

SOUTHERN CALIFORNIA GAS COMPANY
Monthly Aliso Canyon Withdrawal Report

Response Dated January 6, 2021

Report Period Gas Day December 1, 2020 through Gas Day December 31, 2020

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, 2017.¹ 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);
4. 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. the hourly system sendout for the calendar day(s) on which a withdrawal was made and the day immediately preceding the initiation of withdrawal(s);
9. demand response activations and Dial It Down Alerts; and
10. 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 December 1, 2020 through Gas Day December 31, 2020.²

¹ The Aliso Canyon Withdrawal Protocol dated July 23, 2019 was revised on April 1, 2020 to add two additional reporting requirements including reporting requirement 8. These changes did not alter the conditions under which SoCalGas may withdraw gas from Aliso Canyon.

² 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 December 2020³.

Gas Day	Withdrawal Start	Withdrawal End	Withdrawal Volume in Billion Cubic Feet (Bcf)
12/01/2020	12/01/2020 7:08 AM PCT	(continued to next Gas Day)	0.075
12/02/2020	(continued from previous Gas Day)	12/02/2020 8:45 PM PCT	0.049
12/07/2020	12/07/2020 10:28 AM PCT	12/07/2020 8:50 PM PCT	0.157
12/14/2020	12/14/2020 8:55 AM PCT	(continued to next Gas Day)	0.118
12/15/2020	(continued from previous Gas Day)	(continued to next Gas Day)	0.458
12/16/2020	(continued from previous Gas Day)	(continued to next Gas Day)	0.369
12/17/2020	(continued from previous Gas Day)	(continued to next Gas Day)	0.300
12/18/2020	(continued from previous Gas Day)	12/18/2020 2:34 PM PCT	0.093
12/21/2020	12/21/2020 2:12 PM PCT	12/21/2020 10:10 PM PCT	0.039
12/28/2020	12/28/2020 8:35 AM PCT	(continued to next Gas Day)	0.504
12/29/2020	(continued from previous Gas Day)	(continued to next Gas Day)	0.436
12/30/2020	(continued from previous Gas Day)	(continued to next Gas Day)	0.263
12/31/2020	(continued from previous Gas Day)	01/01/2021 1:00 AM PCT	0.244

³ Approximately 2.43 MMcf (0.00243 Bcf) of withdrawal was used for cleanup flow testing between Gas Day 12/28/2020 and Gas Day 12/29/2020.

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

Total Withdrawal during Report Period:
Approximately 3,105 million cubic feet (MMcf)

Hourly Withdrawal during Report Period:

Date-Time	Aliso Canyon Withdrawal (MMcf)
12/1/2020 8:00	
12/1/2020 9:00	
12/1/2020 10:00	
12/1/2020 11:00	
12/1/2020 12:00	
12/1/2020 13:00	
12/1/2020 14:00	
12/1/2020 15:00	
12/1/2020 16:00	
12/1/2020 17:00	
12/1/2020 18:00	
12/1/2020 19:00	
12/1/2020 20:00	
12/1/2020 21:00	
12/1/2020 22:00	
12/1/2020 23:00	
12/2/2020 0:00	
12/2/2020 1:00	
12/2/2020 2:00	
12/2/2020 3:00	
12/2/2020 4:00	
12/2/2020 5:00	
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12/7/2020 11:00	
12/7/2020 12:00	
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12/7/2020 14:00	
12/7/2020 15:00	
12/7/2020 16:00	
12/7/2020 17:00	
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12/15/2020 23:00	
12/16/2020 0:00	
12/16/2020 1:00	
12/16/2020 2:00	
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2. Pre- and post-withdrawal Aliso Canyon working gas inventory⁴

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).

Date-Time	Pre-Withdrawal Inventory (Bcf)	Date-Time	Post-Withdrawal Inventory (Bcf)
12/1/2020 7:00 AM	32.993	12/3/2020 7:00 AM	32.865
12/7/2020 7:00 AM	32.861	12/8/2020 7:00 AM	32.704
12/14/2020 7:00 AM	32.753	12/19/2020 7:00 AM	31.418
12/21/2020 7:00 AM	31.418	12/22/2020 7:00 AM	31.363
12/28/2020 7:00 AM	31.518	01/01/2021 7:00 AM	30.073

3. Inventory of the non-Aliso Canyon fields before and after the Aliso Canyon withdrawal(s)⁵

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).

Date-Time	Pre-Withdrawal Inventory (Bcf)			Date-Time	Post-Withdrawal Inventory (Bcf)		
	Honor Rancho	La Goleta	Playa Del Rey		Honor Rancho	La Goleta	Playa Del Rey
12/1/2020 7:00 AM				12/3/2020 7:00 AM			
12/7/2020 7:00 AM				12/8/2020 7:00 AM			
12/14/2020 7:00 AM				12/19/2020 7:00 AM			
12/21/2020 7:00 AM				12/22/2020 7:00 AM			
12/28/2020 7:00 AM				01/01/2021 7:00 AM			

⁴ 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.

⁵ 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)
11/29/2020			
11/30/2020			
12/1/2020			
12/2/2020			
12/3/2020			
12/4/2020			
12/5/2020			
12/6/2020			
12/7/2020			
12/8/2020			
12/9/2020			
12/12/2020			
12/13/2020			
12/14/2020			
12/15/2020			
12/16/2020			
12/17/2020			
12/18/2020			
12/19/2020			
12/20/2020			
12/21/2020			
12/22/2020			
12/23/2020			
12/26/2020			
12/27/2020			
12/28/2020			
12/29/2020			
12/30/2020			
12/31/2020			
1/1/2021			
1/2/2021			

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)

Gas Day	Avg. Temp. (deg F)	Heating Degree Day (HDD)
11/30/2020	56	9
12/01/2020	56	9
12/02/2020	57	8
12/06/2020	53	12
12/07/2020	57	8
12/13/2020	54	11
12/14/2020	54	11
12/15/2020	52	13
12/16/2020	53	12
12/17/2020	56	9
12/18/2020	52	13
12/20/2020	54	11
12/21/2020	57	8
12/27/2020	53	12
12/28/2020	49	16
12/29/2020	49	16
12/30/2020	50	15
12/31/2020	52	13

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)



Confidential_Receipts(Dec2020).xlsx

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)



Confidential_nonAlisoWithdrawal(Dec2

8. Hourly system sendout for the calendar day(s) on which a withdrawal was made and the day immediately preceding the initiation of withdrawal(s)



Confidential_Sendout(Dec2020).xlsx

9. 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 December 2020.

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

On December 15, 2020, at approximately 7:57 am, the sacrificial sand probe on Porter 68-A was triggered, which in turn caused the surface safety valve on this well to automatically close as designed and shut in the well. The well was temporarily taken out of service. The probe was inspected, and a crack at the radius was identified. No erosion was found on the probe. A new probe was installed, and the tubing choke size was reduced. The well was placed back into service at approximately 10:42 pm on the same day. While the well was out of service, the impact on the field's withdrawal capability was [REDACTED].

On December 16, 2020, at approximately 9:45 am, the sacrificial sand probe on Porter 68-A was triggered, which in turn caused the surface safety valve on this well to automatically close as designed and shut in the well. The well was taken out of service. The probe was inspected, and a crack at the radius was identified. No erosion was found on the probe. A different model probe was installed, and the tubing choke size was increased. The well was

placed back into service at approximately 12:10 pm on the same day. While the well was out of service, the impact on the field's withdrawal capability was [REDACTED].

On December 28, 2020, at approximately 1:30 pm, the sacrificial sand probe on Fernando Fee 32D was triggered, which in turn caused the surface safety valve on this well to automatically close as designed and shut in the well. The well was taken out of service. The probe was inspected, and a crack was identified. No erosion was found on the probe. A new probe was installed. The well was placed back into service at approximately 5:30 pm on the same day. The impact on the field's withdrawal capability was [REDACTED].

On December 28, 2020, at approximately 11:04 pm, the surface safety valve closed on Fernando Fee 32D and shut in the well. The valve and piping were inspected, and no anomalies were identified. On December 29, 2020, at approximately 7:20 am the surface safety valve was reset without issue. The impact on the field's withdrawal capability was [REDACTED].