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(U 904 G) and S (U 902 G) For A Project Revenue	outhern California Gas Company an Diego Gas & Electric Company uthority To Recover North-South Requirement In Customer Rates al Of Related Cost Allocation And posals	 A.13-12-013 (Filed December 20, 2013)

UPDATED DIRECT TESTIMONY OF

JIMMIE I. CHO

SOUTHERN CALIFORNIA GAS COMPANY

AND

SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

November 12, 2014

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UPDATED DIRECT TESTIMONY OF JIMMIE I. CHO

I. PURPOSE

The purpose of my direct testimony is to explain why, from a policy standpoint, the North-South Project proposed by Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) is needed to help us fulfill our mission to provide safe and reliable natural gas service to all of our customers.

II. BACKGROUND

As natural gas corporations regulated by the California Public Utilities Commission (Commission), SoCalGas and SDG&E have an obligation to provide safe and reliable natural gas service to all natural gas customers in our service territory. We aren't allowed to pick and choose among the easiest to serve, or the most profitable, and as new customers enter our service territory, we are required to hook them up and provide service. In return for taking on these obligations, we are allowed to recover the reasonable costs of operating our systems, and we receive a Commission-established return of, and on, the capital investments we make to provide this service.

The service provided by SoCalGas and SDG&E includes comprehensive basin-to-burnertip service for core customers, and transportation-only service for noncore customers, some of whom, such as large electric generators (EGs), are not allowed to elect core service. Unlike service on interstate pipelines, the transportation service we provide to noncore customers is not tied to individual receipt points. All of our noncore customers can deliver supplies to any of our receipt points and we will redeliver those supplies to any end-use location within our system. This customer-friendly arrangement is made possible by the interconnected design of our pipelines and SoCalGas' substantial storage assets. These physical assets enable us to

receive gas at one location and redeliver like volumes to a location hundreds of miles away, notwithstanding physical flows that may prevent gas molecules from actually being exchanged between these two particular points.

SoCalGas and SDG&E also provide our noncore customers with liberal balancing tolerances – 10% *monthly* tolerances during most of the year – that provide substantial flexibility and value. These liberal balancing tolerances are also made possible by our large network of interconnected pipeline and storage assets.

As discussed by Mr. Bisi, one portion of our interconnected transmission system – SoCalGas' Southern Transmission System (Southern System) – requires minimum flowing supplies each day. This is because the Southern System can only receive a relatively small amount of flowing supplies from other parts of our system, and no supplies from storage. Without these minimum supplies, reliability would be compromised, and customers on the Southern System would face supply-based curtailments on a regular basis. This situation creates unique operational and reliability issues for the Southern System.

As explained by Ms. Marelli, the Commission has authorized SoCalGas to purchase the necessary minimum flowing supplies for the Southern System, sell those purchases at the Citygate, and pass the cost of those system support purchases on to customers. As also explained by Ms. Marelli, however, the cost of those Southern System support purchases has been increasing, and market forces will further limit the supplies that are likely to reach our Southern System in the future. Therefore, a physical response is needed to help fulfill our mission of providing safe and reliable natural gas service to the Southern System.

III. THE ELECTRIC SYSTEM IN SOUTHERN CALIFORNIA DEPENDS ON A RELIABLE NATURAL GAS SYSTEM

In September of 1993, the Commission eliminated alternate fuel capability as a requirement for noncore status of natural gas customers. Prior to that time, natural gas curtailments had been a fairly regular occurrence, and dual fuel capability helped to ensure that EGs would be able to keep running in the event of a curtailment. However, with the expansion of interstate pipeline capacity to Southern California and corresponding system capacity increases by SoCalGas, curtailments became infrequent. The increased reliability of natural gas service was coupled with new air quality regulations and market forces which incentivized EGs and other noncore customers to eliminate their fuel switching capability. As a result, natural gas is now the single fuel for a substantial portion of the EG resources serving Southern California, including most of the non-renewable EG resources located in the Southern System. Therefore, at least in part, the electric system in Southern California depends on a reliable natural gas system.

IV. OUR OTHER CUSTOMERS ALSO DEPEND ON A RELIABLE NATURAL GAS SYSTEM

Reliability is crucial for many noncore customers other than EGs. For example, hospitals, refineries, food processing facilities, military bases, and prisons are all noncore customers. Like EGs, these noncore customers no longer have dual fuel capability. Yet they, and the Californians they serve, could face substantial hardships if natural gas service is curtailed more frequently. The same holds true for our core residential and small business customers. As Mr. Bisi explains, the North-South Project will also reduce the potential for supply-related curtailments of core customers located on the Southern System.

¹ D.93-09-082.

V. A PHYSICAL SOLUTION IS NEEDED FOR THE SOUTHERN SYSTEM

SoCalGas and SDG&E customers will always be at risk of curtailment if there are significant problems on one or more of the interstate pipelines connected to our system. There is only so long that storage and in-state supplies can fully support a system and customer base as large as ours. But no portion of our system should be at the mercy of limited interruptions on the upstream interstate pipelines. Currently, however, *any* problem with upstream supplies on the El Paso system will potentially result in curtailments for Southern System customers, including EGs. In the long term, this is no way to run a natural gas system.

As explained by Ms. Marelli, the Commission has authorized SoCalGas to execute Southern System support purchases. However, as deliveries to Mexico from the El Paso system increase, supplies into Blythe are going to become more scarce and more expensive. This decrease in available supplies at Blythe will make it more difficult to find supplies at any price when problems occur in the supply basins or on interstate pipelines serving Southern California.

Natural gas customers served by the SoCalGas and SDG&E integrated transmission system should receive the same level of service, no matter where they are located. To achieve this, Southern System customers need to have access to supplies from SoCalGas' storage and other receipt points, and such access can only be achieved through physical upgrades.

As explained by Ms. Marelli and Mr. Bisi, the North-South Project described in this application is by far the best physical response to long-term Southern System reliability needs. The additional reliability provided by the North-South Project will be beneficial not just to Southern System customers, but to the state as a whole. There is no physical or economic line of demarcation between Northern and Southern California, or between portions of Southern California. We are all interrelated, and future reliability problems on the Southern System could

1 have an effect throughout our economy, particularly if those problems affect the electric grid.

The North-South Project is a reasonable and necessary response to the future flowing supply

needs of the Southern System.

VI. TIME IS OF THE ESSENCE

As explained by Ms. Marelli, Southern System support costs are increasing, deliveries from other customers are decreasing, and supply-related threats to Southern System reliability are on the rise. The quicker this project is put into service, the quicker we deal with these threats to reliability. But an infrastructure project of this magnitude takes time. As explained by Mr. Buczkowski, we anticipate that it will take at least six years to bring this project into service – assuming no unforeseen regulatory or environmental delays. Further, as pointed out by Mr. Buczkowski, delay will add additional costs to the project. In order that our estimated six-year project timeline is not extended even further, SoCalGas and SDG&E are requesting that the Commission process this application expeditiously.

VII. QUALIFICATIONS

My name is Jimmie I. Cho. I am the Senior Vice President, Gas Operations & System Integrity for SoCalGas and SDG&E. My business address is 555 West Fifth Street, Los Angeles, California 90013-1011.

I received a bachelor's degree in geology from Brown University and a master's degree in civil engineering from Stanford University.

I am responsible for all of gas operations and engineering. In my prior role, I served as Vice President of Gas Operations for SoCalGas and SDG&E where I oversaw all aspects of field operations including gas distribution, transmission, storage and system operations. I have also held prior roles as Vice President of Human Resources, Diversity, and Inclusion for SoCalGas,

- 1 Director of Customer Communications, Research and Web Strategy, Director of Safety and
- 2 Emergency Services, and Director of Customer Service Field Operations. I have also held
- positions of increasing responsibility in environmental engineering, corporate affairs, gas
- 4 operations and customer services.

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This concludes my updated prepared direct testimony.