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*Comment Received From: Bill Powers*
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*Docket Number: 17-IEPR-11*

## Powers Engineering comments on May 19, 2017 Aliso Canyon Summer 2017 Assessment

When the Ehrenberg (Blythe) receipt point is assumed to be at 100% available, or 1,210 MMcfd, the amount of combined flowing supply + storage withdrawal assumed in the May 19, 2017 Aliso Canyon Summer 2017 Assessment, 3.385 Bcfd + 1.47 Bcfd, is about the same as the flowing supply + storage withdrawal assumed in the August 22, 2016 Aliso Canyon Winter Action Plan, 3.425 Bcfd + 1.49 Bcfd. Yet as a result of modeling assumptions not provided in the Summer 2017 Assessment, with Line 3000 assumed offline in both cases, the demand that can be met by SoCalGas decline from 4.5 Bcfd in the Winter Action Plan to 3.638 Bcfd. On its face this tremendous decline in the ability to meet demand, based solely on revisions to variables not made available to the reader or compared (and justified) to variables assumed in the August 22, 2016 Winter Action Plan modeling exercise, appears to be a self-serving exercise by the joint parties to justify summer withdrawals by SoCalGas from Aliso Canyon. It is worthy of note that, despite assertions in the Summer 2017 Assessment that the summer of 2016 was mild (p. 3), SCE recorded its second highest 1-hour peak load ever on June 20, 2016. SoCalGas had no difficulty meeting the gas demand on that day. It was met with 3.210 Bcfd of flowing pipeline supply and 96 MMcfd of storage withdrawals. Last April the joint parties warned of up to 14 days of blackouts in the LA Basin without Aliso Canyon. None occurred, and storage withdrawals on the highest electricity demand days of the summer of 2016 never exceeded one-third of the available withdrawal capacity from storage. See pp. 4-8 of the attached Protect Our Communities Foundation March 17, 2017 comment letter in the CPUC's ongoing Aliso Canyon investigation for a review of actual summer 2016 natural gas demand during heat waves and the winter 2016-2017 supply-demand balance during cold spells. SoCalGas allowed the supply-demand balance to drift substantially before and during each of three cold spells in the winter of 2016-2017, by as much as 30 percent. The lesson from the winter of 2016-2017 is that substantially tighter gas balancing rules, specifically +/-5% daily balancing on both noncore and core customers, should be applied at a minimum immediately before and during forecast heat waves and cold spells. That lesson was not incorporated into the May 19, 2017 mitigation measures issued by the joint parties.

Bill Powers, P.E.
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*Additional submitted attachment is included below.*

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**BEFORE THE PUBLIC UTILIES COMMISSION**
**OF THE STATE OF CALIFORNIA**

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| 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<br>(Filed February 9, 2017) |

# PROTECT OUR COMMUNITIES FOUNDATION COMMENTS ON ORDER INSTITUTING INVESTIGATION

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# PROTECT OUR COMMUNITIES FOUNDATION COMMENTS ON ORDER INSTITUTING INVESTIGATION

In accordance with the Order Instituting Investigation (OII) opened on the California Public Utilities Commission's (the "Commission") own motion pursuant to Senate Bill 380 (Statutes of 2016, Chapter 14) and Rule 5.5 of the Commission's Rules of Practice and Procedure, The Protect Our Communities Foundation ("POC") provides this comment on the "Order Instituting Investigation pursuant to Senate Bill 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility located in the County of Los Angeles while still maintaining energy and electric reliability for the region."

## I. DESCRIPTION OF PROTECT OUR COMMUNITIES FOUNDATION

POC is a San Diego County based 501(c)(3) nonprofit dedicated to protecting wild and rural communities and the people, plants, and animals that inhabit them from destructive, industrial energy infrastructure development. POC advocates on behalf of Southern California utility ratepayers against fossil fueled energy development and in support of transition to sustainable energy systems. POC and its board members, members, and supporters have

advocated before the Commission for the past decade representing the unique perspective of small and medium-sized communities throughout Southern California.

## II. INTEREST IN THIS PROCEEDING

POC has a direct interest in this investigation as the continued operation of the Aliso Canyon Natural Gas Storage Facility ("Aliso Canyon") is and will continue to have a harmful impact on the health and safety of communities and the environmental in Southern California and will impact utility rates. In this proceeding, POC will advocate before the Commission on the issues of safety, need, cost, impact on ratepayers, damage to the environment, health risks, as well as other topics germane to an investigation of an unsafe fossil fuel storage facility.

POC is concerned that the project presents a present and ongoing threat to the health and safety of many Southern California communities. POC is concerned that the continued operation of Aliso Canyon will leave ratepayers footing the bill for a facility that is and continues to be harmful to human and environmental health and is unneeded to maintain reliability. The continued operation of Aliso Canyon will increase greenhouse gas emissions even beyond the shocking amount it already has since 2015 and enable our dependence on fossil fuels thus frustrating the goals of SB 350 and SB32.

POC intends to prepare and submit testimony in this proceeding that responds to the above matters and others that develop in this proceeding.

## III. POC ADVOCACY IN THIS PROCEEDING

In the instant proceeding, POC intends to raise and argue the following factual and legal contentions, among others yet to be determined.

1. Aliso Canyon, including all injection wells, should be permanently closed.
2. Due to declining gas demand, Aliso Canyon can be closed without impacting reliability.
3. The continued operation of Aliso Canyon will have detrimental effects on ratepayers in Southern California, on the communities and environment surrounding the facility, and on our climate.

4. The continued operation of Aliso Canyon is at odds with mandatory state goals to reduce greenhouse gases and the use of fossil fuels for electricity.
5. Aliso Canyon is on designated critical habitat for the Coastal California Gnatcatcher (*Polioptila Californica Californica*) and is habitat for many other species protected under the U.S. and California Endangered Species Acts. The continued operation of Aliso Canyon will have significant adverse effects on this habitat as well as on endangered California Red-legged Frog (Rana draytonii), Least Bell's vireo (Vireo bellii pusillus), Southwestern Willow Flycatcher (Empidonax traillii extimus), California Condor (Gymnogyps californianus), Riverside Fairy Shrimp (Streptocephauls wootoni), Vernal Pool Fairy Shrimp (Branchinecta lynchi), and California Orcutt Grass (Orcuttia californica).
6. The current safety of Aliso Canyon has not been determined and presents an ongoing unreasonably high risk to safety.

***Aliso Canyon has been and can remain closed without impacting reliability***

The Aliso Canyon Natural Gas Storage Facility is not the lynchpin of gas reliability in Southern California; it should and can be closed without risking reliability. Natural gas demand in Southern California Gas's ("SoCalGas") coverage area is declining,[1] and even if it were not, there is no demonstrated need for any gas storage facilities in California, including this facility. California can easily maintain a reliable gas supplies without any dependence on storage. Arizona and Nevada, for example, are heavily dependent on natural gas-fired generation yet function with no in-state gas storage facilities and a small number of pipes. Both of these states rely on firm pipeline delivery contracts, and the associated tight balance between supply and demand, to assure reliable natural gas supply to core customers and utility-owned electric generators. Similarly in SoCalGas territory, tighter balancing requirements can be maintained on core and noncore demand to assure gas reliability in the LA Basin without Aliso Canyon.

[1] SoCalGas et al, *2016 California Gas Report*, p. 4. "California natural gas demand, including volumes not served by utility systems, is expected to decrease at a rate of 1.4 percent per year from 2016 to 2035." See: https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf.

SoCalGas has three other storage facilities in addition to Aliso Canyon: Honor Rancho, Goleta, and Playa del Rey. Collectively these three storage fields store approximately 50 billion cubic feet (Bcf) of natural gas[2] and the approximate withdrawal capacity of these three storage fields is 1.8 billion cubic feet per day (Bcfd).[3] Despite warnings from the State and SoCalGas of up to 14 days of service interruptions in the summer of 2016 if Aliso Canyon did not operate, pipeline supply and the other three storage facilities were more than enough to assure uninterrupted gas supply.

During the summer of 2016, with Aliso Canyon not operating, the LA Basin suffered three heat waves, including the second highest electricity demand ever recorded in SCE territory.[4] Yet, there was no issues with meeting gas demand during these events.

The maximum SoCalGas summer natural gas demand of 3.438 Bcfd was recorded on August 16, 2016.[5] This was approximately equivalent to the SoCalGas maximum actual pipeline supply over the last 5 years of 3.4 Bcfd.[6] The maximum gas withdrawal from storage during the summer heat waves, 0.43 Bcfd, was only about one-quarter of the available withdrawal capacity, 1.743 Bcf, without Aliso Canyon, as shown in Table 1.

**Table 1. Maximum SoCalGas storage withdrawal during three summer 2016 heat waves**[7]

| Summer 2016 heat wave dates | Maximum daily withdrawal during heat waves (Bcfd) |
|---|---|
| June 20-21, 2016 | 0.20 |
| July 25-29, 2016 | 0.43 |
| August 15-18, 2016 | 0.41 |

This demonstration of SoCalGas supply reliability during heat waves without Aliso Canyon was in part due to tight daily balancing of non-core customer supply/demand, a mitigation measure imposed on SoCalGas customers during the summer of 2016. The effectiveness of +/- 5 daily balancing to assure LA Basin supply reliability was evaluated by

[2]Ibid,, p. 9.
[3] Ibid, p. 10.
[4] June 20, 2016
[5] SoCalGas Envoy™ online database: https://scgenvoy.sempra.com/
[6] CPUC, CEC, CAISO, LADWP,
*Aliso Canyon Action Plan to Preserve Gas and Electric Reliability for the Los Angeles Basin*, April 5, 2016, p. 16.
[7] Ibid.

SoCalGas in the hydraulic modeling it conducted in early 2016 and which it summarized in the April 5, 2016 *Aliso Canyon Risk Assessment Technical Report.*[8]

The CPUC, CEC, CAISO, LADWP, and SoCalGas *Aliso Canyon Winter Risk Assessment Technical Report* also demonstrated, assuming tight daily balancing of core and noncore gas supplies to mitigate the loss of Aliso Canyon, that SoCalGas could meet a demand of at least 4.7 Bcfd without Aliso Canyon.[9]

The maximum SoCalGas winter natural gas demand of 4.159 Bcfd was recorded on January 24, 2017.[10] As shown in Table 2, maximum gas withdrawal from storage during the winter cold spells, 1.13 Bcfd, was recorded on January 24, 2017 and was about only about two-thirds of the withdrawal capacity without Aliso Canyon, 1.695 Bcf, available on that day.

**Table 2. Maximum SoCalGas storage withdrawal during three winter 2016-2017 cold spells**[11]

| Winter 2016-2017 | Maximum daily withdrawal during cold spells (Bcfd) |
|---|---|
| November 29-30, 2016 | 0.59 |
| December 17-19, 2016 | 0.87 |
| January 23-26, 2017 | 1.13 |

***SoCalGas Intentional Actions***

SoCalGas appears to have manipulated the market so as to unnecessarily increase dependence on storage so that it would be able to justify withdrawing a small amount of gas from Aliso Canyon. It also unnecessarily spread fear through Southern California by issuing "public advisories" warning of impending gas shortages that never materialized.

SoCalGas allowed the supply/demand balance to drift substantially during winter of 2016-2017. Despite modest peak winter natural gas demand and storage withdrawals well below the storage capacity available to SoCalGas, the company issued two public advisories of impending gas shortages and, after the second January 23, 2017 advisory, withdrew a small amount of gas from Aliso Canyon, 0.050 Bcf over two days. A thorough investigation must be

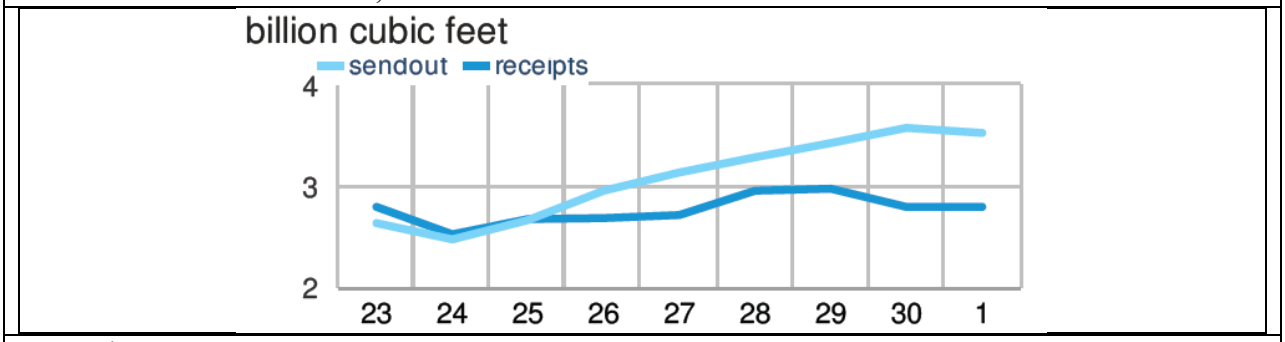
[9] CPUC, CEC, CAISO, LADWP, SoCalGas, *Aliso Canyon Winter Risk Assessment Technical Report*, August 22, 2016, p. 1,
[9] CPUC, CEC, CAISO, LADWP, SoCalGas, *Aliso Canyon Winter Risk Assessment Technical Report*, August 22, 2016, p. 1,
[10] SoCalGas Envoy™ online database: https://scgenvoy.sempra.com/
[11] Ibid.

made into SoCalGas's behavior regarding deployment of mitigation measures, communications with the public, and failure to maintain an effective balance between supply and demand during winter 2016-2017 cold spells. The investigation must include an analysis of the D.16-12-015 settlement agreement and why the Commission concluded in that decision that continued application of operational flow orders to balance noncore gas demand, and effective strategy in summertime, would be sufficient in winter when core demand is the dominant component of overall natural gas demand in winter.[12]

SoCalGas allowed natural gas supply and demand to get substantially out-of-balance as the winter 2016-2017 cold spells developed. Unlike summertime natural gas demand, with its substantial non-core electric generator and refinery demand, peak wintertime gas demand is dominated by core customer space heating needs. Imposing tight gas balancing requirements only on noncore customers in winter would tend to have a limited effect on overall core/non-core gas balance, given the relatively small percentage of noncore demand. The three graphics in Figure 1 show the extent to which the supply/demand balance drifted out-of-balance, by as much as 30 percent, at the beginning of each of the three winter cold spells.

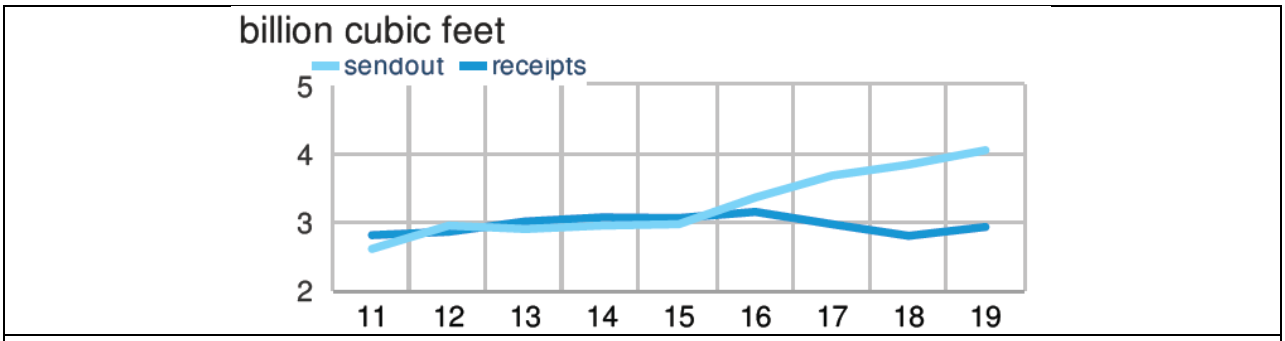
**Figure 1. SoCalGas supply/demand balance during each winter 2016-2017 cold spell**[13]

November 23 - December 1, 2016

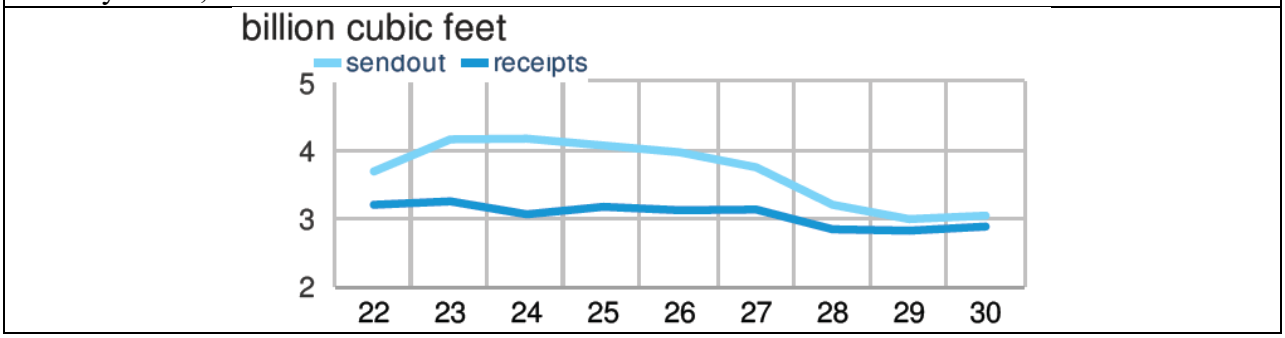



December 11-19, 2016

[12] D.16-12-015, *Decision Approving Second Daily Balancing Proposal Settlement Agreement*, December 1, 2016.
[13] See EIA Aliso Canyon webpage, "archived reports": https://www.eia.gov/special/disruptions/socal/winter/.




January 22-30, 2017




The failure of SoCalGas to maintain core supply/demand in tight balance as cold spells were developing, and to increase pipeline supply flows while the cold snaps were in progress, unnecessarily increased dependence on storage withdrawals during those cold spells to avoid curtailments.

Southern California Edison argued in the fall of 2016 that SoCalGas should use its smart meter capability to keep the core demand in balance in the winter of 2016-2017.[14] SoCalGas refused, claiming that smart meter implementation was not complete and that is would be expensive.[15] In fact, 100 percent of SoCalGas customers were equipped with natural gas smart meters as of the end of February 2017,[16] and an estimated 95 percent of SoCalGas customers were equipped with electronic smart meters as of December 1, 2016.[17]

[14] D.16-12-015, *Decision Approving Second Daily Balancing Proposal Settlement Agreement*, December 1, 2016, p. 13. "SCE argued that greater accuracy in core balancing would ease the strain on SoCalGas' system this winter, mitigating curtailment risk if Aliso Canyon remains subject to injection restrictions. SCE posited that the smart meters installed as part of the Advanced Metering Initiative (AMI) could provide data to allow for balancing against actual."
[15] Id. at p. 13.
[16] Ibid.
[17] SoCalGas webpage, "Advanced Meter Installation Schedule," March 17, 2017: https://www.socalgas.com/innovation/advanced-meter/installation-schedule.php

SoCal Gas could and should have conducted near real-time balancing via smart meter data during the winter of 2016-2017 but instead permitted the supply/demand to fall out of balalnce thus leading a manufactured need for storage withdrawals.

The economic benefit to SoCalGas core customers (ratepayers) of the permanent closure of Aliso Canyon is in the range of $70 million per year.[18] No quantitative information was provided in either the Winter Risk Assessment or the Winter Action Plan on the magnitude of the economic impact of closure of Aliso Canyon on customers, such as the cost of polling smart meters multiple times a day to keep SoCalGas core supply in tight daily balance with demand. An economic analysis must be conducted that compares the cost savings to SoCalGas core customers realized by permanent closure of Aliso Canyon to the cost to comply on a permanent basis with tighter gas balancing rules in the absence of Aliso Canyon.

***Procedural Concerns***

POC object to the plan in the OII to use workshops in this proceeding rather than a formal, fact finding process whereby parties have an opportunity for submission of testimony, cross examination, legal briefing, and public hearings. The inquiry in this investigation is already defined by statue and it is unclear how workshops will provide any benefit to further defining the parameters of this proceeding.

POC objects to a schedule that doesn't allow for the California Council on Science and Technology to complete its study as directed by our Legislature prior to a ruling being made in this proceeding. Despite the acknowledgment of a date certain for the report, the Scoping Memo states that "Energy Division will take into account all relevant information in undertaking this study within the timeframe ultimately adopted by the Commission, including its own reporting under Pub. Util. Code section 715 and the results of the study ordered in SB 826 (to the extent that report is finished and able to be incorporated in the Energy Division study before conlusion of Phase 1.)"[19] Since the Council's report will address "assess the long-term viability of natural

[18] B. Powers, *Technical Assessment: Critical Review of Aliso Canyon Winter Risk Assessment and Action Plan*, prepared for Food & Water Watch, August 31, 2016, p. 1.
[19] OII at pp.7-8.

gas storage facilities in California," a critical factory in the adjudication of this proceeding, it is unclear why this proceeding should proceed without the benefit of the study, as called for by the Legislature.

POC objects to limitations put on the scope of this proceeding in the OII as this seems to conflict with the broader mandate of SB 380. While POC appreciates that there are many different agencies handing different aspects of the crisis at Aliso Canyon, and that there is a desire to be expedient in this proceeding, there are no grounds that justify eliminating issues from scoping prior even to the prehearing conference.

## IV. TIMING

POC intends to fully participate in this proceeding by taking part in all hearings, and legal briefing. A prehearing conference has not yet been held and this comments is submitted within the time frame indicated in the OII. No parties in this proceeding would be prejudiced by POC becoming a party at this time because POC will be able to participate in all substantive aspects of this proceeding.

## V. NOTICES

Service of notices, orders, and other communications and correspondence in this proceeding should be directed to April Rose Sommer, Executive Director and Lead Counsel for The Protect Our Communities Foundation at the address set forth below:

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## VI. CONCLUSION

The Protect Our Communities Foundation's participation in this proceeding will not prejudice the any other party and will not delay the schedule or broaden the scope of the issues in the proceeding. To the extent possible, POC will coordinate with other parties who share POC's concerns. POC respectfully requests that the above identified procedural issues be addressed by the ALJ and Assigned Commissioner and that our comments on the OII be considered.

Respectfully submitted,

/s/ April Rose Sommer

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Dated: March 17, 2017