern California Generation Coalition (SCGC), California Independent System Operator Corporation (CAISO), Indicated Shippers, Environmental Defense Fund, Sierra Club, Valley Industry and Commerce Association, Los Angeles Area Chamber of Commerce, Los Angeles County Business Federation, Orange County Business Council, Independent Energy Producers Association, County of Los Angeles, Protect Our Communities Foundation (PCF), The Utility Reform Network (TURN), Issam Najm (Mr. Najm), Coalition of California Utility Employees, Southern California Gas Company (SoCalGas), and Southern California Edison Company (SCE). Also in 2017, party status was granted to

that date is repealed, unless a later enacted statute, that is enacted before January 1, 2021, deletes or extends that date.” No legislation changed the sunset date and Sections 714 and 715 expired on January 1, 2021. All section references are to the Public Utilities Code, unless otherwise specified.

⁵ Pub. Util. Code Section 714(a).

⁶ *Id.* at Section 715(a); Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge, June 20, 2017, at 1 – 2.

Save Porter Ranch, the City of Los Angeles, California Manufacturers and Technology Association, Utility Consumer's Action Network, Gill Ranch Storage, LLC, and Long Beach Utilities. In 2018, party status was granted to Center for Energy Efficiency and Renewable Technologies and Magnum Energy Midstream Holdings, LLC. In 2021, party status was granted to Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E). In 2022, party status was granted to Clean Power Alliance of Southern California and California Community Choice Association (CalCCA). In 2023, the Joint Parties Coalition's motion for party status was denied as it failed to disclose the persons or entities represented as required by Rule 1.4(b) of the Commission's Rules of Practice and Procedure.⁷

On June 20, 2017, the Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge was issued. On March 29, 2019, the Assigned Commissioner's Phase 2 Scoping Memo and Ruling was issued. On December 20, 2019, the Assigned Commissioner's Phase 3 Scoping Memo and Ruling was issued. On July 9, 2021, the Assigned Commissioner issued the Amended Phase 2 and Phase 3 Scoping Memo and Ruling. Since 2017, the Commission completed three phases in this proceeding.

In Phase 1, the Commission developed the Scenarios Framework, which describes the models, scenarios, inputs, and assumptions to assess the impacts of Aliso Canyon on rates and natural gas and electric reliability. Phase 1 closed on January 4, 2019, with the adoption of Scenarios Framework.

In Phase 2, Energy Division modeled and analyzed the impact of Aliso Canyon on rates and reliability. Energy Division completed the report titled

⁷ All "Rule" references to are to the Commission's Rules of Practice and Procedure, unless otherwise specified.

“Aliso Canyon Investigation (I.) 17-02-002 Phase 2: Results of Econometric Modeling” (Economic Analysis Report) in November 2020.⁸ The parties filed opening comments and reply comments on November 16, 2020, and November 23, 2020, respectively. In January 2021, Energy Division completed the “Aliso Canyon I.17-02-002 Phase 2: Modeling Report,” (Modeling Report) which was entered into the record in March 2021.⁹ Parties filed opening comments and reply comments on the Modeling Report on March 19, 2021, and April 5, 2021, respectively. Before finalizing the reports, Energy Division held seven public workshops with informal questions and answers on August 1, 2017, July 31, 2018, August 28, 2018, June 20, 2019, November 13, 2019, July 28, 2020, and October 15, 2020. Energy Division performed new sensitivities analysis based on feedback on the Phase 2 modeling. The Aliso Canyon I.17-02-002 Phase 2: Additional Modeling Report (Additional Modeling Report) was entered into the record in February 2022.¹⁰ The parties filed opening comments on March 1, 2022, and reply comments on March 15, 2022.

For Phase 3, the Commission contracted with FTI Consulting, Inc. (FTI) and Gas Supply Consulting (GSC for Phase 3 of the proceeding). FTI/GSC

⁸ Administrative Law Judge’s Ruling Entering into the Record Energy Division’s Economic Analysis Report, Requesting Comment, November 2, 2020 (Attachment A “Aliso Canyon I.17-02-002 Phase 2: Results of Econometric Modeling,” hereinafter “Economic Analysis Report”).

⁹ Administrative Law Judge’s Ruling on Confidentiality Claims by Southern California Gas Company Regarding Information in the Energy Division’s Modeling Report, Requesting Comments on Energy Division’s Modeling Report, March 8, 2021 (Attachment A “Aliso Canyon I.17-02-003 Phase 2: Modeling Report,” hereinafter “Modeling Report”).

¹⁰ Administrative Law Judge’s Ruling Entering into the Record Aliso Canyon Investigation 17-02-002 Phase 2 Additional Modeling Report, Requesting Comment, February 10, 2022 (Attachment A “Aliso Canyon I.17-02-002 Phase 2: Additional Modeling Report,” hereinafter “Additional Modeling Report”).

analyzed the natural gas system services needed to support natural gas and electric reliability. In particular, FTI/GSC assessed the costs and benefits of several possible portfolios of resources (e.g., electricity transmission, gas transmission, demand reduction, renewables, and electric storage) that could be implemented to replace the services presently provided by Aliso Canyon if the field were to be eliminated within the two planning horizons of 2027 and 2035. FTI/GSC held three public workshops with informal questions and answers on November 17, 2020, March 30, 2021, and November 3, 2021. On January 19, 2022, the “Aliso Canyon I.17-02-002 Phase 3 Report” (Phase 3 Report) was entered into the record.¹¹ The parties filed opening comments on February 16, 2022, and reply comments on March 2, 2022. To provide more context for the proposed building electrification and energy efficiency alternatives to reduce and eliminate reliance on natural gas discussed in the Phase 3 Report, the “Southern California Winter Gas Peak Savings Potential Analysis” memo by Guidehouse Consulting (Guidehouse Analysis) was entered into the record.

In consideration of Phase 2 and Phase 3, Energy Division issued the Staff Proposal, which summarized the parties’ comments on the Phase 3 Report and presented a possible portfolio to replace Aliso Canyon and implementation steps. On September 23, 2022, the assigned Commissioner issued a ruling which discussed a path forward with Energy Division’s Staff Proposal and ordered the parties to serve testimony. After requests to extend the deadlines were granted, Parties served opening testimony, rebuttal testimony, and sur-rebuttal testimony on December 12, 2022, January 18, 2023, and February 8, 2023, respectively.

¹¹ Administrative Law Judge’s Ruling Entering into the Record Aliso Canyon Investigation (I. 17-02-002, Phase 3 Report, Requesting Comments, January 19, 2022 (Attachment A “Aliso Canyon I.17-02-002 Phase 3 Report,” hereinafter “Phase 3 Report”).

On December 5, 2023, supplemental testimony was ordered to consider natural gas price thresholds in setting the storage limit at Aliso Canyon. After requests to extend the supplemental testimony deadlines were granted, the parties served supplemental opening testimony, supplemental rebuttal testimony, and supplemental sur-rebuttal testimony on January 5, 14, and 22, 2024. On March 20, 2024, SoCalGas informed the ALJ that the parties met and conferred regarding possible stipulations, but the parties were unable to agree to a set of stipulated facts.

On February 27, 2024, the previously served testimony was entered into the evidentiary record. On April 12, 2024, SoCalGas, SDG&E, PG&E, Southwest Gas, Cal Advocates, Indicated Shippers, SCGC, Mr. Najm, and PCF filed opening briefs. On May 3, 2024, SoCalGas, Mr. Najm, and PCF filed reply briefs. On May 3, 2024, SoCalGas filed a motion to strike portions of the opening briefs of PCF and Mr. Najm. Mr. Najm responded on May 17, 2024, and PCF responded on May 20, 2024.

On April 12, 2024, PCF filed a motion for an oral argument and a motion for official notice of California Energy Commission material related to minimum local generation measures. On April 26, 2024, SoCalGas objected to PCF's motion for oral argument.

On April 12, 2024, SoCalGas filed a motion for official notice of exhibits SCG-07, Notice of Ex Parte Meeting; SCG-08, July 19 2017 letter titled "SB 380 Findings and Concurrence Regarding the Safety of the Aliso Canyon Gas Storage Facility;" and SCG-09, March 25, 2024 United States Energy Information Administration document titled "Today in Energy, In-Brief Analysis, December natural gas prices was the lowest in Southern California since 2014." On

April 29, 2024, PCF responded to SoCalGas' motion and objected to its request. On May 15, 2024, SoCalGas replied to PCF's response.

On May 3, 2024, SoCalGas filed a motion for official notice of exhibits SCG-10 (October 26, 2022 Southern California Gas Company Winter 2022-23 Technical Assessment), SCG-11 (April 1, 2024 Southern California Gas Company Summer 2024 Technical Assessment), and SCG-12 (February 14, 2024 California Energy Commission report, 2023 Integrated Energy Policy Report, Docket No.23-IEPR-01). On May 20, 2024, PCF filed its response to that motion.

On May 17, 2024, Mr. Najm filed a motion for official notice of two attached documents: 1) South Coast Air Quality Management District 2000-2022 Emissions Data for Facility ID 800128, and 2) U.S. Energy Information Administration Preliminary Monthly Electric Generator Inventory Data dated January 2024.

On May 20, 2024, PCF filed a motion for official notice of a variety of items, including material from PCF's briefs, statements regarding emissions at Aliso Canyon, market manipulation during the winter 2022-2023 price spike, and operational impacts of hydrogen. On June 6, 2024, SoCalGas filed a response to that motion.

The record was submitted on May 3, 2024.

The Commission has already issued three decisions in this proceeding regarding the maximum allowable working gas inventory at Aliso Canyon. In 2020, Decision (D.) 20-11-044 set the interim maximum storage capacity of Aliso Canyon at 34 Bcf based on five technical reports issued between 2017 and 2018, which evaluated the range of working gas necessary for reliability at Aliso

Canyon.¹² In 2021, D.21-11-008 increased the natural gas storage capacity to 41.16 Bcf due to the need to protect ratepayers from reliability issues and rate impacts during the 2021 winter season.¹³ In 2023, D.23-08-050 granted the Joint Petition for Modification of D.21-11-008 by SoCalGas and SDG&E and increased the natural gas storage capacity at Aliso Canyon from 41.16 Bcf to 68.6 Bcf.

2. Standard of Review

The preponderance of the evidence is generally the default standard in administrative law cases,¹⁴ and we apply that standard in this decision. Preponderance of the evidence is defined “in terms of probability of truth, *e.g.*, ‘such evidence as, when weighed with that opposed to it, has more convincing force and the greater probability of truth.’”¹⁵

3. Issues

SB 380 tasked the Commission with determining “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.”¹⁶ SB 380 also tasked the Commission with evaluating the range of working gas necessary at Aliso Canyon “to ensure safety and reliability for the region at just and reasonable rates.”¹⁷ Given the evolution of this proceeding since 2017, the tasks of SB 380 are reflected by the questions

¹² Decision (D.) 20-11-044.

¹³ D.21-11-008.

¹⁴ California Administrative Hearing Practice, 2d Edition (2005), 365.

¹⁵ D.08-12-058 at 19, *citing* Witkin, Calif. Evidence, 4th Edition, Vol. 1 at 184.

¹⁶ Pub. Util. Code Section 714(a).

¹⁷ Pub. Util. Code Section 715(a).

set forth in the Assigned Commissioner's Ruling Entering into the Record Energy Division's Proposal and Ordering Testimony. The issues we must examine are:¹⁸

1. What are the impacts to system reliability and on electric and gas rates of reducing or eliminating the use of the Aliso Canyon Gas Storage Facility?
2. Given the impacts identified as part of Question 1, should the Commission authorize the reduction or elimination of the use of the Aliso Canyon Natural Gas Storage Facility, and if so, under what timeframe and parameters?
 - a. In making this determination, the Commission will consider the following factors: the safety of the Aliso Canyon facility, reliability of the electric and gas system, the provision of utility electric and gas service at reasonable rates, and the results of the SB 826¹⁹ study as well as how any decision comports with the Clean Energy and Pollution Reduction Act of 2015 and SB 32.²⁰
3. How can services presently provided by the Aliso Canyon field be met if the field was to be eliminated within the two planning horizons 2027 and 2035?
 - a. Scenarios analysis may include any mix of the following, in addition to other solutions: demand reduction and demand management programs that reduce demand incrementally beyond programs presently in place and/or assumed in the demand forecast; replacement of gas transmission pipelines or the construction of new gas transmission pipelines; and replacement electric generation resources that are carbon neutral or act to integrate renewable energy.

¹⁸ These questions are derived from the scope set forth in the Assigned Commissioner's Phase 3 Scoping Memo and Ruling, December 20, 2019; the Assigned Commissioner's Amended Phase 2 and Phase 3 Scoping Memo and Ruling, July 9, 2021; and the Assigned Commissioner's Ruling Entering into the Record Energy Division Proposal and Ordering Testimony, September 23, 2022, with modifications and omissions due to the evolution of this proceeding.

¹⁹ Statutes 2016, Chapter (Ch.) 23.

²⁰ Statutes 2016, Ch. 249.

4. On evaluation of the reports from Phase 2 and the portfolios presented in Phase 3, as the Commission evaluates the paths to close Aliso Canyon, which portfolio should be adopted and why?
 - a. What is the earliest reasonable time a portfolio can be adopted for reduction and elimination of California's reliance on Aliso Canyon?
 - b. When implementing a portfolio, which of the actions and investments would require an application and which will require an Advice Letter (e.g. an Aliso Canyon decommissioning cost application, including ongoing alternatives uses of the facility, applications by LSEs to implement the replacement portfolio)?
 - c. When implementing a portfolio, what supporting showings and data should be required in the applications (e.g., impact on rate base; amount of any decommissioning costs; accounting and associated ratemaking treatment, including rate recovery, for activity associated with portfolio implementation, rate design, and cost allocation)?
5. As the Commission evaluates the paths to close Aliso Canyon, what is the process by which non-SoCalGas entities, such as other Investor Owned Utilities (IOUs) and Load Serving Entities (LSEs), could be directed to implement the Commission's decision?
 - a. Should there be additional or specific requirements for LSE's in the Los Angeles basin?
6. What is the relationship between the decisions being made in this proceeding and other related Commission proceedings? And how should the Commission coordinate with the other related proceedings?
7. Are there other relevant stakeholders – either under or outside of the Commission's jurisdiction – that must act to implement the replacement portfolio and close Aliso Canyon?

8. During the period between the approval of a portfolio of resources to replace Aliso Canyon and the time that portfolio of resources is placed in service, what conditions, if any, should be placed on Aliso Canyon's operation during that limited period?
9. What process should the Commission implement to determine the maximum storage limit during the time period before Aliso Canyon's replacement is online?

4. Discussion

This decision addresses the above Questions 1 through 4, 6, 8, and 9. This decision does not address Questions 5 and 7 as this decision does not require actions by non-SoCalGas utilities, load serving entities, and other stakeholders. Moreover, because this decision concludes that Aliso Canyon, at this time, remains critical for reliability and to support stable rates for natural gas and electricity customers, this decision does not address aspects of the above questions related to the permanent closure of Aliso Canyon and decommissioning.

Below, this decision discusses the impacts of minimizing or eliminating Aliso Canyon on reliability and rates followed by a biennial assessment to track and monitor progress in reducing reliance on Aliso Canyon. Finally, this decision sets forth the implementation steps that will be in place until the Commission decides it is appropriate to close Aliso Canyon.

4.1. It is Not Feasible to Close Aliso Canyon Today Due to its Impacts on Reliability and Rates

To meet the SB 380 directive of determining the "feasibility of minimizing or eliminating the use of Aliso Canyon natural gas storage facility ... while still maintaining energy and electric reliability for the region," we first looked at the impacts to system reliability and on electric and gas rates of reducing or eliminating the use of Aliso Canyon. In Section 4.1.1 below, we discuss the

modeling and analysis conducted in this proceeding on reliability and how Aliso Canyon improves reliability during extreme weather events. Section 4.1.2 discusses analysis of costs and customer bill impacts of Aliso Canyon.

4.1.1. Currently Aliso Canyon is Necessary for System Reliability

As shown in the Modeling Report prepared by the Commission's Energy Division in this proceeding, Aliso Canyon is currently needed to support natural gas and electric system reliability. This conclusion is also supported by the lessons learned from the recent extreme weather events and inter- and intra-state pipeline outages which confirmed the critical role of Aliso Canyon in ensuring system reliability at this time.

Specifically, the Modeling Report presents the Energy Division staff's evaluation of the effect of minimizing or eliminating Aliso Canyon on reliability with analysis of a single cold day and a 1-in-35 cold year in selected years.²¹ Simulations of a 1-in-10 peak natural gas demand day for winter 2030 show that Aliso Canyon is necessary to provide natural gas reliability. Furthermore, for a 1-in-10 peak natural gas demand day, Aliso Canyon is shown to be necessary to maintain reliability whether non-Aliso Canyon storage fields are 30, 50, 70, or 90 percent full. Simulations for a 1-in-35 cold and dry hydro year²² show that Aliso Canyon inventory of between 41.2 and 68.6 Bcf would be needed to support natural gas reliability depending on pipeline capacity.²³

²¹ Modeling Report at 9.

²² A 1-in-35 cold year is approximately two standard deviations colder than an average year. The latter is calculated based on 20 years of historical data.

²³ Modeling Report at 9.

In addition to the amount of natural gas stored at other fields, available pipeline capacity impacts the amount of natural gas needed to be stored at Aliso Canyon. As available pipeline capacity increases, less natural gas will need to be stored at Aliso Canyon. However, both intra- and interstate pipeline capacity can also decrease unpredictably if pipelines must be taken offline for maintenance or repairs.²⁴ Unavailable pipelines limit whether a storage field can be filled at all, while also increasing the need for stored natural gas.

Receipt point utilization (RPU) is the percentage of available pipeline capacity used by customers at a given time. Pipelines are not typically used at 100 percent of capacity.

Reproduced from the Energy Division Modeling Report, Table 1 below illustrates scenarios we examined with the assumption that receipts were capped at 3,000 million cubic feet per day (MMcfd) to account for planned or unplanned outages.²⁵ Based on this assumption and an assumed 85 percent RPU²⁶ when pipeline supplies are 2,800 MMcfd or less,²⁷ the Aliso Canyon storage limit should be 68.6 Bcf. When pipeline supplies reach 2,900 MMcfd, the Aliso Canyon storage is necessary, and its limit should be 54.88 Bcf. For pipeline supplies around 3,000 MMcfd, the Aliso Canyon storage is still necessary and its limit should be 41.16 Bcf. In all scenarios, both the intra- and interstate pipeline capacity must be available to transport natural gas to the Aliso Canyon field.

²⁴ *Id.* at 74, 85.

²⁵ Modeling Report at 85-86 (Table V-3 Storage Level Results).

²⁶ *Id.* at 32 (Reliability assessment results, Table II-4, 85 percent RPU used for winter simulations of S01, S03, and S05).

²⁷ *Id.* at 80 (discussing feasibility assessment).

Table 1: Daily Pipeline Capacity and Aliso Inventory

Daily Pipeline Capacity (MMcfd)	Maximum Inventory at Aliso (Bcf)
2,700	68.6
2,800	68.6
2,900	54.88
3,000	41.16

Table 1 above illustrates the Aliso Canyon maximum storage levels with the coinciding pipeline supply levels, holding other modeling assumptions constant.²⁸ In future assessments, pipeline capacity and other modeling assumptions will be updated to reflect more recent information.

Energy Division's subsequent analysis found that even if its models increased the RPU assumption from 85 to 95 percent, Aliso Canyon is still needed for reliability.²⁹ Furthermore, Energy Division staff pointed out that 95 percent RPU was inconsistent with historical data and does not consider the potential for multi-state events and outages that reduce natural gas availability at Southern California's border.³⁰ Although Mr. Najm continues to assert that 95 percent RPU should be assumed,³¹ Indicated Shippers emphasizes that 95 percent RPU is unrealistic because it does not allow for unplanned in-state or out-of-state events such Winter Storm Uri in February 2021 and the El Paso Interstate Line 2000 explosion in August 2021.³² Southwest Gas states that

²⁸ Modeling Report at 85-86 (Table V-3 Storage Level Results).

²⁹ Additional Modeling Report at 10 - 11.

³⁰ *Id.* at 4, 10 - 11. See Exhibit (Ex.) SCG-03 at 1-5 (stating that Aliso Canyon provides "a buffer against transmission line outages, allowing pipelines to be taken out of service for maintenance and repairs, and allowing pipeline pressure to be reduced to enhance the margin of safety.").

³¹ Ex. IN-01 at 12.

³² Ex. IS-02 at 18 - 20.

relying on anything above 85 percent RPU increases reliability risks on the SoCalGas system because it does not fully account for potential upstream supply disruptions.³³ In short, Energy Division’s analysis is reasonable given the historical record. Even if a 95 percent RPU is assumed, Aliso Canyon is still needed for reliability.

In 2021, the Commission reviewed the Modeling Report recommendations based on pipeline capacity and determined what the maximum inventory should be at Aliso Canyon given then-current circumstances.³⁴ Table 2 below shows the pipeline capacities that were considered in 2021.³⁵

Table 2: Pipeline Capacities

Daily Pipeline Capacity (MMcfd)	Maximum Inventory at Aliso (Bcf)	SoCalGas Assessment: “Best Case” (MMcfd) in April 2021	SoCalGas Assessment: “Worst Case” (MMcfd) in April 2021	Energy Division Assessment in May 2021	SoCalGas Pipeline Capacity on June 22, 2021
2,700	68.6		2,685	2,675	2,658
2,800	68.6	2,835			
2,900	54.88				
3,000	41.16				

Table 2 shows that, with the range of possible and actual pipeline capacity in 2021, a maximum inventory of 68.6 Bcf at Aliso Canyon was needed for reliability. In the 2021 decision increasing the storage limit for Aliso Canyon, the Commission explained that even though modeling suggested that 68.6 Bcf inventory of natural gas at Aliso Canyon was needed for reliability, an inventory

³³ Ex. SGC-02 at 6 – 7.

³⁴ D.21-11-008 at 2.

³⁵ *Id.* at 14.

limit of 41.16 Bcf was appropriate. The Commission explained that given the timing of the decision, which was issued after the end of the gas injection season, and multiple gas pipeline outages, natural gas imports were unavailable to achieve an Aliso Canyon inventory level higher than 41.16 Bcf before cold weather and storage withdrawals began.³⁶ These events in 2021 highlight the multitude of factors that affect the reliability of the natural gas system and natural gas commodity prices.

Below we discuss how extreme weather events and events outside of California make Aliso Canyon an important asset for ensuring reliability. Specifically, we looked at three extreme weather events to provide further examples of how Aliso Canyon is important for reliability and just and reasonable rates.³⁷ First, in 2020, the August heatwave required more natural gas than typical summers for SoCalGas.³⁸ On August 17 and 18, 2020, almost 20 percent of the natural gas used on those days was from storage.³⁹ Second, in February 2021, during Winter Storm Uri, daily receipt point utilization dropped from 90 percent early in the month to as low as 47 percent.⁴⁰ This drop was due to both freeze-offs in gas production basins, which decreased exports to California, and to California customers pulling gas out of storage or reducing their demand to avoid high natural gas spot market prices. On some days

³⁶ *Id.* at 14 – 15.

³⁷ Ex. IS-01 at 4 (stating that California storage fields protect from outages during extreme weather events).

³⁸ Ex. SCG-01 at Chapter (Ch.) 1 at 33 – 34; SCG Opening Brief (OB) at 28-29.

³⁹ SCG OB at 29. On August 17 and August 18 of 2020, the sendout for each day was approximately 3.1 Bcf while receipts were 2.5 Bcf, which means 0.6 Bcf was required from storage. Ex. SCG-01 Ch. 1 at 35.

⁴⁰ Ex. SCG-01 Ch.1 at 36 – 37.

during this cold period, as much as 40 percent of the natural gas used on the SoCalGas system was from storage.⁴¹ Third, during the heatwave from August to September 2022, extended extreme heat strained the California electric grid.⁴² Between August 30 and September 9, 2022, 1.58 Bcf of natural gas was withdrawn from Aliso Canyon, the equivalent of 325 hours of operation for a 500 MW natural gas peaking plant.⁴³ These events show that storage was a resiliency resource that helped balance both the natural gas and electric systems and mitigate the impacts of unforeseen events.⁴⁴

In addition, winter 2022 – 2023 saw unusually cold weather, accompanied by unusually high gas prices throughout the Western states. A long-standing outage on the El Paso interstate Line 2000 coupled with shorter duration outages on the El Paso North Mainline system decreased the amount of natural gas that could be supplied to California from West Texas during winter 2022 – 2023.⁴⁵ In response to the high natural gas prices and considering the impact of Aliso Canyon on reliability, the Commission acted swiftly to increase the Aliso Canyon inventory limit from 41.16 Bcf to 68.6 Bcf in August 2023 to maintain reliability and protect customers for the upcoming winter.⁴⁶

⁴¹ Ex. SCG-01 Ch. 1 at 37; SCG OB at 30.

⁴² Ex. SCG-01 Ch. 1 at 38 – 39; SCG OB at 31.

⁴³ Ex. SCG-01 Ch. 1 at 39.

⁴⁴ Ex. SCG-01 Ch. 1 at 32 – 39; SCG OB at 29.

⁴⁵ SCG OB at 33 – 34.

⁴⁶ D.23-08-050 at 23 (FOF 5).

In this proceeding, SoCalGas, PG&E, Southwest Gas, SDG&E, Indicated Shippers, Cal Advocates, and SCGC agree that Aliso Canyon is necessary for system reliability.⁴⁷

In addition to natural gas system reliability, discussed above, Aliso Canyon also plays a role in electricity reliability. When evaluating the impact of Aliso Canyon on natural gas-fired electric generators, where gas supply is reduced, electricity reliability is reduced also.⁴⁸

We are not persuaded by Mr. Najm's and PCF's arguments that Aliso Canyon is not required for reliability. Below we discuss these arguments and the importance of Aliso Canyon for both natural gas and electricity reliability.

First, both PCF and Mr. Najm argue that the actual SoCalGas winter peak has been consistently lower than the 1-in-10 winter peak day modeling. PCF states that the range of peak natural gas demand during winters 2015 through 2023 is 3,950 to 4,048.⁴⁹ PCF states that from January 2014 to January 2023, no winter peak day demand exceeded 4,286 MMcfd.⁵⁰ Similarly, Mr. Najm states that multiple cold days reaching the 1-in-10 peak cold day demand in Energy Division's Modeling Report are inaccurate because historical demand does not reflect the same high levels.⁵¹ SoCalGas states that PCF misunderstands the purpose of the 1-in-10 peak day analysis and that it is the standard practice for

⁴⁷ SCG OB at 40; PG&E OB at 4; SDG&E OB at 8; SGC OB at 2; IS OB at 7 – 12; SCGC OB at 2; CA OB at 5-6; *see also* Southern California Edison Opening Comments on Proposed Decision Granting in Part and Denying in Part the Joint Petition for Modification of Decision 21-11-008, August 17, 2023, at 1.

⁴⁸ Modeling Report at 12, 24.

⁴⁹ Ex. PCF-02 at 7.

⁵⁰ Ex. PCF-03 at 3 – 4.

⁵¹ Ex. IN-02 at 3; IN OB at 7 – 8.

gas utilities to forecast demand using statistical models based on historical conditions.⁵² SoCalGas explains the conditions were selected as a standard under which gas service should be expected and maintained for reliability, even if the SoCalGas demand does not regularly exceed the maximum demand.⁵³

Mr. Najm is correct that demand has been lower during the ten-year period between 2014 – 2023. Nevertheless, as noted by the Phase 3 Report, “The 1 in 10 Winter Peak Day represents colder than normal weather conditions estimated to have a ten percent likelihood of occurrence in a single calendar year, based on SoCalGas’ statistical analysis of historical minimum average daily temperatures....”⁵⁴ To protect system reliability, it is reasonable to model a peak that has a ten percent chance of occurring.

Second, both Mr. Najm and PCF argue that SoCalGas can control the natural gas system during high demand situations such that Aliso Canyon can be closed immediately. Mr. Najm argues that during the February 2021 Winter Storm Uri, gas users could have supplied more gas to the SoCalGas receipt points but chose not to because of their financial interests.⁵⁵ On the contrary, SoCalGas explains it has limited control over gas delivered by customers to its system receipt points from pipelines inside and outside California.⁵⁶ Indicated Shippers states that gas well freeze-offs affected natural gas production, which meant that available gas supply coming into California was reduced during Winter Storm Uri as nationwide gas demand increased substantially, and gas

⁵² Ex. SCG-02 Ch. 1 at 4; SCG Reply Brief (RB) at 16 – 17.

⁵³ Ex. SCG-02 Ch. 1 at 4 – 5; SCG RB at 17.

⁵⁴ Phase 3 Report at 9.

⁵⁵ Ex. IN-02 at 8.

⁵⁶ Ex. SCG-03 Ch. 2 at 1, 3 – 4; SCG RB at 39.

production in the Permian Basin dropped by 25 percent during February 2021.⁵⁷ In short, the SoCalGas natural gas system operator does not control the amount of gas its customers deliver to the system.

Third, PCF argues that with the Minimum Local Generation standard, Aliso Canyon is not required for reliability.⁵⁸ The Minimum Local Generation standard involves capping the use of gas-fired electric generation in the Southern California region on days with particularly high gas demand. In other words, PCF argues that Aliso Canyon is not required for reliability because SoCalGas can minimize storage withdrawals by curtailing electric generation. The Commission has already rejected PCF's argument in D.06-09-039 because curtailing electric generators to avoid storage withdrawals is inconsistent with the 1-in-10 peak day design standard adopted by the Commission.⁵⁹ The Modeling Report also found that constraints on gas-fired electric generation in Southern California decrease reliability and increase electric production costs by approximately \$121 million per year.⁶⁰

Moreover, Southern California Generation Coalition (SCGC), of which LADWP is a member, rejects PCF's argument as well. SCGC states that reducing generation to minimum generation is not a substitute for maintaining utility facilities given the heightened costs and risks associated with minimum generation. SCGC explains that natural gas is necessary to support LADWP's renewable resources. Due to the renewable resources located outside of Los

⁵⁷ Ex. IS-03 at 7 – 8, Figure 1.

⁵⁸ PCF OB at 17 – 18.

⁵⁹ D.21-11-008 at 19; Modeling Report at 11; Additional Modeling Report at 5; Ex. SCG-02 Ch. 1 at 2 – 3; Ex. IS-03 at 3; Ex. SCGC-02 at 3.

⁶⁰ Modeling Report at 11.

Angeles, LADWP depends on transmission lines for delivery. If events such as fire, maintenance and repair, and upgrades interrupt transmission, then LADWP is more dependent on its local natural gas-fired generation to avoid outages.⁶¹

For example, SCGC explains that the Scattergood Generating Station is an electricity generation plant dependent on natural gas with an 826 MW capacity in the western portion of LADWP's service territory. SCGC explains that the western portion of LADWP's system is vulnerable because there are electric transmission constraints to this part of the system; therefore, the area is dependent on local generation. The local generation is provided entirely by Scattergood. If natural gas is unavailable to Scattergood, then there could be rotating outages.⁶² Moving electric generators to minimum generation conditions is only feasible if both electric transmission lines and sources of imported electricity are available.⁶³ Thus, the Commission rejects PCF's argument again and finds that minimum local generation is undesirable as it involves curtailments that do not meet our reliability standards.⁶⁴

Like PCF, Mr. Najm argues that Aliso Canyon can be closed without jeopardizing natural gas or electric system reliability. Mr. Najm cites to three studies.⁶⁵ We do not find merit in this argument and explain below.

⁶¹ Ex. SCGC-02 at 3 – 4.

⁶² Ex. SCGC-02 at 5 – 6.

⁶³ Ex. SCGC-02 at 3.

⁶⁴ D.21-11-008 at 19. PCF's extensive and continued submissions describing Minimum Local Generation as a viable alternative to Aliso Canyon does not help the Commission with decision making and does not enrich the deliberations or the record.

⁶⁵ IN OB at 5 – 7.

First, Mr. Najm supports SCE's study described in its testimony that Aliso Canyon can be closed by 2027 without additional procurement.⁶⁶ We note that SCE's position is more nuanced than a simple call for closure of Aliso Canyon by 2027. SCE's study points out flaws in FTI's Phase 3 Report and SCE urges the Commission to rely on the Integrated Resource Planning process to determine whether any electric system procurement is needed to maintain reliability.⁶⁷ Additionally, Cal Advocates cautions that SCE's study underestimates future winter peak electricity demand, overrepresents the efficacy of electric storage for meeting demand, and does not factor in out-of-state competition for natural gas supplies that could lower imports to California.⁶⁸

Second, Mr. Najm points out that CAISO's 2023 modeling and special study concluded that the absence of Aliso Canyon would not impact winter reliability if 56 gas-fired electric generators were curtailed.⁶⁹ As noted above, under the Commission's design standard, electric generation should not be curtailed on a 1-in-10 peak winter day. Mr. Najm references testimony by SCE and SoCalGas, which ultimately do not support his argument.⁷⁰ Additionally, CAISO did not sponsor the report or request that it be moved into evidence.⁷¹ Thus, this decision does not rely on CAISO's 2023 modeling and special study.

Lastly, Mr. Najm argues that the 2022 California Gas report predicted a lower 1-in-10 cold day gas demand in 2027 as compared to the 2020 California

⁶⁶ *Id.* at 5.

⁶⁷ Ex. SCE-02 at 3.

⁶⁸ Ex. CA-01 at 2-1, 2-6, 2-15.

⁶⁹ IN OB at 6.

⁷⁰ *Id.* at 6 – 7.

⁷¹ See Ex. SCG-01, Appendix B; Ex. IS-02 at 21.

Report. Mr. Najm argues that since the forecast demand for 2027 decreased, then a shortfall is no longer a concern.⁷² However, the change noted by Mr. Najm does not bring the peak down to the level of 4,121 MMcfd, which the Phase 3 Report found is the level that would need to be met to maintain reliability without Aliso Canyon.⁷³

Thus, we find that Aliso Canyon currently makes significant contributions to the reliability of the natural gas system and the electric system.

4.1.2. Currently Aliso Canyon is Necessary to Protect Against Natural Gas and Electricity Price Spikes

Not only is Aliso Canyon needed for reliability currently, but it also has serious impacts on natural gas and electricity prices. The analysis, data, and real-world events show higher costs for utilities and customers without Aliso Canyon. Aliso Canyon helps stabilize natural gas prices and consequently utility bills for natural gas and electricity customers.⁷⁴ The 2023 – 2024 winter showed stable natural gas prices while other parts of the country experienced relatively higher prices.⁷⁵ Although the causal connection between an increase in storage capacity at Aliso Canyon and stable prices is not definitive, there is a pattern that more storage capacity at Aliso Canyon has supported reliability and just and reasonable rates.

In 2020, Energy Division's Economic Analysis Report concluded that the total impact of the loss of Aliso Canyon on core residential natural gas customers was approximately \$102 million per year. This estimate was based on 2016

⁷² IN OB at 8.

⁷³ Phase 3 Report at 24.

⁷⁴ D.21-11-008 at 4 – 6.

⁷⁵ Ex. IS-05 at 6.

monthly bill impacts when there were no major pipeline outages.⁷⁶ When compared to average gas commodity procurement costs from 2013 to 2015, before the Aliso Canyon leak and the October 1, 2017, intrastate Line 235 pipeline rupture, the average gas commodity procurement cost for SoCalGas customers increased in 2016 (\$1.36 per customer bill), 2017 (\$1.89 per customer bill), and 2018 (\$2.25 per customer bill).⁷⁷

Aliso Canyon has historically supplied natural gas to gas-fired electric generators. However, the Unbundled Storage Program that provides access to storage to electric generators and other noncore customers in the SoCalGas territory was discontinued after the 2015 Aliso Canyon leak due to insufficient storage capacity. SoCalGas did not reinstate the Unbundled Storage Program until the Commission increased the maximum Aliso Canyon inventory to 68.6 Bcf on August 31, 2023.⁷⁸ Constrained availability of natural gas in Southern California can require the California Independent System Operator (CAISO) to import additional electricity into the region, which may raise electricity prices by dispatching less fuel-efficient generators or generators that are farther away.⁷⁹

After the Aliso Canyon leak, there was an increase in the less efficient electric power generation in Northern California in 2018 as compared to 2017 because more-gas-fired electricity was sent from Northern California to Southern

⁷⁶ Economic Analysis Report at 4.

⁷⁷ *Id.* at 21.

⁷⁸ D.23-08-050 at 18. CPUC letter to Rodger Schwecke, SoCalGas, Re: Aliso Canyon Withdrawal Protocol, September 15, 2023, *available at* <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/natural-gas/aliso-canyon/aliso-canyon-withdrawal-protocol-letter-2023-09-15.pdf>.

⁷⁹ Economic Analysis Report at 23 – 24.

California using less efficient power plants.⁸⁰ Because the electricity prices in southern and northern California are related, the increase in less efficient power generation can be explained by the higher price of natural gas at SoCal Citygate,⁸¹ due to the combined impact of limitations on Aliso Canyon and pipeline outages.⁸² Electric customers in Southern California paid an estimated \$599 million in excess costs in 2018 due to the pipeline outages and Aliso Canyon restrictions.⁸³ Customers in Northern California paid \$317 million more in electricity costs compared to predicted costs.⁸⁴

During severe weather events, utilities reported savings from having access to Aliso Canyon. Southwest Gas and Long Beach Utilities state that having access to Aliso Canyon storage during Winter Storm Uri in 2021 facilitated substantial savings for their customers.⁸⁵ During that time, the SoCal Citygate price was as high as \$144 per million British thermal units (MMBtu), while in northern California, PG&E's price was \$9/MMBtu.⁸⁶ Long Beach Utilities noted that it was able to rely on storage withdrawal. If it had been required to purchase gas from the SoCal Citygate instead, the cost to customers would have been approximately \$14 million.⁸⁷ In February 2021, Southwest Gas avoided approximately \$4.9 million in gas procurement costs at the SoCal

⁸⁰ *Id.* at 40 – 41.

⁸¹ SoCal Citygate is a virtual trading location on SoCalGas's systems for natural gas deliveries.

⁸² Economic Analysis Report at 41.

⁸³ *Id.* at 33.

⁸⁴ *Id.* at 41.

⁸⁵ Ex. SGC-01 at 2; Ex. LB – 01 at 7.

⁸⁶ Ex. SCG-01 Ch. 1 at 32 – 39.

⁸⁷ Ex. LB-01 at 7.

Citygate by withdrawing from storage based on firm contracted storage rights with SoCalGas.⁸⁸

In 2023, the Commission examined what happened during the 2022-2023 winter when California and the Western United States experienced high commodity natural gas commodity prices, and electricity prices increased as well.⁸⁹ SoCalGas' and SDG&E's natural gas procurement cost in 2023 for core customers were 300 percent higher than costs in January 2022.⁹⁰ SCE spent 115 percent more on electric procurement costs in December 2022 than forecasted, which led to undercollection of costs from customers. SCE recovered the undercollection from customers, which increased bundled customer generation rates by 3.4 percent (or \$454 million) from June 2023 to June 2024.⁹¹

In D.23-08-050, the Commission recognized that storage capacity can mitigate price volatility. Storage facilities like Aliso Canyon provide the ability to buy cheaper gas during the summer months (April to October) for the winter months when natural gas is usually more expensive.⁹² SoCalGas and SDG&E state the general economic demand and supply principle that if there is less gas inventory and more reliance on pipeline flowing supplies, then there is more exposure to price spikes. Although prices in the winter are not guaranteed to be higher than in the summer, procuring gas during summer when there is less demand and storing it for use in the winter can moderate or dampen price spikes. In short, the natural gas in storage acts as insurance against high natural

⁸⁸ SGC OB at 3.

⁸⁹ I.23-03-008.

⁹⁰ D.23-08-050 at 11.

⁹¹ *Id.* at 13.

⁹² *Id.*

gas market prices when the demand is high and the potential for disruptions to interstate gas supply even if storage gas is not used to its fullest extent.⁹³

SoCalGas and SDG&E estimated that during the 2022-2023 winter, natural gas cost its customers \$307 million more to procure than it would have if the Aliso Canyon maximum inventory had been 68.6 Bcf rather than 41.16 Bcf.⁹⁴ For the then-upcoming 2023-2024 winter, SoCalGas and SDG&E estimated that if natural gas prices were \$1 per dekatherm lower because of increased access to Aliso Canyon storage, customers would save approximately \$2 - \$3 million per day or \$200 - \$450 million over the 100 - 150 days in the winter period.⁹⁵

Cal Advocates cautions, and SoCalGas agrees, that the potential price hedging benefits that Aliso Canyon provides may be undervalued.⁹⁶ Cal Advocates describes a pattern of coal retirements and an increase of variable renewables outside of the CAISO territory and California. Cal Advocates state this pattern changes the electric generation risks across the West, by increasing the correlation of CAISO's grid needs with those of other states. Increased correlation has the potential to reduce the availability of electric imports into CAISO during periods of high demand and to increase the competition for

⁹³ *Id.* at 14; *see also* Ex. IS-02 at 17.

⁹⁴ D.23-08-050 at 10. The \$307 million potential savings is the price differential between the monthly costs during the 2022 injection season and the monthly costs of the 2022-2023 winter season multiplied by the roughly 27 Bcf difference between a storage maximum of 41.16 versus 68.6 Bcf.

⁹⁵ *Id.* at 10 - 11.

⁹⁶ Ex. CA-01 at 2-9; Ex. SCG-03 Ch. 1 at 11; *see also* Ex. IS-03 at 11. Cal Advocates notes that if SoCalGas' analysis and Energy Division's Economic Analysis Report are updated with the December 2022 prices, then the analyses may show greater price risk hedging benefits for ratepayers. In 2022, the daily average gas prices ranged from 23 - 48 (\$/MMBtu) from December 8 to December 14, averaged across Malin, PG&E Citygate, and SoCal border hubs, and increased to 25 - 54 (\$/MMBtu) from December 15 to December 21. CA OB at 8 - 10.

natural gas to run gas-fired electric generators, reducing receipt point utilization in California and exacerbating price volatility.⁹⁷ These risks would be highest when extreme winter or summer conditions occur simultaneously across multiple western states.

Mr. Najm argues that Aliso Canyon does not have an impact on natural gas prices and customers' natural gas and electricity rates.⁹⁸ Mr. Najm presents California Citygate prices for 2015, 2017, 2019 and 2021 when in two out of the four years the summer months prices were not lower than prices in the winter months.⁹⁹ Mr. Najm states that for 2021, the summer prices were not the lowest, but rather the lowest prices occurred in January and February, and higher prices occurred in October through December.¹⁰⁰ Mr. Najm argues that Aliso Canyon does not shields customers from price spikes and calculates the cost if SoCalGas purchased 10.3 Bcf of gas on the market in December 2022, instead of withdrawing the gas from Aliso Canyon.¹⁰¹ Mr. Najm's arguments are unpersuasive. Specifically, using California Citygate prices implies that they are an average of prices at PG&E and SoCalGas Citygate, which does not capture the impacts specific to the SoCalGas system. Furthermore, the assertion that natural gas prices were low in February 2021 is puzzling given that the impacts of Winter Storm Uri caused SoCal Citygate prices to reach a high of \$144/MMBtu that month. Long Beach Utilities and Southwest Gas estimate that access to gas

⁹⁷ Ex. CA-01 at 2-7 – 2-8.

⁹⁸ IN OB at 10.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 11.

storage during that event saved their ratepayers \$14 million and \$4.9 million respectively.¹⁰²

As discussed in D.23-08-050, although diverse variables impact natural gas prices, the availability of natural gas storage provides price hedging benefits. SoCalGas, SCE, SDG&E, Southwest Gas, Indicated Shippers, Cal Advocates, and Long Beach Utilities agree that Aliso Canyon mitigates the volatility of natural gas prices.¹⁰³ The Commission therefore concludes that Aliso Canyon is necessary to support just and reasonable rates, at this time.

4.2. Closure of Aliso Canyon at This Time Would be Imprudent

As discussed below, based on current conditions, the Commission finds it imprudent to order closure of Aliso Canyon within the two planning horizons 2027 and 2035.

After evaluating the impacts of Aliso Canyon on reliability and just and reasonable rates (Question 1), Question 2 of this proceeding asks:

Given the results of Question 1, should the Commission authorize the reduction or elimination of the use of the Aliso Canyon Natural Gas Storage Facility, and if so under what timeframe and parameters?

- a. In making this determination, the Commission will consider the following factors: the safety of the Aliso Canyon facility, reliability of the electric and gas system, the provision of utility electric and gas service at reasonable rates, and the results of the SB 826 study as well

¹⁰² Ex. LB-01 at 7; SGC OB at 3.

¹⁰³ SCG OB at 43 – 44, SGC OB at 2, CA OB at 9 – 10, IS OB at 12 – 13, 22 – 26; LB-01 at 7. *See also* D.23-08-050 at 14 (stating that Indicated Shippers, SCE, Cal Advocates, and TURN support the increase in the Aliso Canyon storage limit as a tool to dampen price spikes in the natural gas market).

as how any decision comports with the Clean Energy and Pollution Reduction Act of 2015 and SB 32.

Based on the results of Question 1 discussed in Section 4.1, it is not in the ratepayers' interest to authorize the reduction or elimination of the use of Aliso Canyon today. Furthermore, safety considerations and the SB 826 study support continued usage of storage at Aliso Canyon to support system reliability and mitigate adverse ratepayer impacts.

First, safety issues addressed in other proceedings or venues include the cause of the well failure, culpability, air quality concerns and impacts, public health concerns associated with the well failure, and safe facility operations.¹⁰⁴ The scope of this proceeding therefore is limited to the safety of Aliso Canyon and determining the feasibility of minimizing or eliminating the use of Aliso Canyon. The Commission has jurisdiction over the above-ground infrastructure, and CalGEM has jurisdiction over underground natural gas storage at the facility. In 2017, after a comprehensive safety review and public comments, the Commission and CalGEM concluded that Aliso Canyon was safe to operate at a pressure between a minimum of 1,080 pounds per square inch absolute (psia) and maximum of 2,926 pounds psia.¹⁰⁵ Currently, Aliso Canyon continues to operate under the safety requirements of CalGem. Additionally, new safety regulations for gas storage fields are in effect.¹⁰⁶

¹⁰⁴ Scoping Memo and Ruling of the Assigned Commissioner and Administrative Law Judge, June 20, 2017, at 11 – 13.

¹⁰⁵ Modeling Report at 9 (stating that CalGem concluded Aliso Canyon is safe to operate at 68.6 Bcf); SCG RB at 23 – 25.

¹⁰⁶ Cal. Code Regs. Tit. 14 Section 1726 et seq.; Assigned Commissioner's Ruling Entering into the Record Energy Division Proposal and Ordering Testimony, September 23, 2022, at 2.

Second, the legislature commissioned a study on the long-term viability of natural gas storage fields in California with SB 826. This study was conducted by the California Council on Science and Technology (CCST), a nonprofit established by the legislature to provide objective advice about science and technology to the state government. Per Question 2, the Commission considers the findings of the SB 826 study completed and released by CCST in a report on January 18, 2018. CCST concluded that California needs natural gas and underground storage to maintain reliability. In short, California needs natural gas storage for reliability.¹⁰⁷

As already discussed above and confirmed by SB 826 study and CCST report findings, Aliso Canyon is currently necessary to support reliability and rate stability for both natural gas and electricity customers. Indicated Shippers states that the record of this proceeding supports maintaining the use of Aliso Canyon at this time and that it is premature to adopt to a final recommendation reducing or eliminating the use of Aliso Canyon.¹⁰⁸ Thus, we are not persuaded by the contrary arguments of PCF and Mr. Najm. The Commission finds that it would be imprudent to adopt a definitive closure date or timeline for Aliso Canyon before the services it currently provides can be replaced without compromising system reliability and just and reasonable rates.

4.3. Portfolio of Resources to Reduce and Eliminate Reliance on Aliso Canyon

Next are Questions 3 and 4 which ask how the services currently provided by Aliso Canyon might be replaced by possible alternatives, the Commission's review and adoption of a replacement portfolio based on the Modeling Report,

¹⁰⁷ SCG OB at 40 – 45; SGC OB at 3; IS OB at 7 – 26; *see generally* CA OB.

¹⁰⁸ IS OB at 1 – 2.

Additional Modeling Report and the Phase 3 Report, while considering paths to close Aliso Canyon. Below, we examine the proposed portfolios, party positions and the adoption of a replacement portfolio.

4.3.1. Phase 3 Report and Staff Proposal

During Phase 3 of the proceeding, the Commission examined Question 3 by engaging a third-party expert to assess alternatives to Aliso Canyon.¹⁰⁹ The Commission hired FTI Consulting, Inc. (FTI) and Gas Supply Consulting, Inc. (GSC) to produce the Phase 3 Report. In the Phase 3 Report, FTI/GSC evaluated possible resources that could replace Aliso Canyon by providing the equivalent services as Aliso Canyon, i.e. possible resources that could negate the base case of natural gas and/or electricity shortfalls of unserved demand otherwise expected if Aliso Canyon retired within two planning horizons: 2027 and 2035.

In the Phase 3 Report, FTI/GSC described five possible portfolios to maintain natural gas and electric reliability by 2027 or 2035 if Aliso Canyon was no longer available. FTI/GSC assessed these alternatives to replace the services provided by Aliso Canyon and their respective costs and benefits. The five potential portfolios identified by FTI/GSC are:

1. Build new natural gas pipelines;
 2. Decrease natural gas consumption with building electrification, electric energy efficiency, and commercial and industrial gas demand response;
 3. Increase renewable electricity generation and storage resources;
 4. Increase electricity transmission into Southern California;
- and

¹⁰⁹ Assigned Commissioner's Phase 3 Scoping Memo and Ruling, December 20, 2019, at 3 – 4; Assigned Commissioner's Amended Phase 2 and Phase 3 Scoping Memo and Ruling, July 9, 2021, at 3 – 5.

5. A combination of the portfolios 2 - 4, including renewable electricity generation and storage, building electrification, energy efficiency, and electricity transmission.¹¹⁰

The Phase 3 Report concluded that the Portfolio 5 approach had the highest benefit-cost ratio for 2027.¹¹¹

Subsequently, the Energy Division Staff Proposal for Portfolio and Next Steps (Staff Proposal) reviewed each portfolio in detail along with the parties' comments and recommended a replacement portfolio.¹¹² The Staff Proposal noted that building new natural gas pipelines had the lowest net benefits and does not contribute towards reducing demand on the natural gas system.¹¹³ The Staff Proposal recommended a Portfolio 5 approach consisting of increased renewable electricity generation and storage resources and increased energy efficiency and building electrification, with the possible inclusion of commercial and industrial gas demand response.¹¹⁴

In the Staff Proposal, Energy Division did not propose the amount of each resource or describe how resources would be procured by utilities.¹¹⁵ The Staff Proposal asked the affected utilities to propose how much of the shortfall should be filled with electricity generation and storage versus how much should be filled with building electrification and energy efficiency. However, the affected utilities did not provide such proposals in their comments. Rather, the responses

¹¹⁰ Phase 3 Report at 75 - 77.

¹¹¹ *Id.* at 5.

¹¹² Assigned Commissioner's Ruling Entering into the Record Energy Division Proposal and Ordering Testimony, Attachment A, September 23, 2022, at Attachment A at 4 - 11. Energy Division's Staff Proposal for Portfolio and Next Steps hereinafter "Staff Proposal."

¹¹³ Staff Proposal at 6.

¹¹⁴ *Id.* at 4.

¹¹⁵ *Id.* at 8.

to Energy Division's recommendations range from support for the portfolio components to arguments that the resources could not replace the natural gas and electricity shortfalls left by Aliso Canyon.

SoCalGas agrees with the Staff Proposal components of non-natural gas electricity generation and storage resources, building electrification, and energy efficiency, but SoCalGas argues that natural gas generation are still needed to meet intra-day ramping needs.¹¹⁶

Several parties suggest resources in addition to, or different from, those in Portfolio 5. SoCalGas recommends using green hydrogen and green hydrogen storage as resources as part of the portfolio to replace Aliso Canyon.¹¹⁷ Indicated Shippers recommends efforts to develop renewable natural gas (RNG) and natural gas fired generation with carbon capture,¹¹⁸ which PG&E argues is premature.¹¹⁹ Indicated Shippers clarifies that it recommends RNG and carbon capture as part of any proceeding that would coordinate with the efforts and findings in this proceeding, not that RNG and carbon capture should be determined in this proceeding.¹²⁰ Southwest Gas recommends alternatives such as procuring biomethane and blending hydrogen into the gas system.¹²¹

Southwest Gas also recommends adopting Portfolio 1, building new natural gas pipelines, because it can be completed by 2027.¹²² PG&E disagrees

¹¹⁶ Ex. SCG-01 Ch. 2 at 1 – 2, Ch. 4 at 1.

¹¹⁷ *Id.* Ch. 2 at 14, Ch. 3 at 20 – 21, Ch. 4 at 1.

¹¹⁸ Ex. IS-01 at 15.

¹¹⁹ Ex. PG&E-02 at 3-2, 3-5.

¹²⁰ Ex. IS-03 at 10.

¹²¹ Ex. SGC-01 at 16.

¹²² *Id.* at 2 – 3.

because this is more expensive than any of the other approaches.¹²³ For PG&E, pipeline installation could cost \$927 million and compressor station improvements could cost \$88 million.¹²⁴ PG&E notes building more natural gas infrastructure is counter to the Commission's efforts to decommission gas systems in R.20-01-007, the Gas System OIR.¹²⁵

4.3.2. Opposition to Portfolio Adoption

Opposition to portfolio adoption to replace Aliso Canyon fall in two groups: 1) additional procurement is unnecessary, therefore, a replacement portfolio is unnecessary, and 2) concerns regarding how a replacement portfolio will be implemented, including coordination with other proceedings and cost recovery. As discussed here, we are not persuaded by those arguments.

SCE asserts that its own modeling shows no reliability-based electric system procurement is needed to support retirement of Aliso Canyon by 2027.¹²⁶ However, SCE states it is "not attempting to argue or demonstrate that no additional procurement is needed."¹²⁷ SCE clarifies that the purpose of its study is to show that the FTI analysis is flawed and that the Commission should not depend on it but rather rely on the Integrated Resource Planning proceeding to establish whether additional resources should be procured to support reliability without Aliso Canyon.¹²⁸

¹²³ Ex. PG&E-02 at 3-2.

¹²⁴ *Id.* at 3-6; Ex. PG&E-03 at 3; PG&E OB at 7 – 9.

¹²⁵ Ex. PG&E-02 at 3-2.

¹²⁶ Ex. SCE-01 at 7.

¹²⁷ Ex. SCE-02 at 3.

¹²⁸ *Id.* at 1 – 3.

Cal Advocates cautions that the SCE study underestimates future winter electricity peak demand because local reliability estimates for winter demand peaks are much higher than the peaks in SCE's 2026 study year analysis.¹²⁹ Cal Advocates states that SCE's 2026 study year does not represent possible future reliability needs in the "shoulder seasons" of spring and fall, given higher electricity demand peaks in 2035 across all months.¹³⁰ Even though SCE has authorization for new battery procurement, Cal Advocates argues that the battery storage resources may not have adequate reliability attributes.¹³¹

SoCalGas criticizes SCE's modeling and argues that it is based on electricity imports that may not be available and battery storage resources that may be delayed beyond 2026.¹³² SoCalGas also states that SCE's projected gas-fired generation is unlikely to be met without SoCalGas deliveries to electric generators and withdrawals from Aliso Canyon.¹³³

We agree with Cal Advocates and SoCalGas that SCE's analysis is flawed. Consistent with SCE's argument, this decision does not rely on FTI's analysis to order procurement. Nevertheless, it is premature to conclude no additional procurement is necessary to close Aliso Canyon by 2027.

Unlike SCE, PCF argues that no additional procurement is necessary to close Aliso Canyon today based on existing excessive transmission and battery

¹²⁹ Ex. CA-01 at 2-1 – 2-4 (discussing CEC Integrated Energy Planning Report (IEPR)); CA OB at 2 – 3; *see also* Ex. SCG-03 at 2:12 – 2:13.

¹³⁰ Ex. CA-01 at 2-5; CA OB at 5.

¹³¹ CA OB at 6.

¹³² Ex. SCG-02 Ch. 2 at 5, 9. Indicated Shippers also notes that resources that could replace ramping and long-duration energy storage attributes provided by Aliso Canyon are delayed and may not meet the 2028 deadline in all cases. IS OB at 39.

¹³³ Ex. SCG-02 Ch. 2 at 4 – 5; Ex. SCG-03 Ch. 2 at 9.

storage capacity.¹³⁴ We are not persuaded by PCF's argument that no procurement is necessary to close Aliso Canyon today and explain below.

PCF argues that with CAISO's peak electricity import capability totals there would be excess electric capacity during a 1-in-10 peak cold day gas demand event instead of a shortfall.¹³⁵ PCF states CAISO's maximum peak import capability is 16,055 megawatts (MW), which would result in 1,200 MW of excess electric capacity during a 1-in-10 peak cold day.¹³⁶ However, we find PCF's excess transmission capacity argument unpersuasive for the following three reasons.

First, Cal Advocates notes that CAISO's maximum peak import capability, 16,055 MW identified by PCF, cannot be relied upon during a 1-in-10 peak cold day. Cal Advocates explains CAISO reserves 5,015 MW for Existing Transmission Contracts and Transmission Ownership Rights held by non-CAISO load serving entities, to serve loads outside of the CAISO control area.¹³⁷ Reducing the 16,055 MW by 5,015 MW results in approximately 11,040 MW, a capacity similar to that adopted by the Phase 3 Report.¹³⁸ Cal Advocates states that the 11,600 MW import constraint is appropriate for electric system reliability study/analysis.¹³⁹ We agree with Cal Advocates that PCF erroneously assumes there is excess transmission capacity above the standard assumption of 11,600 MW import capacity.

¹³⁴ PCF OB at 21 – 22.

¹³⁵ Ex. PCF-01 at 10.

¹³⁶ *Id.*

¹³⁷ Ex. CA-01 at 2-12.

¹³⁸ *Id.*

¹³⁹ CA OB at 11.

Second, Indicated Shippers, Cal Advocates, and SoCalGas emphasize that transmission capacity does not equal available and usable electricity in California where it is needed. Indicated Shippers explains even if total available import capacity is approximately 16,000 MW, electricity may not be available to be imported from outside of CAISO.¹⁴⁰ Cal Advocates notes that SoCalGas does not include actual availability in its calculations and may overstate future import availability. Cal Advocates explains that as areas outside of CAISO experience their own higher demand due to generation retirements, variable renewables, electricity storage, and generation and transmission outages, there may be less import availability.¹⁴¹ SoCalGas agrees with Cal Advocates that actual deliveries of electricity are not the same as import delivery limits.¹⁴² In other words, CAISO's import capacity cannot be assumed to be 16,055 MW to support reliability in the winter.

Third, Indicated Shippers notes that PCF's import electricity supply recommendation only addresses high demand events on cold winter days but does not address Aliso Canyon's role during the summer months.¹⁴³ Indicated Shippers states that local reliability concern remains even with additional transmission import capability. SoCalGas states that in the summer, Aliso Canyon provides gas during peak electric generation demand periods.¹⁴⁴

¹⁴⁰ Ex. IS-02 at 3 – 4, 8; *see also* Ex. IS-03 at 4.

¹⁴¹ Ex. CA-01 at 2-15; CA OB at 14 – 15.

¹⁴² Ex. SCG-03 Ch. 2 at 14 – 15.

¹⁴³ Ex. IS-02 at 4.

¹⁴⁴ Ex. SCG-01 Ch. 1 at 5.

Furthermore, TURN,¹⁴⁵ CAISO,¹⁴⁶ and Indicated Shippers¹⁴⁷ all note that the LA Basin would be directly impacted with the minimizing or eliminating of Aliso Canyon, as reliability shortfalls may manifest themselves in the LA Basin. In short, PCF's argument that excess transmission can replace the services provided by Aliso Canyon is unpersuasive.

In addition to surplus transmission, PCF argues that battery storage can be used to address any shortfall in the electric supply. Indicated Shippers states that more analysis is required to show that battery storage can sustain cold events longer than one day.¹⁴⁸ Battery storage presently provides support for approximately four hours before being fully drained.¹⁴⁹ If there are multiple cold days in a row with significant and persistent cloud cover or several hot days in a row, these conditions would reduce solar generation and lower the capability to replenish battery reserves.¹⁵⁰

We reject SCE's and PCF's arguments that no additional procurement is necessary. Below, we discuss the other concerns related to adopting a portfolio of resources to replace the services provided by Aliso Canyon.

4.3.3. Replacement Portfolio Implementation Concerns

Several parties oppose the adoption of a replacement portfolio due to concerns over implementation, including coordination with other proceedings,

¹⁴⁵ TURN Reply Comments on Phase 3 Report, March 2, 2022, at 5 – 6.

¹⁴⁶ Comments of CAISO on Administrative Law Judge's Ruling Entering into the Record Aliso Canyon Investigation 17-02-002, Phase 3 Report Requesting Comments, February 16, 2022, at 2.

¹⁴⁷ Ex. IS-03 at 7.

¹⁴⁸ Ex. IS-02 at 11 – 13.

¹⁴⁹ *Id.* at 13.

¹⁵⁰ Ex. SCG-01 Ch. 1 at 19.

cost recovery, rate payer impacts, and future uncertainty. In general, these arguments assume that adoption of a replacement portfolio would be accompanied by orders to procure that portfolio within this proceeding and to close Aliso Canyon by a certain date.

PG&E, Long Beach Utilities, and Indicated Shippers state that it is premature to order procurement of resources.¹⁵¹ After reviewing opening testimony, Southwest Gas states that it agrees with other parties that it is premature to adopt a portfolio to close Aliso by 2027.¹⁵² PG&E, SCE, SDG&E, CalCCA, and Alliance for Energy Markets state that the Integrated Resource Planning (IRP) proceeding, Rulemaking (R.) 20-05-003, is the correct proceeding to address electric systemwide resource needs.¹⁵³ Indicated Shippers agrees with SCE that additional electric generation procurement should occur in IRP.¹⁵⁴ PG&E also states that the CAISO transmission planning process (TPP) is the correct place to address local electric reliability needs, which would feed into IRP.¹⁵⁵

Regarding cost recovery for procurement, PG&E and CalCCA state that IRP is the appropriate proceeding.¹⁵⁶ PG&E argues that even though cost recovery should occur in IRP, cost recovery to increase reliability should not be

¹⁵¹ Ex. PG&E-02 at 1-3, 3-3; Ex. LB-01 at 4; Ex. IS-01 at 2.

¹⁵² Ex. SGC-02 at 4.

¹⁵³ Ex. PG&E-02 at 1-2; Ex. SCE-02 at 1; Ex. SDG&E-01 at PK-2; Ex. CalCCA-01 at 1; Ex. ARM-01 at 4 (stating that procurement of any electric resources should be a joint process between the IRP and the RA (resource adequacy) proceeding).

¹⁵⁴ Ex. IS-02 at 22.

¹⁵⁵ Ex. PG&E-02 at 1-3; PG&E OB at 4 - 5.

¹⁵⁶ PG&E OB at 5 - 6; CalCCA OB at 6 - 7.

precluded in other proceedings.¹⁵⁷ SCE agrees that cost recovery should be determined in the relevant proceeding, not just IRP.¹⁵⁸

These comments reflect the general sentiment that to implement a portfolio of resources to replace the service provided by Aliso Canyon involves a multi-faceted and long-term process. Because of the natural gas required presently for natural gas and electric reliability and uncertain factors in the future, it is reasonable to keep Aliso Canyon open for now and adopt the replacement portfolio described above.¹⁵⁹ We agree that other proceedings are appropriate for planning and procurement of electricity resources. As noted by CalCCA, procurement is already occurring in other proceedings that may in part address the need for Aliso Canyon. We agree with CalCCA that procurement in those proceedings ensures that the mix of resources is effective and efficient and considered as a whole.¹⁶⁰ Proceedings that may consider procurement of resources that address the services currently provided by Aliso Canyon include IRP (R.20-05-003 or its successor proceeding), energy efficiency (R.13-11-005 and successor proceedings), building decarbonization (R.19-01-011),¹⁶¹ and long-term gas system planning (R.24-09-012).¹⁶²

¹⁵⁷ Ex. PG&E-02 at 2-2.

¹⁵⁸ Ex. SCE-01 at 19.

¹⁵⁹ As this decision does not adopt a particular closing date or procurement, this decision does not address the “earliest reasonable time a portfolio can be adopted for reduction and elimination of California’s reliance on Aliso Canyon” in Question 4(a) and references to investments and applications in 4(b) and 4(c).

¹⁶⁰ CalCCA OB at 4.

¹⁶¹ Rulemaking (R.)19-01-011 established the framework for two building decarbonization programs – the Build Initiative for Low Emissions Development (BUILD Program) and the Technology and Equipment for Clean Heating initiative (TECH Initiative). D.20-03-027.

¹⁶² This guidance corresponds to and addresses Question 6 (what is the relationship between the decisions in this proceeding and other Commission related proceedings?).

4.3.4. Staff Proposal's Portfolio Mix

At this time, the Commission finds reasonable the Staff Proposal's portfolio mix of carbon neutral resources – renewable generation and storage, building electrification, and energy efficiency – and leaves for other proceedings to determine in what proportion these resources will be procured and how and when they will come online. Furthermore, resources such as green hydrogen are early in their development, and we leave it to IRP and other relevant proceedings to determine if it is appropriate to add hydrogen to the portfolio in the future. Thus, the Commission adopts the Staff Proposal's portfolio mix as part of the tracking and evaluation process set forth in this decision.

Planning for greenhouse gas reductions from the electricity sector is consistent with California's greenhouse (GHG) reduction goals. Gas demand in California is on a downward trajectory due in no small part to landmark California climate policies such as the 2022 Scoping Plan (directed by Assembly Bill 1279, Muratsuchi)¹⁶³, which lays out a path for the state to achieve carbon neutrality and reduce greenhouse gas emission 85 percent below 1990 levels by 2045. At the Commission, the IRP proceeding is planning for a 25 million metric ton GHG target in 2035.¹⁶⁴ Gas demand will be further reduced by building decarbonization incentive programs overseen by the energy efficiency proceedings and the building decarbonization proceedings.¹⁶⁵ In addition to the utilities regulated by the Commission, publicly owned utilities are working towards their own climate targets. As the Commission's work contributes to

¹⁶³ Statutes 2022, Ch. 337.

¹⁶⁴ D.24-02-047 at 139 (OP 10).

¹⁶⁵ R.13-11-005, R.19-01-011, and successor proceedings.

substantial reductions in gas demand, the resulting net gas demand will be reflected in this proceeding's biennial analysis described below.

4.4. Biennial Assessments and Process

To authorize closure of Aliso Canyon, the Commission must conclude that California is able to continue to meet its reliability target even if Aliso Canyon is closed. Below, we discuss and adopt the biennial assessments and the related process to track relevant variables and Aliso Canyon closure readiness. First, we set forth the reliability and economic analyses that the biennial assessments should include and the Commission intends to use to determine the maximum storage limit while Aliso Canyon continues operation.¹⁶⁶ Thereafter, we outline the process and conditions for Aliso Canyon's operation between now and when Aliso Canyon may be closed without compromising system reliability and just and reasonable rates.¹⁶⁷ The specifics of the biennial analyses are set forth in Attachment A of this decision.

4.4.1. Reliability Analysis

The Staff Proposal outlines a biennial assessment with analysis consisting of two reliability elements: identifying the forecast 1-in-10 peak day gas demand, and reliability analysis (consisting of hydraulic flow modeling and gas balance analysis).¹⁶⁸ Both of these analytical approaches reflect Commission requirements to serve all demand unless it is above the 1-in-10-year forecast and utilize methods already vetted in this proceeding. The inputs to the biennial

¹⁶⁶ This guidance corresponds to and addresses Question 9 (what process should the Commission implement to determine the maximum storage limit during the time period before Aliso Canyon's replacement is online?).

¹⁶⁷ This process corresponds to and addresses Question 8 (during the period between the approval of a portfolio and when the portfolio is in service, what conditions should be placed on Aliso Canyon's operation?).

¹⁶⁸ Staff Proposal at 15 – 16.

analysis will be based on the Staff Proposal's Table 5: Gas Sufficiency Analysis Inputs,¹⁶⁹ as revised and clarified in Attachment A. This table may be updated as needed. The analytical inputs identified in the table refer to forecast numbers. As discussed below, these forecast numbers are appropriate.

SCGC and Indicated Shippers express concerns over the use of natural gas demand forecasts. SCGC recommends biennial backcasts instead of biennial forecasts when setting targets for resources to replace Aliso Canyon. SCGC states that the biennial analysis should use recorded data to establish whether the system could have been successfully operated on all days, including peak days, without Aliso Canyon.¹⁷⁰ Next, SCGC recommends using hourly analysis to determine whether non-Aliso Canyon fields can be filled to full capacity by the beginning of the winter period in the absence of Aliso Canyon.¹⁷¹ Lastly, SCGC recommends using a range of historical years to capture a variety of weather types or including sensitivity studies to test major variables such as weather and equipment restrictions.¹⁷²

Similarly, Indicated Shippers states that when conducting analysis to determine whether there was a volumetric decrease in the 1-in-10 cold day demand forecast, with a corresponding increase in new electric resources, the Commission's reliance on forecast data could cause premature reductions to Aliso Canyon. Indicated Shippers argues that the biennial review analysis should be based primarily on backcast numbers, which means using actual

¹⁶⁹ *Id.* at 17 - 19, Table 5.

¹⁷⁰ SCGC OB at 4.

¹⁷¹ *Id.* at 4 - 5.

¹⁷² SCGC OB at 5 - 6.

recorded data.¹⁷³ For example, Indicated Shippers states that Energy Division should rely on actual installed and operational capacity of new-build ramping and long-duration energy storage capacity, not on forecasts. Indicated Shippers argues that this combined with hourly modeling and extreme multi-day heat and cold events, would ensure that carbon-free resources are online, operational, and adequate.¹⁷⁴

We reject the parties' arguments. Specifically, it is illogical to assume that retiring Aliso Canyon in a past year would not affect the system hydraulically¹⁷⁵ or economically. For example, if Aliso Canyon were to retire in a previous year, customers are more likely to schedule higher quantities of gas at the California borders (i.e. higher RPU). In addition, in the absence of Aliso Canyon, the utility procuring gas for core customer would likely purchase more gas in the market during natural gas price spikes to maintain the minimum required inventory levels in the remaining three non-Aliso Canyon fields, which might further exacerbate the price spikes. Furthermore, assuming Aliso Canyon is retired in a past year would result in different Operational Flow Orders (OFO) calculations, which in turn would likely increase the number of High and Low OFOs, thereby forcing customers to tighten their balancing to avoid penalties.¹⁷⁶ These factors

¹⁷³ IS OB at 40 – 41.

¹⁷⁴ *Id.* at 37.

¹⁷⁵ Hydraulic modeling ascertains the ability of current gas infrastructure system to provide reliable gas service to gas customers, inclusive of a minimization in usage or elimination of Aliso Canyon. Modeling Report at 24.

¹⁷⁶ Pipelines must be operated between their minimum and maximum authorized pressure to function effectively and safely. If customers schedule either too little or too much natural gas, it creates problems for the pipeline system. The purpose of an Operational Flow Order (OFO) is to incentivize customers to more closely match their natural gas deliveries to their natural gas burn. During an OFO, customers receive a financial penalty if they deliver either more or less natural gas than their burn, outside a tolerance band.

must be accounted for if a backcast method is used. This implies that using a backcast method for demand forecasting requires developing new models with contentious assumptions that may not yield helpful or conclusive results compared to using forecasts for future years. At this time, there is no need to require or prohibit the use of backcasting.

These concerns highlight the difficulties caused by the yearly changes in natural gas demand, which are greatly influenced by a variety of factors. The concerns and suggestions of SCGC and Indicated Shippers implicate two separate activities that involve forecast calculations: 1) the biennial report recommendations to maintain, decrease, or increase the maximum storage limit, and 2) the permanent closure of Aliso Canyon.

First, forecast numbers are the most appropriate and reasonable numbers to represent peak day gas demand. They are based on the statistical analysis of historical data taking many factors into account and are a better representation of future 1-in-10 peak day demand because they capture weather variation across many years rather than relying on a smaller number of recent years.

Second, the biennial assessment recommendations do not trigger a permanent reduction in the Aliso Canyon storage limit. The storage limit may be increased or decreased based on the biennial assessment, and permanent closure will occur only if ordered by a later decision. To give the Commission flexibility to consider all relevant factors between now and when carbon neutral resources replace the necessary amount of natural gas demand, the use of forecasts is appropriate.

Given the future uncertainties, the Commission agrees that the decision to close Aliso Canyon permanently requires a showing of long-term and consistent natural gas demand reduction so that reliability and just and reasonable rates are

not at risk. Hence, it is premature to authorize a certain date to close Aliso Canyon. Nevertheless, it is critical to monitor progress toward reducing peak day gas demand and reduce the maximum inventory at Aliso Canyon through an incremental process.

Part of the reliability analysis will need to determine the threshold level of peak day gas demand that must be served to preserve reliability. The Phase 3 Report found that the SoCalGas System could manage a peak day demand of 4,121 MMcfd in both 2027 and 2035 without Aliso Canyon. FTI then calculated a “shortfall” that was based on the difference between the then-forecasted peak day demand and 4,121 MMcfd. The portfolio of resources proposed by FTI and recommended in the Staff Proposal was intended to fill this shortfall.¹⁷⁷

Gas demand for electricity generation is a moving target which can be assessed as part of the IRP process, as noted by CalCCA and Cal Advocates.¹⁷⁸ Similarly, as noted by Mr. Najm, the peak day natural gas demand forecast has also declined due to the impact of various state efforts to decrease natural gas usage, albeit not to the target level of 4,121 MMcfd.¹⁷⁹

Given these changes to both the electric and natural gas systems and the determination that procurement will be conducted in other proceedings, this decision switches the focus from an outdated shortfall to the remaining natural gas demand on a forecast 1-in-10 peak day. As forecast peak day natural gas demand declines, reduction to the maximum storage level at Aliso Canyon can be considered, provided that just and reasonable rates are preserved. A forecast natural gas peak day of 4,121 MMcfd is the target for considering closure of Aliso

¹⁷⁷ Phase 3 Report at 24.

¹⁷⁸ Ex. CalCCA-01 at 2 – 3, Ex. CA-01 at 2-1.

¹⁷⁹ IN OB at 7 – 8.

Canyon. Progress toward reaching that goal shall be determined using the California Gas Report until such time as the California Energy Commission provides an alternative 1-in-10 winter peak natural gas day forecast for the SoCalGas service territory and the Commission adopts its use.

The Staff Proposal suggested reducing the Aliso Canyon inventory in increments of 10.3 Bcf each time the forecast natural gas demand decreased by roughly 214 MMcfd. Since the maximum Aliso Canyon inventory at the time the Staff Proposal was published was 41.16 Bcf, the Staff Proposal suggested that Aliso Canyon could be closed after the fourth incremental reduction.¹⁸⁰ Today, the maximum natural gas storage limit has been increased to 68.6 Bcf in response to high natural gas and electricity prices in winter 2022-2023.¹⁸¹

The Staff Proposal's incremental changes to Aliso Canyon inventory is a reasonable way to plan closure of Aliso Canyon, but the proposed mechanism is outdated. Rather than tying the incremental reductions to predetermined decreases in the peak day demand forecast, Energy Division staff will recommend incremental reductions to Aliso Canyon maximum inventory of up to 10 Bcf based on the results of the biennial assessment. This incremental approach has the benefit of avoiding shocks to the market, fuel costs, and customer rates while still progressing on the path to potential closure. If there are negative impacts on fuel costs and customer rates, then staff may recommend an increase in inventory in the subsequent biennial assessment. We account for possible changes to the analysis in the future with the implementation process described in subsequent sections of this decision.

¹⁸⁰ Staff Proposal at 14 (Table 3).

¹⁸¹ D.23-08-050 at 18.

4.4.2. Economic Analysis

Although the Staff Proposal did not envision a biennial assessment that considers gas market prices, as discussed below, Energy Division's biennial assessment will also include economic analyses and consideration of economic factors.

Due to the unprecedented high natural gas prices during the 2022-2023 winter, the Commission initiated an investigation into the cause of the price spikes¹⁸² and increased the storage limit at Aliso Canyon to protect natural gas and electricity customers from reliability and economic impacts.¹⁸³ In this proceeding, Energy Division proposed economic analyses which would enable the Commission to consider economic factors such as high natural gas futures prices as a signal that future demand will be high relative to supply, whether use of storage at Aliso Canyon would contribute to maintaining affordability in the coming two-year period, and whether to change the maximum inventory at Aliso Canyon based on economic reasons.

The parties served supplemental testimony in response to the following Energy Division proposal:

- a. Comparison of Southern California and National Average Forward Prices: If the price of natural gas in Southern California for the upcoming December is 50 percent or more above the national gas price, represented by the Henry Hub price of natural gas, for the upcoming December, then the biennial assessment conducted that year will recommend not reducing the storage level at Aliso Canyon during the two-year period covered by the biennial assessment.

¹⁸² I.23-03-008.

¹⁸³ D.23-08-050.

- i. For this calculation, the Southern California gas price for the upcoming winter will be represented by the SoCal Citygate average forward fixed price of gas for the upcoming December, or its successor, as published by Natural Gas Intelligence, averaged across the values published on each date from March 1 through May 31 of the year when the biennial assessment is published.
 - ii. For this calculation, the national gas price for the upcoming December will be represented by the Henry Hub average forward price of gas for the upcoming December, as published by Natural Gas Intelligence or its successor, averaged across the values published on each date from March 1 through May 30 of the year when the biennial assessment is published.
- b. Comparison of Historical Actuals and Forward Prices: If the forward price of gas in Southern California for the upcoming December is 50 percent or more above the bidweek price of gas in Southern California during the previous three Decembers, the biennial assessment conducted that year will recommend not reducing the maximum storage level at Aliso Canyon during the two-year period covered by the biennial assessment.
 - i. For this calculation, the Southern California gas price for the upcoming December will be represented as described above.
 - ii. For this calculation, the Southern California bidweek price of gas during the previous three Decembers will be represented by the SoCal Citygate average bidweek price, as published by Natural Gas Intelligence or its successor, as published by Natural Gas Intelligence, averaged across the values for December delivery in the preceding three years.¹⁸⁴

¹⁸⁴ Administrative Law Judge's Ruling on Supplemental Testimony, December 5, 2023, at 10 – 11.

The comparison of Southern California and national natural gas prices plus an average price of the previous three winters provides a more detailed picture than just one of the two factors alone. Energy Division would conduct this economic analysis regardless of the results of the reliability analysis and use the results to inform the biennial assessments recommendations.

Several parties support considering economic factors in the biennial assessment, but suggest modifications.¹⁸⁵ SCE, an electric only utility, does not object to the economic criteria. For the average of the previous three Decembers in calculation (b)(ii), SCE observed that the December 2022 Bidweek price was more than double that of December 2021 and December 2023; therefore, SCE contends December 2022 Bidweek price should not be included. We agree because this is an exceptional data point that does not represent the past three-year average and would skew the average calculation.¹⁸⁶

Indicated Shippers agrees with SCE that natural gas storage can be useful in ensuring natural gas generators have reliable supplies of fuel and can help stabilize the cost of natural gas required to operate the electricity generation plants.¹⁸⁷ Indicated Shippers agrees with SCE that market price can be an indicator of natural gas system stress.¹⁸⁸ Indicated Shippers states that when the gas system is stressed, capacity from storage will help maintain system reliability while simultaneously limiting upward pressure on market pricing.¹⁸⁹

¹⁸⁵ Ex. IS-04 at 1, 5; Ex. SCG-04 at 6; Ex. SCE-03 at 1.

¹⁸⁶ Ex. SCE-03 at 1.

¹⁸⁷ Ex. IS-05 at 1.

¹⁸⁸ *Id.* at 2.

¹⁸⁹ *Id.* at 5.

Indicated Shippers notes that there might be significant economic impacts to ratepayers even when the Southern California natural gas price is less than 50 percent above the national price.¹⁹⁰ Similarly, SoCalGas questions whether the threshold of Southern California natural gas price being 50 percent above the national natural gas price is low enough.¹⁹¹ SoCalGas disagrees with Mr. Najm that the threshold should be 250 percent.¹⁹²

We are not persuaded by Mr. Najm's recommendation. The minimum percentage above the national price should indicate an increase in demand, restrictions in supply, and an increase in reliability risks and price spikes. If the minimum percentage is set too low it will be triggered so frequently as to not reflect actual risks. However, if the minimum percentage is too high, then it would not trigger until risks are extremely high. As such, it is reasonable to maintain the threshold percentage at 50 percent.

Instead of using December forward prices, SoCalGas recommends using January forward prices because January may be colder than December.¹⁹³ SoCalGas explains that forward prices for December may not capture the changes or disruptions that impact actual December prices.¹⁹⁴ SDG&E recommends using all winter months in the calculation, including November and March in order to reduce the potential for market manipulation.¹⁹⁵ We agree that the coldest weather may occur in December, January or February, while

¹⁹⁰ *Id.* at 8.

¹⁹¹ Ex. SCG-05 at 9.

¹⁹² *Id.*

¹⁹³ Ex. SCG-04 at 7.

¹⁹⁴ *Id.*

¹⁹⁵ Ex. SDG&E-03 at SL-2.

November and March are less cold. As discussed below, we also agree that using more months will reduce the potential for market manipulation. As such, instead of only using forward prices for December, the economic factor will calculate one average number based on the average of the forward prices for December, January, and February.

Indicated Shippers recommends using actual prices during the storage withdrawal season instead of forward prices. Indicated Shippers argues that the calculation should not average the forward price for December from March 1 through May 31 because those are the shoulder months, not the withdrawal season.¹⁹⁶ However, the purpose of the analysis is to inform a storage level decision that will impact a future storage injection season. Below, this decision notes that an interim decision may be necessary to support reliability and just and reasonable rates, which means a decision would be made as early in the injection season as practicable. If actual prices during the withdrawal season are used instead, they will be more outdated than future prices. The economic factor results will be presented to the Commission as part of the biennial assessment report in June, as discussed in Section 4.4.3 below, which means data collected from March to May are the most recent available data to represent the anticipated prices in December of the upcoming winter.

Similar to Indicated Shippers, Southwest Gas¹⁹⁷ and SDG&E¹⁹⁸ state that storage inventory should not be changed solely based on the forecast data analysis. However, the intent of the economic analysis is to support stable natural gas prices in circumstances where the reliability analysis shows that the

¹⁹⁶ Ex. IS-04 at 6 – 7.

¹⁹⁷ Ex. SGC-03 at 3.

¹⁹⁸ Ex. SDG&E-03 at SL-2,

storage limit can be reduced, but natural gas prices in Southern California are disproportionately high. Because decisions to reduce or increase the storage limit will be based on both the reliability analysis and the economic analysis, there is no danger of making decisions solely based on forward prices. It is therefore reasonable to use forward prices from March 1 through May 31 for the upcoming winter in the biennial assessment report; therefore, we do not adopt changes proposed by Indicated Shippers.

There are two additional objections to the economic analysis. First, Mr. Najm argues the proposal does not quantify the impact of Aliso Canyon on price. Second, Southwest Gas, joined by Indicated Shippers and SDG&E, voice concerns regarding market manipulation.

Mr. Najm states that gas prices do not affect reliability.¹⁹⁹ In contrast, Indicated Shippers explains that rising prices do not cause reduced reliability, rather, rising gas prices are a symptom of perceived threats to reliability and potential scarcity of gas supply.²⁰⁰ Next, Mr. Najm argues the economic factor should not compare prices in Southern California to Henry Hub prices because Henry Hub has more pipeline interconnects than SoCal Citygate, and price volatility could be due to volatility at Henry Hub.²⁰¹ SoCalGas explains that comparing the SoCal Citygate average forward fixed price to the Henry Hub average forward price is reasonable because Henry Hub is considered a standard reference point for the natural gas market.²⁰²

¹⁹⁹ Ex. IN-04 at 2 – 3.

²⁰⁰ Ex. IS-05 at 10.

²⁰¹ Ex. IN-04 at 3.

²⁰² Ex. SCG-05 at 6.

We reject Mr. Najm's argument. Mr. Najm is correct that the economic analysis is a simple approach, which does not quantify the impact of Aliso Canyon on gas prices. However, the economic analysis is not designed to quantify the impact of Aliso Canyon. The economic analysis is designed to be a simple and transparent way to identify conditions when gas prices are high enough to significantly impact ratepayers' bills. We conclude that the economic analysis is reasonable, and in particular it is reasonable to compare the value of natural gas and storage in Southern California to the general benchmark for the United States, i.e. Henry Hub.

Southwest Gas argues that establishing a known economic consideration methodology could result in forward price manipulation.²⁰³ Southwest Gas explains that the first of the month natural gas forward contract settlement prices for a given forward month change daily based on market conditions until the first of the month price is set during bidweek for a particular month. Southwest Gas states that forward and future price information does not absolutely indicate what the actual first of the month price of gas will be for that month. Southwest Gas argues that if the Commission reduces the Aliso Canyon inventory, forward prices will likely increase because there will be less inventory available to buffer against unforeseen conditions.²⁰⁴ Southwest Gas states market participants can conduct their own calculations before the biennial assessment is published to determine whether Aliso Canyon is likely to be reduced to make decisions leading to high settlement prices in the forward market.²⁰⁵ As a solution, Southwest Gas proposes the biennial analysis incorporate "the assumption that

²⁰³ Ex. SGC-04 at 3.

²⁰⁴ Ex. SGC-03 at 5 – 6.

²⁰⁵ *Id.*

storage is a valuable resource for providing price protection against *unforeseen* high first of the month and daily natural gas prices that can occur at any supply point that California relies on.”²⁰⁶ SoCalGas disagrees that the Commission should not include an economic factor in the biennial assessment.²⁰⁷

As described above, instead of calculating only the December forward price, the forward price will be an average of the forward prices for December, January, and February. This represents a greater time period, which mitigates the potential for market manipulation because it would require more market involvement to achieve the same impact. By conducting the economic analysis, the assessment does assume that storage is a valuable resource for price protection, and the biennial assessment will include the economic analysis.

After considering the parties’ arguments, the economic analysis will include January and February in addition to December when calculating the natural gas price in Southern California for the upcoming winter. In addition, prices for December 2022 will not be included when calculating prices for the previous three Decembers. All other aspects of the analysis will stay the same. The implementation process in the following section provides opportunities to update the economic analysis.

4.4.3. Implementation Process

Based on the elements of the Staff Proposal, this decision creates a path for incremental reductions to the Aliso Canyon maximum inventory, our directions and expectations for the Energy Division’s biennial assessment, and establishes the implementation process.

²⁰⁶ *Id.* at 6 (emphasis in original).

²⁰⁷ Ex. SCG-06 at 1.

As described in the Staff Proposal, Energy Division would consult and coordinate with California Energy Commission (CEC), CAISO, CalGEM, and LADWP during the drafting of the biennial assessment report²⁰⁸ and hold a workshop with CEC after the biennial report is released and before comments are due. Energy Division would submit the report to the Commission on June 15 beginning in 2025. The Staff Proposal states that if Energy Division recommends changes to the storage limit, then the Commission would decide via a resolution.²⁰⁹

The parties' comments mainly dealt with ensuring coordination and adequate process. SDG&E argues that analysis of electric resources outside the IRP process would jeopardize reliability, and potential options for reducing reliance on electric resources served by Aliso Canyon are already being considered in IRP.²¹⁰ SoCalGas notes that the biennial assessment report needs to consider increases to the inventory if necessary.²¹¹ Regarding the process, SoCalGas, SDG&E, and Indicated Shippers note that CEC, CAISO, LADWP, and other relevant agencies and jurisdictions should be involved.²¹² Indicated Shippers recommends the Commission opens a formal proceeding to facilitate the biennial process, so that there is an opportunity for testimony, discovery, and cross examination.²¹³ Indicated Shippers states that during the biennial review

²⁰⁸ Staff Proposal at 15.

²⁰⁹ *Id.* at 15 – 16.

²¹⁰ SDG&E OB at 10.

²¹¹ Ex. SCG-01 at 1:41.

²¹² *Id.*; SDG&E OB at 15; IS OB at 31 – 32.

²¹³ IS OB at 44.

process, there must be opportunities for stakeholders to participate and closer coordination with other proceedings.²¹⁴

The analyses described in this decision focus on the impact of Aliso Canyon, which is not the focus of the proceedings mentioned by the parties. The description of the biennial assessment also envisions recommendations to change the storage inventory as needed to support reliability and just and reasonable rates. The Commission agrees that the process should include opportunities to exchange information, public discourse, and a formal process when needed. However, a formal process would be unnecessary if the biennial assessment recommends no change to the storage limit or the reliability and economic analyses.

If the biennial assessment recommends no changes to the storage limit or the reliability and economic analyses, then no formal action is required by the Commission. Energy Division will use the following process to ensure public engagement. On June 15, Energy Division will serve the biennial assessment report on the service list of this proceeding, IRP, and any long-term natural gas rulemaking proceeding, and then notice and hold a public workshop as soon as practicable with the parties and stakeholders to discuss the report and take informal comments. The report, with the comments attached, will be published on the Energy Division Aliso Canyon website and filed as a compliance filing in this proceeding's docket, within 45 days of the workshop.

If the biennial assessment recommends changes to the storage limit and/or the reliability or economic analyses, then the biennial report triggers a formal proceeding process. In this situation, where Commission action is required, an

²¹⁴ *Id.* at 5.

informal process is no longer adequate. A formal proceeding will provide opportunities for discovery, testimony, and cross examinations, and the following formal process should be followed. From June 15, when Energy Division serves the report on the service list of this proceeding, IRP, and any long-term natural gas rulemaking proceeding, SoCalGas will have 90 days to file an application requesting the Commission to review the Energy Division's recommended actions and set forth its own recommendations (if different from Energy Division). Within 90 days of filing the application, SoCalGas will organize a workshop during which Energy Division will present its report, and SoCalGas will present its application. In the formal proceeding, the Commission will review the biennial report, the recommendations, the record, and issue a decision. Lastly, the Commission may also issue an interim decision in the formal proceeding regarding the storage limit, if needed, to protect reliability and just and reasonable rates before the conclusion of the proceeding initiated by the SoCalGas application. Because it is unknown how soon the peak day forecast will decline or what economic events might occur, this process will remain in effect until changed by the Commission.

The above outlined process that we adopt today is the last step of the framework to monitor, assess, and support reliability and rate stability while working to reduce and eliminate reliance on Aliso Canyon. When the peak day demand forecast for two years out decreases to 4,121 MMcfd and the biennial assessment process shows that Aliso Canyon could be closed without jeopardy to reliability or just and reasonable rates, then the Commission will open an Order Instituting Investigation proceeding to review the conclusions of the biennial assessment and to address the relevant issues related to permanent closure and decommissioning.

Both SoCalGas and Indicated Shippers argue that before making any decision to close Aliso Canyon, the natural gas demand reduction must be permanent. SoCalGas notes that the reductions in demand used (a volumetric decrease in the 1-in-10 year cold day demand forecast), must be actual, sustained, and permanent, which should not rely on forecasts.²¹⁵ SoCalGas points out that the 2020 California Gas report predicted the 2022 summer peak demand to be 3,206 MMcfd, but the 2022 California Gas Report summer peak demand forecast was 20 percent lower, at 2,579 MMcfd. During the 2022 summer heatwave, however, SoCalGas customer demand was often over 2,579 MMcfd. SoCalGas argues that actual displacement of natural gas demand has to be repeatable over time, demonstrated to be a permanent loss, both on peak days and annually.²¹⁶

These arguments highlight the current need for Aliso Canyon, which is why the Commission implements a biennial assessment process focused on tracking and evaluation of California's natural gas demands.

5. Other Issues

5.1. Evidentiary Hearing

PCF argues that its due process rights have been violated because the Commission did not hold an evidentiary hearing and PCF did not have the opportunity to cross examine witnesses.²¹⁷ PCF states that, in D.21-11-008, the Commission promised that the parties would be afforded opportunity to contest evidence at hearings.²¹⁸ PCF states that it would have conducted cross examination on SoCalGas expert testimony that Aliso Canyon is needed to

²¹⁵ Ex. SCG-01 Ch. 1 at 46, Ch. 3 at 5

²¹⁶ *Id.* Ch. 1 at 46 - 47.

²¹⁷ PCF OB at 32 – 33.

²¹⁸ *Id.* at 9, 32 – 35.

preserve reliability and that eliminating Aliso Canyon will increase price volatility and raise customer bills.²¹⁹ PCF claims that evidentiary hearings could have allowed PCF to establish that there is no foundation for SoCalGas' testimony.²²⁰ In response, SoCalGas states PCF failed to identify disputed issues of material fact which an evidentiary hearing would resolve.²²¹

In 2021, when D.21-11-008 was issued, the Commission anticipated holding evidentiary hearings. However, by 2024, the ALJ in this proceeding determined and issued rulings and found that PCF failed to identify disputes of material facts in sufficient specificity to warrant holding an evidentiary hearing.²²² In this and other proceedings, the Commission has inherent authority to determine whether there are material disputed facts that warrant evidentiary hearings and hold them when necessary. Here, we agree with SoCalGas that PCF failed to identify disputed issues of material fact which an evidentiary hearing would resolve. We therefore affirm the ALJ's rulings and confirm that no evidentiary hearings are needed.

5.2. Motions to Strike

On May 3, 2024, SoCalGas filed a motion to strike portions of the opening briefs by PCF and Mr. Najm. PCF and Mr. Najm timely filed their responses on May 20, 2024, and May 17, 2024, respectively.

SoCalGas states that materials in the opening briefs by Mr. Najm and PCF address issues that are outside the scope of this proceeding, including issues

²¹⁹ *Id.* at 34 – 35.

²²⁰ *Id.* at 35.

²²¹ SCG RB at 48.

²²² Administrative Law Judge's Ruling Moving Evidence into the Record and the Schedule, August 29, 2023; Administrative Law Judge's Ruling on Testimony and Schedule, February 27, 2024, at 5.

related to well failure, health impacts, air quality, and market manipulation. SoCalGas includes a table that lists the statements it argues should be stricken.

Regarding PCF, the table covers issues such as the methane leak from Aliso Canyon, greenhouse gas emissions, minimum local generation, letters from Governor Gavin Newsom to the Federal Energy Regulatory Commission regarding the 2022 - 2023 winter natural gas prices and market manipulation, and reports and assessments. PCF states that its arguments regarding greenhouse gas emissions relate to compliance with climate change legislation, not the control of pollutants limited by air quality standards. It also states that PCF's opening brief appropriately argues that the economic analysis should be rejected because it might incentivize market manipulation.

Regarding Mr. Najm, the table lists statements related to the air quality standards, the health of communities near Aliso Canyon, and reports. In response, Mr. Najm refers to Question 2 of this proceeding, which states "the Commission will consider the safety of the facility and the results of the SB 826[] study ..." Additionally, Mr. Najm recites Section 451 of the Public Utilities Code, which requires the utilities to operate safely.

The Commission has been careful to limit the scope of this proceeding since 2017. The 2017 Scoping Memo and Ruling of Assigned Commission and Administrative Law Judge devoted a detailed section to issues outside of the scope of this proceeding because they are addressed in other proceedings and venues. The 2017 Scoping Memo and Ruling noted that the Aliso Canyon issues are complex and listed particular issues with explanations as to why they are outside the scope of this proceeding. We agree that issues such as the mechanical operations of the wells, impact to air quality from the Aliso Canyon leak, and public health concerns are addressed by other agencies and in other

venues. Sections 4.1 and 4.2 above considers safety in the narrow context of mechanical operations at Aliso Canyon, where CalGEM has primary jurisdiction.

The other arguments presented in PCF's briefs, including minimum local generation and market manipulation during the 2022 – 2023 winter are addressed by this decision and other decisions. Section 4.1 above rejects PCF's minimum local generation argument again, reiterating the reasons already stated in the Commission's 2021 decision.²²³ Similarly, the Commission already held that market manipulation during the 2022 – 2023 winter is outside the scope of this proceeding because the Commission is focused on this topic in another proceeding.²²⁴ Although Section 4.4.2 above discusses arguments regarding market manipulation related to the economic analysis, it does not discuss allegations of market manipulation during the 2022 – 2023 winter.

In short, PCF and Mr. Najm's briefs include material that is outside the scope of this proceeding. Although briefs can and do contain each party's arguments and advocacy, extra-record material should not be cited. Rule 13.12 of the Commission's Rules of Practice and Procedure states that "Factual statements must be supported by identified evidence of record.... Citations to exhibits must indicate the exhibit number and exhibit page number." Here, we do not strike the materials identified in SoCalGas' table to the extent they represent PCF's and Mr. Najm's arguments and advocacy. However, we assign no value to the materials that are outside the scope of this proceeding, arguments

²²³ D.21-11-008 at 19.

²²⁴ D.23-08-050 at 18 – 19; *see* I.23-03-008, Order Instituting Investigation on the Commission's Own Motion into Natural Gas Prices During Winter 2023-2023 and Resulting Impacts on Energy Markets.

based on extra-record materials, and the extra-record materials themselves.

Therefore, we grant SoCalGas' motion in part and deny in part.

6. Conclusion

For the forgoing reasons, the Commission finds that the Aliso Canyon is a necessary part of California's energy infrastructure today. By pursuing a policy of non-carbon resources to replace Aliso Canyon and a plan to track and monitor the natural gas demand reduction over time, the Commission creates a path to reduce and eliminate reliance on Aliso Canyon so the Commission can consider potential closure without compromising system reliability and just and reasonable rates.

With the biennial assessment reports beginning in 2025, Energy Division staff will monitor natural gas demand, reliability, and economic impacts. If warranted, the reports will recommend a change to the maximum storage level at Aliso Canyon. The biennial assessment process will, over time, enable a thoughtful path to incremental step-down of Aliso Canyon operation, at a rate which is feasible and consistent with providing reliable and affordable energy.

7. Summary of Public Comments

Rule 1.18 of the Commission's Rules of Practice and Procedure allows any member of the public to submit written comment in any Commission proceeding using the "Public Comment" tab of the online Docket Card for that proceeding on the Commission's website. Pursuant to Rule 1.18(a), public comments received prior to the submission of the record in the proceeding are entered into the administrative record of that proceeding. Rule 1.18(b) requires that relevant written comment submitted in a proceeding to be summarized in the final decision issued in that proceeding.

264 public comments were received prior to the submission of the record in the proceeding on May 3, 2024. 206 public comments were received since May 3, 2024. The public comments oppose natural gas storage at Aliso Canyon and support its closure.

8. Comments on Proposed Decision

The proposed decision of ALJ Zhang in this matter was mailed to the parties in accordance with Section 311(d) of the Public Utilities Code and comments were allowed under Rule 14.3. On December 3, 2024, SCE, CAISO, TURN, Indicated Shippers, CalCCA, PCF, Sierra Club and Mr. Najm filed opening comments. SoCalGas and SDG&E filed joint opening comments. On December 9, 2024, TURN, CalCCA, PCF, Sierra Club and Mr. Najm filed reply comments. SoCalGas and SDG&E filed joint reply comments.

In general, the parties support the decision's reasonable and practical path to close Aliso Canyon as the Commission tracks and evaluates decreasing reliance on Aliso Canyon without harm to reliability and just and reasonable rates. PCF and Mr. Najm argue that the decision should close Aliso Canyon.²²⁵ As Sections 4.1 and 4.2 above explain, based on current conditions, it would be imprudent to set a definitive closure date or timeline given Aliso Canyon's role in natural gas and electric reliability and benefits to ratepayers.

The parties propose a variety of clarifications relating to coordination, process, and the natural gas peak forecast inputs. First, there are a variety of

²²⁵ The Protect Our Communities Foundation Comments on Proposed Decision Adopting Biennial Process, December 3, 2024, at 12; The Protect Our Communities Foundation Reply Comments on Proposed Decision Adopting Biennial Assessment Process, December 9, 2024, at 5; Comments of Issam Najm on the Proposed Decision Adopting Biennial Assessment Process, December 3, 2024, at 6 – 8; Reply Comments of Issam Najm Regarding the Proposed Decision Adopting Biennial Assessment Process, December 9, 2024, at 3.

recommendations for the decision to direct coordination with entities outside the Commission and to direct Commission proceedings to address specific Aliso Canyon topics. For example, CalCCA and Sierra Club agree with CAISO that the decision should direct IRP to consider the resources to replace Aliso Canyon.²²⁶ TURN states this decision should direct the IRP proceeding to conduct local reliability analysis related to Aliso Canyon.²²⁷ The parties' comments highlight the complex coordination necessary to close Aliso Canyon, which this decision discusses in Sections 4.3.3 and 4.4.3. By providing the biennial process for key stakeholder input, the Commission will monitor the progress related to Aliso Canyon and order specific studies and activities as needed.

Next, TURN and PCF argue that more process is necessary. First, TURN objects to Energy Division only holding a workshop and providing an opportunity to comment when the Energy Division biennial assessment report recommends no changes to the storage limit and/or analyses. TURN requests a more explicit opportunity to challenge the findings.²²⁸ Because this decision creates cyclical review of Aliso Canyon and related analyses, the Commission is able to determine and initiate any necessary changes in the future if the current process proves inadequate. Second, PCF and TURN argue that the Commission

²²⁶ Comments of the California Independent System Operator Corporation on the Proposed Decision Adopting Biennial Assessment Process, December 3, 2024, at 3 – 5; Sierra Club Reply Comments on Proposed Decision Adopting Biennial Assessment Process, December 9, 2024, at 2 – 3; California Community Choice Association's Reply Comments on the Proposed Decision Adopting Biennial Assessment Process, December 9, 2024, at 2 – 3.

²²⁷ Reply Comments of The Utility Reform Network on the Proposed Decision Adopting Biennial Assessment Process, December 9, 2024, at 3.

²²⁸ Comments of The Utility Reform Network on the Proposed Decision Adopting Biennial Assessment Process, December 3, 2024, at 7.

should have held an evidentiary hearing.²²⁹ Here, PCF participated in creating the evidentiary record with its written expert testimony. For reasons explained in Section 5.1, we affirm that an evidentiary hearing, beyond receipt of written evidence as was done here, was not required in this proceeding.²³⁰

Lastly, the parties argue that the California Gas Report is an unreliable source to establish the peak day natural gas demand forecast.²³¹ The decision's Attachment A, Table 1, addresses the forecast natural gas peak day demand and states that Energy Division will consider the California Gas Report and the CEC forecast when it is available and the Commission adopts it.

We have carefully reviewed and considered the parties' comments and made appropriate changes to the proposed decision where warranted. We find that all other comments not specifically addressed by revisions to the proposed decision do not raise any factual, legal or technical errors that would warrant further modifications to the proposed decision.

9. Assignment of Proceeding

Alice Reynolds is the assigned Commissioner and Zhen Zhang is the assigned Administrative Law Judge and the presiding officer in this proceeding.

²²⁹ The Protect Our Communities Foundation Comments on Proposed Decision Adopting Biennial Assessment Process, December 3, 2024, at 2; Reply Comments of The Utility Reform Network on the Proposed Decision Adopting Biennial Assessment Process, December 9, 2024, at 1 – 2.

²³⁰ Pub. Util. Code Section 1701(a) (stating “No informality in any hearing, investigation, or proceeding or in the manner of taking testimony shall invalidate any order, decision, or rule made, approved, or confirmed by the commission.”).

²³¹ Joint Opening Comments of Southern California Gas Company (U 904 G) and San Diego Gas and Electrical Company (U 902 G) on Proposed Decision Adopting Biennial Assessment, December 3, 2024, at 2 – 3; Comments of The Utility Reform Network on the Proposed Decision Adopting Biennial Assessment Process, December 3, 2024, at 3 – 5; Sierra Club Reply Comments on Proposed Decision Adopting Biennial Assessment Process, December 9, 2024, at 3 – 4.

Findings of Fact

1. Aliso Canyon is a necessary part of California's energy infrastructure, at this time, to support natural gas and electric system reliability and just and reasonable natural gas and electricity rates.
2. Aliso Canyon is currently necessary to protect against natural gas and electricity price spikes.
3. Closure of Aliso Canyon at this time would be imprudent and will likely compromise gas and electric system reliability and negatively impact ratepayers.
4. D.21-11-008 increased the interim limit of working natural gas stored at Aliso Canyon from 34 Bcf to 41.16 Bcf to protect natural gas and electricity customers from reliability and economic impacts during the 2021-2022 winter.
5. During the 2022-2023 winter, SoCalGas, SDG&E, and SCE experienced high natural gas costs.
6. During the 2022-2023 winter, customers of SoCalGas, SDG&E, and SCE experienced high natural gas and electricity bills compared to previous years.
7. D.23-08-050 increased the storage limit of working natural gas at Aliso Canyon from 41.16 Bcf to 68.6 Bcf to protect natural gas and electricity customers from reliability and economic impacts during the 2023-2024 winter.
8. Given the uncertainties and changes in the natural gas and electric systems, there is insufficient evidence to conclude that Aliso Canyon should close by 2027 or earlier with only existing electric transmission resources and procurement requirements.
9. As part of the tracking and evaluation process ordered in this decision, it is reasonable to adopt the Staff Proposal's resource mix composed of increased renewable electricity generation, storage resources, energy efficiency, and building electrification.

10. It is reasonable to leave for other proceedings to determine in what proportion the adopted resource mix will be procured and how and when the resources will come online.

11. Forecasted peak electricity demand and peak day natural gas demand have changed in recent years; therefore, the natural gas shortfalls for a forecast 1-in-10 peak day if Aliso Canyon is unavailable identified in the 2021 Phase 3 Report and the 2022 Energy Division Staff Proposal are outdated.

12. The incremental changes to the maximum storage limit at Aliso Canyon tied to predetermined decreases in peak day demand forecasts proposed in the 2022 Energy Division Staff Proposal are outdated.

13. Given the changes to electricity and natural gas demand, instead of focusing on the outdated shortfall calculations from 2021 and 2022, it is reasonable to set the goal of reaching a forecasted natural gas peak day demand of 4,121 MMcfd before considering the potential closure Aliso Canyon.

14. Higher storage levels at Aliso Canyon reduce natural gas price spikes and protect just and reasonable rates, even if the reliability analysis finds that the Aliso Canyon storage level can be reduced from a reliability perspective.

15. Using natural gas demand forecasts for future 1-in 10 peak day demand is reasonable because they best represent peak day demand for the upcoming winter season.

16. To establish whether high prices in the upcoming winters should be considered in our decision to change maximum level of storage at Aliso Canyon, it is reasonable to monitor and compare Southern California Citygate natural gas prices to national gas prices at Henry Hub.

17. It is reasonable to calculate one average natural gas price based on the average prices for December, January, and February forward prices published from March 1 through May 31.

18. An economic analysis is necessary determine what level of the storage limit at Aliso Canyon is appropriate to support reliability and protect just and reasonable rates for customers.

19. It is reasonable for the Energy Division to conduct reliability analyses, economic analyses, and track and monitor the natural gas demand forecast, which results in recommendation(s) related to the maximum storage limit.

20. It is reasonable for Energy Division to conduct technical analyses, including the reliability and economic analyses, as part of a biennial assessment.

21. Based on the biennial assessment, it is reasonable for Energy Division to recommend reductions to the Aliso Canyon maximum storage limit by increments of up to 10 Bcf.

22. It is reasonable for the first biennial assessment report to occur in 2025 and biennially thereafter.

23. The Staff Proposal outlined the implementation process after conducting the biennial assessment, which would result in a report and draft resolution for the Commission to consider.

24. If the biennial assessment report recommends changes to the maximum storage limit or the technical reliability and economic analyses, then the resolution process would be inadequate to promote active stakeholder participation, and the Commission would need to act on the recommendations in a formal proceeding.

25. If the biennial assessment report recommends changes to the maximum storage limit or the technical reliability and economic analyses, then a formal

proceeding would allow the parties due process and opportunities for participation with discovery, testimony, and cross examination, as needed.

26. If a formal proceeding is initiated, due to the critical role of Aliso Canyon in supporting reliability and just and reasonable rates, it is reasonable to change the storage limit based on the latest biennial assessment report with an interim decision while considering in detail the biennial assessment report, the recommendations, and the record.

27. If the biennial assessment report recommends no changes to the maximum storage limit, then it is reasonable that Energy Division follow an informal public engagement process.

28. The opening briefs of PCF and Mr. Najam raise several issues outside the scope of this proceeding

29. There are no material facts in dispute requiring evidentiary hearing.

30. The record was submitted on May 3, 2024.

Conclusions of Law

1. Aliso Canyon should remain in operation and the maximum working natural gas storage level at Aliso Canyon Natural Gas Storage Facility is set at 68.6 billion cubic feet until such time as the Commission modifies these outcomes.

2. There is insufficient record in this proceeding to find that Aliso Canyon can be closed at this time without compromise to system reliability and harm to ratepayers.

3. It would be detrimental to ratepayers and system reliability to close Aliso Canyon at this time.

4. The Staff Proposal's portfolio mix of carbon neutral resources – renewable generation and storage, building electrification, and energy efficiency – is reasonable and should be adopted.

5. Other proceedings should determine in what proportion of the Staff Proposal's portfolio mix of carbon neutral resources will be procured and how and when they will come online.

6. Energy Division should conduct reliability and economic analyses to determine what level of storage at Aliso Canyon is appropriate to protect reliability and just and reasonable rates for customers through its biennial assessments.

7. Starting on June 15, 2025, Energy Division should serve the biennial assessment report on the service list of this proceeding, IRP, and any long-term natural gas rulemaking proceeding.

8. If the biennial assessment report recommends no changes to the maximum storage limit, then the Energy Division should notice and hold a public workshop as soon as practicable with the parties and stakeholders to discuss the report and take informal comments. The report, with the comments attached, should be published on the Energy Division Aliso Canyon website and filed as a compliance filing in this proceeding's docket, within 45 days of the workshop.

9. If the biennial assessment report recommends changes to the storage level at Aliso Canyon or changes to the reliability and economic analyses, then within 90 days of the June 15 report, SoCalGas should file an application requesting the Commission to review the recommendations and present its own recommendations, if any.

10. Within 90 days of filing the application, SoCalGas should organize a workshop during which Energy Division will present its report and SoCalGas will present its application.

11. Due to the critical role of Aliso Canyon in supporting reliability and just and reasonable rates, it is reasonable to change the storage limit based on the latest biennial assessment report with an interim decision while considering in detail the biennial assessment report, the recommendations, and the record.

12. No evidentiary hearings are needed.

13. The Motion of Southern California Gas Company to Strike Portions of the Opening Briefs of the Protect Our Communities Foundation and Issam Najm should be granted in part and denied in part, and no weight should be given to the materials outside the scope of this proceeding, arguments based on extra-record materials, and the extra-record materials themselves.

14. All rulings issued in this proceeding by assigned ALJ and assigned Commissioner should be affirmed.

15. All pending motions not expressly ruled on to date should be denied.

16. I.17-02-002 should be closed.

O R D E R

IT IS ORDERED that:

1. Aliso Canyon Natural Gas Storage Facility is authorized to continue its operation, subject to future Commission review, and the maximum working natural gas storage level at Aliso Canyon Natural Gas Storage Facility is set at 68.6 billion cubic feet.

2. The Staff Proposal's portfolio mix of carbon neutral resources – renewable generation and storage, building electrification, and energy efficiency – is adopted while leaving for other proceedings to determine in what proportion the

Staff Proposal's portfolio mix of carbon neutral resources will be procured and how and when they will come online.

3. With methods detailed in Attachment A, the Energy Division biennial assessment report will include reliability analyses and economic analyses, and recommendations regarding the Aliso Canyon Natural Gas Storage Facility maximum storage limit or consideration of closure.

4. The biennial assessment report will be served on the service list of this proceeding, energy efficiency (Order Instituting Rulemaking (R.) 13-11-005 and successor proceedings), building decarbonization (R.19-01-011 and successor proceedings), Resource Adequacy (R.23-10-011 and successor proceedings), Integrated Resource Planning (R.20-05-003 and successor proceedings), and any long-term gas proceeding (R.24-09-012 and successor proceedings), on June 15, starting in 2025, and biennially thereafter.

5. If the biennial assessment report does not recommend changes to the maximum storage limit or the reliability and economic analyses, then Energy Division will notice and hold a public workshop as soon as practicable with the parties and stakeholders to discuss the report and take informal comments. The report, with the comments attached, thereafter will be published on the Energy Division Aliso Canyon website and filed as a compliance filing in this proceeding's docket, within 45 days of the workshop.

6. If the biennial assessment report recommends changes to the maximum storage limit or the reliability and economic analyses, then within 90 days of the June 15 report, Southern California Gas Company shall file an application requesting the Commission to review the recommendations and present its own recommendations, if any.

7. Within 90 days of filing the application, Southern California Gas Company (SoCalGas) shall organize a workshop during which Energy Division will present its biennial assessment report and SoCalGas shall present its application.

8. The Motion of Southern California Gas Company to Strike Portions of the Opening Briefs of the Protect Our Communities Foundation and Issam Najm is granted in part and denied in part.

9. Evidentiary hearings are not needed.

10. All rulings issued in this proceeding by the assigned Administrative Law Judge and assigned Commissioner are affirmed.

11. All outstanding motions not previously addressed are denied.

12. Investigation 17-02-002 is closed.

This order is effective today.

Dated _____, at San Francisco, California.

ATTACHMENT A

Biennial Assessment Report Inputs and Methods