SOUTHERN CALIFORNIA GAS COMPANY Monthly Aliso Canyon Withdrawal Report Response Dated December 4, 2019 Report Period Gas Day November 1, 2019 through Gas Day November 30, 2019

PUBLIC VERSION

Purpose

On July 23, 2019 the Energy Division of the California Public Utilities Commission (CPUC) issued a new Aliso Canyon Withdrawal Protocol (Withdrawal Protocol), replacing the Withdrawal Protocol that was issued on November 2, 2017. The Withdrawal Protocol specifies the 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:

In a monthly report to be provided on the third business day after each month in which withdrawals from Aliso Canyon occurred, SoCalGas shall provide the CPUC's Energy Division both a confidential and public report with a full description of the events and conditions leading up to the Aliso Canyon withdrawal(s). The report shall include:

- 1. the total and hourly withdrawals from the field;
- 2. the pre- and post-withdrawal Aliso Canyon working gas inventory;
- 3. the inventory of the non-Aliso fields before and after the Aliso Canyon withdrawal(s);
- the geographical and/or the time price spread used in determining the OFO stages for the day(s) of the withdrawal(s) and the two days immediately preceding and following;
- 5. weather conditions in the SoCalGas service territory for the day(s) of the withdrawal(s) and the day immediately preceding the initiation of withdrawal(s);
- 6. the hourly pipeline receipts for the calendar day(s) on which a withdrawal was made and the day immediately preceding the initiation of withdrawal(s);
- 7. 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 initiation of withdrawal(s);
- 8. demand response activations and Dial It Down Alerts; and
- 9. information concerning any anomalies experienced during the operation of the field.

Pursuant to the Withdrawal Protocol, SoCalGas provides the following monthly report with respect to the withdrawals from Aliso Canyon that occurred from Gas Day November 1, 2019 through Gas Day November 30, 2019.¹

¹ The report would include the gas day starting on the first day of the month and include the gas day that ends on the first day of the subsequent month. A gas day is from 7am to 7am the following day.

Summary

The table below provides the Aliso Canyon approximate withdrawal start times, withdrawal end times, and withdrawal volumes during November 2019.

Gas Day	Withdrawal Start	Withdrawal End	Withdrawal Volume in Billion Cubic Feet (Bcf)
11/20/2019	11/20/2019	(continued to	0.090
	4:48 PM PCT	next Gas Day)	
11/21/2019	(continued from	11/21/2019	0.047
	previous Gas Day)	2:57 PM PCT	
11/26/2019	11/26/2019	(continued to	0.178
	7:11 AM PCT	next Gas Day)	
11/27/2019	(continued from	11/28/2019	0.374
	previous Gas Day)	6:58 AM PCT	
11/29/2019	11/29/2019	(continued to	0.644
	7:16 AM PCT	next Gas Day)	
11/30/2019	(continued from	11/30/2019	0.002^2
	previous Gas Day)	7:28 AM PCT	

² A minimal amount of withdrawal occurred on Gas Day November 30, 2019 due to the time necessary for the Aliso Canyon storage field to ramp down its withdrawal activities from Gas Day November 29, 2019.

1. Total and hourly withdrawals from the (Aliso Canyon) field

Total Withdrawal during Report Period: Approximately 1,335 million cubic feet (MMcf)

Hourly Withdrawal during Report Period:

Date-Time	Aliso Canyon Withdrawal (MMcf)
11/20/2019 17:00	
11/20/2019 18:00	
11/20/2019 19:00	
11/20/2019 20:00	
11/20/2019 21:00	
11/20/2019 22:00	
11/20/2019 23:00	
11/21/2019 0:00	
11/21/2019 1:00	
11/21/2019 2:00	
11/21/2019 3:00	
11/21/2019 4:00	
11/21/2019 5:00	
11/21/2019 6:00	
11/21/2019 7:00	
11/21/2019 8:00	
11/21/2019 9:00	
11/21/2019 10:00	
11/21/2019 11:00	
11/21/2019 12:00	
11/21/2019 13:00	
11/21/2019 14:00	
11/21/2019 15:00	
11/26/2019 8:00	
11/26/2019 9:00	
11/26/2019 10:00	
11/26/2019 11:00	
11/26/2019 12:00	
11/26/2019 13:00	
11/26/2019 14:00	
11/26/2019 15:00	
11/26/2019 16:00	
11/26/2019 17:00	
11/26/2019 18:00	
11/26/2019 19:00	
11/26/2019 20:00	
11/26/2019 21:00	
11/26/2019 22:00	
11/26/2019 23:00	

Date-Time	Aliso Canyon Withdrawal (MMcf)
11/27/2019 0:00	
11/27/2019 1:00	
11/27/2019 2:00	
11/27/2019 3:00	
11/27/2019 4:00	
11/27/2019 5:00	
11/27/2019 6:00	
11/27/2019 7:00	
11/27/2019 8:00	
11/27/2019 9:00	
11/27/2019 10:00	
11/27/2019 11:00	
11/27/2019 12:00	
11/27/2019 13:00	
11/27/2019 14:00	
11/27/2019 15:00	
11/27/2019 16:00	
11/27/2019 17:00	
11/27/2019 18:00	
11/27/2019 19:00	
11/27/2019 20:00	
11/27/2019 21:00	
11/27/2019 22:00	
11/27/2019 23:00	
11/28/2019 0:00	
11/28/2019 1:00	
11/28/2019 2:00	
11/28/2019 3:00	
11/28/2019 4:00	
11/28/2019 5:00	
11/28/2019 6:00	
11/28/2019 7:00	
11/29/2019 8:00	
11/29/2019 8:00	
11/29/2019 9:00	
11/29/2019 10:00	
11/29/2019 12:00	
11/29/2019 12:00	
11/29/2019 14:00	
11/29/2019 15:00	
11/29/2019 16:00	
11/29/2019 17:00	
11/29/2019 18:00	
11/29/2019 19:00	
11/29/2019 20:00	

Date-Time	Aliso Canyon Withdrawal (MMcf)
11/29/2019 21:00	
11/29/2019 22:00	
11/29/2019 23:00	
11/30/2019 0:00	
11/30/2019 1:00	
11/30/2019 2:00	
11/30/2019 3:00	
11/30/2019 4:00	
11/30/2019 5:00	
11/30/2019 6:00	
11/30/2019 7:00	
11/30/2019 8:00	

2. Pre- and post-withdrawal Aliso Canyon working gas inventory³

The table below provides the approximate inventories of Aliso Canyon storage field, in billion cubic feet (Bcf), at the beginning and end of the withdrawal event(s).

	Pre-Withdrawal		Post-Withdrawal
Date-Time	Inventory (Bcf)	Date-Time	Inventory (Bcf)
11/20/2019		11/22/2019	
7:00 AM	33.684	7:00 AM	33.547
11/26/2019		11/28/2019	
7:00 AM	33.770	7:00 AM	33.218
11/29/2019		12/01/2019	
7:00 AM	33.218	7:00 AM	32.573

3. Inventory of the non-Aliso Canyon fields before and after the Aliso Canyon withdrawal(s)

The table below provides the approximate inventories of the non-Aliso Canyon storage fields, in Bcf, at the beginning and end of the withdrawal event(s).

	Pre-Withdrawal Inventory (Bcf)			Post-Withdrawal Inventory (Bcf)		ntory (Bcf)	
	Honor		Playa Del		Honor		Playa Del
Date-Time	Rancho	La Goleta	Rey	Date-Time	Rancho	La Goleta	Rey
11/20/2019				11/22/2019			
7:00 AM				7:00 AM			
11/26/2019				11/28/2019			
7:00 AM				7:00 AM			
11/29/2019				12/01/2019			
7:00 AM				7:00 AM			

³ 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.

4. Geographical and/or the time price spread used in determining the OFO stages for the day(s) of the withdrawal(s) and the two days immediately preceding and following

The table below provides the geographical and time price spreads, in dollars per Dth (\$/Dth), for the day(s) of the withdrawal(s) and the two days immediately preceding and following.

Gas Day	Geographical Spread	Time Spread (next month)	Time Spread (two months ahead)
11/18/2019			
11/19/2019			
11/20/2019			
11/21/2019			
11/22/2019			
11/23/2019			
11/24/2019			
11/25/2019			
11/26/2019			
11/27/2019			
11/28/2019			
11/29/2019			
11/30/2019			
12/1/2019			
12/2/2019			

5. Weather conditions in the SoCalGas service territory for the day(s) of the withdrawal(s) and the day immediately preceding the initiation of withdrawal(s)

Date	Avg. Temp. (deg F)	Heating Degree Day (HDD)
11/19/2019	63	2
11/20/2019	55	10
11/21/2019	59	6
11/25/2019	58	7
11/26/2019	57	8
11/27/2019	50	15
11/28/2019	46	19
11/29/2019	49	16
11/30/2019	51	14

6. Hourly pipeline receipts (MMcf) for the calendar day(s) on which a withdrawal was made and the day immediately preceding the initiation of withdrawal(s)



7. Hourly withdrawals by field (MMcf) from non-Aliso Canyon storage facilities for the calendar day(s) on which a withdrawal was made and the day immediately preceding the initiation of withdrawal(s)



8. Demand response activations and Dial It Down Alerts

SoCalGas did not declare any Smart Therm demand response events or issue any Dial-It-Down alerts in November 2019.

9. Information concerning any anomalies experienced during the operation of the field

On November 21, 2019 at approximately 5:00 am, a separator at the Sesnon Gathering Plant was found with an inoperable liquid level dump controller. The separator was isolated and taken out of service for repair during which time the process flow was diverted to another separator. The controller was replaced, and the vessel was returned to service by approximately 4:00 pm the same day. There was no impact on withdrawal operations.

On November 27, 2019 at approximately 7:00 a.m., a heater on the Dehydration (Dehy) 1 unit was shut down due to an anomaly related to the pilot ignitor and regulator, and another heater was placed in service. A new pilot ignitor and regulator were installed, and the heater was placed back into service by approximately 11:00 a.m. the same day. There was no impact on withdrawal operations.