

Application No: A.17-10-
Exhibit No.: _____
Witness: Paul Borkovich

Application of Southern California Gas Company
(U 904 G) and San Diego Gas & Electric Company
(U 902 G) Regarding Feasibility of Incorporating
Advanced Meter Data Into the Core Balancing
Process.

A.17-10-_____
(Filed October 2, 2017)

PREPARED DIRECT TESTIMONY OF
PAUL BORKOVICH
ON BEHALF OF
SOUTHERN CALIFORNIA GAS COMPANY
SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

October 2, 2017

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1 **PREPARED DIRECT TESTIMONY**
2 **OF PAUL BORKOVICH**

3 **I. PURPOSE**

4 The purpose of my prepared direct testimony on behalf of Southern California Gas
5 Company (“SoCalGas”) and San Diego Gas & Electric Company (“SDG&E”) is to explain why
6 SoCalGas and SDG&E are not proposing to modify the Utility Gas Procurement Department’s
7 (“Core Procurement Department’s”) core balancing procedures from the use of a daily core
8 forecast to the use of real-time usage information from the Advanced Metering Infrastructure
9 (“AMI”) systems.

10 **II. IT IS NOT PHYSICALLY POSSIBLE TO OBTAIN REAL-TIME USAGE**
11 **INFORMATION FOR EACH CORE CUSTOMER**

12 In D.07-12-019 (the “Omnibus Decision”), the California Public Utilities Commission
13 (“CPUC”) approved revisions to the natural gas operations and service offerings of SoCalGas
14 and SDG&E, including imbalance requirements for core customers. These revisions were
15 intended to achieve parity in costs and responsibilities between core and noncore customers.¹
16 The Commission ordered that the core market must balance to a 6 AM flow day forecast rather
17 than actual usage because “it is not physically possible to obtain real-time usage information
18 from each core customer.”² This reality remains unchanged. As the direct testimonies of Mr.
19 David Mercer and Mr. Jerry Stewart explain, the current AMI systems at SoCalGas and SDG&E
20 were not designed to provide real-time usage information for any core customer. Updating
21 SoCalGas’ and SDG&E’s current systems to provide “Hour Lag Data” (as that term is defined
22 in Mr. Mercer’s testimony) would incur significant costs, which are described in Mr. Mercer’s
23 and Mr. Stewart’s testimonies. Although Hour Lag Data is still not “real-time,” these costs were

¹ D.07-12-019 at 52.

² D.07-12-019 at 57.

1 estimated to provide a sense of the magnitude of the expenses that would be necessary to even
2 approach real-time data. For SoCalGas, these costs include upgrades to the advanced meters,
3 upgrades to the AMI system servers for data processing, and upgrades to SoCalGas' Electronic
4 Bulletin Board, SoCalGas ENVOY[®] (Envoy), to display aggregated core hourly meter usage to
5 the respective core balancing agents. Mr. Mercer's testimony also provides several potential
6 technical challenges that will be faced in such an effort. Based on these significant and costly
7 limitations, SoCalGas and SDG&E believe that the current system using daily forecasts to
8 determine core usage for the purpose of operational flow order ("OFO") compliance is still in
9 alignment with the Omnibus Decision.

10 Mr. Sharim Chaudhury's testimony provides details on how SoCalGas' Demand
11 Forecasting Group has recently improved its core forecast for SDG&E by using historical AMI
12 data for its core customers. Mr. Chaudhury proposes that, similarly, SoCalGas' AMI data be
13 used in the forecasting process when SoCalGas' AMI installation is complete and sufficient
14 historical AMI data is available. As noted by Mr. Chaudhury, SoCalGas and SDG&E are not
15 requesting in this application any additional revenues to make these improvements.

16 **III. CORRESPONDING IMPROVEMENTS TO SOCALGAS' ELECTRONIC**
17 **BULLETIN BOARD AND SOCALGAS' BILLING SYSTEM ARE NECESSARY**
18 **TO ACCOMMODATE HOUR LAG DATA**

19 As discussed above, the costs to update SoCalGas' and SDG&E's current systems to
20 provide Hour Lag Data were estimated to provide a sense of the magnitude of the expenses that
21 would be necessary to even approach real-time data. Construction of systems to report and
22 record Hour Lag Data would also be required to make possible the Core Procurement
23 Department transitioning from using a daily usage forecast; SoCalGas and SDG&E are not
24 proposing this change.

1 SoCalGas and SDG&E would need to be able to discretely measure each core customer's
2 usage each day, aggregate the daily usage by respective core balancing agent, report the
3 individual and aggregated usage to the core balancing agent each day, and store the individual
4 and aggregated daily usage in a form retrievable by the billing system that would calculate the
5 OFO noncompliance charges each month and charge them to the respective core balancing agent.
6 As mentioned in the previous section, and similar to the AMI system, Envoy was not designed to
7 manage Hour Lag Data. Therefore, additional modifications to Envoy and SoCalGas' billing
8 system would be necessary to provide core balancing agents with similar Hour Lag Data.

9 Minimum and maximum daily quantities would also need to be determined for core
10 customers that have elected to opt-out from the installation of automated measurement
11 capability. These amounts would have to be incorporated in the daily measurement database and
12 be periodically updated to maintain accuracy.

13 **IV. THE ENTIRE PACIFIC GAS & ELECTRIC COMPANY CORE MARKET** 14 **BALANCES TO A CORE FORECAST**

15 Pacific Gas & Electric Company ("PG&E") also uses a daily forecast process as a proxy
16 for real time usage by all core balancing agents on its gas system. Commission Order D.16-06-
17 056 summarized PG&E's current core balancing requirements by stating:

18 Under Gas Rule 21, PG&E's Core Gas Supply (CGS) Department
19 and CTAs (collectively, the Core Procurement Groups, or CPG)
20 must match nominated supply to daily usage for the customers for
21 which they are responsible. PG&E's Gas Control provides each
22 CPG with an individualized estimate of its customers' aggregate
23 daily usage (Determined Usage). Each CPG must supply this
24 amount of gas to the system or incur a penalty. Further, each CPG
25 must stay within a monthly balancing target of 5 percent of actual
26 aggregated metered usage. Otherwise, tariffs require PG&E to buy
27 or sell volumes on the customer's behalf to correct the imbalance.³

³ D.16-06-056 at 359.

1 SoCalGas and SDG&E can conclude from this that using a daily load forecast as a proxy
2 for real time core usage is not an isolated practice limited to the SoCalGas and SDG&E systems.

3 This concludes my prepared direct testimony.

4 **V. QUALIFICATIONS**

5 My name is Paul D. Borkovich. My business address is 555 West Fifth Street,
6 Los Angeles, California 90013-1011. I am employed by SoCalGas as the Energy Markets
7 Segment Manager in the Capacity Products Support Department. My responsibilities are to
8 manage transportation services provided to suppliers and marketers who provide gas to SDG&E
9 and SoCalGas customers. I also manage the Backbone Transportation Service program, the
10 California Energy Hub back office, policies and procedures for scheduling and nominations on
11 the SDG&E and SoCalGas systems, daily operation and enhancements to SoCalGas' Electronic
12 Bulletin Board, and all aspects of SoCalGas and SDG&E's interconnect and operational
13 balancing agreements with pipelines delivering natural gas into their integrated transmission
14 system. I have been employed by SoCalGas in numerous positions including: Capacity Projects
15 Support Manager, Senior Accounts Manager, Project Manager, Market Strategy Manager, Senior
16 Market Advisor, Gas Scheduling Manager, Regulatory Affairs Administrative Manager, Account
17 Executive Supervisor, Account Executive, Market Analyst, and Energy Systems Engineer. I have
18 been responsible for various aspects of utility operations, sales and marketing, regulatory
19 matters, and customer relations. I graduated in 1981 from University of California Santa Barbara
20 with a Bachelor of Science Degree in Mechanical Engineering and in 1985 from the University
21 of Southern California with a Master of Science Degree in Petroleum Engineering.

22 I have previously testified before the California Public Utilities Commission.