

March 5, 2019

The California Public Utilities Commission, Energy Division was notified by Southern California Gas Company of Aliso Canyon withdrawals at approximately 5:14 AM on March 5, 2019. This posting will be updated with a report containing more information as soon as possible.

March 6, 2019

The California Public Utilities Commission, Energy Division was notified by Southern California Gas Company that withdrawals from Aliso Canyon ceased at approximately 7:04 AM on March 6, 2019.

The data request required within 24 hours of the cessation of a withdrawal from Aliso Canyon has been provided by SoCalGas and is attached below.

April 8, 2019

The data request required within 30 days of the cessation of a withdrawal from Aliso Canyon has been provided by SoCalGas and is attached below.



Joseph Mock
Regulatory Affairs

555 W. Fifth Street, GT14D6
Los Angeles, CA 90013-1011
Tel: 213.244.3718
Fax: 213.244.4957
JMock@semprautilities.com

March 5, 2019

Edward Randolph
Director, Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Aliso Canyon Withdrawal Protocol Notification

Dear Mr. Randolph:

Pursuant to the Aliso Canyon Withdrawal Protocol dated November 2, 2017 (Protocol), I am writing to inform you that SoCalGas initiated withdrawal of natural gas from the Aliso Canyon storage field at approximately 5:14 AM on March 5, 2019. SoCalGas will immediately notify you when withdrawal of natural gas from the Aliso Canyon storage field has ceased. Pursuant to the Protocol, SoCalGas will provide information regarding the withdrawal event to the Energy Division within 24 hours of the withdrawal event's cessation.

Please let me know if you have any questions.

Sincerely,

/s/ Joseph Mock

Joseph Mock
Regulatory Affairs - SoCalGas

cc: Simon Baker, Energy Division, CPUC
Dorothy Duda, Energy Division, CPUC
Jean Spencer, Energy Division, CPUC
Renee Guild, Energy Division, CPUC
Christina Ly, Energy Division, CPUC
Judith Ikle, Energy Division, CPUC
Simone Brant, Energy Division, CPUC
Jonathon Bromson, Legal Division, CPUC
Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Kenneth Bruno, Safety and Enforcement Division, CPUC
Matthewson Epuna, Safety and Enforcement Division, CPUC
Lana Tran, Safety and Enforcement Division, CPUC

SOUTHERN CALIFORNIA GAS COMPANY
ALISO CANYON WITHDRAWAL PROTOCOL (11-2-17)
SOCALGAS RESPONSE TO CPUC-ENERGY DIVISION
DATED MARCH 6, 2019

Public Version

Question 1:

Pursuant to the Aliso Canyon Withdrawal Protocol dated November 2, 2017, SoCalGas shall within 24 hours of cessation of a withdrawal from Aliso Canyon, provide the Energy Division of the CPUC:

- a. the total and hourly withdrawals from the field;
- b. the number of wells used for making withdrawals and the SoCalGas identifier for each well used;
- c. the pre- and post-withdrawal Aliso working gas inventory;
- d. the hourly pipeline receipts for the calendar day(s) on which a withdrawal was made and the day immediately preceding the withdrawal;
- e. the hourly withdrawals by field from non-Aliso storage facilities for the calendar day(s) on which a withdrawal was made and the day immediately preceding the withdrawal;
- f. information concerning any anomalies experienced during the operation of the field;
- g. any repairs or mitigation required as a result of the withdrawal, including the time necessary to make them before another withdrawal could be made and the impact on the field's injection and withdrawal capacity;
- h. whether the withdrawal was made under conditions identified in 1.B.

Response 1:

SoCalGas provides the following response with respect to the withdrawal of gas from Aliso Canyon that began at approximately 5:14 am on March 5, 2019 and ceased at approximately 7:04 am on March 6, 2019.

- a. The total withdrawal from the field was 0.27 Bcf. The hourly withdrawals from the field are provided in the table below. Inventory volumes are based on Gas Control system data and are subject to adjustment based on SoCalGas' routine monthly reconciliation between real-time SCADA system data, and the measurement data recorded by our Measurement Data Operations (MDO) department. SoCalGas will update this response following the reconciliation process, if appropriate.

SOUTHERN CALIFORNIA GAS COMPANY
ALISO CANYON WITHDRAWAL PROTOCOL (11-2-17)
SOCALGAS RESPONSE TO CPUC-ENERGY DIVISION
DATED MARCH 6, 2019

Public Version

Date / Time	Hourly Withdrawal (MMCF)
3/5/2019 5:00	
3/5/2019 6:00	
3/5/2019 7:00	
3/5/2019 8:00	
3/5/2019 9:00	
3/5/2019 10:00	
3/5/2019 11:00	
3/5/2019 12:00	
3/5/2019 13:00	
3/5/2019 14:00	
3/5/2019 15:00	
3/5/2019 16:00	
3/5/2019 17:00	
3/5/2019 18:00	
3/5/2019 19:00	REDACTED
3/5/2019 20:00	
3/5/2019 21:00	
3/5/2019 22:00	
3/5/2019 23:00	
3/6/2019 0:00	
3/6/2019 1:00	
3/6/2019 2:00	
3/6/2019 3:00	
3/6/2019 4:00	
3/6/2019 5:00	
3/6/2019 6:00	
3/6/2019 7:00	
3/6/2018 8:00	

b. 45 wells were used for making withdrawals. Please see the attached spreadsheet.

REDACTED

c. The pre- and post-withdrawal Aliso working gas inventory were 20.10 Bcf and 19.83 Bcf, respectively.

SOUTHERN CALIFORNIA GAS COMPANY
ALISO CANYON WITHDRAWAL PROTOCOL (11-2-17)
SOCALGAS RESPONSE TO CPUC-ENERGY DIVISION
DATED MARCH 6, 2019

Public Version

Inventory volumes are based on Gas Control system data and are subject to adjustment based on SoCalGas' routine monthly reconciliation between real-time SCADA system data, and the measurement data recorded by our Measurement Data Operations (MDO) department. SoCalGas will update this response following the reconciliation process, if appropriate.

- d. The hourly pipeline receipts for the calendar days on which a withdrawal was made and the calendar day immediately preceding the withdrawal, is provided in the attached spreadsheet.

REDACTED

Pipeline receipt data is based on Gas Control system data and are subject to adjustment based on SoCalGas' routine monthly reconciliation between real-time SCADA system data, and the measurement data recorded by our Measurement Data Operations (MDO) department. SoCalGas will update this response following the reconciliation process, if appropriate.

- e. The hourly withdrawals by field from non-Aliso storage facilities for the calendar days on which a withdrawal was made and the calendar day immediately preceding the withdrawal are provided in the attached spreadsheet.

REDACTED

Inventory volumes are based on Gas Control system data and are subject to adjustment based on SoCalGas' routine monthly reconciliation between real-time SCADA system data, and the measurement data recorded by our Measurement Data Operations (MDO) department. SoCalGas will update this response following the reconciliation process, if appropriate.

- f. **REDACTED**

- g. **REDACTED**

- h. No.

**SOUTHERN CALIFORNIA GAS COMPANY
30-Day Aliso Canyon Withdrawal Report
Response Dated April 5, 2019**

PUBLIC VERSION

Purpose

On November 2, 2017, the Energy Division of the California Public Utilities Commission (“CPUC-ED”) issued the Aliso Canyon Withdrawal Protocol (“Withdrawal Protocol”). The Withdrawal Protocol specifies the circumstances and conditions when Southern California Gas Company (“SoCalGas”) may execute a withdrawal operation from the Aliso Canyon storage field. In addition, the Withdrawal Protocol contains certain noticing and reporting requirements, including the following:

Within 30 days after a withdrawal, SoCalGas shall provide the Energy Division with a full description of the events and conditions leading up to the withdrawal, all actions taken prior to the withdrawal, and any observations or recommendations concerning the execution of future withdrawals. Further, SoCalGas shall identify and describe any steps or actions not taken that could have diminished or eliminated the need for a withdrawal and make comments and/or recommendations for future consideration.¹

Pursuant to the Withdrawal Protocol, SoCalGas provides the following 30-day report with respect to the withdrawals from Aliso Canyon that occurred between March 5, 2019 and March 6, 2019.

Background

Withdrawals from Aliso Canyon were based on forecasted and known conditions including but not limited to weather, overall gas demand, electric generation gas demand, and the current and anticipated operating condition of the SoCalGas system.

Actions Taken Prior to (and During) the Withdrawal

Curtailement Actions

Per the Withdrawal Protocol, SoCalGas took actions available to meet demand and to avoid curtailments including working with the Balancing Authorities (the California Independent System Operator [CAISO] and the Los Angeles Department of Water and Power [LADWP]) to reduce or limit electric generation demand through voluntary curtailments. Coordination took place between SoCalGas and the Balancing Authorities during this period, having multiple interactions per day with both management and the real-time control room operators to manage the system reliability of three energy delivery systems (CAISO, LADWP, and SoCalGas) in near real-time.

¹ CPUC-ED Aliso Canyon Withdrawal Protocol dated 11/2/2017, page 3.

ENVOY Critical Notices

The table below summarizes the SoCalGas ENVOY® (ENVOY) Critical Notices posted during this event.

Notice Date	Summary of Notice (Times stated are Pacific Time)								
03/05/2019	Issued system-wide voluntary curtailment of electric generation, effective from March 5, 2019 at approximately 5:14 AM through March 5, 2019 at 11:59 PM.								
03/05/2019	Notified customers that the system-wide voluntary curtailment of electric generation that was effective earlier in the day (March 5) was extended until March 6, 2019 at 11:59 PM.								
03/06/2019	Notified customers that the system-wide voluntary curtailment of electric generation that was effective on March 5 ended on March 6, 2019 at 10:00 AM.								
03/06/2019	Notified customers of the times of initiation and cessation of withdrawal at Aliso Canyon – Gas Day ² March 4, 2019 at approximately 5:14 AM and Gas Day March 6, 2019 at approximately 7:04 AM – as well as the withdrawal volumes for each Gas Day in that period.								
	<table border="1"> <thead> <tr> <th>Gas Day</th> <th>Aliso Canyon Withdrawal Volume (BCF)</th> </tr> </thead> <tbody> <tr> <td>03/04/2019</td> <td>0.04200 BCF</td> </tr> <tr> <td>03/05/2019</td> <td>0.23000 BCF</td> </tr> <tr> <td>03/06/2019</td> <td>0.00003 BCF</td> </tr> </tbody> </table>	Gas Day	Aliso Canyon Withdrawal Volume (BCF)	03/04/2019	0.04200 BCF	03/05/2019	0.23000 BCF	03/06/2019	0.00003 BCF
	Gas Day	Aliso Canyon Withdrawal Volume (BCF)							
	03/04/2019	0.04200 BCF							
	03/05/2019	0.23000 BCF							
03/06/2019	0.00003 BCF								

Operational Flow Orders

Customers are responsible for scheduling and delivering gas supplies to the SoCalGas and San Diego Gas and Electric (“SDG&E”) system to meet their usage. SoCalGas has few tools besides its storage fields to manage the mismatch between what customers bring onto the system in supplies and their usage. SoCalGas must rely on regulatory tools in place to try to manage the system’s reliability, integrity, and safety. These tools include the low operational flow order (“Low OFO”), the high operational flow order (“High OFO”), the emergency flow order (“EFO”), and curtailment procedures. The table below shows the Low OFO declarations during this event.

Low OFO Declarations For each Gas Day		
03/04/2019	Stage 2	-5%
03/06/2019	Stage 2	-5%

SoCalGas did not call a Low OFO for March 5 because the forecasted storage withdrawal for system balancing did not exceed the withdrawal capacity allocated for this purpose. The

² A Gas Day is from 7:00 AM to 7:00 AM

declaration of a Low OFO is based on a daily calculation completed by ENVOY that determines whether the system forecast of storage withdrawal used for balancing exceeds the withdrawal capacity allocated to the balancing function (details of this calculation are available in ENVOY).

Dial-It-Down Alerts, Smart Therm Demand Response Events, and Restricted Maintenance Operations

There were no Dial-It-Down alerts, Smart Therm Demand Response events, or Restricted Maintenance Operations during this event. SoCalGas determined that it would not be effective to use a Dial-it-Down alert and/or Smart Therm demand response during this event because of (1) the warmer temperatures, (2) the risk of customer fatigue and negative response, and (3) the expected short duration of the event.

SoCalGas did not call an RMO at the time of withdrawal due to the expected short duration of this event. The need for an RMO could be re-assessed in the morning if the event looked to be lasting longer than expected.

Events and Conditions Leading Up to (and During) the Withdrawal

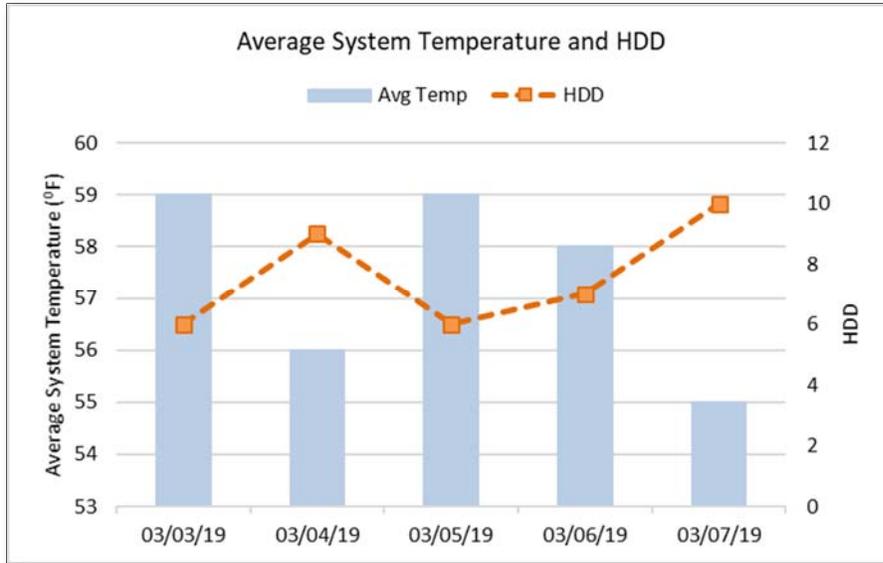
SoCalGas initiated withdrawals from Aliso Canyon on Gas Day March 4 at approximately 5:14 AM because (1) Gas Day March 4's daily customer demand and available supply (customer deliveries plus non-Aliso Canyon withdrawals) were nearly equal (narrow margin); (2) Gas Day March 5's hourly customer demand exceeded available hourly supply without Aliso Canyon withdrawals; and (3) the non-Aliso Canyon fields have been relied upon heavily this winter and SoCalGas must maintain critical inventory at the fields for the remainder of this winter to protect core reliability. These points are discussed later in this section.

Weather

The graph below shows the system average heating degree days³ ("HDD") and the daily custom system average temperatures⁴ for the SoCalGas and SDG&E service territories, from March 3, 2019 through March 7, 2019. March 4 was noticeably cooler than surrounding days and this, coupled with being a Monday which typically sees higher customer demand, increased the demand for natural gas significantly as compared to most other days in that work week.

³ An HDD is a measurement designed to quantify the demand for energy needed to heat a building. It is the number of degrees that a day's average temperature is below 65° Fahrenheit, which is the temperature below which buildings need to be heated.

⁴ The custom system average temperature calculation incorporates data from 12 weather stations across the SoCalGas and SDG&E service territories and is provided by calendar day.



Status of Storage Fields

In accordance with the Withdrawal Protocol, SoCalGas has placed greater reliance on its non-Aliso Canyon storage fields (Honor Rancho, La Goleta, and Playa del Rey) to meet customer demand since the beginning of the winter season on November 1, 2018. This reliance on the non-Aliso Canyon storage fields for the 2018-19 winter season has resulted in lower inventory levels at the non-Aliso Canyon fields and in turn led to significantly reduced available withdrawal capacities.

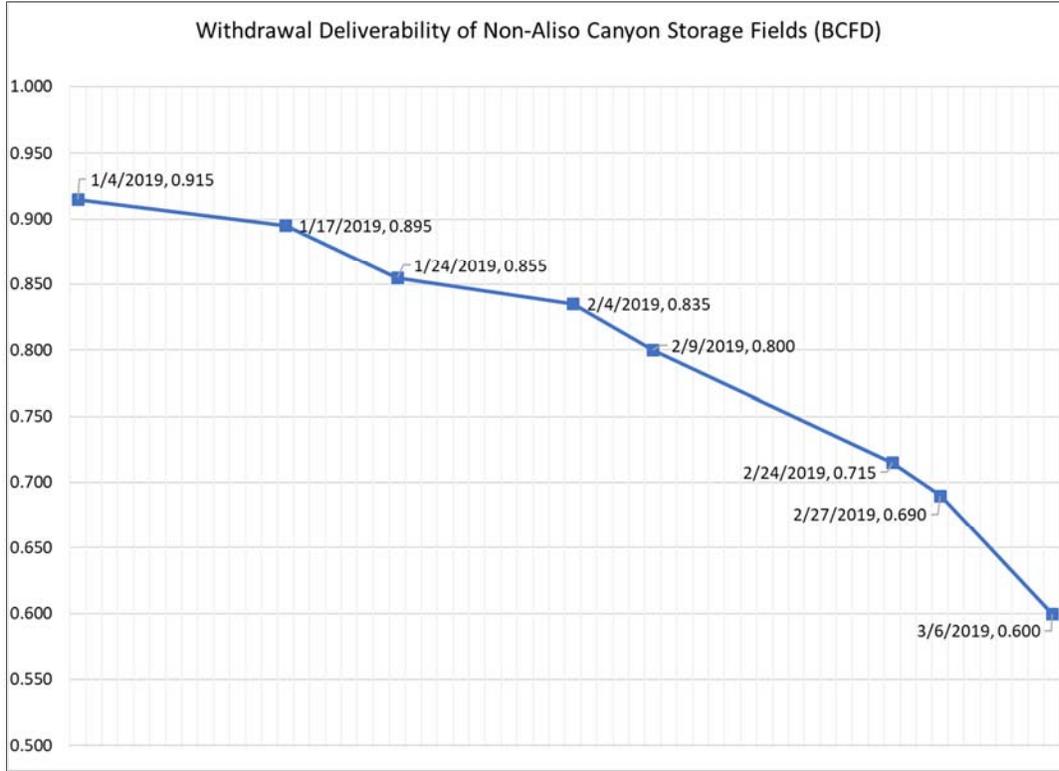
In addition, SoCalGas’ safety enhancements and integrity assessments at the storage fields have reduced SoCalGas’ system-wide withdrawal capacity because wells have been taken offline for mechanical integrity testing and conversion to tubing-only flow. This too has resulted in decreased storage withdrawal capabilities.

The table below provides the approximate inventories and withdrawal capacities of each of the storage fields at the beginning and end of the event.

Storage Field	Beginning of Gas Day Mar 5, 2019 Inventory (BCF)	Beginning of Gas Day Mar 5, 2019 Withdrawal Capacity (MMCFD)	Beginning of Gas Day Mar 6, 2019 Inventory (BCF)	Beginning of Gas Day Mar 6, 2019 Withdrawal Capacity (MMCFD)
Aliso Canyon	20.063		19.833	
Honor Rancho				
La Goleta				
Playa Del Rey				
Total Storage W/O Aliso		625	17.334	600
Total Storage W/ Aliso				

Non-Aliso Canyon Storage Field Withdrawal Deliverability (Withdrawal Capacity)

The graph below shows the decreasing withdrawal deliverability of the non-Aliso Canyon storage fields. This reduction in withdrawal capacity means that it is increasingly difficult for the non-Aliso Canyon storage fields to manage moderately higher average demand days in both total gas day demand and hourly gas demand.



Flowing Pipeline Capacity & Supplies

The table below shows the average available flowing supply capacity and the average scheduled quantity on Gas Day March 4, 2019 and Gas Day March 5, 2019. The higher percentage in capacity utilization is likely due to capacity constraints.

Gas Day March 4, 2019 – Gas Day March 5, 2019			
	Average Available Pipeline Flowing Supply Capacity (MMCFD)	Average Scheduled Pipeline Flowing Supply Quantity (MMCFD)	Average Percent Capacity Utilization
Gas Day March 4	2,732	2,359	86.3%
Gas Day March 5	2,735	2,585	94.5%

Total System Receipts vs. Total System Demand

The table below shows the total system receipts and demand for Gas Day March 4 through Gas Day March 6.

On Gas Day March 4, customer deliveries and non-Aliso Canyon withdrawals were potentially insufficient to meet customer demand. The SoCalGas system was operating on an extremely narrow margin (daily supply minus daily demand) of 58 MMCFD during Gas Day March 4. A narrow margin for this event means that it was likely that there would not be enough gas supply (pipeline supplies and non-Aliso Canyon storage withdrawals) to pack the system adequately before a morning or evening peak period. System reliability was determined to be at risk.

Gas Day	Total Daily Supply (MMCF)	Total Daily Demand (MMCF)	Volume of gas that must be supplied by storage withdrawal (MMCF).⁵	Aliso Canyon Storage Field Withdrawal Capacity (MMCFD)	Non-Aliso Canyon Storage Field Withdrawal Capacity (MMCFD)
03/04	2,396	2,963	567		625
03/05	2,586	2,797	211		625 to 600
03/06	2,595	2,886	291		600

Available Supply vs. Hourly Demand

The daily margin discussed earlier does not account for the need for the system to respond to the peak hourly morning demand and the peak hourly evening demand. The table below compares the pipeline flowing supplies and available storage supplies to the hourly peak demand during the evening of March 4, the morning and evening of March 5, and the morning of March 6. When the sum of pipeline flowing supplies and the available storage field withdrawal is exceeded by the peak hourly demand, the system must use linepack (the system must draft) to make up the difference.⁶

⁵ A small amount of line pack may be used in lieu of storage withdrawal on one gas day to meet system demand, but the line pack must be replaced the following gas day by additional storage withdrawals to ensure the peak hourly demand can be managed.

⁶ The system is packing when available pipeline flowing supplies plus storage withdrawal exceeds the real-time send out. The system is drafting when the real-time sendout exceeds available pipeline flowing supplies plus storage withdrawal. When allowed to appropriately prepare for the peak sendout periods, the SoCalGas system typically has approximately [REDACTED] in available draft supplies that can be used to meet the real-time sendout. For example, if the system is drafting approximately [REDACTED] and the system has [REDACTED] pack available at the start of the peak period, the system could sustain reliability for approximately 3-4 hours.

Date	Average Pipeline Flowing Supplies During Ramp (MMCFH)	Available non-Aliso Canyon Storage Withdrawal Capacity During Ramp (MMCFH)	Available Aliso Canyon Storage Withdrawal Capacity During Ramp (MMCFH)	Ramping Period (HRS)*	Hourly Demand at Start of Ramp (MMCFH)	Morning and Evening Peak Hourly Demand (MMCFH)	Peak Hourly Demand minus [Flowing Supplies plus non-Aliso Canyon Withdrawal Capacity] ⁷ (MMCFH)	Calculated Draft (Pack). Peak Hourly Demand minus [Flowing Supplies plus Aliso Cyn & Non-Aliso Cyn Withdrawal Capacity] ⁸ (MMCFH)
03/04	98	26		4	96	162	38	Aliso Canyon was not on withdrawal during the evening peak
03/05	97	26		7	100	188	65	
03/05	110	25		2	103	138	3	
03/06	101	25		4	82	140	14	

The March 5 morning and evening peak demand periods were projected to have considerably more customer demand than could have been supplied by the hourly pipeline flowing supplies and the non-Aliso Canyon storage fields combined. A higher customer hourly demand is typical for Mondays, but this day was also coupled with the fact that temperatures were forecasted to be cooler and the scheduled pipeline flowing supplies were low. Given these high potential “drafting” periods, the pipeline system has to have enough supply to be able to recover its “pack” after each peak period so it has the ability to “draft” and thereby support system reliability during the next peak period.

Over the night of March 4 and into the morning of March 5, not only did the system experience higher-than-expected peak hourly demand, but also higher overall average hourly demand, during periods of time in which the system would typically be packing. This situation was monitored over the course of the entire evening and into the early morning hours to see if the overall demand would decrease enough to allow the system to pack with the non-Aliso Canyon fields on maximum withdrawal, in preparation for the morning peak load period. Given the fact that gas travels slowly at approximately 20-30 MPH, it is necessary for the System Operator to evaluate information and make decisions far in advance of the actual high demand events.

In the early morning of March 5, from 1:00 AM to 8:00 AM the hourly demand, which ranged from 100-188 MMCFH, had provided minimal opportunity to pack the system. During that time, the non-Aliso Canyon fields plus the pipeline flowing supplies could only provide approximately 123 MMCFH. If only the non-Aliso Canyon fields been on maximum withdrawal for the morning peak hour demand, the draft, would have been up to 65 MMCFH. The non-Aliso Canyon storage fields could neither provide enough gas in an hourly rate to be able to pack the system in time for the morning load nor be able to sustain the peak hourly demand of 188 MMCFH. In addition, the forecasted customer demand and available supplies without Aliso Canyon would not have allowed the pipeline system to further recover its pack for the evening

⁷ Next to last column explanation: If the calculated number is less than or equal to zero, that means the peak hourly demand could be met with flowing supplies plus withdrawals from non-Aliso Canyon storage fields.

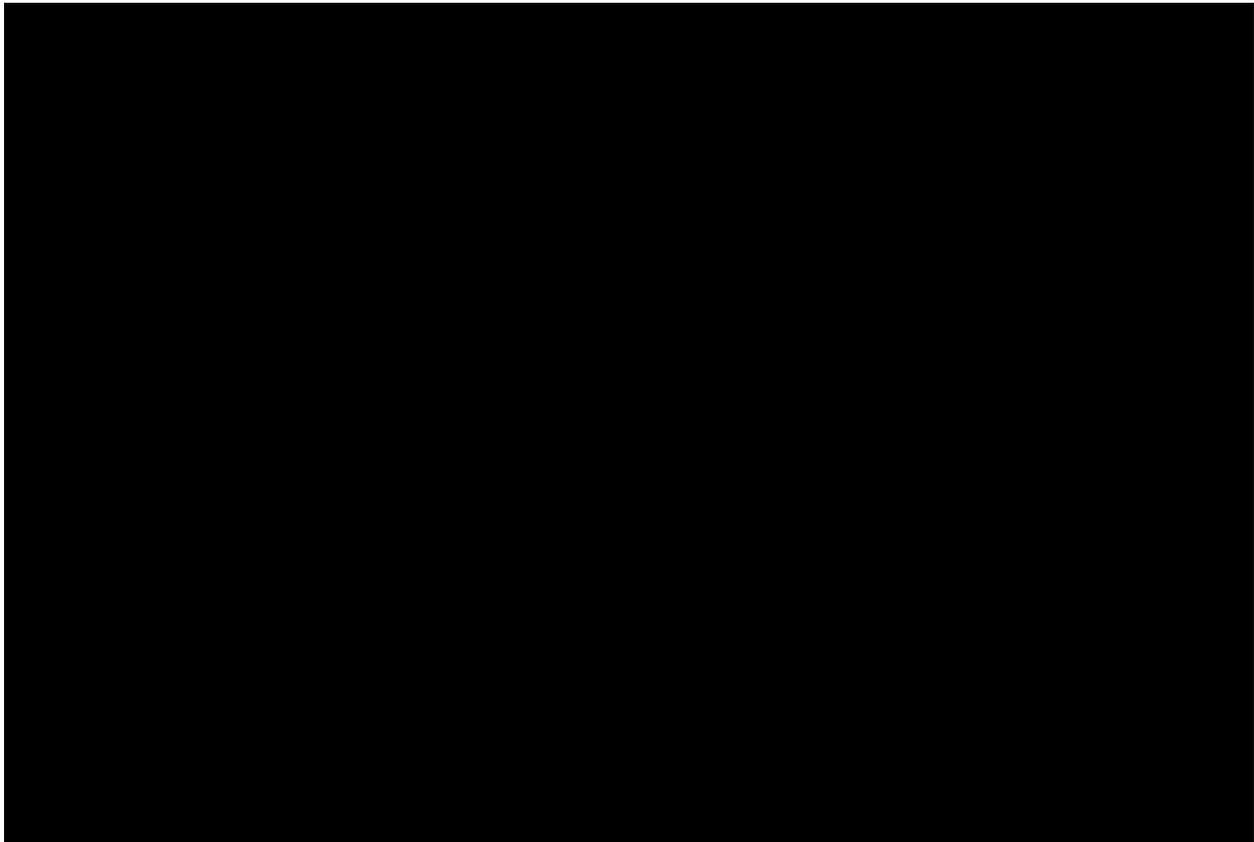
⁸ Last column explanation: If the calculated number is less than or equal to zero, that means the peak hourly demand could be met with flowing supplies plus withdrawals from all four storage fields.

load of March 5. System reliability was determined to be at risk and in response, withdrawals were initiated from Aliso Canyon on March 5 at 5:14 AM.

Aliso Canyon and Non-Aliso Canyon Withdrawals for each Gas Day

The table and graph below show Aliso Canyon and non-Aliso Canyon withdrawals throughout this event.

Gas Day	Aliso Canyon Withdrawal (BCF)	Non-Aliso Canyon Withdrawal (BCF)
03/04	0.04200	
03/05	0.23000	
03/06	0.00003	



Storage Fields' Remaining Inventories

The table below compares the remaining inventories for each storage field at the end of the withdrawal period to their respective March month-end minimum inventory requirements, as stated in the 2018-19 Winter Technical Assessment. The table below also provides the total withdrawal of each storage field from Gas Day March 4 through Gas Day March 6.

Storage Field	March 2019 Month-End Minimum (BCF)	Approximate Inventory Remaining at End of Withdrawal, Mar 6 (BCF)	Withdrawal from Gas Day Mar 4 through Gas Day Mar 6 (BCF)	Inventory Remaining Minus Month-End Minimum (BCF)
Aliso Canyon	2.1	19.833	0.272	17.733
Honor Rancho	5.0			
La Goleta	7.5			
Playa Del Rey	0.7			

Additional Steps or Actions That Could Have Reduced or Eliminated the Need for Withdrawal

SoCalGas proactively worked with the Balancing Authorities to determine if the level of the on-system generation demand could be reduced prior to withdrawing gas supply from Aliso Canyon. As per the Withdrawal Protocol, SoCalGas withdrew gas from Aliso Canyon when the amount by which the Balancing Authorities could voluntarily curtail demand was insufficient to resolve the shortage of natural gas. SoCalGas could have further curtailed customer demand to reduce or eliminate the need to withdraw gas supply from Aliso Canyon. Per SoCalGas Rule No. 23 and SDG&E Rule No. 14, electric generation demand not necessary to maintain grid reliability is to be curtailed first, followed by other noncore customer demand, and then the remaining electric generation demand. SoCalGas does not consider this to be a reasonable action to reduce or eliminate the need to withdraw gas supply from Aliso Canyon.

Observations and Recommendations

The event discussed above highlights a number of items or observations regarding SoCalGas’ system, assets, and customer demand.

- Comparing non-Aliso Canyon storage inventory levels between now and around this time last year, there is less inventory in those fields this year. In order to manage storage inventory and preserve withdrawal deliverability at the non-Aliso Canyon storage fields, SoCalGas plans to withdraw gas from Aliso Canyon consistent with the Aliso Canyon Withdrawal Protocol. Preserving these storage inventories at the non-Aliso Canyon storage fields is critical in meeting forecasted customer daily and hourly demand and in mitigating the risk of further gas curtailments this winter. In a letter written to the Commission on January 8, 2019, SoCalGas explained that it may withdraw gas from Aliso Canyon to (1) meet immediate high customer demands; (2) limit withdrawals at Honor Rancho to an average of 90 MMCFD per day for the remainder of January; and (3) restore Playa Del Rey inventory. In the middle of February 2019, SoCalGas began to target limits to Honor Rancho withdrawal at 200 MMCF per day, when possible, for the remainder of February, to prevent going below the monthly minimum

inventory level set in the 2018-19 Winter Technical Assessment. Assuming a constant daily withdrawal rate throughout March from each storage field, Aliso Canyon, Honor Rancho, La Goleta, and Playa Del Rey could have been on daily withdrawal rates of 581 MMCFD, ■■■ MMCFD, ■■■ MMCFD, and ■■■ MMCFD, respectively, to not exceed their respective, month-end minimum inventory levels.

- Although SoCalGas' non-Aliso Canyon storage fields play a significant role in supporting reliability of the gas system, they cannot always provide the necessary reliability during significant events. Because of its size, its physical location on SoCalGas' transmission system, and its withdrawal capacity, Aliso Canyon storage field plays a key role in preventing customer curtailments and protecting the integrity of the SoCalGas system. On April 2, 2019, SoCalGas submitted its Summer 2019 Technical Assessment which focused on the injection projections for each of the storage fields. It will be a priority to build back up the storage inventories, which are currently extremely low to near max levels, to provide reliability for customers in the 2019-2020 winter season. Given SoCalGas' extensive inventory management efforts and the fortunate timing of warmer weather occurring in mid-March, the non-Aliso Canyon storage fields stayed above their March month-end minimum levels. As of approximately March 15, which marked the start of net injection gas days, Honor Rancho, La Goleta and Playa Del Rey were over their minimum levels by approximately ■■■ MMCF, ■■■ MMCF and ■■■ MMCF respectively.
- The high demand placed on the system during this event further supports eliminating or modifying the Withdrawal Protocol to allow Aliso Canyon to increase system flexibility, increase system reliability, and add to available supplies more strategically.