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Southern California Gas Company
555 W. 5th Street, GT21C3
Los Angeles, CA 90013

March 30, 2017

Timothy J. Sullivan
Executive Director
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Storage Safety Enhancement Plan

Dear Mr. Sullivan:

This letter responds to your March 16, 2017 letter regarding SoCalGas' plans to implement additional safety enhancements and integrity assessments at the La Goleta, Playa del Rey and Honor Rancho storage fields. In your March 16th letter, you direct SoCalGas to revise its Storage Safety Enhancement Plan to maintain a system wide withdrawal capacity level of 2.065 Bcf per day beginning June 1, 2017, and throughout the balance of the safety enhancement project. Further, you direct that the amount should increase as quickly as possible to 2.420 Bcf per day using improvements to withdrawal capacity at each of the fields, including the management of inventory levels and increases to wells in service at all fields. It is SoCalGas' understanding that this directive to maintain elevated levels of withdrawal capacity through the summer season is intended to address reliability concerns for electric generating facilities operating in the Los Angeles Basin and prepare for the coming winter season.

The March 16th directive effectively imposes a new requirement that SoCalGas maintain sufficient inventory and withdrawal capacity levels to ensure reliable supplies are available to serve non-core customers. SoCalGas understands that the commission does not want electric generation to be curtailed, but under existing regulations and policies electric generation is a non-core customer and is the first user set to be curtailed, as needed, to manage system reliability. The Commission's directive to maintain minimum withdrawal capacity levels throughout the summer, coupled with the unanticipated delay in obtaining authorization to resume injection operations at Aliso Canyon, may also inhibit SoCalGas' ability to perform maintenance and inspection work both at its underground storage facilities and throughout its pipeline system.

Due to many factors described below to provide the required levels of withdrawal through the summer season and to build withdrawal capacity for the upcoming winter season, the inventory at Aliso Canyon must be increased as soon as possible. Without the ability to inject and build gas inventory at Aliso Canyon as a result of reduced pressure as a result of low inventory levels, the deliverability rate of the field will continue to degrade quickly as any withdrawals are made. Until Aliso Canyon can resume injection operations, SoCalGas may be unable to meet the Commission's objective.

Required Modifications to SoCalGas' Storage Safety Enhancement Plan

To comply with your directive to modify the Storage Safety Enhancement Plan to assure that the prescribed withdrawal capacity level is available by June 1, 2017 and maintained throughout the summer season, SoCalGas must continue to operate 19 wells at our three remaining storage fields without a dual barrier of safety after March 31. This directive will delay the implementation of the company's objective to no longer operate any wells without a dual barrier of safety after April 1. The transition to a new dual barrier operation of underground storage wells standard was recommended by the October 2016 Federal Joint Agency Taskforce Report and expected to be implemented by DOGGR in new State regulations scheduled to be finalized later this year or early next. Although not a current regulation or requirement, SoCalGas deemed it prudent to move forward with the new double barrier practice at the other storage fields in light of the new practice being applied at Aliso Canyon. The company clearly recognizes the authority of the CPUC in its directive to delay implementation of the new recommendation from the federal agencies and possible new regulations from DOGGR.

With this mandated modification to our Storage Safety Enhancement Plan, SoCalGas anticipates having a system wide storage field withdrawal capacity of 2.070 Bcf by June 1, 2017, slightly over the 2.065 Bcf system wide withdrawal capacity required under your March 16th letter. For the withdrawal capacity to be at the directed level on June 1, 2017, it will require inventory management at both La Goleta and Honor Rancho to increase inventory levels and returning inspected wells to service with a tubing flow only configuration as now determined in the revised plan. Without the anticipated inventory management and wells coming into service as planned, SoCalGas may be required to operate additional wells in a casing flow configuration, further delaying the integrity assessment of existing wells.

Furthermore, we anticipate reaching a system wide withdrawal capacity above 2.420 BCFD by October 1, 2017. This withdrawal capacity is based on Honor Rancho, La Goleta and Playa del Rey delivering at maximum field capacities, which is only achievable with the projected inventory build-up and well workover plans, but would also require Aliso Canyon to sustain a withdrawal capacity of at least 0.600 BCFD. **Once any withdrawals are made from Aliso Canyon, the withdrawal capacity is anticipated to decline below this required level as pressures reduce as inventory is depleted without the ability to replenish it.** Furthermore, because we do not have operational history of wells flowing through large tubing at the current low inventory levels at Aliso Canyon, we are unable to predict if any wells will fill, or "load-up", with fluid and cease flow altogether as the existing inventory is further depleted through withdrawals. These circumstances may make it difficult, if not impossible, to comply with the 2.420 BCFD withdrawal capacity directive.

While SoCalGas has an aggressive plan to perform well inspections throughout 2017 to meet the required system wide withdrawal capacity levels, our ability to achieve the required withdrawal capacity levels is highly dependent on the availability of gas to manage the inventory at the storage fields. We built our current inventory model based on historical withdrawals from April through the end of the year and the current low inventory levels at Goleta and Honor Rancho. **In projecting the needed inventory build-up from injections, we assumed that gas supplies will be available between April 1 and July 1 to physically inject at minimum average daily rates of 50 MMcfd at Goleta and 85 MMcfd at Honor Rancho which is also required to have sufficient inventory at Goleta and Honor Rancho for the coming winter.** If we are unable to build the inventory levels at Honor Rancho and La Goleta to maintain the required system wide delivery capacity, we may be required to selectively open sleeves on wells and place them on casing flow to increase withdrawal capacity until the inventory levels can be built up. Likewise, we would reevaluate planned workovers to convert wells to tubing-only flow at Honor Rancho, if inventory buildup does not take place as needed. Neither of these actions will replace the need to have sufficient inventory at Goleta, Honor Rancho, and Aliso Canyon for the coming winter season.

SoCalGas' Existing System Resources May Still be Insufficient to Meet the Commission's Directive to Maintain Specified Effective Withdrawal Capacity Levels

Although SoCalGas can theoretically meet the required directive of 2.065 BCFD withdrawal capacity, as explained above, this is solely based on field deliverability. Under various system operating conditions, the supplies from La Goleta storage field and a portion of the supplies from the Honor Rancho storage facility cannot be effectively delivered to meet the demands of the in-basin electric generation customers. It is SoCalGas' understanding that the Commission's new requirement is intended to maintain supply to ensure reliable service to electric generation facilities in the Los Angeles Basin. Under this new operating condition, SoCalGas cannot prudently include the La Goleta storage field's contribution to available system supplies for electric generation demand, and requires the ability to actively manage inventory at Aliso Canyon to meet the Commission's intent.

Supply to meet the Los Angeles Basin electric generator intraday demand is provided by the Honor Rancho, Playa del Rey and Aliso Canyon storage fields. As explained by SoCalGas in both Technical Reports prepared for the Reliability Task Force, Playa del Rey will be able to provide full capacity for a short period, however, it's withdrawal capacity becomes limited when withdrawals are needed for several consecutive hours. In addition, the size of Playa del Rey is also a limiting factor, as its withdrawal capability diminishes quickly as inventory levels drop and is further complicated by its limited ability to rebuild inventory, taking approximately 4-5 times as long to inject gas than it does to withdrawal the gas.

The La Goleta storage field is located too far away from the Los Angeles Basin load center to support intraday changes in demand. Although small volumes of gas supply can reach the Los Angeles Basin from La Goleta, supply volumes simply do not travel across the pipeline network quickly enough to meet the hourly changes in the in-basin demand. Therefore, the Commission should not consider the gas supplies withdrawn from the La Goleta storage field to support the Commission's objective to ensure reliable service to in-basin electric generators. Moreover, SoCalGas' La Goleta storage field provides necessary and valuable support to meet the demand

from the Coastal communities in our service territory, from San Luis Obispo to Ventura, especially during the winter season. Without supply from La Goleta, SoCalGas would need to use supply delivered to our system by the interstate pipelines or from our Honor Rancho storage field to support the Coast, rather than using these supplies to support the Los Angeles Basin and other parts of our service territory. This heightens the need to build inventory at La Goleta this summer in preparation for the coming winter season. This is especially critical given the current operational status of our Aliso Canyon storage field.

Similarly, while supply from the Honor Rancho storage field can support the Los Angeles Basin more rapidly and in larger volumes than La Goleta, it too is located too far away to effectively support intraday hourly electric generator demand. Further, the ability to withdraw supply from Honor Rancho is limited by both pipeline and facility capacities. Supply from Honor Rancho competes for pipeline capacity with supplies delivered by the Kern/Mojave pipeline at Wheeler Ridge and Pacific Gas and Electric Company at Kern River Station, which was also documented in the Technical Reports. And the capacity to deliver supply to the Los Angeles Basin is limited by the capacity of both the Quigley and Westside City Gate stations. This results in Honor Rancho being able to contribute approximately 0.800 BCFD towards the electric generator demand in the Los Angeles basin, even though the commission has projected that 1.0 BCFD of its withdrawal capacity could be utilized to meet the March 16th directive.

Therefore, if the Commission’s objective is for the directed 2.065 BCFD storage withdrawal capacity to be available for EG in the LA Basin, SoCalGas will not be able to achieve this objective with the 2.070 BCFD system-wide withdrawal capacity that we forecast will be available on June 1st, for the reasons outlined above. If this is the objective, the capacity can only be met with additional withdrawal capacity from Aliso Canyon to directly support the in-basin generation, which will not be available at current inventory levels. In its report titled “Aliso Canyon Working Gas Inventory, Production Capacity, Injection Capacity, and Well Availability for Reliability,” dated January 17, 2017, the Commission found that 0.906 BCFD of withdrawal from Aliso Canyon was necessary to meet summer reliability requirements with tighter non-core balancing requirements, and 1.119 BCFD without such requirements. Further, the Commission correlates the required withdrawal capacity to an inventory range of 29.7 to 35 BCF.

Once again, to provide the required levels of withdrawal through the summer season, the inventory at Aliso Canyon must be increased as soon as possible. Without the ability to inject and build gas inventory at Aliso Canyon, the deliverability from the field will continue to degrade quickly as any withdrawals are made. Until Aliso Canyon can resume normal operations (which includes the ability to both inject and withdraw gas supplies from the field), SoCalGas may be unable to meet the Commission’s objective.

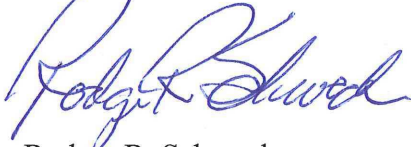
Gas Supply Availability for Injections to Manage Inventory Levels

SoCalGas expects high and low operational flow orders to be triggered frequently, given the current restrictions on Aliso Canyon’s operations and other required compliance and system maintenance. SoCalGas anticipates that the balancing tolerance during operational flow order events will be very tight, which will result in shippers and customers balancing very close to their forecasted demand, rather than deciding to inject into storage. This may result in requiring

withdrawals from storage, even on mild sendout days, which will further lower storage inventories. For these reasons, SoCalGas is concerned that it will not be able to meet the objective of the March 16th directive through the building of inventory at Honor Rancho and Goleta. Operationally, SoCalGas cannot solely mitigate this, as market response is needed to ensure enough flowing supplies are scheduled to allow for injection. Therefore, SoCalGas proposes to make the current approved injection capacity allocation to the balancing function available in Cycle 1 to allow for injection nominations by customers and increasing storage inventories. SoCalGas will also leverage other tools it has to further manage the system and optimize the amount of flowing supplies such that storage injection is maximized. This is a temporary measure to support SoCalGas' efforts to bolster its storage inventories while meeting the requirements of the March 16th directive.

The attached provides additional details regarding projected withdrawal and injection capacity levels under the modified Storage Safety Enhancement Plan, reflecting our current best estimates, and will be posted on Envoy.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rodger R. Schwecke".

Rodger R. Schwecke
Senior Vice President, Gas Transmission and Storage

cc: Edward Randolph, CPUC
Maryam Ebke, CPUC
Kenneth Harris, DOGGR
Alan Walker, DOGGR

Attachment 1
 Required Modifications to the Storage Safety Enhancement Plan

	ORIGINAL STATUS			PROPOSED STATUS			REVISED STATUS		
	Goleta	Honor Rancho	PDR	Goleta	Honor Rancho	PDR	Goleta	Honor Rancho	PDR
Tubing Flow Only	6	9	9	10	19	17	8	19	14
Tubing/Casing Flow	12	24	4	0	0	0	7	9	3
Out of Service/Plugged	1	3	10	9	17	6	4	8	6
Total	19	36	23	19	36	23	19	36	23

Attachment 2 Projected Withdrawal and Injection Capacity

Withdrawal Capacity (MMcfd)

(Forecast Date: 3/28/17)

		4/1/17	5/1/17	6/1/17	7/1/17	8/1/17	9/1/17	10/1/17	11/1/17	12/1/17	1/1/18
La Goleta	Withdrawal (MMcfd)	290	310	330	360	400	420	420	420	420	410
	Inventory (BCF)	10.50	12.00	13.55	15.05	16.60	17.53	18.43	19.36	19.36	16.30
Playa del Rey	Withdrawal (MMcfd)	380	400	400	400	400	400	400	400	370	400
	Inventory (BCF)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Honor Rancho	Withdrawal (MMcfd)	610	690	840	860	860	810	1000	1000	1000	930
	Inventory (BCF)	12.44	14.99	18.49	21.04	20.63	19.88	20.91	23.05	22.05	18.62
Aliso Canyon	Withdrawal (MMcfd)	410	440	500	530	590	660	670	720	750	770
	Inventory (BCF)	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
Total System	Withdrawal (MMcfd)	1690	1840	2070	2150	2250	2290	2490	2540	2540	2510

Injection Capacity (MMcfd)

(Forecast Date: 3/28/17)

	4/1/17	5/1/17	6/1/17	7/1/17	8/1/17	9/1/17	10/1/17	11/1/17	12/1/17	1/1/18
La Goleta (MMcfd) (Note 1)	130	130	130	130	130	130	130	130	130	130
Playa del Rey (MMcfd) (Note 2)	75	75	75	75	75	75	75	75	75	75
Honor Rancho (MMcfd) (Note 3)	120	200	200	200	200	200	200	200	200	200
Aliso Canyon (MMcfd) (Note 4)	0	0	0	0	0	0	0	0	0	0
Total System (MMcfd)	325	405	405	405	405	405	405	405	405	405

1. Currently limited by the Coastal transmission pipeline system capacity to approximately 50 MMcfd.
2. Playa del Rey injection capacity is currently zero due to the field being at full inventory.
3. Limited by compressor maintenance in April.
4. Dictated by moratorium on injection.