**APPLICATION OF SOUTHERN CALIFORNIA GAS COMPANY &
SAN DIEGO GAS & ELECTRIC COMPANY FOR AUTHORITY TO REVISE THEIR NATURAL GAS RATES AND IMPLEMENT STORAGE PROPOSALS EFFECTIVE JANUARY 1, 2020 IN THE TRIENNIAL COST ALLOCATION PROCEEDING**

(A.18-07-024)

(6th DATA REQUEST FROM SOUTHERN CALIFORNIA GENERATION COALITION)

DATA RECEIVED: 2-26-19

DATE RESPONDED: 3-12-19

QUESTION 6.1:

With respect to the response to SCGC-02, Q.2.3.2/2.3.3 that states: "The 21 Bcf of storage inventory allocated to the new reliability function provides a withdrawal capacity of 1,240 MMcfd on a year-round basis, which is to accommodate both core and balancing withdrawal. This is split in the 151 days of winter by 840 MMcfd for Core Reliability and 400 MMcfd for balancing, and the 214 days of summer by 400 MMcfd for Core Reliability and 840 MMcfd for balancing. Additionally, noncore customers will pay for only a portion of the balancing function. Therefore, noncore customers are not paying for the inventory required to produce 1,240 MMcfd of withdrawal capacity, but rather only a portion of the inventory required to provide withdrawal for the noncore portion of the balancing function. This allows the balancing function to continue to withdraw at the firm rate for summer or winter until the remaining inventory for the balancing function is 0 Bcf. Without the new reliability function, if the remaining inventory for balancing is 0 Bcf, there would not be sufficient withdrawal for the balancing function."

6.1.1. Which storage fields would be expected to provide the 1,240 MMcfd of withdrawal capacity that would be used for core reliability and for balancing?

6.1.2. If Aliso Canyon is not available except under the current very restricted conditions, would it be possible to provide 1,240 MMcfd of withdrawal capacity on a year around basis?

6.1.3. If the answer to previous question is "yes," please explain in detail how the company would provide the 1,240 MMcfd on a year around basis.

6.1.4. Please state the withdrawal rate for the balancing function assuming a 0 Bcf inventory for balancing and no reliability function?

6.1.5. Please state the withdrawal rate for the balancing function assuming a 0 Bcf inventory for balancing and the proposed 21 Bcf of reliability inventory assuming that all 21 Bcf of reliability inventory were filled?

6.1.6. Please state the withdrawal rate for the balancing function assuming a 0 Bcf inventory for balancing and the proposed 21 Bcf of reliability inventory and assuming that only half of the 21 Bcf of reliability inventory was filled?

6.1.7. Is all 16 Bcf of the inventory capacity that is proposed to be allocated to the balancing function assumed to be empty when the discussion states: "if the remaining inventory for balancing is 0 Bcf," or is only 8 Bcf out of the proposed 16 Bcf of inventory capacity assumed to be empty?

6.1.8. Please provide a copy of each study, memo, or report that discusses the relationship between the remaining inventory for the balancing function and the rate of withdrawal for the balancing function.

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RESPONSE 6.1:

6.1.1. It would be the combination of SoCalGas's four storage fields.

6.1.2. Applicants have not performed this analysis. However, as shown in the table provided in Response 6.3, the three non-Aliso storage fields have a combined maximum withdrawal capacity of approximately 1,300 MMcfd at maximum inventory levels.

6.1.3 N/A

6.1.4 Applicants have not performed this analysis

6.1.5 Applicants have not performed this analysis

6.1.6 Applicants have not performed this analysis

6.1.7 Yes, all 16 Bcf of the inventory capacity that is proposed to be allocated to the balancing function is assumed to be empty when the discussion states: "if the remaining inventory for balancing is 0 Bcf,"

6.1.8 Aside from Chapter 1 and accompanying workpapers, Applicants do not have any additional studies, memoranda, or reports that discuss the relationship between the remaining inventory for the Balancing function and the rate of withdrawal for the Balancing function.

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QUESTION 6.2:

According to attachment DR1_IS_Q3_SEP, which was provided in response to Indicated Shippers' first data request, Q.IS-3(a), the total amount of withdrawal capacity available from the combined non-Aliso Canyon fields is 1,245 MMcfd when the fields are at high inventory, the amount of withdrawal capacity from these fields is only 426 MMcfd at low inventory, and the amount of inventory capacity for these three fields is only 50.35 MMcfd.

6.2.1. How would SoCalGas propose to distribute the 21 Bcf of "reliability" storage inventory among its storage fields?

6.2.2. Would any "reliability" storage inventory be allotted to Aliso Canyon?

6.2.3. If the answer to the previous question is "yes," please state how much of the 21 Bcf of "reliability" storage would be provided by Aliso Canyon.

6.2.4. If no "reliability" storage inventory is to be provided by Aliso Canyon, and the total inventory capacity for the three non-Aliso Canyon fields is only about 50 Bcf, would SoCalGas propose to operate the three non-Aliso Canyon fields so that the combined inventory at the three fields would be maintained between 50 Bcf and 21 Bcf throughout the year?

6.2.5. If the answer to the previous question is "no," please explain how SoCalGas proposes the three non-Aliso Canyon storage fields would operate with the 21 Bcf inventory capacity reserved for the "reliability" function.

6.2.6. Please provide a copy of each study, memo, or report that discusses the relationship between storage field pressures and the rate of withdrawal assuming a tubing only configuration in the wells.

RESPONSE 6.2:

6.2.1. Storage assets are operated as a combined system. The 21 Bcf of reliability storage inventory would be distributed amongst the combined storage inventory of all four fields.

6.2.2. Please refer to response 6.2.1 above.

6.2.3. N/A

6.2.4 Applicants have not performed this analysis

6.2.5 N/A

6.2.6 SoCalGas objects to this question to the extent it seeks confidential, market sensitive data. Subject to and without waiving this objection, SoCalGas responds as follows. See response to SCGC-04, Q4.6.4.

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QUESTION 6.3:

With respect to attachment DR1_IS_Q3_SEP.pdf, Attachment 1, which was provided in response to Indicated Shippers First Data Request, Q.IS-3(a):

6.3.1. Please provide an update to the table shown in Attachment 1 labeled "Proposed Status" that show the number of wells falling into each of the categories as of 12/31/18.

6.3.2. Please show an update to the table labeled "Projected Deliverability Impacts" showing the High Inventory Assessment for each storage field based on the number of wells falling into the tubing flow only category as of 12/31/18.

6.3.3. Please show an update to the table labeled "Projected Deliverability Impacts" showing the Low Inventory Assessment for each storage field based on the number of wells falling into the tubing flow only category as of 12/31/18.

6.3.4. Please show the Inventory for each field as of 12/31/18.

RESPONSE 6.3:

SoCalGas objects to this question to the extent it seeks confidential, market sensitive data. Subject to and without waiving this objection, SoCalGas responds as follows.

Status as of 12/31/18			
Well Status	Goleta	Honor Rancho	PDR
Tubing Flow Only	9	22	16
Tubing/Casing Flow	0	0	0
Isolated/Plugged	10	14	7
Total	19	36	23

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Scenario	High Inventory	Low Inventory
	Non-Aliso Strorage Fields	Non-Aliso Strorage Fields
Inventory Level (Bcf)	50.35	9.4
Tubing Flow Only W/D (MMcfd)	1300	493

Inventory as of 12/31/18[1]		
Goleta	Honor Rancho	PDR
17.451	16.831	1.371

[1] Inventory levels as filed to EIA as of December 31, 2018.

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QUESTION 6.4:

With respect to the response to Indicated Shippers First Data Request, Q.IS-7.c that states: "Currently, the 21 Bcf of inventory is part of the total allocated inventory among the Core, Balancing, and the Unbundled Storage Program."

6.4.1. Please identify the amount of storage inventory that was allocated to the core in the last TCAP that is proposed to be allocated to the new reliability function.

6.4.2. Please identify the amount of storage inventory that was allocated to the balancing function in the last TCAP that is proposed to be allocated to the new reliability function.

6.4.3. Please identify the amount of storage inventory that was allocated to the unbundled storage program in the last TCAP that is proposed to be allocated to the new reliability function.

RESPONSE 6.4:

The capacity allocated to core, inventory, and unbundled storage can be found in D.16-06-039. The inventory for the proposed new Reliability function does not come from any particular function from the current TCAP period, but rather from the total inventory proposed for the 2020 TCAP.

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QUESTION 6.5:

Please provide a copy of each attachment that is referenced in the response to Indicated Shippers DR 3, Q.3-5, Supplemental Response.

RESPONSE 6.5:

Please see attachment.

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QUESTION 6.6:

Please review the definitions of cushion gas and working gas taken from the FERC Order Approving Abandonment. Issued June 14, 2018 in CP18-12-000 (163FERC ¶ 62,178) at 6: "Cushion gas, often called base gas, is defined as the volume of natural gas intended as permanent inventory in a storage field necessary to maintain adequate pressure and deliverability rates throughout the withdrawal season. Cushion gas in storage fields similar to Natural's is primarily injected natural gas that is injected at the time of development and intended to remain permanently in place to provide a minimum pressure for withdrawal of the working gas. Working gas is that portion of total stored natural gas intended to be injected and withdrawn on a regular, usually annual, cyclical basis."

6.6.1. Does SoCalGas agree with those definitions?

6.6.2. If the answer to the previous question is "no," please state what SoCalGas considers the definition of cushion gas and working gas to be.

6.6.3. Please state the total amount of cushion gas in Bcf that is currently present at SoCalGas' four storage fields.

RESPONSE 6.6:

6.6.1. SoCalGas notes the FERC definitions of cushion gas and working gas provided in SCGC's question 6.6 appears to be specific to Natural Gas Pipeline Company of America LLC (Natural's) Abandonment Project, and SoCalGas is not familiar with Natural's storage field to agree or disagree with any implied similarities with Natural's storage field.

6.6.2. SoCalGas defines cushion gas as the volume of gas intended to serve as the permanent inventory within a storage reservoir that is required to maintain adequate pressure for deliverability rates throughout the withdrawal season. This definition is generally consistent with the Division of Oil, Gas, and Geothermal Resources' (DOGGR) definition of cushion gas: "The volume of natural gas intended as a permanent inventory in the storage reservoir to maintain adequate pressure and deliverability rates throughout the withdrawal process.," [1] as well as the FERC definition of cushion gas,

[1] As defined by DOGGR, accessed on 3/5/19:
https://www.conservation.ca.gov/dog/Pages/UndergroundGasStorage.aspx

"Cushion gas (base gas) - the volume of gas, including native gas, needed as a permanent inventory in a storage reservoir to maintain adequate reservoir pressure and deliverability rates throughout the withdrawal season."[2]

SoCalGas' definition of working gas is generally consistent with the DOGGR definition of working gas: The volume of natural gas in the reservoir above the base or cushion gas level that is available to the marketplace.[3] as well as the FERC definition of working gas: Working gas (top gas) - the volume of gas in the reservoir above the designed level of cushion gas. If the Conditions allow it, a percentage or all of the working gas capacity could be injected and withdrawn more than once during any season.[4]

6.6.3. As filed to EIA as of December 31, 2018:

Storage Field	Playa Del Rey	Honor Rancho	La Goleta	Aliso Canyon
Cushion Gas (Mcf)	4,461,545	20,996,949	24,589,073	81,525,000

[2] As defined by FERC, accessed on 3/5/19: https://www.ferc.gov/industries/gas/indus-act/storage/underground.asp
[3] As defined by DOGGR, accessed on 3/5/19: https://www.conservation.ca.gov/dog/Pages/UndergroundGasStorage.aspx
[4] As defined by FERC, accessed on 3/5/19: https://www.ferc.gov/industries/gas/indus-act/storage/underground.asp