



A  Sempra Energy utility

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Subject: 715 Report

Southern California Gas Company (SoCalGas) has received and reviewed the California Public Utilities Commission's (Commission) November 30, 2017 draft "Aliso Canyon Working Gas Inventory, Production Capacity, Injection Capacity, and Well Availability for Reliability" (715 Report).

SoCalGas shares the Commission's concerns regarding energy reliability this winter. SoCalGas has expressed many of these same concerns to the state for several months, most recently in a letter and SoCalGas' "Winter 2017-18 Technical Assessment" submitted on October 30, 2017. Although we may reach similar conclusions on reliability risks this winter, SoCalGas continues to disagree with certain conclusions and assumptions included in the 715 Report and offers the following comments and clarifications.

The Status of the Pipeline System is not Unprecedented

The 715 Report indicates that "[t]he determinations in this Supplemental Report reflect significantly changed conditions, most notably an unprecedented level of outages on the Southern California Gas (SoCalGas) system that include all of the major system elements: storage facilities, pipelines, and compressor stations."¹ However, the capacity impacts of the events SoCalGas is currently managing are not unprecedented or unforeseeable.

As SoCalGas has frequently noted, unplanned pipeline outages are known to occur and prudent operations require planning for these types of events. A combination of supply shortfalls and outages on the SoCalGas system, or upstream of SoCalGas' system, has in the past reduced system capacity to the levels we see today. In prior years, underground natural gas storage, primarily Aliso Canyon, reduced associated reliability risks.

Natural Gas Storage Provides Resiliency and Protects Against Outage-Related Reliability Risks

SoCalGas' system is designed to utilize a combination of flowing pipeline supplies and storage inventory to meet demand and provide resiliency. SoCalGas' system is designed to use storage assets, particularly Aliso Canyon, to maintain system reliability even when difficult and

¹ 715 Report at 1.

unexpected conditions arise. The current restrictions on Aliso Canyon, however, limit the system's resiliency and ability to withstand capacity reductions. If Aliso Canyon was authorized to operate without the withdrawal protocol while adhering to 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 curtailment risk. Even with Aliso Canyon, however, there remains a risk that other unplanned events will occur that further impact the system's capabilities, or that storage inventory levels will be depleted below what is needed to maintain reliability throughout the winter season.

The CPUC and DOGGR have determined that Aliso Canyon is safe to operate, risks of failure have been identified and addressed, and well integrity has been verified. As a result, injection operations resumed on July 31, 2017 and Aliso Canyon's inventory level has increased accordingly – reaching the maximum inventory allowed pursuant to the Commission's July 19, 2017, California Public Utilities Code Section 715 Report. Despite determining that the facility is safe, the state continues to impose restrictions on the use of Aliso Canyon.

The 715 Report, for example, continues to impose unnecessary restrictions on the inventory levels at Aliso Canyon. Furthermore, in setting restrictions on the range of working gas that is usable at Aliso Canyon, the 715 Report incorrectly concludes that the new range of working gas inventory is sufficient to support reliability this winter.

The 715 Report Overstates the Value of Increasing the Inventory by 1 Bcf

The 715 Report states: "The maximum of 24.6 Bcf of working gas may provide the withdrawal capacity needed to meet winter demand reliably."² Based on SoCalGas' analysis, the increase from 23.6 Bcf to 24.6 Bcf will have a minimal impact on the facility's withdrawal rate and, while it could increase the total inventory before the winter season begins, injecting 1 Bcf of gas into Aliso Canyon requires that customers deliver sufficient natural gas onto the system to allow for injection. This may be difficult as the winter season has already begun and gas brought into the system at this point is being burned. Therefore, although increasing the maximum allowable inventory is a positive step, it should not be viewed as sufficient to offset winter reliability risks.

The 715 Report Overstates the Value of Lowering the Minimum Allowable Working Gas Inventory

The 715 Report states: "The lower minimum of 5 Bcf (from a former minimum of 14.8 Bcf) increases the amount of gas available for use. Effectively, by lowering the minimum of the range, SoCalGas can access 18.6 Bcf of the gas stored compared to 8.8 Bcf under the previous range."³ This interpretation of the impact of reducing the lower minimum of the working gas inventory range oversimplifies the situation and may overstate the amount of gas that is actually available for use. SoCalGas does not have experience operating Aliso Canyon in its current configuration and at such extreme low inventory levels. Therefore, with the current circumstances, SoCalGas is uncertain of the facility's ability to withdraw gas in sufficient quantities. At a minimum, we would expect to see dramatically reduced withdrawal capabilities

² 715 Report at page 2.

³ 715 Report at page 1.

associated with declining inventories. As a result, prudent planning should not assume that these lower inventory levels will support system reliability on a peak day.

The 715 Report Determines Whether There is Sufficient Capacity and Inventory Based on “Minimum Electric Generation and an N-1 Contingency” Levels

The 715 Report calculates the ability to support demand not based on the forecast 1-in-10 year cold day peak demand, but rather based on forecast demand for a 1-in-10 year peak day *with minimum electric generation and an N-1 contingency*.^{4, 5} This means that the forecast demand is already being reduced by curtailing electric generators in order to reduce their natural gas use to minimum levels. As acknowledged by the Aliso Canyon Technical Assessment Group⁶ in their Aliso Canyon Winter Risk Assessment Technical Report 2017-18 Supplement (2017-2018 Supplement):

The minimum gas burn by electricity generators calculated here is **significantly lower than the electricity-generator gas burn under normal circumstances**. It is the absolute, extreme minimum that electricity generators must have to maintain electric reliability. This reduction in gas use from normal to minimum levels is **effectively a curtailment of gas service to electricity generators**. **Replacing the generation that would have occurred with this gas means the electricity balancing authorities have replaced generation to other, less-desirable, and more expensive facilities in order to reduce their gas requirement and the stress on the gas system.**⁷

Consistent with this analysis, SoCalGas plans include curtailing electric generators to these minimum levels when addressing system reliability. SoCalGas does, however, question the prudence of reducing electric generation demand in this way, especially considering the Commission’s and DOGGR’s determination that Aliso Canyon is safe to operate.

The 715 Report Potentially Conflicts with the Commission’s Aliso Canyon Withdrawal Protocol

The CPUC authorizes SoCalGas to maintain Aliso Canyon working gas inventory within a range of 5 Bcf to 24.6 Bcf.⁸ Furthermore, the 715 Report generally indicates that Aliso Canyon is available to support the system this winter:

⁴ 715 Report at page 6.

⁵ As part of electric planning assessments, the electric industry plans for upsets under an N-1 condition, which requires electric operators to plan their system to have sufficient resiliency to lose a critical component and continue operating. The natural gas industry does not have that planning requirement. For SoCalGas, the system was designed to storage assets to create system resiliency and, in effect, provide a similar N-1 contingency.

⁶ The Aliso Canyon Technical Assessment Group is composed of technical experts from the California Public Utilities Commission (CPUC), the California Energy Commission (Energy Commission), the California Independent System Operator (California ISO), and the Los Angeles Department of Water and Power (LADWP).

⁷ 2017-2018 Supplement at page 10 (emphasis added).

⁸ 715 Report at page 1.

It is likely that SoCalGas will withdraw gas from Aliso Canyon this winter in order to meet gas demand that cannot be met by gas from pipelines or other storage fields. This Supplemental Report authorizes a greater range of Aliso Canyon gas inventory so that SoCalGas may store and withdraw more gas inventory from Aliso Canyon in order to meet gas demand on a peak winter demand day (a 1-in-10 year cold day), as well as under ‘normal’ conditions (average temperature winter throughout the season).⁹

The 715 Report’s indication that the inventory in Aliso Canyon may be “maintained” between a range of 5 to 24.6 Bcf, and relied upon during the winter appears in contrast to the Commission’s Aliso Canyon Withdrawal Protocol (Withdrawal Protocol) which labels Aliso Canyon as an “asset of last resort” and usable for withdrawals “after all other alternatives have been exhausted.”¹⁰ This includes curtailing electric generation down to the established minimum levels. The 715 Report makes no mention of the Withdrawal Protocol or the procedures that must be followed before withdrawals from Aliso Canyon may occur. SoCalGas is confident in the safety of the facility, and suggests that, consistent with the apparent intent of the 715 Report, the Commission authorize SoCalGas to freely manage the inventory of Aliso Canyon within the range authorized by the 715 Report.

Closing Comments

SoCalGas appreciates the opportunity to comment on 715 Report. SoCalGas will continue to work diligently to provide safe, reliable, and affordable natural gas service to our 21 million customers across our service territory and stands ready to support the state’s efforts to promote a reliable supply of energy to fuel California’s residents, businesses, and economy.

⁹ 715 Report at page 1.

¹⁰ Withdrawal Protocol available at:

http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/News_and_Updates/11.2Protocol%20PUBLIC%20UTILITIES%20COMMISSION.PDF