Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2019 General Rate Case
Application: A.17-10-___
Exhibit: SDG&E-37

SDG&E

DIRECT TESTIMONY OF ROSE-MARIE PAYAN

(GAS CUSTOMER FORECAST)

October 6, 2017

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

317042

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SUMMARY

- The annual average total gas customers are forecasted to increase from 875,462 in 2016 to 892,419 in 2019.
- Gas customer growth is forecasted to be 0.60%, 0.55%, 0.71%, and 0.67% in 2016, 2017, 2018, and 2019, respectively.

SDG&E DIRECT TESTIMONY OF ROSE-MARIE PAYAN
(GAS CUSTOMER FORECAST)

I. INTRODUCTION

A. Summary of Proposals

My testimony presents San Diego Gas & Electric Company's (SDG&E) gas customer and new meter forecast for Test Year (TY) 2019.

B. Organization of Testimony

Section II of my testimony discusses the forecast. Section III discusses the forecast methodology. My testimony provides a forecast for active meters, which in turn is assumed to translate into customers. As such, new meters and new customers are used interchangeably herein. Further, this testimony does not discuss gas volumes, as SDG&E is using the current adopted throughput forecast as its gas sales assumption, as adopted by the California Public Utilities Commission (CPUC) in Decision (D.) 14-06-007 regarding the Triennial Cost Allocation Proceeding (TCAP) Phase II Settlement Agreement.

C. Support To/From Other Witnesses

The gas customer forecast is used primarily to determine financial needs for certain customer services and new meter installations in TY 2019. For this purpose, total customers are defined as total active meters. Needs related to new meter installations resulting from forecasted gas customer growth are discussed in the Gas Distribution testimony of Gina-Orozco Mejia (Exhibit SDG&E-04). Customer growth is also discussed in the Customer Services Field testimony of Gwen Marelli (Exhibit SDG&E-17) as it relates to the area of customer service field and meter reading operations.

My testimony is limited to the gas customer forecast. As such, the electric market customer forecast is discussed in the Electric Customer Forecast testimony of Kenneth Schiermeyer (Exhibit SDG&E-38).

II. RECORDED DATA AND FORECAST OF CUSTOMERS AND NEW METERS

The annual average total gas customers are forecasted to increase from 875,462 in 2016 to 892,419 in 2019. This represents a total three-year increase of 16,957 customers and a compound annual growth rate of 0.6 percent. Table RMP-1 shows annual total gas customer

recorded data from 2012 through 2016, and forecasted data from 2017 through 2021. Gas customers are forecasted to grow by a net 5,909 from 2018 to 2019, compared to recorded net growth of 5,260 from 2015 to 2016. The process and methodology by which this forecast was derived is described in Section III.

Table RMP-1
San Diego Gas & Electric Company
Average Annual Total Gas Customers

Year	Gas Customers	% change
2012	856,752	0.54%
2013	862,010	0.61%
2014	865,093	0.36%
2015	870,203	0.59%
2016	875,462	0.60%
2017	880,289	0.55%
2018	886,510	0.71%
2019	892,419	0.67%

III. FORECAST METHODOLOGY

A. General Description

The total gas customer count includes quarterly-data forecasts for two major customer classes: residential meters and total commercial and industrial (C&I) meters. As stated in Section I.C above, total customers are defined as total active meters. For the residential market segment, SDG&E uses housing-starts as the basis of its forecast because a housing start has more likelihood of completion than a housing permit and once complete, the housing start is likely to lead to a new gas meter hookup. Recorded and forecasted housing-start assumptions underlying the residential customer forecast came from IHS Global Insight's February 2017 Regional Forecast for San Diego County.[1] The employment assumptions underlying the C&I customer forecast used San Diego County recorded data from the California Employment Development Department.[2] Recorded employment data were then projected into the forecast period by applying Global Insight's forecasted percentage growth rates to the latest year of corresponding recorded data at the time the forecast was made. Employment assumptions are utilized as the

[1] IHS Global Insight is an internationally recognized econometric forecasting firm. The firm's forecasts have been used in many regulatory proceedings, including SoCalGas' TY 2016 GRC.
[2] http://www.labormarketinfo.edd.ca.gov/data/employment-by-industry.html.

basis for the non-residential forecast because the business cycle drives production in commercial and industrial sectors. When economic activity contracts, businesses exit and active meters become inactive. However, when business activity is expanding, new commercial and industrial meters are connected in our service territory.

SDG&E uses econometric and statistical techniques to develop quarterly-data forecasts of residential and C&I customers based on the data discussed above. The econometric models are linear. Once a fitted relationship is established, a comparison is made between the historical data and the predicted values for the most recent observed historical period. As a final step, the model forecasts are calibrated to match up with the last recorded actuals so the forecast and the historical trend are consistent. Detailed equations, methods, and data are shown in my workpapers in Exhibit SDG&E-37-WP.

B. Residential

Residential customers are first forecasted in terms of gas-serviced residential dwelling units as a function of lagged authorized housing starts. Some residential gas meters have multiple residential units connected to them. Total residential customers are forecasted to increase from 845,289 in 2016 to 861,541 in 2019, with average annual compound growth of 0.64%.

C. Non-Residential

C&I is defined as all other non-residential customers -- with the exception of approximately 50 customers in the natural gas vehicle (NGV) fueling and electric generation sectors. C&I customers are forecasted based on total San Diego County employment and are predicted to be 30,712 in 2019, a slight increase from the 2016 recorded total C&I customers of 30,018. The employment assumptions underlying the non-residential customer forecast are based on recorded data from the California Employment Development Department. For the forecast, percentage growth rates for San Diego County were taken from Global Insight's February 2017 Regional Forecast.

Table RMP-2 shows gas customers by class for each year, plus the forecasted three-year percentage change from recorded year 2016 through TY 2019.

Table RMP-2
San Diego Gas & Electric Company
Average Annual Gas Customers By Class

Gas Customers	2016	2017	2018	2019	Total % Change 2016 to 2019
Residential	845,289	849,856	855,820	861,541	16,252 or 1.9%
Commercial & Industrial	30,018	30,277	30,527	30,712	694 or + 2.3%
NGV	25	26	26	27	2 or + 8.0%
Electric Generation	80	86	88	90	10 or + 12.5%
TOTAL	875,462	880,289	886,510	892,419	16,957+ 1.9%

IV. CONCLUSION

SDG&E's customer forecast model projects growth in total gas meters to increase from 875,462 in 2016 to 892,419 in 2019. Based on the foregoing, SDG&E requests the CPUC adopt this forecast.

This concludes my prepared direct testimony.

V. WITNESS QUALIFICATIONS

My name is Rose-Marie Payan. My business address is 555 West Fifth Street, Los Angeles, California, 90013. I am employed by Sempra Energy Utilities. Since 2005, I have been employed as a forecasting advisor and as a principle economic regulatory advisor in the Gas Regulatory Affairs Department for SoCalGas and SDG&E.

My academic and professional qualifications are as follows: I earned an undergraduate degree in Economics from the University of California, Davis in 1990, where I was also a Regents' Scholar. In 1993, I received my Master of Arts Degree in Economics from the University of California, Santa Barbara. My employment outside of SoCalGas has been in the area of Economics. I held the positions of: Analyst at Micronomics, Consultant at Navigant Consulting; Economics Lecturer at California Polytechnic Institute, San Luis Obispo; and Adjunct Lecturer at California State University, Channel Islands, Diablo Valley College, Glendale Community College and California State University, Los Angeles. I have taught courses on econometrics, money and banking, macroeconomics and microeconomics.

I have previously testified before the CPUC.

LIST OF ACRONYMS

ACRONYM	DEFINITION
C&I	Commercial and Industrial
CPUC	California Public Utilities Commission
NGV	Natural Gas Vehicle
SDG&E	San Diego Gas & Electric Company
TCAP	Triennial Cost Allocation Proceeding
TY	Test Year