

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



February 28, 2018

Advice Letters 5208 and 5208-A

Ray Ortiz
Tariff Manager - GT14D6
Southern California Gas Company
555 West 5th Street
Los Angeles, CA 90013-1011

Subject: Advice Letter Providing Information Pursuant to Resolution G-3529

Dear Mr. Ortiz:

This disposition letter approves Southern California Gas Company's (SoCalGas) Tier 2 Advice Letter (AL) 5208, filed on October 30, 2017, and the partial supplement AL 5208-A, filed on December 18, 2017. Advice Letters 5208 and 5208-A provide the following information required by Resolution G-3529: a status report of storage inventories, costs incurred from the Injection Enhancement Plan (IEP), and an analysis of system reliability for the upcoming winter.

Background

On May 8, 2017, the California Public Utility Commission's (CPUC) Executive Director, Tim Sullivan, sent a letter to Bret Lane, President and Chief Operating Officer of SoCalGas, entitled "SoCalGas Summer Reliability and Storage Inventories." The letter expressed concern about the low inventory in the non-Aliso Canyon gas storage fields and directed SoCalGas to take immediate action to increase injection at these fields using the procurement capabilities of the SoCalGas Gas Acquisition Department.

The May 8, 2017, letter further directed SoCalGas to file a Tier 2 Advice Letter "proposing an agreement between the SoCalGas System Operator and the SoCalGas Gas Acquisition Department to support SoCalGas' storage requirements for system reliability." The AL was to include: minimum month-end storage targets for the remaining months of 2017 beginning with June 2017; forecasted monthly natural gas storage quantities to be procured by the Gas Acquisition Department solely for the purpose of ensuring system reliability outside of its normal business-as-usual procurement for core customers; and an estimated cost to the Gas Acquisition Department for procuring the additional quantity of gas.

SoCalGas was also directed to file a separate AL seeking the establishment of a memorandum account to track costs resulting from the IEP.

SoCalGas filed AL 5139 and AL 5140 on May 19, 2017. Res. G-3529 for AL 5139 was issued on June 29, 2017, approving SoCalGas' proposed IEP but denying proposed temporary modifications to the System Operator Injection Capacity Limits. In addition, Ordering Paragraph 3 provided that SoCalGas "shall file an advice letter containing a status report of storage inventories, costs incurred from the IEP, and an analysis of system reliability for the upcoming winter within thirty days of the expiration of the IEP and the Injection Enhancement Memorandum (IEM) on September 30, 2017." AL 5140 was approved by disposition letter issued on July 11, 2017.

On October 30, 2017, SoCalGas filed AL 5208 to comply with Res. G-3529 and included an analysis of system reliability for the upcoming winter that included a supply and demand outlook.

Staff from the CPUC's Energy Division (ED staff) requested that SoCalGas supplement the AL 5208 winter analysis to include new information available after AL 5208 was filed. The supplement was to incorporate the following:

- Current storage inventories;
- The results of Aliso Canyon flow tests conducted in early December;¹
- The clarification provided in the November 16, 2017, Letter from the Executive Director of the CPUC that gas in storage could be used to meet winter demand;
- The impact of the resumption of Storage Safety Enhancement Program (SSEP) work;²
- Updates to the Aliso Withdrawal Protocol;³ and
- Updates to the 715 Report.⁴

In response, SoCalGas filed AL 5208-A.

Protests

AL 5208 was timely protested by the Environmental Defense Fund (EDF) on November 20, 2017.

EDF makes several claims in its protest. First, EDF maintains that SoCalGas' statements about its storage inventory do not match the figures in Energy Information Administration (EIA) documents. Second, EDF argues that SoCalGas' justification of its assumption that monthly pipeline receipts should be forecast to be 85% of pipeline capacity is flawed and that the assumption is inappropriate and too conservative. Third, EDF states that SoCalGas should plan

¹ SoCalGas performed flow testing on specified wells at the Aliso Canyon Gas Storage field to validate the gas withdrawal flow rate. Based on the results, SoCalGas updated Aliso Canyon's total peak daily withdrawal capability.

² SoCalGas resumed SSEP work to convert wells at the Honor Rancho and La Goleta storage fields to tubing-only flow on December 1, 2017. This work, which reduces total storage withdrawal capacity for an unspecified period, was resumed at the height of the winter 2017-18 reliability crisis without providing prior notice to Energy Division.

³ The [Aliso Canyon Withdrawal Protocol](#), published November 2, 2017, allows SoCalGas to use the Aliso Canyon storage field to ensure gas system reliability after all other alternatives have been exhausted.

⁴ The updated [715 Report](#) increased the authorized inventory range of Aliso Canyon. The previously authorized range was 14.8 billion cubic feet (Bcf) to 23.6 Bcf. In the update, the range was expanded to 0 Bcf to 24.6 Bcf.

for winter injections into natural gas storage fields. Lastly, EDF bases many of its calculations on a pipeline supply of between 3.7 and 3.9 billion cubic feet per day (Bcfd) of natural gas.

SoCalGas filed a timely reply to EDF on November 29, 2017.

In its reply, SoCalGas states that it was unable to find the EIA documents to which EDF referred and that the data in AL 5208 was based on actual expected capacity. SoCalGas also maintains that although the assumption that pipeline receipts would be equal to 85% of system capacity might be conservative, that does not make it inaccurate. The utility further claims that it is not prudent to forecast winter injections into storage. Lastly, SoCalGas notes that EDF seems to have misinterpreted the 3.7 to 3.9 Bcf *total system capacity* that SoCalGas forecasted based on its hydraulic analysis with *pipeline capacity*. Total system capacity includes both pipeline capacity and storage withdrawals. In AL 5208, SoCalGas estimated that pipeline capacity would be 2.77 Bcf without Line 4000 and 2.97 Bcf once Line 4000 returned to service.

AL 5208-A was not protested.

Discussion

EDF is correct that SoCalGas statements about storage inventory do not match figures in the 2016 documents posted by the EIA.⁵ However, given the Storage Safety Enhancement Plan and other work done over the past year, ED staff accepts that the estimates provided by SoCalGas are likely to be more up to date than the information on the EIA website.

Energy Division staff agrees with EDF that SoCalGas uses a flawed justification for the assumption that monthly pipeline receipts would be equal to 85% of pipeline capacity. SoCalGas states that the 85% figure was put forward by ED staff in the Proposed Scenarios Framework in Order Instituting Investigation (OII) I.17.02-002. However, in the Proposed Scenarios Framework, ED staff suggested that this assumption be used for peak day forecasts, not for a monthly gas balance.⁶ The distinction is important because the 85% figure is intended to capture the possibility that high customer underdeliveries could coincide with a temporary, unplanned pipeline outage on a peak demand day. These are not conditions that ED staff would anticipate continuing for every day of every month.

ED staff agrees with SoCalGas' contention that it is not prudent to forecast winter injections into storage. Although winter injections are sometimes possible during periods of mild weather, such conditions are too uncertain to include in forecasts based on an average temperature year and a 1-in-10 cold temperature and dry hydro year. The gas balance in the "Aliso Canyon Winter Risk Assessment Technical Report 2017-18 Supplement" produced by the CPUC, the California Energy Commission, the California Independent System Operator, and the Los Angeles Department of Water and Power⁷ also assumes zero injections during the winter season.

⁵ The EIA's 2016 estimates of SoCalGas storage capacity can be found at: https://www.eia.gov/cfapps/ngqs/ngqs.cfm?f_report=RP7.

⁶ "Proposed Scenarios Framework: I.17-02-002" p. 5: <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M191/K054/191054394.PDF>.

⁷ http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-11/TN221863_20171128T103411_Aliso_Canyon_Winter_Risk_Assesment_Technical_Report_201718_Supp.pdf

Energy Division staff also agrees with SoCalGas that EDF seems to have mistaken the total system capacity, including storage withdrawal, of 3.7-3.9 Bcf for the pipeline capacity in its analysis.

Advice Letters 5208 and 5208-A are approved with the foregoing clarifications and observations.

Sincerely,



FOR

Edward Randolph,
Director, Energy Division

CC: Timothy J. O'Connor (toconnor@edf.org) and Greg Lander (glander@skippingstone.com)
on behalf of Environmental Defense Fund.



Ronald van der Leeden
Director
Regulatory Affairs

555 W. Fifth Street, GT14D6
Los Angeles, CA 90013-1011
Tel: 213.244.2009
Fax: 213.244.4957

RvanderLeeden@semprautilities.com

October 30, 2017

Advice No. 5208
(U 904 G)

Public Utilities Commission of the State of California

Subject: Advice Letter Providing Information Pursuant to Resolution G-3529

Southern California Gas Company (SoCalGas) hereby provides the following information requested in California Public Utilities Commission (Commission or CPUC) Resolution (Res.) G-3529.

Background

On May 8, 2017, the Executive Director sent a letter to Bret Lane, President and Chief Operating Officer of SoCalGas, entitled "SoCalGas Summer Reliability and Storage Inventories." The letter states that "[a]dequate natural gas inventory levels are necessary in order to maintain reliable delivery to customers during peak demand periods for both core and non-core customers" and that "[w]ith the continued unavailability of Aliso Canyon, overall storage inventory remaining in the available storage fields is substantially lower than historical figures. . . ." To support energy reliability for Southern California, the May 8 Letter directs SoCalGas to "take immediate actions to increase storage injection at the remaining available storage facilities" and "to immediately begin maximizing storage injections using the procurement capabilities of the SoCalGas Gas Acquisition Department to support SoCalGas' storage requirement for system reliability." (the "System Reliability Directive").

In the System Reliability Directive, SoCalGas was directed to file a Tier 2 Advice Letter (AL) "proposing an agreement between the SoCalGas System Operator and the SoCalGas Gas Acquisition Department to support SoCalGas' storage requirements for system reliability similar to the Memorandum in Lieu of Contract approved by Resolution G-3485."

In addition, the System Reliability Directive stated that SoCalGas should include the following in its Tier 2 AL:

- Minimum month-end storage targets for the remaining months of 2017 beginning with June 2017;
- Forecasted monthly natural gas storage quantities procured by the Gas Acquisition Department solely for the purpose of ensuring system reliability outside of its normal business as usual procurement for core customers; and
- An estimated cost for the Gas Acquisition Department to provide these support services.

Additionally, SoCalGas was directed to file a separate AL seeking the establishment of a memorandum account to track costs resulting from the Injection Enhancement Plan.¹

SoCalGas filed AL 5139 and AL 5140 on May 19, 2017, in compliance with the System Reliability directive. Res. G-3529 was issued on June 29, 2017, regarding AL 5139, approving SoCalGas' proposed Injection Enhancement Plan (IEP) but denying proposed temporary modifications to the System Operator Injection Capacity Limits. In addition, Ordering Paragraph 3 provided that SoCalGas "shall file an advice letter containing a status report of storage inventories, costs incurred from the IEP, and an analysis of system reliability for the upcoming winter within thirty days of the expiration of the IEP and the Injection Enhancement Memorandum (IEM) on September 30, 2017."² AL 5140 was approved effecting May 8, 2017, by disposition letter issued on July 11, 2017.

Status Report of Storage Inventories

Res. G-3529 requested that SoCalGas provide a status report of storage inventories. Pursuant to the System Reliability Directive, AL 5139 included targeted inventories for each of SoCalGas' storage fields. The following table provides the actual inventory at each of the storage fields for each date included in AL 5139. As shown, SoCalGas met each of its monthly targets established in AL 5139.

¹ See Advice No. 5140, Expedited Advice Letter Requesting to Establish the Injection Enhancement Cost Memorandum Account (IECMA) Pursuant to the May 8, 2017 "SoCalGas Summer Reliability and Storage Inventories" Letter from CPUC Executive Director Timothy Sullivan.

² Res. G-3529 at p. 10.

Storage Field	6/1/2017		7/1/2017		8/1/2017		9/1/2017		10/1/2017	
	Target Inventory (Bcf)	Actual Inventory (Bcf)	Target Inventory (Bcf)	Actual Inventory (Bcf)	Target Inventory (Bcf)	Actual Inventory (Bcf)	Target Inventory (Bcf)	Actual Inventory (Bcf)	Target Inventory (Bcf)	Actual Inventory (Bcf)
La Goleta	11.52	11.72	12.72	12.86	13.96	14.26	15.20	15.13	16.40	16.4
Playa Del Rey	1.85	1.83	1.85	1.84	1.85	1.69	1.85	1.58	1.85	1.86
Honor Rancho	17.10	17.94	20.08	21.42	22.56	23.50	23.05	21.89	23.05	24.02
Aliso Canyon	14.80	14.74*	14.80	14.65*	14.80	14.82**	14.80	17.48	14.80	21.05
Total System	45.27	46.23	49.45	50.77	53.17	54.27	54.9	56.08	56.1	63.33

*Since January 23, 2016 Aliso Canyon has been on zero withdrawal. This means all storage wells were shut-in the afternoon of January 23 at each respective header valve and those valves remain closed. The small volumes of gas measured passing through Dehy 2 originate from maintenance activities on surface facilities and well inspections and other well work which may involve blowing down and removing high pressure surface piping.

** SoCalGas resumed natural gas injection operations at the Aliso Canyon storage facility on July 31, 2017 consistent with CPUC letter on July 19th, 2017 regarding "Directive to maintain a range of working gas in the Aliso Canyon gas storage facility that ensures safety and reliability for the region, and just and reasonable rates in California."

Costs Incurred from the IEP

Pursuant to the IEM approved by Res. G-3529, SoCalGas' Gas Acquisition Department was to use reasonable best efforts to utilize storage injection capacity allocated to the system balancing function and made available for Cycle 1 or Cycle 3 for injection nominations in support of the System Reliability Directive. SoCalGas Gas Acquisition estimated that accelerating procurement of up to 3 Bcf of natural gas to meet the inventory targets in support of system reliability would result in incremental costs of approximately \$1.5 to \$3 million.³ These incremental costs were to be recorded in the Injection Enhancement Cost Memorandum Account (IECMA), which was subsequently approved by AL 5140.

Res. G-3529 requested that SoCalGas provide in this AL the costs incurred for the IEP. SoCalGas identified accelerated injections pursuant to the IEP of **551,359 Dth**. The net incremental cost of these injections was **\$130,121**. As noted above, SoCalGas met its storage targets set in AL 5139.

³ AL 5139 at p. 8.

Analysis of System Reliability for the Upcoming Winter

Res. G-3529 directed SoCalGas to include “an analysis of system reliability for the upcoming winter.” The CPUC has mandated that SoCalGas maintain a reliability standard such that it can provide service during a 1-in-10 year cold day event for noncore customers and provide service during a 1-in-35 year peak day event for core customers.⁴ The supply reductions resulting from the current pipeline outages and pressure limitations, along with the restrictions imposed by the CPUC on both the use of Aliso Canyon and SoCalGas’ other storage fields, have negatively impacted SoCalGas’ ability to meet these standards.

With the current supply reductions, including the limitations on the use of Aliso Canyon, and the expected level of storage supply available, SoCalGas has performed hydraulic simulations and calculated its winter system capacity to be no greater than 3.7 – 3.9 BCFD,⁵ significantly less than the 4.955 BCFD demand during the 1-in-10 year cold day event. Additionally, under a cold temperature and dry hydro condition, SoCalGas forecasts that its gas in storage will be fully depleted before the end of February 2018, using data provided in the 2016 California Gas Report. SoCalGas therefore expects that noncore service will need to be curtailed pursuant to CPUC approved SoCalGas Rule No. 23 during the 1-in-10 year cold day event in order to preserve service to core customers. In addition, SoCalGas anticipates that noncore service will need to be curtailed even during less extreme and higher temperature conditions than the 1-in-10 year cold day event in order to preserve storage inventory and withdrawal capacity needed during the 1-in-10 year cold day event.

While there is risk to noncore customers, including electric generation, at this time, SoCalGas does not believe that service to core customers is at risk. Sufficient pipeline and storage capacity exists to meet the CPUC-mandated reliability standard of a 1-in-35 year peak day event planning standard for core service. However, this reliability standard includes the full curtailment of all noncore customers.

In both instances, SoCalGas’ ability to maintain uninterrupted service also depends upon customers delivering sufficient supply to the SoCalGas system. SoCalGas will continue to use all the regulatory tools it has as authorized by the CPUC; however, SoCalGas expects that there may be times during the winter season when gas supply from the interstate pipelines is unavailable due to weather conditions elsewhere in the country or pipeline constraints upstream of SoCalGas’ system.

Any additional loss of pipeline or storage capacity will further degrade the ability to provide service to noncore customers, and could also impact capacity to maintain continuous service to core customers as well.

⁴ See Decision (D.) 02-11-073, D.06-09-039, and D.16-07-008.

⁵ The system capacity increases from 3.7 to 3.9 Bcf once Line 4000 returns to service at a reduced operating pressure as discussed below.

Supply Outlook*Available Flowing Pipeline Supplies*

The SoCalGas system has been designed to receive up to 3.875 billion cubic feet per day (BCFD) of flowing supply on a firm basis. This means, if customers deliver that much supply to the SoCalGas system, and SoCalGas has a sufficient level of customer demand, SoCalGas can redeliver that gas supply to customers' burners. Supplies delivered to the SoCalGas system, however, do not reach these maximum receipt levels for a variety of reasons, including that customers may choose to use SoCalGas' balancing service rather than deliver supplies, California production has declined over time, system demand frequently does not require maximum delivery of supply, or flowing supplies may not be available due to weather patterns or maintenance impacting the interstate pipelines upstream of the SoCalGas system. Additionally, planned and unplanned pipeline outages can reduce receipt capacity. Currently, the pipeline outages on Lines 235, 4000, 3000, and the pressure reduction to Line 2000 have reduced the receipt capacity of the SoCalGas system to 2.770 BCFD, as detailed below in Table 1.

Table 1
Available Flowing Pipeline Supplies (10/30/2017)

Receipt Point	Supply (million cubic feet per day, MMcfd)
North Needles	0 ¹
Topock	0 ²
Kramer Junction	700 ³
Blythe	1010
Otay Mesa	200 ⁴
Wheeler Ridge/Kern River Station	800 ⁵
California Production	60 ⁶
TOTAL	2,770

¹ No receipt capacity due to Line 235 and Line 4000 outage.

² No receipt capacity due to Line 3000 outage.

³ SoCalGas temporarily increased the operational receipt capacity of Kramer Junction from 550 to 700 MMcfd on 10/19/17.

⁴ Historically, no supply delivered at Otay Mesa.

⁵ The firm capacity of the Wheeler Ridge receipt point is 765 MMcfd. SoCalGas is able to increase the capacity to 800 MMcfd on a seasonal basis in the winter due to increased demand downstream of the receipt point.

⁶ Although SoCalGas has firm receipt capacity of 310 MMcfd for local California production, producers are utilizing only approximately 60 MMcfd of that capacity for actual flowing supplies.

The SoCalGas receipt capacity is expected to increase by another 200 MMcfd to 2,970 MMcfd once Line 4000 is restored to service operating at a reduced pressure. SoCalGas currently expects this restoration to occur by December 30, 2017.

SoCalGas is also working diligently to complete maintenance and repairs on Line 235 and Line 3000, so that they can be safely returned to service. As with Line 4000, SoCalGas

expects to initially operate Line 235 at a reduced pressure when it is restored to service. When Line 235 is restored, it will provide redundancy, but will not provide incremental firm receipt capacity. There is currently no timetable for when Line 235 will be restored to service. Line 3000 is expected to be back in service by May 1, 2018, which is after the winter season.

Available Storage Supplies

SoCalGas currently estimates a withdrawal capacity of 1.95 BCFD to be available during the peak winter months of December and January, including storage supplies from Aliso Canyon. This withdrawal capacity is detailed in Table 2 below, and includes both the inventory level at which the projected withdrawal rate is no longer possible and the expected storage field inventory levels at the beginning of the winter season. Line 3000's return to service, however, possibly could have been accelerated had State of California agencies intervened to expedite the permitting process.⁶

Table 2
Projected Storage Withdrawal

Storage field	Projected withdrawal rate during peak demand period (MMcfd)	Minimum field inventory for projected rate (BCF)	Expected field inventory on 12/1/2017 (BCF)
Honor Rancho	850	22	24
La Goleta	300	11	19
Playa del Rey	300	1.5	1.85
Aliso Canyon	500 *	23.6	23.6
TOTAL	1,950	58.1 **	68.45 **

* Estimate as of 10/31/2017, has not been validated with flow tests. After validation and additional well availability, the withdrawal capacity may reach 625 MMcfd.

** These totals do not reflect the actual working inventory available to serve customer demand. SoCalGas is only authorized to use the Aliso Canyon storage field as a last resort in accordance with the most recent withdrawal protocol, however, even then only 8.8 BCF of Aliso inventory can be used.

⁶ SoCalGas operates critical pipeline infrastructure throughout Southern California, encompassing multiple state and federal jurisdictions. When a pipeline is taken out of service for remediation purposes, the permitting process with these jurisdictions can significantly impact the time required to return the pipeline to service. If the CPUC decides it wants to exercise its authority and express the need for expedited permitting treatment with these jurisdictional agencies, critical infrastructure can be returned to service more quickly and avoid reliability risk. For example, SoCalGas contacted the CPUC in the beginning of 2017 for assistance in securing necessary California Fish and Wildlife permits for Line 3000. Had the CPUC exercised its authority and expressed the need for expedited treatment, the permits could have been received and work could have begun as early as May of 2017. Instead, because of permit delays, work on this pipeline is not scheduled to commence until November of 2017.

These withdrawal rates are dependent on having sufficient inventory and the number of wells available to maintain the withdrawal rate for an extended time. As inventories are depleted, the withdrawal rates from the fields decline. As a result, these withdrawal rates are only available when the fields are within a specific range of inventory levels. Operationally, this means that storage inventories must be held (not used) during the winter season in order to maintain the required withdrawal rates necessary for peak day reliability.

As seen in Table 2, there is very little inventory capacity (2.5 BCF) between Honor Rancho and Playa del Rey that can be used between the start of the winter season, on November 1st, and the peak demand period of December through January. While more inventory supply (8 BCF) can be used from the La Goleta storage field before its critical inventory level is reached, gas supply from La Goleta primarily serves the demand on the SoCalGas Coastal System, and actual demand on that system will determine how much supply from La Goleta can be utilized. Further, it is unlikely that the Playa del Rey storage field can sustain its withdrawal rate for an entire operating day, let alone multiple days.

Demand Outlook: 1-in-10 Year Cold Day Event

For the upcoming winter season, the forecast level of demand during the 1-in-10 year cold day event is 4.955 BCFD:

Table 3
Forecast Customer Demand During 1-10 Year Cold Day Event

Customer Type	Winter Demand (BCFD)
Core	3.250
Noncore, Non-Electric Generation	0.805
Noncore, Electric Generation	0.900
Total	4.955

Based on the above data, SoCalGas expects that it will have insufficient supplies to meet the 1-in-10-year cold day demand forecast. This cold day event has the potential to occur in December or January, and may also occur more than once per season. To avoid curtailments, this 4.955 BCFD must be supplied through a combination of flowing supply (interstate pipeline supplies and local California produced supplies) and storage withdrawal. As shown in Tables 1 and 2, the expected level of flowing and storage supplies available through the peak demand period is 4.720 BCFD - short of the level of demand even with the use of Aliso Canyon. While the level of flowing pipeline supply is expected to increase by 200 MMcfd by the end of December, it is likely that storage levels will be drawn down below the minimum levels shown in Table 2, offsetting this gain in flowing pipeline supply with a loss of withdrawal capability. This is further discussed below and described in Table 4.

Hydraulic modeling of the transmission system has determined the winter system capacity to be 3.7 BCFD, increasing to 3.9 BCFD with the partial restoration of Line 4000, without the use of Aliso Canyon. Even with the estimated withdrawal supply from Aliso Canyon of 500 MMcfd, SoCalGas still has insufficient capacity and supply to meet the 1-in-10 year

cold day demand forecast. Therefore, if the 1-in-10 year cold day event were to occur, as required by SoCalGas' CPUC-approved tariff rules, noncore customers would need to be curtailed, starting with noncore electric generators.

Demand Outlook: 1-in-35 Year Peak Day Event

For the upcoming winter season, the forecast level of demand during the 1-in-35 year peak day event is 3.454 BCFD. This is within SoCalGas' system capacity with the current level of outages, and the ability to meet this level of demand has been confirmed with hydraulic simulation. SoCalGas therefore believe that its ability to maintain continuous service to the core customers is not at risk this winter; however, this entails all noncore service being curtailed, in accordance with the CPUC-approved design standard.

Examination of Seasonal Storage Needs

In addition to the examination of SoCalGas' ability to meet the CPUC's mandated reliability design standards, SoCalGas examined the use of its available storage throughout the winter season. Table 4 below examines this using demand data prepared for the 2016 California Gas Report. This level of demand was then compared to the expected level of flowing supply (interstate pipeline and local California producer supply). It is not realistic to assume that full receipts will be delivered every day throughout the winter season. For the purposes of this assessment, SoCalGas assumed a level of supply equal to 85% of the receipt capacity, a level which CPUC Staff proposed in the SB 380 modeling framework. If this level of flowing supply was insufficient to meet the level of demand, the amount of storage supply (withdrawal) needed was calculated, and that amount was reduced from the system-wide storage field inventory. The beginning (end of month) storage inventory is taken from Table 2 above, and includes the 8.8 Bcf of usable inventory from Aliso Canyon (24 BCF at Honor Rancho, 19 BCF at La Goleta, 1.85 BCF at Playa del Rey, and the 8.8 BCF available to use at Aliso Canyon).

Table 4
Monthly Storage Utilization Assessment

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
AVG TEMP BASE HYDRO					
CGR demand (MMCF)	78750	97216	87220	96131	80640
Pipeline supply (MMCF), 85%	70635	72990	70686	78260	75735
Storage withdrawal (MMCF)	8115	24227	16534	17872	4905
Month-End Storage inventory (MMCF)	45535	21309	4775	-13097	-18002
COLD TEMP DRY HYDRO					
CGR demand (MMCF)	82860	105338	95788	104656	87270
Pipeline supply (MMCF), 85%	70635	72989.5	70686	78259.5	75735
Storage withdrawal (MMCF)	12225	32349	25102	26397	11535
Month-End Storage inventory (MMCF)	41425	9077	-16026	-42422	-53957

Per Table 2, SoCalGas requires 43.3 BCFD of inventory in storage in order to maintain sufficient withdrawal capacity for peak reliability (22 BCF at Honor Rancho, 11 BCF at La Goleta, 1.5 BCF at Playa del Rey, and the 8.8 BCF available to use at Aliso Canyon). As can be seen in Table 4, the inventory levels in December and January – the peak demand months of the winter season – fall far below what is needed to maintain reliability. Additionally, SoCalGas' storage inventory is fully depleted before the end of the winter season - in February under an average temperature/base hydro ("average/base") scenario and in January under a cold temperature/dry hydro ("cold/dry") scenario.

This will require a significant level of noncore curtailment: 18 BCF in the average/base scenario and 54 BCF in the cold/dry scenario over the season. This results in approximately 202 MMcfd of required curtailment on average from January through March under the average/base scenario and approximately 607 MMcfd on average under the cold/dry scenario for this same period. Under Commission approved SoCalGas Rule No. 23, curtailments based on these volumes would be effectuated first starting with the prescribed percentage of noncore EG demand. If further curtailment is required, noncore/non-EG customers would be curtailed to the extent possible, followed by additional curtailment to the noncore EG demand.

The curtailments discussed above are necessary only to balance seasonal demand and supply. Additional curtailment will be required in order to maintain inventory levels to provide the withdrawal rates needed for reliability as shown in Table 2, and to reflect the actual hydraulic capacity of the SoCalGas system.

Protest

Anyone may protest this AL to the Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and must be received within 20 days of the date this AL, which is November 19, 2017. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of the Energy Division Tariff Unit (EDTariffUnit@cpuc.ca.gov). A copy of the protest shall also be sent via both e-mail and facsimile to the address shown below on the same date it is mailed or delivered to the Commission.

Attn: Ray B. Ortiz
Tariff Manager - GT14D6
555 West Fifth Street
Los Angeles, CA 90013-1011
Facsimile No.: (213) 244-4957
E-Mail: ROrtiz@semprautilities.com

Effective Date

SoCalGas believes that this filing is subject to Energy Division disposition, and should be classified as Tier 2 (effective after staff approval) pursuant to General Order (GO) 96-B. SoCalGas respectfully requests that this filing be approved and made effective November 29, 2017, which is 30 days from the date of this AL.

Notice

A copy of this AL is being sent to SoCalGas' GO 96-B service list and the Commission's service lists for I.17-02-002, I.17-03-002, and A.15-07-014. Address change requests to the GO 96-B should be directed by electronic mail to Tariffs@socalgas.com or call 213-244-2837. For changes to all other service lists, please contact the Commission's Process Office at 415-703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

Ronald van der Leeden
Director – Regulatory Affairs

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **SOUTHERN CALIFORNIA GAS COMPANY (U 904G)**

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Ray B. Ortiz

Phone #: (213) 244-3837

E-mail: ROrtiz@semprautilities.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 5208

Subject of AL: Advice Letter Providing Information Pursuant to Resolution G-3529

Keywords (choose from CPUC listing): Reliability and Storage

AL filing type: Monthly Quarterly Annual One-Time Other

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

Resolution G-3529

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL¹: N/A

Does AL request confidential treatment? If so, provide explanation: No

Resolution Required? Yes No

Tier Designation: 1 2 3

Requested effective date: 11/29/17

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division

Attention: Tariff Unit

505 Van Ness Ave.,

San Francisco, CA 94102

EDTariffUnit@cpuc.ca.gov

Southern California Gas Company

Attention: Ray B. Ortiz

555 West 5th Street, GT14D6

Los Angeles, CA 90013-1011

ROrtiz@semprautilities.com

Tariffs@socalgas.com

¹ Discuss in AL if more space is needed.