

**DOCKETED**

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**PacGas and Electric\_So Cal Reliability**

*Additional submitted attachment is included below.*

May 22, 2018

**VIA ELECTRONIC FILING**

California Energy Commission  
Dockets Office, MS-4  
Re: Docket No. 18-IEPR-03  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Re: Pacific Gas and Electric Company Comments on Energy Reliability in Southern California**

On May 8, 2018, the California Energy Commission (CEC) held a workshop on energy reliability in Southern California. The presentations at the workshop included one by Dave Weber and Justin Palfreyman of Gill Ranch Storage, LLC. Gill Ranch Storage has previously approached the CEC and California Public Utilities Commission (CPUC) to discuss the potential for an expanded role of the independent natural gas storage providers in supporting reliability in Southern California. To ensure that both the CPUC and CEC have the same information on PG&E's perspectives on the Gill Ranch proposal, PG&E provides the following information on possible natural gas system expansion and interconnection options. For the reasons below, Gill Ranch's proposals may not be the most cost-effective means to enhance Southern California reliability.

PG&E also provides comments on improving the gas balance calculations and other recommendations to ensure supply costs are appropriately captured in day-ahead markets.

**A. Modifying PG&E's Natural Gas System May Not Yield the Anticipated Benefits Expected by Gill Ranch**

PG&E currently has an interconnection point with SoCal Gas at Kern River Station. The design capacity of this station is 630 MMcf/d. PG&E believes the size of the interconnect between the two companies is sufficient to accommodate all the physical flows the market could provide. However, certain modifications or additions to the PG&E transmission system would be required to ensure that PG&E could transport supplies to Kern River Station at sufficient pressure for delivery into the SoCalGas system in the winter months. Maintaining pressure would require that PG&E, at a minimum, construct a new cross-tie between Line 300 A&B or a new compressor station at Kern River Station.

**1. Market Conditions and Transmission Constraints in Northern California**

PG&E, in its 2019 Gas Transmission and Storage (GT&S) Rate Case application has proposed to close two of its gas storage fields. As part of the showing in the case, PG&E presented its peak day demands,

sources of supply and the transmission constraints that limit the amount of supplies that can be transported across the PG&E system (See Chapter 11). One of the transmission constraints is the amount of supplies PG&E can move from the northern receipt points south into and through its main load center in the Bay Area.

The northern receipt points include supplies at Malin and from the three Independent Storage Providers (ISP) that connect to the PG&E backbone north of the Bay area (i.e., Lodi Gas Storage, Central Valley Gas Storage, and Wild Goose Gas Storage). PG&E can only move about 2,700 MMcf/d of northern supplies south.

PG&E estimates that only about 100 MMcf/d to 200 MMcf/d would be available from supply sources connected to the PG&E system on a peak day. Obviously on non-peak days there would be more supplies available for transportation off the PG&E system to SoCalGas.

There is a second dynamic which would limit the amount of supplies that originate in Northern California from flowing to SoCalGas. Rarely is the market price of supplies at PG&E's Citygate lower than the other supplies available to SoCalGas at its interconnects with other pipelines. All the ISPs connected to PG&E's system are considered to be at PG&E's Citygate. Shippers wishing to inject gas into the ISPs pay PG&E's backbone rates at the time gas is delivered into the gas storage fields. Shippers do not pay an additional fee to transport gas on the PG&E system when it is withdrawn. Therefore, all the gas that is stored in an ISP is valued at the PG&E Citygate price. Because of this market dynamic, PG&E believes there is limited opportunity for ISP withdrawals to be competitive into the SoCalGas system.

## **2. PG&E System Modification Needed To Reliably Deliver Gas to SoCalGas In The Winter**

During many days in the winter months, the required operating pressure of the SoCalGas system is higher than the operating pressure of the PG&E system at the SCG-PG&E interconnect point. This is particularly true if the source of the gas being delivered is coming from the north. PG&E delivers supplies from the north to Kern River Station whenever the flows to Kern River Station plus the demand from PG&E customers south of Kern River Station are higher than the receipts from the interstate pipelines at Topock (Transwestern and El Paso) and Daggett (Kern River Pipeline).

For PG&E to increase its pressure when supplies are coming from the north, it would be necessary to install approximately 55 miles of new Line 300 or install a new compressor station at Kern River Station. The permitting and construction of either project would take several years.

Either alternative would be expensive (\$100M – \$500M) and add no value to customers on the PG&E system. Any such addition would need to be fully supported and funded by the ISPs or shippers who would use the facilities. The facilities needed to increase pressure at Kern River Station do not provide any value for PG&E customers from either an increase in supplies available at PG&E Citygate or operating flexibility.

### **3. Conclusion**

PG&E could make the necessary investments in its gas transmission system if the CPUC believes such investments are in the best interest of customers of PG&E and it ensures full recovery of the required investments. However, PG&E believes the investment needed to transport gas from the gas storage fields in Northern California during the winter months far exceeds the market need for such service.

#### **B. Suggested Improvements to Gas Balances Calculations**

Both SoCalGas and the Joint Agencies presented summer assessments that noted gas reliability concerns for both this summer and the upcoming winter. While both assessments provide evidence for these concerns, PG&E would like to highlight the qualifications included in Joint Agency Assessment that the monthly average gas balances do not fully account for daily load variations<sup>[1]</sup> and a 2016 load forecast was used.<sup>[2]</sup> Specifically, the inventory estimation resulting from gas balance analysis and the load forecast used likely result in spurious results and remedies based on such analysis should consider this.

##### **1. Monthly average day gas balances significantly overestimate the amount of injection possible**

The use of a daily load distribution would likely provide a more precise estimate of supplies received (due to low load days that are less than pipeline capacity), withdrawals needed on high load days and end-of-month storage inventories. Specifically, on days when loads are greater than pipeline capacity, necessary withdrawals will decrease the amount of net injection possible, whereas days when loads plus maximum injection are less than pipeline capacity will not result in increased/offsetting injection. Using the actual SoCalGas April 2018 loads scaled to the April 2018 loads used in the Joint Agency gas balance, a daily load distribution with 2655 MMcf/d of available pipeline capacity and 140 MMcf/d of injection capacity results in an estimate of 2.1 Bcf of net injections whereas the Joint Agency's monthly average approach results in 4.5 Bcf of net injections or a 2.4 Bcf overestimate of the amount of injection possible in one month. Such differences, when totaled over the injection season and across scenarios, are likely significant.

##### **2. 2016 forecast load used likely overestimates thermal generation load**

The Joint Agency Assessment uses the 2016 California Gas Report as the source of the SoCalGas load forecast. Thermal generation forecasts, in particular, are likely to have changed significantly since then. Recent price trends where SoCal Citygate prices are frequently greater than PG&E Citygate prices would also impact SoCalGas thermal generation loads. Using data from SoCalGas' Envoy, April 2018 total loads, excluding injection, were 200 MMcf/d less than the total load forecast used in the Joint Agency Assessment.

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<sup>[1]</sup> [http://docketpublic.energy.ca.gov/PublicDocuments/18-IEPR-03/TN223343\\_20180507T141837\\_Aliso\\_Canyon\\_Summer\\_2018\\_Risk\\_Assessment\\_Technical\\_Report.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/18-IEPR-03/TN223343_20180507T141837_Aliso_Canyon_Summer_2018_Risk_Assessment_Technical_Report.pdf), p.34

<sup>[2]</sup> Ibid, p.35, footnote 39.

PG&E recommends that more accurate methods and timely forecasts be used to assess critical gas system challenges.

### **3. Purchasing Gas to Fill Unused Pipeline Capacity**

Regarding the Joint Agency 2018 Summer Technical Assessment., the third mitigation measure on page 46 states:

“The CPUC should grant SoCalGas’ operational hub the authority to buy gas to fill unused pipeline capacity whenever required and feasible, so that generators are not curtailed when pipeline capacity is available.”

PG&E requests that any supply costs incurred by SoCalGas for such purposes be allocated equally to all customers, with such charges being transparent, enabling the inclusion of such costs in generator’s next-day bids.

### **C. Conclusion**

PG&E appreciates the opportunity to submit these comments and is available to discuss as needed with the CEC team.

Sincerely,

/s/

Valerie J. Winn