Application No: A.15-06-020
Exhibit No.:
Witness: Andrew J. Sawin

Application of Southern California Gas Company (U 904 G) and San Diego Gas & Electric Company (U 902 G) for Authority to Revise their Curtailment Procedures	A.15-06-020 (Filed June 26, 2015)

PREPARED REBUTTAL TESTIMONY OF

ANDREW J. SAWIN

SOUTHERN CALIFORNIA GAS COMPANY

SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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PREPARED REBUTTAL TESTIMONY

OF ANDREW J. SAWIN

I. PURPOSE

The purpose of my prepared rebuttal testimony on behalf of Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) is to address certain statements regarding SoCalGas and SDG&E's Curtailment Procedures Application presented in the February 5, 2016 testimony of the Southern California Generation Coalition (SCGC), Southern California Edison (SCE), and the Indicated Shippers regarding capacity open seasons, sub-zonal curtailments, curtailment of storage injection, prioritizing firm storage withdrawal, curtailment of off-system deliveries (OSD), and planned outages and coordination.

II. ELIMINATING CAPACITY OPEN SEASONS WILL NOT OVERBUILD THE TRANSMISSION SYSTEM

SCGC believes that open seasons and the firm and interruptible customer classes should remain in potentially capacity constrained areas. According to SCGC, the main reason to keep open seasons is to prevent overbuilding the transmission system.[1] This is simply not the case.

As stated by Mr. Bisi, "SoCalGas and SDG&E will continue to design their gas transmission system to meet the CPUC-mandated 1-in-35 year peak day design standard for core service and 1-in-10 year cold day design standard for noncore service."[2] As stated in our application, SoCalGas and SDG&E cannot reasonably forecast firm noncore demand in the long term.[3] Despite using *total* forecast noncore demand for the 1-in-10 year cold day design standard, the transmission system will not be overbuilt. SoCalGas and SDG&E use this standard for all areas of the transmission system other than capacity constrained areas, and it has not led to

[1] Direct Testimony of Catherine E. Yap at 24-30.
[2] Prepared Direct Testimony of David M. Bisi at 10, Lines 3-5.
[3] *Id.* at 10, Lines 8-11.

overbuilding the system. Forecast demand that exceeds available capacity in the long term does not mean that facilities will be immediately proposed and built; but rather that the area must be monitored during future forecasts and capacity planning.

Furthermore, capacity open seasons are not demonstrating the actual required firm demand, a problem that does not allow for planning adequate capacity in constrained areas. This topic has already been discussed in the curtailment procedures application A.15-06-020,[4] by Mr. Bisi,[5] and by Ms. Marelli.[6]

III. SUB-ZONAL CURTAILMENTS ARE CURRENTLY IMPLEMENTED AND WILL CONTINUE TO BE UTILIZED

SCGC requests that Rule 23 explicitly state that curtailments can be minimized to a sub-zonal level.[7] This is not necessary, as SoCalGas and SDG&E already have the authority to effectuate a curtailment "when in the judgment of the Utility, operating conditions require curtailment of service . . ."[8] Ms. Marelli further clarifies that "SoCalGas and SDG&E will have the right to interrupt the receipt or delivery of gas, but, when doing so, will try to cause a minimum of inconvenience to the customer."[9] The proposed curtailment procedures, particularly with respect to planned outages, do not require SoCalGas and SDG&E to curtail an entire local service zone. SoCalGas and SDG&E currently limit curtailment areas to minimize impact to customers, when possible and practical, and will continue to do so.

Not all curtailments can be kept to a sub-zonal level, however. During times of high system stress, backbone pipeline outage, or other unforeseen issue, curtailments will need to be called for a larger area. These larger areas are the proposed local service zones, which reflect

[4] A.15-06-020 at 6-7, Section III.
[5] Prepared Direct Testimony of David M. Bisi at 9.
[6] Prepared Direct Testimony of Gwen Marelli at 7-9, Section VIII.
[7] Direct Testimony of Catherine E. Yap at 37, Section 16.
[8] SoCalGas Rule 23, Section C.1.
[9] Prepared Direct Testimony of Gwen Marelli at 9, lines 11-12.

regions used by SoCalGas and SDG&E's operations and planning departments. Local service zones combined with the proposed curtailment queue provides the System Operator with a simple, quick, and effective way to cut noncore demand and protect core customers.

IV. CURTAILMENT OF STORAGE INJECTION IS UNNECESSARY

SCGC recommends that storage injections should be curtailed before electric generation customers, if there is a storage field in the same zone facing curtailment, and eliminate the transmission of gas out of the local service zone that is subject to curtailment to the extent that the System Operator is delivering the gas to the downstream zone for purposes of storage injection.[10] This should not be a required step in the curtailment order. Curtailing storage injections prior to curtailing EGs will not lessen the extent or frequency of curtailments. Instead, it will just unnecessarily limit the ability of the System Operator to effectively manage the system, and perhaps lead to high OFOs at the same time a portion of our system is subject to a supply-related curtailment.

The SoCalGas System Operator uses storage withdrawal and injection to balance system load and demand. In the event of a supply shortage to one or multiple zones, the system operator will withdraw from one or more storage fields, and will not be physically injecting into a field if such injections would exacerbate the supply shortage.

Physically injecting at a storage field does not necessarily match the paper world of gas scheduling. Gas scheduled to be injected does not require the System Operator to inject any gas, particularly if withdrawals are scheduled simultaneously, potentially resulting in net zero storage injection and withdrawal. SoCalGas and SDG&E should not be required to curtail scheduled injection when it has no bearing on what happens physically on the system.

[10] Direct Testimony of Catherine E. Yap at 20-21, Section 6. SCGC also incorrectly assumes at 20, lines 18-21, that the Coastal System is downstream of the North LA Basin. No local service zones are downstream of the North or South LA Basin.

Not all curtailments are the result of insufficient supplies; deliverability to or within a local service zone can limit the ability to physically send supplies within a zone. In this instance, curtailment of injection, even within the same local service zone, will not benefit the system operator or customers, just as withdrawal will not fix a capacity problem. As stated above, curtailment of injection may actually lead to a high OFO in this case, as customers are bringing in gas to burn, but cannot physically use it. Injection allows some of that supply to still enter the system without being burned.

Finally, eliminating injection downstream of a local service zone facing a curtailment will not always prevent that curtailment. For example, a physical problem in the Valley System, such as a line break, that produces curtailment on that system will not be prevented by curtailing injection at Aliso Canyon. Additional supplies obtained by curtailing injection at Aliso Canyon cannot be delivered through a broken pipeline.

V. FIRM STORAGE WITHDRAWAL SERVICE SHOULD NOT BE PRIORITIZED

SCE proposes that firm withdrawal service should be given the highest priority in the curtailment order for noncore customers that are located in a zone that has a storage field.[11] SoCalGas and SDG&E disagree. Firm withdrawal service should not be included in the curtailment queue for the reasons discussed below.

First, customer-owned gas is not stored in any particular field, but rather storage is an aggregate of all storage fields. Customers cannot elect to withdraw or inject at any particular storage field, and having a rule that reflects field-specific withdrawals or injections would

[11] Direct Testimony of Robert C. Grimm at 7-8, 14-15. SCE also claims that Mr. Borkovich does not justify the removal of firm withdrawal service from the curtailment order in his testimony (Direct Testimony of Robert C. Grimm at 15, Lines 10-12); Mr. Borkovich did justify this removal: "firm withdrawal services are removed from the queue because they are allocated on a scheduled basis and do not increase capacity available for the local service." Prepared Direct Testimony of Paul Borkovich at 12, Lines 4-5.

diminish the System Operator's ability to maximize injection and withdrawal capabilities for the system by utilizing all storage fields.

Second, prioritizing the firm withdrawal service will not minimize the effect of the curtailment, and will only further complicate the effectuation of the curtailment. The System Operator already utilizes storage withdrawal to maintain system pressures when there is a deliverability constraint to a local service zone. As a result, customer nominations from storage accounts will do nothing to help prevent or alleviate a curtailment.

Third, creating a system in which firm withdrawal service is allowed to offset a zonal curtailment in zones with storage fields would effectively path a portion of the SoCalGas system.[12] Pathing cannot be implemented on a highly interconnected system such as that of SoCalGas and SDG&E. It is not feasible to path the Transmission system for each customer, particularly when they may be served from several locations. Customers are free to schedule gas from any receipt point or nominate storage, regardless of where they are located on the system and whether those supplies can be physically delivered to them.

VI. OFF-SYSTEM DELIVERIES SHOULD NOT BE CURTAILED

SCE suggests that off-system deliveries should be curtailed before any local or system-wide curtailment.[13] This is unnecessary; the curtailment procedures pertain primarily to pipeline and facility deliverability, not to supply shortages. For example, the potentially constrained SDG&E system has a capacity of 630 MMcfd. If there were a demand of 700 MMcfd, additional supplies obtained from curtailing OSD would not increase the capacity of the SDG&E system to serve 700 MMcfd.

[12] This proposal would not apply to SDG&E because SDG&E does not have any storage fields.
[13] Direct Testimony of Robert C. Grimm at 7-8 Section II.C., 14-15 Section III.B.

Additionally, Rule 30 already provides that "the Utility will determine the quantity of capacity available for off-system deliveries."[14] Rule 30 further clarifies that "Both Firm and Interruptible OSD rights, at any Delivery Point, can be reduced in any cycle (subject to the NAESB elapsed pro rata rules) if, in the sole judgement of the Utility, the provision of OSD service at that Delivery Point would result in the Utility having to bring additional gas into the Utility's system at an additional cost."[15] Put simply, the System Operator will discontinue OSD transactions to the extent providing the OSD service would make a supply-related situation worse.

VII. PLANNED OUTAGES AND CUSTOMER COORDINATION

The Indicated Shippers suggest that SoCalGas and SDG&E provide a non-binding schedule of long-term planned maintenance one year in advance of the work, with final notice provided 30 days in advance.[16] SCGC suggests that SoCalGas and SDG&E should be required to meet with electric utilities and grid operators on a quarterly basis.[17] SoCalGas and SDG&E disagree with these suggestions.

With respect to a non-binding schedule of long-term planned maintenance being provided one year in advance, not all planned maintenance is completed as originally scheduled, and not all maintenance work will result in a curtailment. There are several factors that may advance or delay a project such as permitting, safety-related conditions uncovered during inspections, and unexpected changes to the system. Providing a schedule a year in advance, even if it is non-binding, may cause the market to react to a project that may not occur.

[14] SoCalGas Rule 30, Section D5, Off-System Delivery (OSD) Services.
[15] Prepared Direct Testimony of Paul Borkovich, Attachment A, SoCalGas Rule 30, Section D5.
[16] Prepared Direct Testimony of James A. Ross at 18-20, 22-23.
[17] Direct Testimony of Catherine E. Yap at 21-22, Section 7.

Regarding the 30 day notice requirement proposed by Indicated Shippers, SoCalGas and SDG&E already work to provide all affected customers with at least 30 days advance notice prior to any maintenance work that may impact the service we provide to them. However, 30 days advance notice is not *always* feasible due to many external and internal factors that affect the timing of maintenance work such as permitting, safety-related conditions uncovered during inspections, and minimization of risk to system reliability due to real-time operating conditions. Under these conditions, notification is made as soon as the scope of the maintenance has been verified. Project scopes and timing can change drastically from initial planning until actual construction, and a long-term maintenance schedule would not prove beneficial because of these changes.

Finally, with respect to quarterly meetings with grid operators, SoCalGas and SDG&E already maintain close coordination and communication is already maintained with the California Independent System Operator (CAISO) and Los Angeles Department of Water and Power (LADWD) Grid Operations for short term operations and long term shutdown planning. SoCalGas works to leverage existing planned CAISO and LADWP resource outages to concurrently perform pipeline maintenance that may affect those customers, thus minimizing customer, market, and grid impact.

VIII. QUALIFICATIONS

My name is Andrew J. Sawin. I am employed by SoCalGas as a Senior Engineer in the Gas Transmission Planning department. My business address is 555 West Fifth Street, Los Angeles, California, 90013-1011.

I received a Bachelor of Science degree in Mechanical Engineering from California State University Northridge in 2011, and am pursuing a Master's Degree in Engineering from

California State University Northridge. I have been employed by SoCalGas since 2011, and have held positions in the Gas Transmission Planning and Gas Transmission Technical Services departments.

My current responsibilities include: Transmission system planning and analysis; recommending improvements and additions as necessary; performing short-term capacity analyses for customer service requests from the transmission system; and evaluating system impacts from storage projects.

This concludes my prepared rebuttal testimony.