Application No:	<u>A.17-05-</u>
Exhibit No.:	
Witness:	H. Moreno

Application of Southern California Gas Company (U 904 G) for Approval To Extend the Mobilehome Park Utility Upgrade Program.

Application 17-05-_____(Filed May 5, 2017)

CHAPTER 3

COST FORECAST FOR CONVERSION ACTIVITIES

PREPARED DIRECT TESTIMONY OF

HECTOR S. MORENO

ON BEHALF OF

SOUTHERN CALIFORNIA GAS COMPANY

DEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

May 5, 2017

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I. PURPOSE

The purpose of my testimony is to sponsor the direct capital and operations and maintenance ("O&M") forecasted costs for Southern California Gas Company's ("SoCalGas") Mobilehome Park Utility Upgrade Program ("Program"). The Program is a six-year extension (i.e., 2018-2023) of the three-year pilot program ("Pilot"), which was authorized by the California Public Utilities Commission ("Commission"), to provide safe and reliable utility service at mobilehome parks and manufactured housing (jointly, "MHP") communities by transferring master-metered natural gas and electricity to direct utility service.¹

II. COSTS ASSOCIATED WITH SOCALGAS' PROPOSED MHP PROGRAM

SoCalGas proposes to convert approximately an additional 20% of MHP spaces in its service territory as part of the Program between January 1, 2018 and December 31, 2023, which translates to an estimated 26,000 MHP spaces to be converted during the proposed timeframe.

SoCalGas' forecast is based on the proposed number of MHP spaces to convert at the average To-The-Meter ("TTM") and Beyond-The-Meter ("BTM") per-space preliminary average conversion cost as of December 31, 2016.² In addition to TTM and BTM costs, the forecast includes estimated program management costs for the Program period, related overheads, escalation, Construction Work In Progress ("CWIP"), property tax, and Allowance for Funds Used During Construction ("AFUDC").

TTM costs include utility and contracted labor, purchased services and materials, and trenching and paving. Utility labor costs include civil construction, setting meters, gas service turn-on, purging of legacy systems, removal of master meters, and the procurement and warehousing of materials.

¹ See Decision ("D.") 14-03-021, issued on March 13, 2014.

² See SoCalGas Mobilehome Park Utility Upgrade Program, February 1, 2017 Report.

BTM costs include work related to the connection of new utility services from the meter to the mobile home; this work is performed by BTM contractors selected by MHP owner/operator.

Program management costs include Program Outreach activities, such as primary customer contact and coordination before, during, and after construction activities in accordance with the Commission-reviewed statewide Outreach Plan; Program Construction Management ("CM"), which includes construction management and planning; and Project Management Office ("PMO") activities which include program strategy, risk, change, and schedule management, liaison for the Program's regulatory reporting compliance, and the Program's budgeting and accounting functions. To leverage PMO resources, selected PMO staff provide management services to both SoCalGas and San Diego Gas & Electric Company ("SDG&E"), and costs for such staff are allocated at a rate of 50% to each utility.

Last, as the MHP Pilot activities are still being performed and the current average costs³ reflect only preliminary findings, SoCalGas' cost forecast includes a 20% contingency⁴ to accommodate the risks of numerous uncertainties which may affect the Program execution, and thereby its cost estimates. Further details on potential risks are found in Section III ("Factors Which Could Impact Cost Forecasts") in this testimony.

SoCalGas anticipates that 2018 Program activities will be primarily focused on Outreach, preliminary MHP eligibility, application processing, and engineering and planning for the new

³ See SoCalGas Mobilehome Park Utility Upgrade Program, February 1, 2017 Report, appended hereto as Attachment A.

⁴ SoCalGas adds this contingency, even though its forecasted costs are based on its actual experiences in executing the MHP Pilot Program, in order to account for the numerous factors the Commission recognized in D.14-03-021 that cause variances: "the physical conditions at MHP master-meter / submeter systems will vary greatly, depending upon age, type of materials used in prior construction, existing MHP design, terrain and other factors." *See* D.14-03-021 at p. 49. In any event, notwithstanding inclusion of this contingency, as with the MHP Pilot Program, all Program costs will be subject to an after-the-fact reasonableness review in SoCalGas's general rate case.

group of selected MHPs. The annual conversion forecast shown in Table 1 reflects these assumptions. Table 1 also represents SoCalGas' cost projections with the expectation that joint trenching efforts will be continued whenever possible to permit conversion of natural gas and electric systems in order to maximize efficiency and minimize costs ("Joint Trenching Request").

Table 1
SoCalGas Annual MHP Space Conversion and Costs
(In Millions of Dollars, Nominal)

	20	018	20	019	2020	20)21	2022	2023	20	024	Total
Annual Space Conversion		1	4,	,650	6,000	6,	000	5,900	3,450		-	26,000
TTM Direct Capital	\$	2.2	\$	25.8	\$ 32.0	\$	32.0	\$ 31.3	\$ 19.6	\$	-	\$ 142.9
TTM Direct O&M		0.3		0.4	0.4		0.4	0.4	0.4		-	\$ 2.3
BTM Direct Regulatory Asset				12.8	16.5		16.5	16.2	9.5		-	\$ 71.5
Other Costs*		1.8		7.9	10.5		11.9	13.0	10.3		0.1	\$ 55.5
Total Program Costs	\$	4.2	\$ 4	46.9	\$ 59.5	\$ 6	60.8	\$ 61.0	\$ 39.8	\$	0.1	\$ 272.2

^{*}Includes overhead, escalation, CWIP property tax, and AFUDC.

Table 2 summarizes the costs associated with SoCalGas' Joint Trenching Request compared to costs if joint trenching is not feasible and assumes that the participating MHPs will only convert their natural gas systems ("Alternate Proposal").

Table 2
Comparison of Fully Loaded & Escalated Costs
(In Millions of Dollars, Nominal)

	F	Request	 lternate ropos al
TTM Direct Capital	\$	142.9	\$ 170.1
TTM Direct O&M		2.3	2.3
BTM Direct Regulatory Asset		71.5	75.3
Other Costs*		55.5	62.0
Total Program Costs	\$	272.2	\$ 309.8
Cost Per Space (in dollars)	\$	10,470	\$ 11,914

^{*}Includes overhead, escalation, CWIP property tax, and AFUDC.

O&M Program costs are expected to be primarily Outreach activities and a percentage of the Program management activities in support of Outreach functions.

The regulatory accounting treatment of costs associated with the Program are detailed in the Chapter 4 prepared direct testimony of Reginald M. Austria. For a discussion of the illustrative revenue requirements of the Program, see the Chapter 5 prepared joint direct testimony of Karen C. Chan and Ramon Gonzales.

III. FACTORS WHICH COULD IMPACT COST FORECASTS

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The cost estimates for TTM, BTM, and Program Management are based on a sample of 32 MHPs (i.e., 16% of MHPs participating in the Pilot) converted as part of the Pilot activities prior to December 31, 2016, and may differ from the final costs to convert all MHPs that participate in the Program. As contemplated by D.14-03-021 and based on its actual experience, SoCalGas expects the costs to continue to fluctuate as more MHP conversions are completed.⁵ A number of assumptions may affect the final average per-space cost, specifically: that there are no constraints which may prevent the MHP's participation in the Program, such as the MHP owner's ability and willingness to complete and move forward with a detailed application, execute the Program Agreement, grant the required easements, secure a qualified BTM contractor, finance the BTM construction activities and removal of the legacy system as necessary, and meet the prescribed program schedule. The plan also assumes that the total number of MHP spaces indicated on the Form of Intent ("FOI") completed by the MHP owners is accurate. Further assumptions include that a joint schedule can be developed and be deemed acceptable and executable by all impacted utilities where shared territory requires joint construction. Costs are further dependent on availability of both TTM and BTM contractors having sufficient qualified crews to perform construction activities, and the California

⁵ See D.14-03-021 at pp. 49.

Department of Housing and Community Development ("HCD") and/or other jurisdictional agencies having available trained resources to perform timely inspections on completed portions of the projects.

IV. CONCLUSION

The process for forecasting costs associated with SoCalGas' Mobilehome Park Utility
Upgrade Program proposed in this Application is based upon costs actually incurred by
SoCalGas in executing the MHP Pilot Program authorized in D. 14-03-021 and therefore should be adopted as reasonable.

This concludes my prepared direct testimony.

V. WITNESS QUALIFICATIONS

My name is Hector S. Moreno. I am employed by SoCalGas and my business address is 555 West Fifth Street, Los Angeles, California 90013-1011. I hold the position of Program Management Office ("PMO") Manager for the Mobilehome Park Utility Upgrade Program which is responsible for managing the Program's Governance and Financial activities. My responsibilities include implementing and executing processes in compliance with project management best practices including risk management, change management, schedule management, and finance and cost controls in support of the Program. I have held my current position since August 11, 2014. Prior to August 11, 2014, I served as the Governance, Contracts and Audit Controls Manager for SoCalGas' Advanced Meter Program. Since joining SoCalGas in 1988, I have held positions of increasing responsibility in the areas of Information Systems, Project Management, Energy Savings Assistance Programs, and Internal Audit. I hold a Bachelor of Science Degree from University of Phoenix, Certified Information Systems Auditor ("CISA"), and Project Management Professional ("PMP") certifications.

I have not previously testified before the Commission.





Mobilehome Park Utility Upgrade Program

FEBRUARY 1, 2017 Report

SOCALGAS MOBILEHOME PARK UTILITY UPGRADE PROGRAM FEBRUARY 1, 2017 REPORT

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Mobilehome Park Utility Upgrade Program

FEBRUARY 1, 2017 Report

1. Executive Summary

On March 13, 2014, the California Public Utilities Commission ("Commission") approved and authorized Southern California Gas Company ("SoCalGas") to execute the *Mobilehome Park Utility Upgrade Program* ("Program") through D.14-03-021 ("Decision"). The Program is a three-year pilot (2015-2017) to convert master-metered/sub-metered natural gas and/or electric services to direct utility services for qualified mobile home parks and manufactured housing communities (collectively "MHPs").

The Decision directs each electric and/or gas utility to annually prepare a status report for the Program on February 1 of each year. Pursuant to Ordering Paragraph ("OP") 10 of the Decision, each electric and/or gas utility filed their first status report on February 1, 2016; and must file a second and third report on February 1 of 2017 and 2018, respectively. In SoCalGas' February 1, 2016 Report, SoCalGas provided a timeline for implementation of the three-year pilot, its current status on the timeline, the number of initial applications received, information on the MHPs that would be converted, and the number of spaces to be converted.

In accordance with OP 10 of the Decision, this report provides information on the following: (1) a Program timeline and the current progress towards that timeline, and (2) a preliminary quantification of construction costs incurred per space identified separated by "to the meter" and "beyond the meter." The Decision further requires that on both "to the meter" and "beyond the meter" bases, cost should be broken out to identify: civil work/trenching; other gas system construction (if applicable); other electric system construction (if applicable); and other costs such as permits and easements.

As of December 31, 2016, SoCalGas has completed conversion of 32 MHPs (of 199 MHPs currently in scope) with a combined total of 1,665 spaces (of 11,619 spaces currently in scope). An additional 59 MHPs are in various stages of construction. The total conversion cost for the 32 MHPs is \$15,843,099. These costs may be adjusted as trailing and other costs are received and charged to their respective MHPs.

2. Program Timeline and Where SoCalGas is on the Timeline

The Program has been planned to achieve the conversion, on a combined To-The-Meter ("TTM") and Beyond-The-Meter ("BTM") basis of 10% of the estimated spaces in SoCalGas' service territory, which currently represents approximately 12,800 spaces. However, there have been a number of MHPs that have elected not to move forward which has resulted in a current space count of 11,619 across 199 MHPs or approximately 9% of all MHP master meter spaces in SoCalGas' territory. To reach all participating MHP spaces, SoCalGas developed the timeline shown in Figure 1 ("Timeline for Implementation of Three-Year Pilot") noting that, where possible, dual conversions (natural gas and electric) have been planned through joint efforts with the respective electric service providers. Additionally, joint trenching opportunities may be leveraged with the MHP's existing telecommunications¹ provider(s).

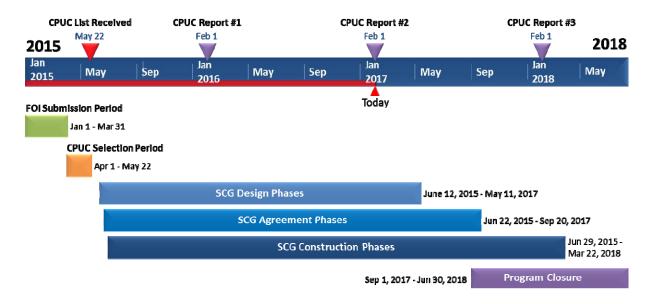
A number of assumptions are inherent in the Schedule, specifically; it assumes that there are no constraints which may prevent the MHP's participation in the Program, such as the MHP owner's ability and willingness to complete and move forward with a detailed application, execute the Program Agreement, grant the required easements, secure a qualified BTM contractor, successfully address any environmental issues, finance the BTM construction activities and removal of the legacy system as necessary, and meet the prescribed program schedule. The timeline also assumes that the total number of MHP spaces indicated on the Form of Intent ("FOI") completed by the MHP owners is accurate. Further assumptions include, but are not limited to, the ability for a joint schedule to be developed, acceptable, and executable by all impacted utilities where shared territory requires joint construction. Also, the schedule is dependent on availability of both TTM and BTM contractors having qualified crews to perform construction and the California Department of Housing and Community Development ("HCD") and/or other jurisdictional agencies having available trained resources to perform timely inspections on completed portions of the projects. SoCalGas' schedule is expected to continue to change throughout the Program's life as Agreements are signed and MHPs decline or opt to participate.

As of December 31, 2016, SoCalGas has 167 MHP designs completed and has 91 MHPs currently in the construction stage or where construction has completed.

Based on its current schedule, SoCalGas forecasts starting all 11,619 currently participating MHP spaces by August 30, 2017, and completing conversion of approximately 80% of the goal by December 31, 2017, whereby major construction activities would be substantially underway.

¹ As of December 31st, 2016, one telecommunications provider has participated in one MHP conversion.

FIGURE 1. TIMELINE FOR IMPLEMENTATION OF THREE-YEAR PILOT AND CURRENT STATUS



3. Preliminary Cost Assessment

As of December 31, 2016, SoCalGas has converted² 32 MHPs (of 199 MHPs currently in scope) with a combined total of 1,665 spaces (of 11,619 spaces currently in scope). In accordance with OP 10 of the Decision, SoCalGas' preliminary quantification of construction costs incurred per space are shown in Table 1 ("SoCalGas Preliminary Quantification of Construction Costs") below. These costs may be adjusted as trailing costs or other changes are required and allocated to their respective MHPs³.

Table 1 details preliminary costs for each category of:

- (1) TTM Contractor Costs, which include contractor costs for gas-only MHPs as well as the portion paid by SoCalGas for TTM activities which are shared with other participating utilities where service territories overlap⁴. These are comprised but not limited to including trenching and paving;
- (2) Utility Crews and Material Cost: This includes the loaded costs of company labor in support of the program including to-the-meter work for selected MHPs, setting meters and tuning on gas service, purging the legacy system, removal of the master meter, as well as the procurement and warehousing of materials.
- (3) BTM Contractor Costs, which are costs reimbursed to the MHP owner/operator to perform the BTM construction work. BTM contractors are selected by the MHP owner/operator; and
- (4) Program Management Costs ("PMC"), which are comprised of:
 - (a) Project Management Office ("PMO") which includes overall Program Management (e.g. program strategy, risk management, change management, schedule management) and the program's Budgeting and Accounting functions;
 - (b) Construction Management ("CM"), which includes Construction Project Management, preliminary planning and full design activities. Planners and designers perform work for multiple parks. Project Managers, Construction Contractor Administration staff, and other support personnel also perform work at multiple construction sites; and

² SoCalGas labels "Converted" MHPs as those where System Cutover has occurred, Master Meter has been removed, and all costs for all TTM, BTM, PMC costs are expected to have been received and allocated to each MHP. SoCalGas established and strives to meet a "Closing Period" of 180-days beyond Master Meter removal to allow for these activities to occur. This report includes MHPs which have completed or are in the Closing Period.

³ "Trailing charges" may include, but are not limited to, contractor invoices, internal labor charges, or other costs which may not have been received within SoCalGas' Closing Period.

⁴ Pacific Gas & Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company.

(c) Outreach activities which include primary customer contact and coordination before, during and after construction consistent with the Commission-reviewed statewide Outreach Plan.

PMC are tracked separately from TTM costs and BTM Contractor costs and allocated to each MHP based on the number of spaces converted. PMC are allocated as part of SoCalGas' project close activities. To most efficiently utilize PMO resources, selected PMO staff provides management and services to both SoCalGas and SDG&E and costs for such staff are allocated at a rate of 50% to each utility.

TABLE 1. SOCALGAS PRELIMINARY QUANTIFICATION OF CONSTRUCTION COSTS

So	CalGas	
1	To The Meter (TTM) Contractor Costs	
2	Civil / Trenching	\$4,294,587
3	Electric System	N/A
4	Labor	
5	Materials/Structures	
6	Gas System	
7	Labor	\$1,259,160
8	Materials/Structures	\$641,722
9	Sub-Total TTM Contractor Costs	\$6,195,469
10		
11	Other TTM Non-Labor Costs	
12	Property Taxes	\$8,954
13	AFUDC	\$60,817
14	Sub-Total Other TTM Non-Labor Costs	\$69,770
15	Sub-Total TTM Costs	\$6,265,239
16		
10		
17	Beyond The Meter (BTM) Contractor Costs	
	Beyond The Meter (BTM) Contractor Costs Civil / Trenching	-
17		- N/A
17 18	Civil / Trenching	- N/A
17 18 19	Civil / Trenching Electric System	- N/A
17 18 19 20 21 22	Civil / Trenching Electric System Labor Materials/Structures Gas System	\$2,956,463
17 18 19 20 21	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor	\$2,956,463 \$2,117,036
17 18 19 20 21 22	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor Materials/Structures	\$2,956,463 \$2,117,036 \$839,427
17 18 19 20 21 22 23	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor	\$2,956,463 \$2,117,036
18 19 20 21 22 23 24	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor Materials/Structures	\$2,956,463 \$2,117,036 \$839,427
17 18 19 20 21 22 23 24 25	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor Materials/Structures Other ⁵	\$2,956,463 \$2,117,036 \$839,427 \$784,411
17 18 19 20 21 22 23 24 25 26 27	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor Materials/Structures Other ⁵ Sub-Total BTM Costs Costs for Utility Crews (UC) supporting	\$2,956,463 \$2,117,036 \$839,427 \$784,411
17 18 19 20 21 22 23 24 25 26 27	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor Materials/Structures Other ⁵ Sub-Total BTM Costs Costs for Utility Crews (UC) supporting Program ⁶	\$2,956,463 \$2,117,036 \$839,427 \$784,411 \$3,740,874
17 18 19 20 21 22 23 24 25 26 27	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor Materials/Structures Other ⁵ Sub-Total BTM Costs Costs for Utility Crews (UC) supporting	\$2,956,463 \$2,117,036 \$839,427 \$784,411
17 18 19 20 21 22 23 24 25 26 27	Civil / Trenching Electric System Labor Materials/Structures Gas System Labor Materials/Structures Other ⁵ Sub-Total BTM Costs Costs for Utility Crews (UC) supporting Program ⁶	\$2,956,463 \$2,117,036 \$839,427 \$784,411 \$3,740,874

32

⁵ Includes city, Local Enforcement Agency (LEA) and/or HCD fees.
⁶ Includes meter Installation and turn-on, legacy system purging, master meter removal, company crews performing civil, trenching, construction, and installation for selected MHPs.

33	Program Management Costs (PMC)					
34	Program Management Office (PMO)		\$652,264			
35	Outreach		\$249,222			
36	Construction Management (CM)		\$2,466,950			
37	Subtotal Program Management Costs		\$3,368,435	-		
38						
39	TOTAL		\$15,843,099			
40						
41	Total Spaces Converted	TTM	BTM			
42	Gas	1,665	1,459			
43	Electric	N/A	N/A			
44				-		
45	Average Cost / Space	TTM	BTM	UC	PMC	TOTAL
46	Gas	\$3,763	\$2,564	\$1,483	\$2,023	\$9,833
47	Electric	N/A	N/A	N/A	N/A	\$0

4. Conclusion

48 Total Average Cost / Space

This concludes the second annual filing in accordance with OP 10 of D.14-03-021.

Additional Program information can be found online on SoCalGas' website at https://www.socalgas.com/stay-safe/safety-and-prevention/mobilehome-park-utility-upgrade-program

\$3,763

\$2,564

\$1,483

\$2,023

\$9,833



Mobilehome Park Utility Upgrade Program Management Certification

California Public Utilities Commission (CPUC) Decision (D.) 14-03-021 Ordering Paragraph 11 requires that all reports be verified by an officer of the utility.

As an officer of the Southern California Gas Company (SoCalGas), I hereby certify that the Mobilehome Park Utility Upgrade Program Annual Report generated in compliance with D.14-03-021 is accurate.

Reporting Period:	January 1	<u>1, 2016</u> to	December 31, 2016	
	Start D	ate	End Date	
Sing Oros	co nejo	_ Executed on:	/30/2017	
Signature of C	Officer /		Month, Day, Year	
Gina Orozco-N	lejia	Vice Preside	nt – Gas Operations	
Print Name			Title	