DATE OF ISSUANCE: May 11, 2018

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION **RESOLUTION G-3540**
May 10, 2018

R E S O L U T I O N

Resolution G-3540; Southern California Gas Company request for expedited approval of its Second Injection Plan and Memorandum between its System Operator and Gas Acquisition Department to Maintain Summer Reliability.

PROPOSED OUTCOME:

- Southern California Gas Company's (SoCalGas') Proposed Second Injection Plan and Second Injection Enhancement Memorandum between the Utility System Operator and the Gas Acquisition Department for Services to Maintain Summer Reliability is approved in part and denied in part.

SAFETY CONSIDERATIONS:

- This resolution has an indirect positive impact on customer safety by improving system reliability through the summer and upcoming winter.

ESTIMATED COST:

- Unknown at this time.

By Advice Letter 5275-A, Filed on April 20, 2018.

SUMMARY

This resolution approves in part and denies in part Southern California Gas Company's (SoCalGas) Supplemental Advice Letter (AL) 5275-A, which

replaced SoCalGas AL 5275 in its entirety[1], requesting approval of a Proposed Second Injection Enhancement Plan and a Second Injection Enhancement Memorandum between the System Operator and the Gas Acquisition Department for services to maintain summer reliability pursuant to the March 13, 2018, "Injection Required for SoCalGas Summer Reliability and Storage Inventories" Letter from the California Public Utilities Commission (Commission or CPUC) Executive Director.

This resolution approves the following measures in SoCalGas' Second Injection Enhancement Plan to enhance injections to increase the system's ability to meet summer customer demand and to prepare storage for the winter operating season:

1. **Continuing to implement temporary modifications to system operations to increase storage injections;**
2. **Implementing temporary modifications to increase storage injection capacity available to the market; and**
3. **Implementing temporary modifications to system operator limits on available injection capacity provided to the market and temporary, conditional modifications to Rule 41.**

It denies the following proposed measures:

1. **Increasing the allowable inventory at Aliso Canyon to enable more system-wide injections; and**
2. **Modifying the Aliso Canyon Withdrawal Protocol to allow for more flexible use of Aliso Canyon to manage storage inventories and support reliability in conjunction with a temporary deviation to SoCalGas Rule No. 23.**

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[1] A Supplemental Advice Letter 5275-A was filed April 20, 2018. This supplemental Advice Letter (AL) replaces in its entirety AL 5275, filed on March 30, 2018. This supplemental AL includes: 1) correcting an addition error and year reference in Table 2; 2) changing the withdrawal rates measurements from billion cubic feet per day (Bcfd) to million cubic feet per day (MMcfd) in Table 2; 3) clarifying that the temporary modifications to increase injection operations and injection capacity available to market have an end date of October 31, 2018; and 4) revising the end date for the temporary modifications to System Operator limits on available injection capacity provided to the market to October 31, 2018 for consistency with the other proposed measures.

These measures are denied because the Commission intends to review its Public Utilities Code Section 715 Report[2] findings on Aliso Canyon inventory levels and the Aliso Canyon Withdrawal Protocol based on the upcoming Summer 2018 Aliso Canyon Risk Assessment Technical Report.

BACKGROUND

This resolution responds to SoCalGas Advice Letter 5275, which was filed in response to the Commission's Executive Director's letter to SoCalGas on March 13, 2018. The letter directed SoCalGas to file an expedited Tier 2 Advice Letter containing elements that are detailed below.

Aliso Canyon is the largest of SoCalGas' natural gas storage facilities, and formerly had an inventory capacity of 86.2 Billion cubic feet (Bcf). On October 25, 2015, a natural gas leak occurred at the Aliso Canyon facility. Due to the magnitude and duration of the leak, which proved difficult to cap, the Governor declared a state of emergency for Los Angeles County on January 6, 2016. The proclamation directs all agencies of state government to "ensure a continuous and thorough response to this incident" and further directs the Commission to "take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months."

The leak was sealed on February 17, 2016. However, pursuant to SB 380, which was approved by the Governor on May 10, 2016, injections into Aliso Canyon were prohibited until all wells had undergone a comprehensive safety review. On July 19, 2017, the Division of Oil, Gas, and Geothermal Resources (DOGGR) certified, and the Commission concurred, that the required inspections and safety improvements had been completed and injections could resume at Aliso Canyon. DOGGR authorized Aliso Canyon to operate at pressures up to 2,926 pounds per square inch absolute (psia), which translates into an inventory of 68.6 Bcf.[3]

[2] All statutory references are to the Public Utilities Code unless otherwise noted.

[3] Based on information provided to the CPUC by DOGGR on April 19, 2018.

The current maximum Aliso inventory is lower than the DOGGR-authorized amount due to another provision of SB 380, which added Section 715 to the Public Utilities Code. Section 715 requires the CPUC to determine "the range of working gas necessary to ensure safety and reliability for the region and just and reasonable rates in California." The CPUC has released a series of "715 Reports" in response to changing conditions on the SoCalGas system. The most recent such report was issued on November 30, 2017, and set a cap of 24.6 Bcf on Aliso Canyon inventory.[4]

The Commission has issued a number of technical reports and assessments concerning the reliability impacts of reduced use of Aliso Canyon and established an Aliso Canyon Withdrawal Protocol (Protocol), which was last updated on November 2, 2017. The Protocol specifies that Aliso Canyon will be treated as an "asset of last resort" and used for withdrawals after all other alternatives have been exhausted.[5]

A prior Commission resolution, G-3529 (June 29, 2017) addressing similar matters, approved SoCalGas' (first) gas storage Proposed Injection Enhancement Plan to support system reliability for summer 2017. That resolution also included approval of a Memorandum between the System Operator and the SoCalGas' Acquisition Department for services to maintain summer reliability through and including September 30, 2017. The Resolution approved several elements of SoCalGas Advice Letter 5139 concerning storage protocols that were responsive to the Commission's Executive Director's letter on May 8, 2017. That resolution directed SoCalGas to file a Tier 2 Advice Letter proposing an agreement between the utility's System Operator and the Gas Acquisition Department that would maximize storage injections. Resolution G-3529 also denied SoCalGas' request for temporary modifications to the System Operator Injection Capacity Limits in Rule 41.

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[4]Aliso Canyon Working Gas Inventory, Production Capacity, Injection Capacity, and Well Availability for Reliability: Supplemental Report for Winter 2017-18 (715 Report): http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/News_and_Updates/Draft%20Update%20to%20Aliso%20Canyon%20Working%20Gas%20Inventory%20-%20715%20Report%20-%20113017.pdf.

5. The full Protocol is at http://cpuc.ca.gov/aliso.

Several pipeline outages have occurred on the SoCalGas systems since the previous Injection Enhancement Plan expired. On October 1, 2017, Line 235-2 ruptured, and there is still no estimate for when it will return to service. Line 4000 also underwent maintenance and is now operating at significantly reduced capacity with no estimate for when it will return to full capacity. In addition, a right-of-way through lands held in reserve for the Morongo Band of Mission Indians has expired, further reducing the capacity of Line 2000. All of these outages have placed additional stress on the system, making storage injection even more urgent than it was in spring 2017.

In accordance with the Protocol, on March 2, 2018, SoCalGas wrote to the CPUC Energy Division Director requesting "the ability to *immediately* begin using Aliso Canyon to manage gas storage inventory and preserve withdrawal deliverability at SoCalGas' non-Aliso storage fields." (Emphasis in original.) This letter was sent following two weeks of below average temperatures in the SoCalGas service territory, and SoCalGas estimated that conditions in the days ahead would require extensive use of gas supplies from storage. The letter states inventory at the non-Aliso fields was critically low and that, in accordance with the Protocol, noncore customers such as electric generators had been curtailed, with curtailments expected to continue into the following week due to continuing cold weather. Lower levels of storage inventory result in lower withdrawal capacity, further lowering SoCalGas' ability to deliver gas to customers.

On March 3, 2018, the CPUC Energy Division Director wrote to Rodger Schwecke, Vice President of SoCalGas, authorizing withdrawals from Aliso Canyon, in that withdrawals from all other storage facilities had been maximized. This authority was provisional to SoCalGas continuing to coordinate with the Balancing Authorities[6] to reduce overall natural gas demand, was limited to be authorized only through March 13, 2018, and directed SoCalGas "to act to rapidly restore inventories in all storage facilities" once the high demand returned to average levels.

[6] The Balancing Authorities are the California Independent System Operator and the Los Angeles Department of Water and Power

On March 13, 2018, the Executive Director of the CPUC wrote to Bret Lane, Chief Operating Officer of SoCalGas, asking that SoCalGas "immediately begin maximizing storage injections at all storage fields."[7] The letter instructs SoCalGas to file an expedited 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 similar to the Injection Enhancement Plan and Injection Enhancement Memorandum process approved by Resolution G-3529 (June 29, 2017)."[8]

The Executive Director further stated that SoCalGas should include the following in its AL:

- An Injection Plan based on rapidly achieving storage withdrawal capacity at the non-Aliso storage fields of 1,320 million cubic feet per day (MMcfd);[9]
- Minimum month-end storage targets for the remaining months of 2018 beginning with May 2018;
- 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.

[7] http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Safety/Untitled_03132018_141521.pdf

[8] The March 13, 2018, letter originally directed the AL to be submitted by March 20, 2018, however, the deadline was extended to March 30 per Executive Director Stebbins' letter dated March 19, 2018.

[9] As noted in the March 13, 2018 letter, the Commission does not require that SoCalGas maintain this level of withdrawal capacity at all times. SoCalGas is authorized to use storage to meet demand, even if it means withdrawal capacity at the non-Aliso Canyon fields temporarily falls below 1,320 MMcfd. If that occurs, however, the Commission indicates that it expects SoCalGas to make effort to return storage to levels needed to support this withdrawal capacity.

Additionally, the Executive Director directed SoCalGas to request expedited treatment by proposing a shortened protest period and time to reply to the protest, and authorized SoCalGas to submit a separate Advice Letter seeking the establishment of a memorandum account to track costs resulting from the Second Injection Enhancement Plan.[10]

On March 30, 2018 SoCalGas filed expedited Advice Letter 5275 requesting approval on a Second Injection Enhancement Plan and a Second Injection Enhancement Memorandum between the System Operator and the Gas Acquisition Department for services to maintain summer reliability. AL 5275-A was filed April 20, 2018 with a zero-day Protest Period, to correct several errors, omissions and typos found in the original AL.

NOTICE

Notice of AL 5275 was made by publication in the Commission's Daily Calendar. SoCalGas states that a copy of the Advice Letter was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

PROTESTS

Advice Letter 5275 was not protested.

DISCUSSION

Proposed Second Injection Plan

The Energy Division has reviewed SoCalGas AL 5275-A. Elements of SoCalGas' proposed Second Injection Enhancement Plan should be approved because granting the company temporary modifications to increase injection operations at Aliso Canyon will make more injection capacity available to Gas Acquisition. Temporary modifications to system operator limits on available injection capacity provided to the market and Rule 41 are also approved,

[10] *See* SoCalGas AL 5276, Expedited Advice Letter Requesting to Modify the Injection Enhancement Cost Memorandum Account (IECMA) Pursuant to the March 13, 2018 "Injection Required for SoCalGas Summer Reliability and Storage Inventories" letter from the CPUC Executive Director.

subject to conditions. However, SoCalGas' request to increase the allowable inventory at Aliso Canyon and modify the Protocol to allow Aliso Canyon to be used as a source of supply is denied as being out-of-scope for this Resolution.

In Advice Letter 5275-A, SoCalGas projected inventories necessary to achieve storage withdrawal capacity of 1,320 MMcfd at the non-Aliso storage fields, as required by the Commission's Executive Director letter dated March 13, 2018. SoCalGas also noted that limits on storage injection capacity will present challenges this summer. SoCalGas estimates the following maximum injection capacities at each of its storage facilities:

Table 1: Projected Monthly Maximum Storage Injection Capacities (MMcfd)

Storage Field	6/1/2018	7/1/2018	8/1/2018	9/1/2018	10/1/2018
La Goleta	40	40	40	40	40
Playa Del Rey	0	0	0	0	0
Honor Rancho	200	170	0	0	200
Aliso Canyon	410	0	0	0	0
Total System	650	210	40	40	240

The above injection capacities are SoCalGas's estimations of storage injection capacity as inventories increase and due to the maximum allowable storage inventory at Aliso Canyon. These numbers are used in this Resolution solely for the purposes of calculating storage capacity ranges and will be verified as the Joint Agencies (CPUC, California Independent System Operator, California Energy Commission and the Los Angeles Department of Water and Power) complete their own assessments in the forthcoming Aliso Canyon Risk Assessment Technical Report for Summer 2018. The CPUC will also be doing independent analysis for its Aliso Canyon updated report pursuant to PUC Section 715.

It should be noted that high ambient temperatures result in lower injection capacity and that storage fields lose the ability to inject once full. For example, Playa del Rey storage is projected to be full and to have zero injection capacity by June 2018; similarly, Honor Rancho inventory levels will reach their maximum in August 2018, so injection capacity will be at zero from then until withdrawals occur.

SoCalGas estimates that Aliso Canyon's mandated maximum inventory of 24.6 Bcf will be reached by June 2018, which eliminates its injection capacity past June (absent withdrawals from the facility). This limitation is likely to lead indirectly to an increase in the number of high Operational Flow Orders (OFOs)[11] triggered, because it reduces overall system capacity.

In SoCalGas' "Summer 2018 Technical Assessment" (Attachment C to AL 5275) (Technical Assessment), the Company estimates pipeline capacity and capacity utilization rates for the coming months under a "best-case" and a "worst-case" scenario. Under the best-case scenario, SoCalGas could meet the required withdrawal rates, even without the use of Aliso Canyon. SoCalGas also provided an assessment of summer season delivery reliability and found that, for the upcoming summer season, its system will be able to meet a 1-in-10 year peak day demand under either a best- or worst-case scenario, so long as Aliso Canyon is available.

Because of pipeline outages, pipeline capacity reductions, and other limitations on critical path pipelines, SoCalGas' Technical Assessment shows that, under its worst-case scenario, there is not enough flowing capacity through the summer season to meet both customer demand *and* to inject additional gas into storage at the rates necessary to meet the winter season storage withdrawal rates as directed by the Commission, even with the use of Aliso Canyon. Without Aliso Canyon, SoCalGas system would not be able to meet summer peak day demand under either scenario.

In order to achieve the Commission's directive of maintaining storage withdrawal capacity at the non-Aliso storage fields of 1,320 MMcfd, SoCalGas proposed the storage inventory targets in Table 2. (The inventories were developed using SoCalGas estimate of worst-case scenario pipeline capacity but at a higher pipeline utilization rate than assumed in the Technical Assessment.)

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[11] OFOs occur when either too much or too little gas is injected into the pipelines, as pipelines have to operate within a range of pressures and too much gas can cause the pipeline to explode, too little can cause the gas to not flow.

Reaching these targets depends on the availability of sufficient supply and capacity to fill storage and on the use of Aliso Canyon. The Second Injection Enhancement Plan described below supports efforts toward achieving these targets, but even using Aliso Canyon, SoCalGas cannot guarantee the targets will be reached and that curtailments of noncore customers will not be necessary.[12]

Table 2: Targeted Monthly Storage Inventories with Corresponding Withdrawal Rates

Storage Field	6/1/2018		7/1/2018		8/1/2018	
	Target Inventory (Bcf)	Resulting WD Rate (MMcfd)	Target Inventory (Bcf)	Resulting WD Rate (MMcfd)	Target Inventory (Bcf)	Resulting WD Rate (MMcfd)
La Goleta	14.4	238	15.6	247	16.9	257
Playa Del Rey	1.9	302	1.9	302	1.9	302
Honor Rancho	18.8	677	24.4	823	27.0	892
Non-Aliso	35.1	1217	41.9	1372	45.8	1451
Aliso Canyon	21.9	815	24.6	869	24.6	869
Total System	**57.0**	**2032**	**66.5**	**2241**	**70.4**	**2320**

Storage Field	9/1/2018		10/1/2018		11/1/2018	
	Target Inventory (Bcf)	Resulting WD Rate (Bcfd)	Target Inventory (Bcf)	Resulting WD Rate (Bcfd)	Target Inventory (Bcf)	Resulting WD Rate (Bcfd)
La Goleta	18.1	267	19.3	277	19.5	279
Playa Del Rey	1.9	302	1.9	302	1.9	302
Honor Rancho	27.0	892	19.1	685	17.3	637
Non-Aliso	47	1461	40.3	1264	38.7	1218
Aliso Canyon	24.6	869	24.6	869	24.6	869
Total System	**71.6**	**2330**	**64.9**	**2133**	**63.3**	**2087**

<u>SoCalGas' Second Injection Enhancement Plan</u>

[12]SoCalGas Advice Letter 5275-A, p. 8 and Energy Division staff discussions with SoCalGas.

As shown in Table 2, SoCalGas projects that non-Aliso target inventories will result in withdrawal capacities that are below 1,320 MMcfd for non-Aliso fields after September 2018. The company identifies the following measures to enhance injections to meet summer demand and to prepare for the winter operating season:

1. <u>Increase the allowable inventory at Aliso Canyon to enable more system-wide injections.</u>

SoCalGas projects that the currently approved inventory at Aliso Canyon will be reached in June 2018. This has a number of undesirable effects on the system.[13] SoCalGas recommends the allowable inventory be increased to a minimum of 30 Bcf from its current 24.6 Bcf mandated maximum. However, this is outside the scope of this Resolution and needs further examination in upcoming technical assessments and reliability reports, subject to Public Utilities Code 715. This request is denied.

2. <u>Modify the Aliso Canyon Withdrawal Protocol to allow for more flexible use of Aliso Canyon to manage storage inventories and support reliability</u>

SoCalGas requests that the Protocol be modified to allow the System Operator to withdraw from Aliso Canyon without curtailing customers, using the field as a source of supply is necessary this summer in order to build and maintain inventory levels and capacity at the other storage fields. (Absent this relief, SoCalGas maintains that a temporary deviation from Rule No. 23 would be required, effectuating the curtailment of noncore customers in order to preserve storage inventory to achieve the 1,320 MMcfd of non-Aliso withdrawal capacity.) SoCalGas' request to modify the withdrawal protocol is outside the scope of this resolution. This request is denied.

[13] Not having Aliso Canyon's injection capacity available reduces system capacity, increases the likelihood of High OFOs, and will reduce the amount of gas that could enter the system on any given day.

3. Implement temporary modifications to increase injection operations

SoCalGas' current rules set aside 200,000 dekatherms (Dth) in storage for use in the balancing function. In order to increase injection operations, on April 9, 2018, SoCalGas began releasing 100,000 Dth of this capacity for customers to use.

SoCalGas also proposes to defer projects that impact injection operations, such as shutdowns or operational deviations that impact injection capacity, until such time as storage inventory targets have been met. However, shutdowns or work related to system reliability, safety, or compliance will not be deferred. We approve these temporary modifications to increase storage injection capacities to benefit the reliability of the overall SoCalGas system, to end October 31, 2018.

4. Implement temporary modifications to increase injection capacity available to market

SoCalGas proposes to set a portion of the storage injection capacity allocated to the system balancing function for injection nominations for the following month, every month before Bid Week, which is the five business days preceding the first of the month. This injection capacity will be posted on Envoy. Gas Acquisition will use best efforts to utilize the quantity made available. We approve these temporary modifications to increase injection capacity available to Gas Acquisition, to end October 31, 2018.

5. Temporary Modifications to Rule 41, System Operator Limits on Available Injection Capacity Provided to the Market

SoCalGas seeks to make temporary changes to Rule 41[14] to make available to the market injection capacity that exceeds the physical injection capacity of the storage fields on days when gas is being withdrawn. This could potentially increase the amount of gas delivered into the system and thereby increase injection capacity.

[14] SoCalGas Rule No. 41: https://socalgas.com/regulatory/tariffs/tm2/pdf/41.pdf.

SoCalGas does not propose to modify the physical injection capacity which is based on actual operating conditions. Under this request, SoCalGas would add an additional variable to the Forecasted System Capacity calculation to account for the additional injection capacity. SoCalGas' proposed changes for the Rule 41 calculation of when High OFOs would be called is described below. A High OFO is issued if Forecasted System Capacity is less than On-System Scheduled Quantities where:

> Forecasted System Capacity = Forecasted Sendout + Physical Storage Injection Capacity + Off-System Scheduled Quantities + <u>Incremental Injection Capacity</u>

and

> Incremental Injection Capacity = Prior Cycle Scheduled Withdrawal + Withdrawal Capacity Used for Balancing

In Resolution G-3529 (June 29, 2017) we were concerned that this change to Rule 41 might also increase the number of High OFO days, and therefore we denied it at that time.

However, circumstances have changed since June of 2017. We continue to be concerned that these changes to Rule 41 will result in increased High OFO days, but in view of the pipeline outages and system constraints that SoCalGas is experiencing, on a trial basis, we will allow SoCalGas to make available injection capacity to the system that is beyond the system's physical limits due to under-scheduling of gas into the system, and/or when customers schedule withdrawal. This authorization is granted on a trial basis, subject to conditions, and will end October 31, 2018, unless an extension is granted by the CPUC or CPUC Executive Director. The conditions are as follows:

a. High OFOs do not increase more than twenty percent (20 %) over last year's monthly averages.
b. In order to allow measurement of whether this change leads to High OFOs that exceed twenty percent (20%), SoCalGas will add the

following to its monthly Core Forecasting Report:[15]

1. The number of High OFOs from the previous year's monthly report for that month, i.e. May of 2017;
2. The number of High OFOs from the month of the report, i.e. May of 2018;
3. An analysis of the percentage increase of OFOs, if any, between the two months;
4. On any day of the month, if the number of High OFOs in the present month exceeds that of the previous year's month by twenty percent (20%), the Commission must be notified within three days of such occurrence, along with an explanation as to why the High OFOs occurred.
5. This addition to the Core Forecasting Report will commence with the report for May of 2018.

In light of our concerns regarding the potential for increased High OFO days, we also authorize the Director of Energy Division to terminate these changes to Rule 41 if these reports reflect an unreasonable increase in High OFOs of more than twenty percent (20%) per month. With these conditions, we grant SoCalGas' request to add an additional variable to the Forecasted System Capacity calculation to account for additional injection capacity.

Proposed Agreement Between the SoCalGas System Operator and the SoCalGas Gas Acquisition Department to Support SoCalGas' Storage Requirements for System Reliability Similar to the Injection Enhancement Plan and Injection Enhancement Memorandum Process Approved by Resolution G-3529

In order to reach the summer targeted storage inventories set forth in its Advice Letter, Gas Acquisition intends to accelerate injections to the extent additional system firm injection rights become available. Gas Acquisition estimates that it will need to accelerate procurement of up to 8 Bcf of natural gas to reach the targeted storage inventories identified in Table 2. However, in the March 13, 2018, letter from the CPUC Executive Director to SoCalGas, the Executive

[15] This Core Forecasting Report is required by the Winter Balancing Settlement Agreement in A.15-06-020.

Director indicated that the SoCalGas Advice Letter should include a forecast of monthly gas storage quantities to be procured by Gas Acquisition solely for the purpose of ensuring system reliability, and the company has not provided that monthly forecast in this Advice Letter. This resolution directs SoCalGas to provide this monthly storage quantity forecast and status report in an Advice Letter ordered by this resolution.

SoCalGas Requests to Modify Its Injection Enhancement Cost Memorandum Account to Track the Incremental Costs Associated with the Commission's Second System Reliability Directive

While it is difficult to forecast the costs that may be incurred by Gas Acquisition for obtaining the accelerated supplies for injection to support system reliability, Gas Acquisition estimates that accelerating procurement of up to 8 Bcf of natural gas to meet the inventory targets to support system reliability will result in incremental costs of approximately $4 to $8 million.[16]

Gas Acquisition will create separate accounts in SoCalGas' Injection Enhancement Cost Memorandum Account for incremental injections that result from the System Reliability Directive for the purpose of helping to track volumes and associated costs of gas supplies that have been accelerated. On a bi-weekly basis, Gas Acquisition will review results from implementing these additional measures during ongoing conference calls with the Office of Ratepayer Advocates, Energy Division, and The Utility Reform Network.

Recognizing the urgent nature of ensuring reliable gas delivery during peak summer periods and with the summer season quickly approaching, as well as various pipeline outages and curtailments constraining gas flows into the SoCalGas system, we grant approval of the Second Injection Enhancement Memorandum between the System Operator and the Gas Acquisition Department, effective March 13, 2018, which is the date of the System Reliability Directive.

[16] Calculated based on the assumption that the approximate cost would be $0.50 to $1 per dekatherm.

Tariff Modifications

Within 20 days, SoCalGas shall file a Tier 1 Advice Letter implementing the necessary changes to Rule No. 41.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived "in an unforeseen emergency… " The Commission's Rules of Practice and Procedure also provides that public review and comment may be waived or reduced in an "unforeseen emergency situation" specifically where there are "[a]ctivities that severely impair or threaten to severely impair public health or safety…."
On January 6, 2016, Governor Brown declared a State of Emergency due to the Aliso Canyon leak, which gives the Commission broad powers to ensure the reliability of the natural gas system.

Article 10 of the emergency order states:

> The California Public Utilities Commission and the California Energy Commission, in coordination with the California Independent System Operator, shall take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months during the moratorium on gas injections into the Aliso Canyon Storage Facility.

The 30-day comment period is reduced, with comments due on April 30, 2018, pursuant to these authorities, and notification of the shortened comment period was included with the cover letter that was circulated with the Draft Resolution.

Comments by SoCalGas

Pursuant to the shortened comment period, comments were timely filed by SoCalGas on April 30, 2018. SoCalGas commented on the following:

1. Providing A Monthly Forecast of Gas Storage Quantities to be Procured by Gas Acquisition Solely for The Purpose of Ensuring System Reliability

SoCalGas requests that the Commission eliminate the Draft Resolution's directive that SoCalGas provide a monthly storage quantity forecast. SoCalGas posits that it cannot provide monthly procurement numbers because they are indeterminable because it is not sure of demand from both core and noncore customers and because of system limitations due to maintenance, pressure reductions and outages. However, the company did not object to the Draft Resolution's allowing it to track these incremental costs for system reliability in a cost memorandum account, noting that it will use "reasonable best efforts to use these additional tools to attempt to fill the incremental inventory needed at the lowest cost." We remind the company that its primary duty is to provide reliability of gas supplies to its customers. Monthly procurement numbers will help the Commission have better tracking of SoCalGas' ability to provide safe and reliable service. We deny this request.

2. Request to increase the allowable inventory and modify the Aliso Canyon Withdrawal Protocol

SoCalGas reargues its request that the allowable inventory and Aliso Canyon withdrawal protocol be modified. The Advice Letter 5275-A to which this Resolution is addressed was produced in response to the CPUC Executive Director's March 13, 2018. The Executive Director's letter did not request nor contemplate the revision of the allowable inventory or Aliso Canyon Withdrawal Protocol. It specifically asks for injection plans for the non-Aliso storage fields within the existing constraints of the system. Hence, the Aliso Canyon allowable inventory and withdrawal protocol are not within the scope of this resolution.

3. Conditions imposed on temporary changes to Rule 41

SoCalGas does not object to our conditional approval of temporary changes to Rule 41, which will make available injection capacity to the system that is beyond the system's physical limits due to under-scheduling of gas into the system, and/or when customers schedule withdrawal. It does object to the imposition of a five percent (5%) threshold which would be triggered when there were 5% more high OFOs in a given month as compared to the same month in the previous year. SoCalGas points out that the five percent (5%) threshold is too low, giving the example that there were 10 High OFOs in August of 2017, so only one more high OFO day would trigger the threshold.

Energy Division Staff has analyzed the numbers of High OFOs for the months April 2017 through March of 2018, using SoCalGas' Daily Core Demand Forecast Performance Reports. The average number of OFOs over that period was 10 per month. Therefore we find it is reasonable to change this threshold to a higher, more substantial percentage increase of 20 percent (20%), on a trial basis. Since we ask SoCalGas to explain these increases when they occur, this change will enable a better understanding of what causes the High OFO days, (e.g., weather, congestion, outages on various lines) and whether or not there is any relationship between our allowing this change in Rule 41, or other factors are responsible for twenty percent (20%) year-over-year increases.

The Resolution is revised to reflect a higher threshold of twenty present (20%).

4. The Resolution's use of Governor Brown's State of Emergency Declaration to shorten the comment period.

SoCalGas claims in its comment that the Governor's declaration is irrelevant. We disagree. Governor Brown's 2016 State of Emergency Declaration concerning the Aliso Canyon Storage Facility remains in effect. As SoCalGas does not oppose the reduction of the comment period, this comment itself is irrelevant to the purposes of this Resolution.

FINDINGS

1. A previous Resolution G-3529 addressed a number of issues raised herein, approving an Injection Enhancement Plan, an Injection Enhancement Memorandum between the company and its Gas Acquisition Department, and denying proposed changes to Rule 41.
2. On March 2, 2018, in a letter to the CPUC Energy Division Director, SoCalGas requested "the ability to *immediately* begin using Aliso Canyon to manage gas storage inventory and preserve withdrawal deliverability at SoCalGas' non-Aliso Canyon storage fields." (Emphasis in original.)
3. On March 3, 2018, the CPUC Energy Division Director wrote to Rodger Schwecke, Senior Vice President of SoCalGas, authorizing withdrawals from Aliso Canyon since the Aliso Canyon Withdrawal Protocols had been followed and withdrawals from all other storage facilities had been maximized.
4. On March 13, 2018, the Executive Director of the CPUC wrote to Mr. Bret Lane, Chief Operating Officer of SoCalGas, asking that SoCalGas

"immediately begin maximizing storage injections at all storage fields. The letter also asks SoCalGas to file an expedited Tier 2 Advice Letter by March 20, 2018, containing a number of specific elements to help assure that enough gas is put in storage to meet both summer and winter reliability needs given the numerous outages and pipeline failures on SoCalGas' system.

5. On March 15, 2018, Mr. Bret Lane requested that the deadline for the Tier 2 expedited Advice Letter be extended from March 20, 2018 to April 6, 2018.
6. On March 19, 2018, the CPUC Executive Director allowed for the deadline for the expedited Advice Letter to be extended from March 20, 2018 to March 30, 2018.
7. On March 30, 2018, SoCalGas filed an expedited Advice Letter requesting approval of a Second Injection Enhancement Plan and Second Injection Enhancement Memorandum between the utility's System Operator and the Gas Acquisition Department. Also included was SoCalGas' Summer 2018 Technical Assessment.
8. On April 20, 2018, SoCalGas filed Supplemental Advice Letter 5275-A, correcting math and column heading errors and omissions, which replaces in its entirety AL 5275.
9. The injection capacities are SoCalGas' estimations.
10. Adequate storage inventory is necessary in order to maintain reliable delivery to customers during peak summer demand periods for both core and noncore customers, and noncore electric generation is particularly critical during hot weather months in Southern California.
11. Temporary modifications to Rule 41 should be approved, with conditions as set forth in this resolution, because this change could potentially increase the amount of gas delivered into the system and thereby increase injection capacity.
12. SoCalGas has not proposed a cost recovery or cost recovery mechanism at this time.
13. Due to the urgent nature of ensuring reliable delivery during peak summer periods and with the summer season quickly approaching, as well as various pipeline outages and curtailments constraining gas flows into the SoCalGas system, SoCalGas' request for approval of the Second Injection Enhancement Plan and Second Injection Enhancement Memorandum between the System Operator and the Gas Acquisition Department, should be effective March 13, 2018, which is the date of the Second Reliability Directive and the Commission's Executive Director

Letter to SoCalGas, directing SoCalGas to immediately begin maximizing storage injections at all storage fields.

THEREFORE, IT IS ORDERED THAT:

1. Southern California Gas Company's request in Advice Letter 5275-A for permission to implement temporary modifications to increase injection operations and to make injection capacity available to market are approved and effective until October 31, 2018, as modified by the Commission, unless modified further by further order of the Commission OR unless modified by direction of the CPUC Executive Director.
2. Southern California Gas Company's Second Injection Enhancement Memorandum between the System Operator and the Gas Acquisition Department is approved and effective until October 31, 2018, unless modified by further order of the Commission OR unless modified by direction of the CPUC Executive Director.
3. Southern California Gas Company's request to increase the allowable inventory at Aliso Canyon is denied.
4. Southern California Gas Company's request to modify the Aliso Canyon Withdrawal Protocol to allow for more flexible use of Aliso Canyon is denied.
5. Southern California Gas company's request to change Rule 41 is approved and effective, subject to the following conditions:
    a. High OFOs do not increase more than twenty percent (20%) over last year's monthly averages.
    b. In order to allow measurement of whether this change leads to High OFOs that exceed twenty percent (20%), SoCalGas will add the following to its monthly Core Forecasting Report:
        i. The number of High OFOs from the previous year's monthly report for that month, i.e. May of 2017;
        ii. The number of High OFOs from the month of the report, i.e. May of 2018;
        iii. An analysis of the percentage increase of OFOs, if any, between the two months;
        iv. On any day of the month, if the number of High OFOs in the present month exceeds that of the previous year's month by twenty percent (20%), the Commission must be notified within three days of such occurrence, along with an explanation as to why the High OFOs occurred.

v. This addition to the Core Forecasting Report will commence with the report for May of 2018.

vi. The Director of CPUC Energy Division will terminate these changes to Rule 41 if these reports reflect an unreasonable increase in High OFOs of more than twenty percent (20%) per month.

This change to Rule 41 is approved, as modified by the Commission, and is effective until October 31, 2018 unless further modified by further order of the Commission OR unless modified by direction of the Executive Director.

Within 20 days, SoCalGas shall file a Tier 1 Advice Letter implementing the necessary changes to Rule No. 41.

6. Southern California Gas Company shall file a Tier 1 Advice Letter containing a status report of storage inventories, costs incurred from the Second Injection Enhancement Plan, and an analysis of system reliability for the upcoming winter within thirty days of the expiration of the Second Injection Enhancement Plan and Second Injection Enhancement Memorandum between the System Operator and the Gas Acquisition Department.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on May 10, 2018, the following Commissioners voting favorably thereon:

/s/*ALICE STEBBINS*
ALICE STEBBINS
Executive Director

MICHAEL PICKER
President

CARLA J. PETERMAN
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Commissioners