

Application No: A.17-05-
Exhibit No.: _____
Witness: H. Moreno

Application of San Diego Gas & Electric Company
(U 902 M) 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
SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

May 5, 2017

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1 **I. PURPOSE AND OVERVIEW OF TESTIMONY**

2 The purpose of my testimony is to sponsor the capital and operations and maintenance
3 (“O&M”) forecasted costs for San Diego Gas & Electric Company’s (“SDG&E”) Mobilehome
4 Park Utility Upgrade Program (“Program”). The Program is a six-year extension (i.e., 2018-
5 2023) of the three-year pilot program (“Pilot”), which was authorized by the California Public
6 Utilities Commission (“Commission”), to provide safe and reliable utility service at mobile home
7 parks (“MHP”) and manufactured housing communities by transferring master-metered natural
8 gas and electricity to direct utility service.¹

9 **II. COSTS ASSOCIATED WITH THE SDG&E’S PROPOSED MHP PROGRAM**

10 SDG&E proposes to convert approximately 20% of mobile home spaces in its service
11 territory as part of the Program between January 1, 2018 and December 31, 2023, which
12 translates to an estimated 6,615 spaces to be converted during the proposed timeframe.

13 SDG&E’s forecast is based on the proposed number of MHP spaces to convert at the
14 average To-The-Meter (“TTM”) and Beyond-The-Meter (“BTM”) per-space preliminary average
15 conversion cost as of December 31, 2016.² In addition to TTM and BTM costs, the forecast
16 includes estimated program management costs for the Program period, related overheads,
17 escalation, Construction Work In Progress (“CWIP”), property tax, and Allowance for Funds
18 Used During Construction (“AFUDC”).

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

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

² See SDG&E Mobilehome Park Utility Upgrade Program, February 1, 2017 Report, appended hereto as Attachment A.

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

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

13 As the MHP Pilot activities are still being performed and the current average costs³
14 reflect only preliminary findings, SDG&E’s cost forecast includes a 20% contingency⁴ to
15 accommodate the numerous uncertainties which affect the Program execution, and thereby its
16 cost estimates. Further details on potential risks are found in Section III (“Factors Which Could
17 Impact Cost Forecasts”) in this testimony.

18 SDG&E anticipates that 2018 Program activities will be primarily focused on Outreach,
19 preliminary MHP eligibility, application processing, and engineering and planning for the new

³ See SDG&E’s Mobilehome Park Utility Upgrade Program, February 1, 2017 Report.

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.

1 set of selected MHPs with a limited number of conversions. The annual conversion forecast
 2 shown in Table 1 (“SDG&E Annual MHP Conversion and Costs”) reflects these assumptions.

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

	2018	2019	2020	2021	2022	2023	2024	Total
Estimates MHP Spaces Converted	715	1,400	1,400	1,035	1,035	1,030	-	6,615

Gas	2018	2019	2020	2021	2022	2023	2024	Total
TTM Direct Capital	1.0	11.1	11.0	8.7	8.7	8.6	-	49.1
TTM Direct O&M	0.1	0.1	0.1	0.1	0.1	0.1	-	0.4
BTM Direct Regulatory Asset	-	6.3	6.3	4.8	4.8	4.8	-	27.2
Other Costs*	1.0	3.5	4.0	3.8	4.2	4.5	0.0	20.9
Total Gas Costs	\$2.0	\$20.9	\$21.4	\$17.4	\$17.8	\$18.0	\$0.0	\$ 97.6

Electric	2018	2019	2020	2021	2022	2023	2024	Total
TTM Direct Capital	1.1	12.4	12.3	9.8	9.8	9.6	-	55.0
TTM Direct O&M	0.1	0.1	0.1	0.1	0.1	0.1	-	0.4
BTM Direct Regulatory Asset	-	6.3	6.3	4.8	4.8	4.8	-	27.2
Other Costs*	1.1	3.6	4.3	4.2	4.7	5.2	0.0	23.3
Total Electric Costs	\$2.3	\$22.4	\$23.1	\$18.9	\$19.4	\$19.8	\$0.0	\$105.9

Total Program Costs **\$4.3 \$43.3 \$44.5 \$36.3 \$37.2 \$37.8 \$0.1 \$203.5**

3 *Includes overhead, escalation, CWIP property tax, and AFUDC

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

6 The regulatory accounting treatment of costs associated with the Program are detailed in
 7 the Chapter 4 prepared direct testimony of Reginald M. Austria. For a discussion of the
 8 illustrative revenue requirements, see the Chapter 5 prepared direct testimony of Mr. M.
 9 Woodruff and Mr. J. Vanderhye.

1 **III. FACTORS WHICH COULD IMPACT COST FORECASTS**

2 The cost estimates for TTM, BTM, and Program management are based on a sample of
3 six MHPs (i.e., 18% of MHPs participating in the Pilot) converted as part of the Pilot activities
4 prior to December 31, 2016, and may differ from the final costs expected to be incurred by all
5 MHPs who ultimately participate in the Program. As contemplated by D.14-03-021, SDG&E
6 expects the costs to continue to fluctuate as more MHP conversions are completed.⁵ A number
7 of assumptions inherent in the plan may affect the final average per-space cost, including that
8 there are no constraints which may prevent the MHP’s participation in the Program, such as the
9 MHP owner’s ability and willingness to complete and move forward with a detailed application,
10 execute the Program Agreement, grant the required easements, secure a qualified BTM
11 contractor, finance the BTM construction activities and removal of the legacy system as
12 necessary, and meet the prescribed program schedule. The plan also assumes that the total
13 number of MHP spaces indicated on the Form of Intent (“FOI”) completed by the MHP owners
14 is accurate. Further assumptions include that a joint schedule can be developed and deemed
15 acceptable and executable by all impacted utilities where shared territory requires joint
16 construction. The plan is further dependent on availability of both TTM and BTM contractors
17 and their having sufficient qualified crews to perform construction, and the California
18 Department of Housing and Community Development (“HCD”) and/or other jurisdictional
19 agencies having available trained resources to perform timely inspections on completed portions
20 of the projects.

21 **IV. CONCLUSION**

22 The method for forecasting costs associated with SDG&E’s Mobilehome Park Utility
23 Upgrade Program proposed in this Application is based upon costs actually incurred by SDG&E

⁵ See D.14-03-021 at pp. 49.

1 in executing the MHP Pilot Program authorized in D. 14-03-021 and therefore should be adopted
2 as reasonable.

3 This concludes my prepared direct testimony.

4 **V. WITNESS QUALIFICATIONS**

5 My name is Hector S. Moreno. I am employed by SoCalGas and my business address is
6 555 West Fifth Street, Los Angeles, California, 90013-1011. I hold the position of Program
7 Management Office (“PMO”) Manager for the Mobilehome Park Utility Upgrade Program
8 which is responsible for managing the Program’s Governance and Financial activities. My
9 responsibilities include implementing and executing processes in compliance with project
10 management best practices including risk management, change management, schedule
11 management, and finance and cost controls in support of the Program. I have held my current
12 position since August 11, 2014. Prior to August 11, 2014, I served as the Governance, Contracts
13 and Audit Controls Manager for SoCalGas’ Advanced Meter Program. Since joining SoCalGas
14 in 1988, I have held positions of increasing responsibility in the areas of Information Systems,
15 Project Management, Energy Savings Assistance Programs, and Internal Audit. I hold a
16 Bachelor of Science Degree from University of Phoenix, Certified Information Systems Auditor
17 (“CISA”), and Project Management Professional (“PMP”) certifications.

18 I have not previously testified before the Commission.

Attachment A



Mobilehome Park Utility Upgrade Program

FEBRUARY 1, 2017 Report

SDG&E 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 San Diego Gas & Electric Company (“SDG&E”) 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 mobilehome 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 SDG&E’s February 1, 2016 Report, SDG&E 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” (“TTM”) and “beyond-the-meter” (“BTM”) 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, SDG&E has completed conversion of 6 MHPs (of 30 MHPs currently in scope) with a combined total of 411 spaces (of 3,344 spaces currently in scope). An additional 16 MHPs are currently in various stages of construction. The total conversion cost for the 6 MHPs is \$11,541,080. These costs may be adjusted as trailing and other costs are received and charged to their respective MHPs.

2. Program Timeline and Where SDG&E is on the Timeline

The Program has been planned to achieve the conversion, on a combined TTM and BTM basis of 10% of the qualified spaces in SDG&E' service territory, which currently represents approximately 3,300 spaces. While there have been a number of MHPs that have elected not to move forward, the Program's current space count is 3,344 across 30 MHPs, or approximately 10% of all MHP master meter spaces in SDG&E's territory. To reach the Program's goal, SDG&E 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 by SDG&E or through joint efforts with the respective natural gas or electric service providers. Additionally, joint trenching opportunities may be leveraged with the MHP's existing telecommunications¹ provider(s).

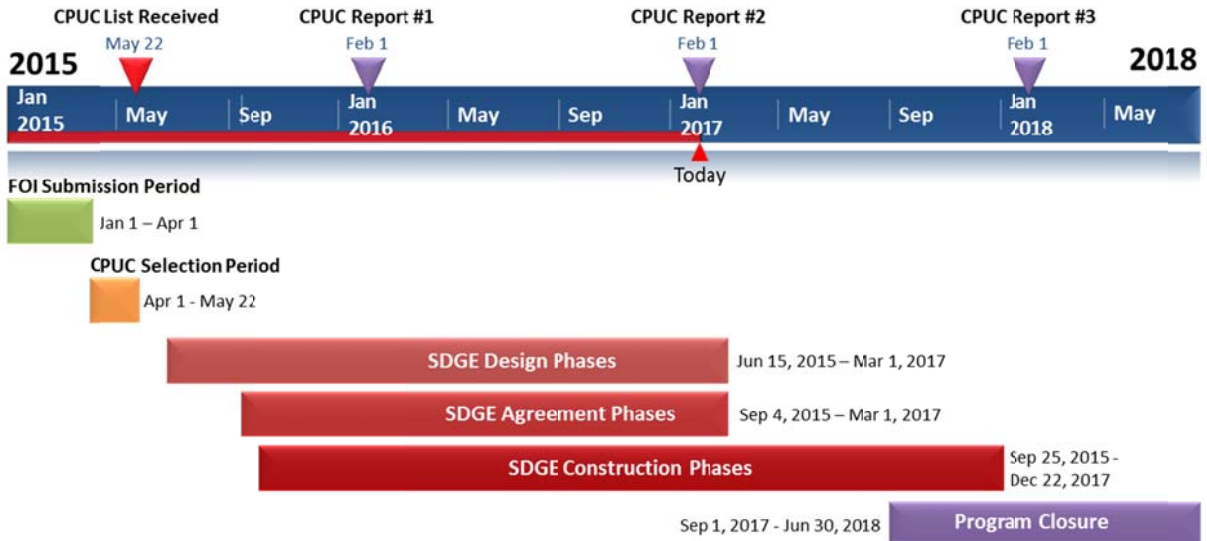
A number of assumptions are inherent in the Schedule, specifically; it assumes that there are no constraints which may prevent the MHP's participation in the Program, such as the MHP owner's ability and willingness to complete and move forward with a detailed application, execute the Program Agreement, 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 are accurate. Further assumptions include, but are not limited to, the ability for a joint schedule to be developed, acceptable, and executable by all utilities (energy and communications) on joint trench 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. SDG&E's schedule is expected to continue to change throughout the Program's life as additional Agreements are signed and MHPs are choosing to either decline, or are opting to participate.

As of December 31, 2016, SDG&E has 28 MHP designs completed and has 22 MHPs currently in the construction stage or where construction has completed.

Based on its current schedule, SDG&E forecasts starting 100% of its current goal of 3,344 MHP spaces by March 30, 2017, and completing conversion of approximately 90% of the goal by December 31, 2017, whereby major construction activities would be substantially underway.

¹ As of December 31, 2016, no telecommunications providers have coordinated for joint service installation at any of the six completed parks included in this report.

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



3. Preliminary Cost Assessment

As of December 31, 2016, SDG&E has converted² 6 MHPs (of 30 MHPs currently in scope) with a combined total of 411 spaces (of 3,344 spaces currently in scope). In accordance with OP 10 of the Decision, SDG&E's preliminary quantification of construction costs incurred per space are shown in Table 2 ("SDG&E 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: includes contractor costs for dual commodity conversions (gas and electric), as well as the portion paid by SDG&E for TTM activities which are shared with other participating utilities or communications service providers where service territories overlap⁴. These are comprised of, but not limited to, trenching and paving;
- (2) Utility Crews ("UC") and Material Cost: This includes the loaded costs of company labor in support of the program including TTM work for selected MHPs, setting meters, performing gas safety checks, turning on gas and electric service, purging the legacy system, removal of the master meter, as well as the procurement and warehousing of materials.
- (3) BTM Contractor Costs: costs reimbursed to the MHP owner/operator (or directly to the BTM contractor via SDG&E's payment remittance form) 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
 - (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 SDG&E's 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.

² SDG&E 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. SDG&E 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 SDG&E's Closing Period.

⁴ Currently, Southern California Gas Company.

TABLE 1. PRELIMINARY QUANTIFICATION OF CONSTRUCTION COSTS

SDG&E		
1	To The Meter (TTM) Contractor Costs	
2	Civil Trenching	\$4,658,700
3	Electric System	
4	Labor	\$4,179
5	Materials/Structures	\$231,336
6	Gas System	
7	Labor	\$1,469
8	Materials/Structures	\$134,652
9	Sub-Total TTM Contractor Costs	\$5,030,336
10		
11	Other TTM Non-Labor Costs	
12	Property Taxes	\$29,523
13	AFUDC	\$98,555
14	Sub-Total Other TTM Non-Labor Costs	\$128,078
15	Sub-Total TTM Costs	\$5,158,415
16		
17	Beyond The Meter (BTM) Contractor Costs	
18	Civil/Trenching	\$77,881
19	Electric System	
20	Labor	\$1,085,355
21	Materials/Structures	\$643,795
22	Gas System	
23	Labor	\$750,896
24	Materials/Structures	\$329,517
25	Other (HCD, LEA Permit Fees)	\$255,473
26	Sub-Total BTM	\$3,142,918
27		
28	Costs for Utility Crews (UC) supporting Program	
29	Electric System	
30	Labor	\$260,545
31	Non-Labor	\$164,239
32	Gas System	
33	Labor	\$528,985
34	Non-Labor	\$343,874
35	Sub-Total UC Costs	\$1,297,643
36		
37	Program Management Costs (PMC)	
38	Program Management Office (PMO)	\$504,891
39	Outreach	\$147,328
40	Construction Management (CM)	\$1,289,886

41 Subtotal PMC \$1,942,105

42

43 **TOTAL \$11,541,080**

44

45 Total Spaces Converted	TTM	BTM
46 Gas	411	411
47 Electric	411	411

48

49 Average Cost / Space	TTM	BTM	UC	PMC	TOTAL
50 Gas	\$7,004	\$3,103	\$2,124	\$2,481	\$14,712
51 Electric	\$5,547	\$4,544	\$1,034	\$2,244	\$13,368
52 Total Preliminary Average Cost/Space	\$12,551	\$7,647	\$3,157	\$4,725	\$28,080

4. Conclusion

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

Additional Program information can be found online on SDG&E's website at

<http://www.sdge.com/mobilehome-upgrade>.



**Mobilehome Park Utility Upgrade Program
Management Certification**

A  Sempra Energy utility

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 San Diego Gas & Electric Company (SDG&E), 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, 2016 to December 31, 2016
Start Date End Date

Gina Orozco Mejia Executed on: 1/30/2017
Signature of Officer Month, Day, Year

Gina Orozco-Mejia Vice President – Gas Operations
Print Name Title