# DOCKETED

| | |
|---|---|
| **Docket Number:** | 17-IEPR-01 |
| **Project Title:** | General/Scope |
| **TN #:** | 222455 |
| **Document Title:** | Southern California Gas Company Comments SoCalGas Comments on Proposed Final 2017 IEPR |
| **Description:** | N/A |
| **Filer:** | System |
| **Organization:** | Southern California Gas Company |
| **Submitter Role:** | Public |
| **Submission Date:** | 2/7/2018 3:45:52 PM |
| **Docketed Date:** | 2/7/2018 |

*Comment Received From: Southern California Gas Company*
*Submitted On: 2/7/2018*
*Docket Number: 17-IEPR-01*

## SoCalGas Comments on Proposed Final 2017 IEPR

*Additional submitted attachment is included below.*

**George Minter**
Regional Vice President
External Affairs & Environmental Strategy
Southern California Gas Company

555 W. 5th Street
Los Angeles, CA 90013
(213) 244-2550
GIMinter@semprautilities.com

February 7, 2017

California Energy Commission
Dockets Office, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

**Subject: Comments on the Proposed Final 2017 Integrated Energy Policy Report—17-IEPR-01 – General/Scope**

Southern California Gas Company (SoCalGas) appreciates the opportunity to comment on the Proposed Final 2017 Integrated Energy Policy Report (IEPR). Natural gas infrastructure supports resiliency in the energy sector and will continue to be instrumental in maintaining electric grid reliability, safety and security, especially as California continues to integrate an increased percentage of renewable electric energy. In addition, development and utilization of renewable gas and its use in ultra-low emission technologies can help further greenhouse gas (GHG) reductions.

SoCalGas provides feedback on the following chapters:

I. Chapter 2: Implementing SB 350
II. Chapter 7: Transportation Energy
III. Chapter 8: Natural Gas Trends and Outlook
IV. Chapter 9: Renewable Gas
V. Chapter 10: Climate Adaptation and Resiliency
VI. Chapter 11: Update on Energy Reliability Issues in Southern California

## I. Chapter 2: Implementing SB 350

SoCalGas supports the State's ambitious efforts to increase energy efficiency (EE) and reduce GHG emissions as part of Senate Bill (SB) 350. As we have stated in previous SB 350 comment letters,[1] the California Energy Commission (CEC) should consider impacts to feasibility and energy affordability when evaluating proposals and measures, such as fuel substitution.

[1] SoCalGas Comments on SB 350 Energy Efficiency Savings Doubling Targets Draft Commission Paper, September 21, 2017, and SoCalGas Comments on SB 350 Energy Efficiency Savings Doubling Targets Staff Papers, August 3, 2017.

### *The Effectiveness of Regional Energy Networks (RENs) is Still Under Evaluation*

The Utility Energy Efficiency Program Savings section contains a new statement that concludes that Community Choice Aggregators (CCA) and RENs will be important in meeting SB 350 targets, and should be an important element of future potential and goals studies carried out by the California Public Utilities Commission (CPUC).[2] However, the CPUC is still evaluating the effectiveness of RENs and any inclusion in future studies should be based on the outcome of those evaluations.

As of now, proposed REN activities in filed CPUC EE business plans[3] are pending a CPUC decision. D.16-08-019 reiterates that RENs should continue to focus on: "activities that utilities cannot or do not intend to undertake; pilot activities where there is no current utility program offering, and where there is potential for scalability to a broader geographic reach, if successful; and pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap." Some of the proposed new activities described in the proposals,[4] however, are duplicative of current and/or planned efforts by IOUs or are inconsistent with CPUC policy for proper use of EE ratepayer funds.

RENs must achieve their current objectives before expanding their current offerings. SoCalGas supports continued funding of existing RENs as pilots, where appropriate, and maintains that the most prudent course of action is to complete the evaluation of REN pilots before new REN activities or new RENs are authorized. Therefore, any tactics or future strategies included in the Final IEPR should be flexible, and based on the outcome of these business plan applications.

### *SoCalGas Supports the Creation of the Fuel Substitution Working Group*

SoCalGas appreciates the new recommendation for agencies, utilities and stakeholders to work together in evaluating fuel substitution with renewable gas and meeting the State's Short-Lived Climate Pollution (SLCP) reduction goals. As stated in our previous comments, SoCalGas agrees that this is an important step in ensuring that electrification of natural gas end-uses does not preclude adoption of other lower carbon energy sources and decelerate achievement of the State's climate goals. SoCalGas would like to be included in this working group and can provide input on utilizing renewable gas in the residential sector.[5]

## II. Chapter 7: Transportation Energy

[2] Proposed Final 2017 IEPR, p. 64.
[3] See applications of Southern California Edison Company (A.17-01-013), San Diego Gas & Electric Company (A.17-01-014), Pacific Gas and Electric Company (A.17-01-015), and Southern California Gas Company (A.17-01-016) for adoption of its Energy Efficiency Rolling Portfolio Business Plans.
[4] As an example, intervention strategies proposed by the Southern California Regional Energy Network can be found at https://docs.wixstatic.com/ugd/0c9650_c3d9a5b446704389bdff9cd0db785dc7.pdf, pp. 9-13.
[5] SoCalGas comments on 2017 Draft IEPR, November 13, 2017.

The Proposed Final 2017 IEPR states "To meet federal clean air standards, reduce overall GHGs, and reduce petroleum dependence within California, the state must clean up the transportation sector. One way to accomplish this is to electrify transportation, and many rules, regulations, policies, and programs throughout the state are focused on vehicle electrification."[6]

SB 350 and California Public Utilities Code section 740.12(a)(1)(A) state that "Advanced clean vehicles and fuels are needed to reduce petroleum use, to meet air quality standards, to improve public health, and to achieve greenhouse gas emissions reduction goals". Further, 740.12(a)(1)(C) states that the increased use of both zero emission and near-zero emission vehicles, in disadvantaged communities is necessary to "enhance air quality, lower greenhouse gas emissions, and promote overall benefits to those communities." As the majority of transportation GHGs come from light-duty vehicles[7], electrification of the light-duty transportation sector is an important strategy to achieving GHG reductions. However, as heavy-duty vehicles are the greatest contributors to NOx and air pollution in California's most impacted air basins, combining renewable gas with low- and ultra-low-NOx engines provides the best opportunity for California to achieve its air quality and climate change goals in the on-road heavy-duty transportation sectors in the near term[8].

Since *both* zero emission and near-zero emission vehicles provide public health and societal benefits, increasing access to multiple technologies and fuels in disadvantaged communities is desirable and required under SB 350. Therefore, SoCalGas recommends the following modification:

> "To meet federal clean air standards, reduce overall GHGs, and reduce petroleum dependence within California, the state must clean up the transportation sector. One way to accomplish this is to **encourage the use of advanced clean vehicles and fuels** ~~electrify transportation~~, and many rules, regulations, policies, and programs throughout the state are focused on **advanced clean** vehicle**s and fuels** ~~electrification~~."

Page 256 states "This expansion is in line with [California Air Resources Board's (CARB)] Innovative Clean Transit goal of transitioning all transit buses to zero-emission technologies by 2040. This assumption is justified on the basis of battery-electric buses being cost-competitive with diesel electric buses, capital costs for transit being borne largely by federal grants, and the reduced costs of fuel and maintenance."

SoCalGas recommends the text be modified as follows:

---

[6] Proposed Final 2017 IEPR, p. 255.
[7] Light-duty vehicles accounted for approximately 70% of transportation emissions in 2014 https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf
[8] https://www.gladstein.org/gna_whitepapers/game-changer-next-generation-heavy-duty-natural-gas-engines-fueled-by-renewable-natural-gas/

> "This expansion is in line with CARB's **proposed** Innovative Clean Transit goal of transitioning all transit buses to zero-emission technologies by 2040. This assumption is **based on CARB staff's position** that ~~justified on the basis of~~ battery-electric buses are ~~being~~ cost-competitive with diesel electric buses, capital costs for transit being borne largely by federal grants, and the reduced costs of fuel and maintenance."

We believe it is important to note that many stakeholders in the Innovative Clean Transit (ICT) workshops disagree with the CARB staff's position and believe mandating the use of electric buses in lieu of other alternate fuels and technologies will be extremely expensive. Notably, the California Transit Association recently published their concerns regarding the high cost and adverse operational impacts of electric buses.[9]

## III. Chapter 8: Natural Gas Trends and Outlook

SoCalGas appreciates the CEC's consideration of our previous comments relating to the Pipeline Safety & Reliability Project (PSRP). SoCalGas requests the following clarifications relating to the description of this proposed project.

SoCalGas and SDG&E have proposed PSRP to: 1) enhance the safety of their integrated natural gas transmission system and comply with State safety mandates, 2) improve the reliability and resiliency of the natural gas system within San Diego County, and 3) enhance operational flexibility to manage stress conditions by increasing local capacity in the San Diego region.

The proposed project would construct a new approximately 47-mile long, 36-inch diameter natural gas transmission pipeline from the existing Rainbow Metering Station, where SoCalGas and SDG&E also propose a new pressure-limiting station, and terminate on Marine Corps Air Station Miramar. The new pipeline would replace the transmission function of existing Line 1600 and allow it to be converted to distribution service. SoCalGas and SDG&E do not propose pressure testing Line 1600 and instead propose to de-rate—or lower the pressure of—Line 1600. Replacing Line 1600's transmission function and operating Line 1600 at a lower pressure achieves a greater margin of safety.

The new pipeline would also enhance the resiliency, reliability, and operational flexibility of SoCalGas and SDG&E's system by increasing local capacity in the San Diego region, which would allow SDG&E to handle intra-day fluctuations in electric generation demand. This is particularly important as new fast-ramping natural gas-fired electric generation comes online in San Diego County.

SoCalGas therefore requests revising page 260 of the clean version of the Final 2017 IEPR as follows:

[9] http://caltransit.org/news-publications/our-newsroom/press-releases/setting-the-record-straight-on-bus-electrification/

> California's existing combination of pipeline capacity and underground gas storage appears adequate to meet forecast natural gas demand and no general increase in capacity is proposed. SoCalGas and SDG&E~~, however,~~ have an application before the CPUC seeking permission to build a new 47-mile pipeline **which will provide several benefits to the San Diego region, including an increase in local system capacity. The proposed pipeline would** transport natural gas from the **existing** Rainbow ~~**Pressure-Limiting**~~ **Metering** Station at the Riverside/San Diego County line, south to the Marine Corps Air Station Miramar in San Diego. The proposed pipeline would replace **the** ~~**existing**~~ transmission **function of existing** Line 1600, which, under this proposal, would be **de-rated, or lowered in pressure,** ~~**converted**~~ to **serve as** a distribution line. The new line ~~**would allow safety testing**~~ **and de-rating** of ~~**the existing**~~ Line 1600 ~~and~~ **would** provide a measure of redundancy and additional **safety and** reliability for gas service into San Diego.

The Proposed Final 2017 IEPR also mischaracterizes the status of SoCalGas' Aliso Canyon storage field. The Proposed Final IEPR states, "As a result of the leak, Senate Bill 380 (Pavley, Chapter, 14, Statues of 2016) (SB 380) and DOGGR imposed a moratorium on injections at Aliso Canyon until SoCalGas complies with regulations and meets certain conditions."[10] On July 19, 2017, the CPUC and DOGGR confirmed that SoCalGas had met the requirements of the comprehensive safety review and could resume injections after several checks and activities were completed. On July 31, 2017, SoCalGas resumed injection operations at Aliso Canyon. SoCalGas requests that this CEC include this clarification in the report before finalizing the 2017 IEPR.

Finally, the Proposed Final 2017 IEPR simplifies the cause of the price impacts in Southern California: "The Energy Commission views this volatility as being caused by the pipeline outages and not by the reduced operating status Aliso Canyon."[11] SoCalGas operates an integrated system that relies on storage, transmission, and distribution assets to reliably serve our customers. The loss of any of these assets impacts reliability and could impact price volatility. The price volatility seen this winter is impacted by both events, but is primarily driven by CPUC-imposed restrictions on Aliso Canyon, which restricts and limits a strategically located source of natural gas supply that provides sufficient system resiliency to support the system when pipeline outages occur.

## IV. Chapter 9: Renewable Gas

***Corrections to Power-to-Gas and Hydrogen Statements***

[10] Proposed Final 2017 IEPR, p. 262.
[11] Ibid., p. 250.

SoCalGas appreciates the addition of power-to-gas in the recommendations for Chapters 3 and 9. However, we are concerned with a few incorrect statements made about power-to-gas in the Pipeline Injection section.

The Proposed Final 2017 IEPR references "the one operational project at the University of California, Irvine, (UC Irvine) that injects 0.24–0.78 percent hydrogen gas by volume into a SoCalGas natural gas pipeline." [12] For accuracy, we recommend editing this sentence to state that the injection occurs on UC Irvine's natural gas line, not a SoCalGas pipeline.

The Proposed Final 2017 IEPR states, "5 percent hydrogen concentration will accelerate fatigue crack growth in steel pipes, conservatively requiring pipelines to be repaired or replaced every 80 years, as opposed to 100 or more years."[13] However, this is not consistent with research findings. The research report states (emphasis added):

> "Parametric studies on the initial crack depth were conducted to find the maximum crack depth after 100 years under the given pressure fluctuations in hydrogen and in natural gas (assumed to be the same as that in air). **The results showed that axial cracks** in X42 line pipes with an initial depth smaller than 40% of the wall thickness **do not reach depths equal to 75% of the thickness over a period of 100 years**. For X52, X56, X60, and X65, the corresponding initial crack depth of 50% of the wall thickness **never leads to depths equal to 75% of the thickness over a period of 100 years**."[14]

Thus, for the existing pipeline materials and pressure fluctuations investigated, pipeline lifetimes of greater than 100 years can be expected for complete substitution of hydrogen (100% hydrogen) when the initial depth of cracks in these pipelines is 50% through or less.

The apparent "80 year" limit that was found by IEPR authors may have been garnered from Figure 26 of the report. Note that this failure shown in Figure 26, however, occurred in one of the simulations for a case of 100% hydrogen in a pipeline with an initial crack depth of 53% through.

***The CEC Must Make Stronger Recommendations for the Development and Use of Renewable Gas***

SoCalGas reiterates our previous concerns with the lack of sufficient recommendations on increasing the development and use of renewable gas, particularly with respect to infrastructure development and procurement policies. Without specific policies that prioritize and support in-

---

[12] Ibid., p. 344.
[13] Ibid., pp. 344-345.
[14] M. Dadfarnia and P. Sofronis, Assessment of Resistance of Line Pipe Steels to Hydrogen Embrittlement, November 29, 2016, p. 14. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0ahUKEwi0gZyggd3YAhWvmuAKHRHhCCAQFgg0MAI&url=http%3A%2F%2Fwww.apep.uci.edu%2Fdownload01%2FPower-to-Gas%2FFinal_Report_SoCalGas_Project_UIUC.doc&usg=AOvVaw1mrQ4W1bu7KFISGedK_qDP.

state development of pipeline-injected renewable gas, California will not meet the goal of 40% reduction of methane below 2013 levels by 2030. It is well documented that the largest methane emissions in California come from the agricultural and waste sectors.[15] Capturing these emissions will be integral to lowering methane emissions in California in a reasonable and economic way.[16] The existing natural gas infrastructure provides a solution by transporting renewable natural gas over existing transmission and distribution infrastructure. These efforts would have the added benefit of promoting economic development in these areas and energy reliability in California by developing new renewable energy sources.

The CEC should include pipeline injection for direct end-use as an explicit recommendation for the long-term use of renewable gas. Using the pipeline system will provide this resource access to the broadest market, enabling greater flexibility and maintaining long-term value.

Additionally, SoCalGas believes that market stability through a utility procurement requirement will be necessary to increase production, drive down costs over time, develop new gasification and other renewable gas technologies, and provide the volumes necessary to move renewable gas to the core market. This will drive greater GHG reductions without the massive disruption and investment that would be required for individual customers to replace existing equipment and appliances. SoCalGas also recommends that the CEC support facilitating long-term supply contracts, which would enable capital financing of long-term production projects and provide further market certainty for the renewable gas market.

## V. Chapter 10: Climate Adaptation and Resiliency

In the Proposed Final 2017 IEPR, the following comment from SoCalGas is incorrectly attributed to our sister company, SDG&E: "In order for climate plans to be effective, every region of California must be considered and engaged. Specifically, SoCalGas wants to be involved in establishing a California Partnership for Energy Sector Climate Resilience and convening a joint-agency workshop on climate resilience metrics to help track California's action and successes."[17] This quote is from our comment letter on the Draft 2017 IEPR.[18] We welcome the support from the CEC and look forward to participating in the Partnership for Energy Sector Climate Resilience.

## VI. Chapter 11: Update on Energy Reliability Issues in Southern California

[15] Proposed Final 2017 IEPR, p. 279 (See also https://www.arb.ca.gov/board/books/2017/092817/17-9-5pres.pdf).
[16] See October 2, 2017, Introduction to the Phase I Report of the California Methane Survey from the Staff of the California Air Resources Board (CARB), available at https://www.arb.ca.gov/research/methane/CA_CH4_Survey_Phase1_Report_2017.pdf.
[17] Proposed Final 2017 IEPR, p. 404.
[18] SoCalGas Comments on the Draft 2017 Integrated Energy Policy Report. November 13, 2017.

***Southern California Customers Deserve Mitigation Measures That Are Targeted and Reasonable, and Will Not Unnecessarily Impact SoCalGas Customers and Customer Choice***

SoCalGas agrees that warmer and milder than expected weather conditions this winter have significantly contributed to SoCalGas avoiding the need to withdraw the quantities of gas it would during a normal (or cold) winter.[19] Other parts of the United States have not been so fortunate. In fact, extreme conditions east of California have restricted supplies and caused prices in certain areas to significantly increase.[20]

Although the unusually warm weather conditions in California have helped mitigate some concerns regarding reliability this winter, SoCalGas remains concerned about the potential for colder temperatures later in the season, especially considering the current limitations on the system. This risk is especially true in the Santa Barbara County area, where Southern California continues to manage the aftereffects of the recent wildfires and mudslides.

California deserves mitigation measures to these risks that are targeted and reasonable, and that will not unnecessarily impact SoCalGas customers and customer choice. The CEC's and CPUC's recommendation of an emergency moratorium on new natural gas connections in Los Angeles County is not a targeted or reasonable mitigation measure.[21]

When the CPUC issued a proposal to direct SoCalGas to implement such a moratorium on new commercial and industrial customer natural gas connections in Los Angeles County,[22] SoCalGas requested that the CPUC reject the draft resolution because it is unreasonable, unnecessary, contrary to the public interest, and inconsistent with established curtailment rules, priority of service, and applicable CPUC decisions.[23] Numerous other parties[24] opposed the CPUC's proposal, and highlighted the harm that would be done to the economy if the moratorium were implemented. The Los Angeles County Economic Development Corporation's (LAEDC) Institute for Applied Economics examined the potential economic implications of the proposed moratorium, including the direct, indirect, and induced employment impacts within Los Angeles County. LAEDC determined that, if implemented, the emergency moratorium would have the following estimated economic and job impacts over its proposed duration (January 11th through March 2018):

- 5,160 fewer total jobs would be created

[19] Proposed Final 2017 IEPR, p. 377.
[20] See http://www.naturalgasintel.com/articles/112957-natgas-spot-hits-record-175mmbtu-at-transco-z6-ny-amid-noreaster-midday-alert.
[21] Proposed Final 2017 IEPR, p. 378.
[22] See CPUC Draft Resolution G-3536.
[23] SoCalGas Comments on CPUC Draft Resolution G-3536.
[24] Los Angeles County, American Gas Association, LA County Business Community Coalition, Bloom Energy, California Manufacturers and Technology Association, Biz Fed LA County, PTG Water & Energy, Californians for Affordable and Reliable Energy, California Council for Environmental and Economic Balance, Clean Energy, and Honeybird Restaurant.

- $879.5 million lost in future economic output
- $323.9 million lost in future labor earnings
- $119.7 million lost in future federal, state and local tax revenues, of which $13.3 million and $5.8 million will be lost in tax revenues to Los Angeles County and local cities, respectively[25]

This demonstrates the importance of natural gas to the economy and the need for investment in and use of natural gas infrastructure to support California. California policymakers must support the maintenance of a safe and reliable natural gas system, promote a healthy California economy, and continue towards its environmental and air quality goals, which natural gas and renewable gas can help support.

***Aliso Canyon Is an Important Part of California' Energy System***

As acknowledged by the Proposed Final 2017 IEPR: "The Aliso Canyon natural gas storage facility has been an important tool for managing natural gas supply for electric generation (particularly in summer when air-conditioning use is high) and home heating use (in the winter)."[26] Aliso Canyon has been instrumental in supporting an affordable, reliable, and resilient energy system; enabling the integration of renewable resources; and in promoting a healthy and functioning economy.

Despite this, much of the Proposed Final IEPR seems colored by efforts to achieve the permanent closure of the Aliso Canyon facility within 10 years.[27] The goal of closing Aliso Canyon was first announced in July 2017, when Chair Weisenmiller announced that the CEC plans to work with other agencies to plan for the permanent closure of the Aliso Canyon natural gas storage facility within 10 years.[28] SoCalGas continues to disagree with the CEC's recommendation to permanently close Aliso Canyon within ten years, and recent analysis validates the importance of underground storage to energy reliability.

As acknowledged in Chair Weisenmiller's announcement, the Governor called for the California Council of Science and Technology (CCST) to prepare an independent and scientific assessment of the long-term viability of all natural gas storage facilities in California, and this assessment "will inform how the state will rethink all natural gas storage facilities in California."[29] That independent assessment should cause the CEC to reconsider how it views natural gas storage

[25] See https://laedc.org/2018/01/09/proposed-gas-moratorium-warrants-further-study/.
[26] Proposed Final 2017 IEPR, p. 24.
[27] Ibid., p. 373 ("The report also raised the possibility of curtailing noncore customers to preserve storage inventory and withdrawal capacity needed for core customers. SoCalGas further reiterated its top mitigation measure is to operate Aliso Canyon unrestricted in the same manner it did before the gas rupture and historic leak in 2015. Doing so, however, would be inconsistent with the long-term policy goals of reducing California's reliance on methane and closing Aliso Canyon in 10 years.").
[28] Ibid., p. 140.
[29] See http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/News_and_Updates/2017-07-19-energy-commission-chair-releases-letter-ailso-canyon_nr.pdf (emphasis added).

facilities in the state, including Aliso Canyon – a facility that, before the current restrictions imposed by the CPUC, accounted for approximately 23% of the natural gas storage inventory in California and 64% in Southern California.

The CCST report was created by having numerous scientific experts and research institutions consult with the CPUC, CEC, CARB, and the Division of Oil, Gas, and Geothermal Resources (DOGGR). Consistent with its legislative mandate, the CCST report includes a broad review of the potential health risks and community impacts associated with the operation of underground natural gas storage facilities, including fugitive emissions. The report also examines the linkages between gas storage, California's current and future energy needs, and its greenhouse gas reduction goals.

The CCST report ultimately determines that California needs natural gas and underground natural gas storage to run reliably, and that without such storage, California would be unable to consistently meet winter demand for natural gas.[30] In fact, the CCST report assessed the need for natural gas in the near- (2020), mid- (2030), and long-term (2050), and determined:

- "In the near term, no method of conserving or supplying electricity—including electricity storage (batteries, pumped hydroelectric, compressed air storage, etc.), new transmission, energy efficiency measures, and demand response—can replace the need for gas to meet the winter peak in the 2020 timeframe."[31]
- "We could not identify a technical alternative gas supply system that would meet the 11.8 Bcfd extreme weather peak day demand forecast and allow California to eliminate all underground gas storage by 2020." [32]
- "Two possible longer-range physical solutions are extremely expensive, carry their own risks, and would incur barriers to siting. The potential benefits of other approaches that were examined are either small, cannot be estimated at this time, or have negative impacts such as dramatic increase in air toxins and greenhouse gas emissions. No 'silver bullet' can replace underground gas storage in the 2020 timeframe."[33]
- "The total amount of underground gas storage needed is unlikely to change by 2030."[34]
- "California's climate change policies for 2030 are likely to reduce total gas in California, however, they are also likely to require significant ramping in our natural gas generation to maintain reliability.[35]
- "California has not yet targeted a future energy system that would meet California's 2050 climate goals and provide energy reliability in all sectors. California will likely rely on

[30] Long-Term Viability of Underground Natural Gas Storage in California Summary Report, p. 9 (Conclusion SR-2); Long-Term Viability of Underground Natural Gas Storage in California, p. 496 (Conclusion 2.1).
[31] Ibid., p. 547 (Conclusion 2.15).
[32] Ibid., p. 562 (Conclusion 2.16).
[33] Ibid., p. 562 (Conclusion 2.16).
[34] Ibid., p. 649 (Conclusion 3.9).
[35] Ibid., p. 649 (Conclusion 3.8).

underground gas storage for the next few decades as these complex issues are worked out."[36]

As SoCalGas has stated on numerous occasions, the need for flexible and strategically located supply sources will only increase as more renewables are brought online. California needs more flexibility on the energy system, not less. Consistent with the CCST report, it is important for the State to recognize the crucial role of natural gas in reaching our climate policy goals.

SoCalGas agrees with the CCST report that underground natural gas storage could increasingly be called upon to provide natural gas and electric reliability during emergencies caused by extreme weather and wildfires, which is expected to only increase with climate change.[37] This is evidenced by the recent wildfires and mudslides in the Santa Barbara County area, and the consequences of those events being mitigated by underground natural gas storage.

In addition, the CCST report addresses potential health and safety risks associated with underground natural gas storage, concluding that associated potential risks can be mitigated and managed.[38] Here, too, SoCalGas agrees, and has already introduced industry-leading safety practices that state regulators and independent experts have referred to as the most comprehensive in the nation.

Further, the CCST report notes that the natural gas pipeline system and related infrastructure could continue to be a useful energy resource for the state for decades to come. For example, the state's underground natural gas storage facilities may be important resources for long-term storage of renewable gas, renewable hydrogen, and carbon dioxide related to carbon capture and sequestration.[39]

The CEC's formal statements that Aliso Canyon should be closed in ten years should be reconsidered based on the findings of the CCST report – which included consulting with the CEC. Public policy must be guided by technical analysis performed by independent experts and research institutions. The CEC should revise its policy goals consistent with the CCST report.

***The Future of Aliso Canyon is the Subject of an Ongoing CPUC Proceeding***

As the CEC is aware, the CPUC is already examining the future of Aliso Canyon through the proceeding it opened pursuant to SB 380 (I.17-02-002). In reaching a final determination in that proceeding, SB 380 (Chapter 14, Statues of 2016) requires that multiple stakeholders and "relevant government entities" must be consulted. In I.17-02-002, the CPUC will consider the results of the CCST's report on the long-term viability of underground natural gas storage in California,[40] in order to determine whether the CPUC should reduce or eliminate the use of the Aliso Canyon.[41]

---

[36] Ibid., p. 664 (Conclusion 3.12).
[37] Ibid., p. 506 (Conclusion 2.5).
[38] Long-Term Viability of Underground Natural Gas Storage in California Summary Report, p. 8 (Conclusion SR-1)
[39] Ibid., pp. 66-78 (Conclusion SR-3)
[40] See http://ccst.us/projects/natural_gas_storage/publications.php.
[41] I.17-02-002 Scoping Memo.

The CEC's formal statements that Aliso Canyon should be closed in ten years is not based on fact, but rather on policy, and undermines due process afforded to all parties in the CPUC's open proceeding. SoCalGas suggest that the appropriate regulatory process be permitted to complete before the CEC recommends any plan for closure of Aliso Canyon. It is necessary that policy be guided by technical analysis such as the CCST report, especially when assessing the energy needs of a region as large and as diverse as Southern California, which will occur through the completion of I.17-02-002.

***Corrections to Aliso Canyon Statements***

The Proposed Final 2017 IEPR mischaracterizes SoCalGas' position on mitigation measures, incorrectly stating that SoCalGas believes the "top mitigation measure is to operate Aliso Canyon unrestricted in the same manner [as] before the gas rupture and historic leak in 2015."[42] SoCalGas does not believe the safety and operational enhancements in place at Aliso Canyon—including the tubing-flow only configuration and real-time pressure monitoring of all wells, among others—should be removed as a means to return the field to an "unrestricted" status. We do believe that lifting the restrictions on when natural gas may be withdrawn from Aliso Canyon to support energy reliability would reduce the risk of curtailment in the current winter season. As was stated in our reply comments to the Winter Risk Assessment Technical Report Supplement (emphasis added): "If Aliso Canyon was authorized to resume normal operation, consistent with state and federal regulations, and at the inventory levels deemed safe by the Division of Oil, Gas and Geothermal Resources (DOGGR), Aliso Canyon would be able to reduce the curtailment risk identified in the 2017-18 Supplement."[43]

The Proposed Final 2017 IEPR also contains incorrect statements regarding current Aliso Canyon proceedings. It states, "Aliso Canyon continues to be the subject of multiple proceedings – each addressing different aspects of the issue – ranging from a root cause analysis, whether to allow reinjection (and when), to the long-term future of the facility."[44] As mentioned above, on July 19, 2017, the CPUC and DOGGR authorized reinjection operations at Aliso Canyon. Consequently, there is no ongoing proceeding related to reinjection at Aliso Canyon. Further, although the root cause analysis of the October 23, 2015 incident is ongoing, the CPUC has yet to initiate a proceeding related to this issue.

Additionally, the Proposed Final 2017 IEPR states that "On October 1, 2017, SoCalGas suffered a rupture of Line 235-2 near the Newberry compressor station, which also damaged Line 4000 nearby"[45] and "As a result of the rupture on Line 235-2 and damage to Line 4000, an additional 800 MMcfd was suddenly out of service, reducing deliveries to North Needles receipt point to 0

[42] Proposed Final 2017 IEPR, p. 415.
[43] SoCalGas Comments on Aliso Canyon Winter Risk Assessment Technical Report 2017-18 Supplement, December 5, 2017 (emphasis added).
[44] Proposed Final 2017 IEPR, p. 364.
[45] Proposed Final 2017 IEPR, p. 372.

on top of Toprock receipt point being 0 capacity."[46] This is inaccurate: the remediation work for Line 4000 was not due to the rupture on Line 235-2.

SoCalGas requests that the CEC correct these statements before finalizing the 2017 IEPR.

**Conclusion**

SoCalGas strongly believes that a diverse energy portfolio which includes multiple fuels and technologies is needed to ensure that energy is affordable for all Californians, the infrastructure is resilient to increasing extreme climate change events, and the economic vitality of the State is not jeopardized from relying on a single energy pathway.

SoCalGas appreciates the CEC's consideration of these comments for the 2017 IEPR and looks forward to continuing to work on advancing California's energy policy goals and objectives.

Sincerely,

George I. Minter
Regional Vice President
External Affairs & Environmental Strategy

[46] Ibid.