

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2019 General Rate Case
Application: A.17-10-007
Exhibit: SDG&E-47-R

REVISED

SDG&E

**DIRECT TESTIMONY OF JOSEPH S. VELASQUEZ
(MOBILEHOME PARK UTILITY UPGRADE PROGRAM)**

DECEMBER 2017

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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SUMMARY

Table JSV-1

San Diego Gas and Electric Company Capital and Operations and Maintenance (O&M) Mobilehome Park (MHP) Utility Upgrade Pilot Program through 2016

MHP Pilot Program	Gas Costs Incurred for MHP Projects Completed through 2016 (\$Million)	Electric Costs Incurred for MHP Projects Completed through 2016 (\$Million)	Total (\$Million)
Capital	5.9	5.4	11.3
O&M	0.1	0.1	0.2
Total	6.0	5.5	11.5

San Diego Gas and Electric Company (SDG&E) asserts the reasonableness of \$11.5 million (\$11.3 million in capital expenditures and \$0.2 million in O&M expenditures) incurred in executing the ongoing MHP Utility Upgrade Pilot Program (MHP Pilot Program). These costs are for activities related to the conversion of MHP Pilot Program projects through 2016 pursuant to the MHP Pilot Program Decision (D.) 14-03-021 (“MHP Decision”). Pursuant to D.14-03-021, these costs are presented in SDG&E’s General Rate Case (GRC) for reasonableness. These costs are reasonable and justified in that:

- The activities are consistent with the Commission’s approved MHP Decision and tariffs, applicable codes and standards established by local, state, and federal authorities and SDG&E’s standards;
- The activities enhance the safety and reliability of MHP communities;
- The activities are conducted by qualified employees and contractors; and
- The activities support SDG&E’s commitment to enhance public safety and system reliability.

1 **REVISED SDG&E DIRECT TESTIMONY OF JOSEPH S. VELASQUEZ**
2 **MHP UTILITY UPGRADE PROGRAM**

3 **I. INTRODUCTION**

4 **A. Summary of the MHP Utility Upgrade Program**

5 The purpose of this section of my testimony is to establish the reasonableness of
6 \$11.5 million (\$11.3 million in capital expenditures and \$0.2 million in O&M expenditures)
7 incurred in executing the Mobilehome Park Utility Upgrade Program (MHP Pilot Program). My
8 testimony (1) describes the activities and reasonableness of costs recorded by SDG&E in
9 executing the MHP Pilot Program as directed by the Commission in D.14-03-021 (MHP
10 Decision), and (2) in accordance with Ordering Paragraph (OP) 8 of the MHP Decision, submits
11 as reasonable the costs reported in SDG&E’s 2017 MHP Utility Upgrade Program Report.¹
12 Reasonableness review of costs is limited to recorded costs and excludes any program cost
13 forecasts.

14 As of December 31, 2016, SDG&E has completed conversion of six MHPs (of 30 MHPs
15 currently in scope that represent 3,344 spaces, or approximately 10% of all MHP master meter
16 spaces in SDG&E’s territory). The six MHPs represent a combined total of 411 spaces (of the
17 3,344 spaces within the scope of the MHP Pilot Program).

18 **II. PROCEDURAL BACKGROUND**

19 Rulemaking (R.) 11-02-018 was commenced to “examine what the Commission can and
20 should do to encourage the replacement by direct utility service of the master-meter / submeter
21 systems that supply electricity, natural gas, or both to mobile home parks and manufactured
22 housing communities located within the franchise areas of electric and/or gas corporations.”²
23 The rulemaking “grapple[d] with issues that have proven intractable for decades”³ and, “[a]fter

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

² Rulemaking (R.) 11-02-018, *Decision Granting Petition in Part and Instituting Rulemaking Into Issues Concerning Transfer of Electric and Natural Gas Master-Metered Service at Mobilehome Parks and Manufactured Housing Communities to Direct Service by Electric And/Or Natural Gas Corporations*, issued February 25, 2011, at 1.

³ Decision (D.) 14-03-021 at 3. The Commission also discussed efforts commenced in the 1990s to encourage California MHPs with master-metered service to convert to direct utility service, noting that over a period of 17 years little more than two dozen conversions occurred. *Id.* at 4-5.

1 three years of review,”⁴ the Commission ordered SDG&E and other utilities to execute the MHP
2 Pilot Program.

3 The MHP Pilot Program was ordered to be a three-year program (2015-2017) to convert
4 master-metered/sub-metered natural gas and/or electric services to direct utility services for
5 approximately ten percent (10%) of spaces in MHPs and manufactured housing communities
6 (collectively, MHPs) in SDG&E’s service territory. The focus of the conversions is primarily on
7 safety and secondarily on system reliability/capacity.⁵

8 The MHP Decision ordered that conversions must be completed on a “to the meter”
9 (TTM) and “beyond the meter” (BTM) basis.⁶

10 Regarding cost recovery for this Commission-mandated safety and reliability program,
11 the Commission stated:

12 Utilities will be authorized to fully recover the reasonably incurred, actual
13 costs of the conversion program in distribution rates. Reasonable
14 incremental expenses for program development and administration, not
15 otherwise recovered in rates, should be entered as incurred for annual
16 recovery in the utility’s pilot program balancing account. Reasonable
17 expenditures for actual construction costs should be entered as incurred
18 and recovered in the year following cut over to direct utility service. “To
19 the meter” construction costs will be capitalized at the utility’s then-
20 current authorized rate of return on rate base, based on actual (not
21 forecast) expenditures. “Beyond the meter” construction costs also will be
22 capitalized based on actual (not forecast) expenditures but, consistent with
23 their status as a regulatory asset, will be amortized over ten years at the
24 utility’s then-current authorized return on rate base.⁷

25 The Commission made provisions for program oversight: annual reports that include
26 specific information are required to be filed in the first quarter of every year, and the
27 reasonableness of program costs are to be reviewed by the Commission in an after-the-fact
28 reasonableness review. Specifically, the Commission ordered:

29 Each electric and/or gas corporation is authorized to fully recover in
30 distribution rates the costs of the conversion program approved in
31 Ordering Paragraph 2, subject to reasonableness review. The following
32 ratemaking is approved: actual, prudently incurred program costs shall be
33 entered in a balancing account for recovery in the first year following cut
34 over of service; “to the meter” construction costs must be capitalized

⁴ *Id.* at 2.

⁵ *Id.* at 2-3.

⁶ *Id.* at 75 (Ordering Paragraph (OP) 2).

⁷ *Id.* at 3.

1 based on actual (not forecast) expenditures at the utility’s then-current
2 authorized return on rate base; “beyond the meter” construction costs must
3 be capitalized based on actual (not forecast) expenditures and consistent
4 with their status as a regulatory asset, these costs must be amortized over
5 ten years at a rate equivalent to the utility’s then-current authorized return
6 on rate base. Review for reasonableness of “to the meter” costs will occur
7 in the general rate case where those costs are put into rate base. Review
8 for reasonableness of “beyond the meter” costs will occur in the first
9 general rate case after service cut over.⁸

10 **II. SAFETY CULTURE**

11 In D.14-03-021, the Commission states:

12 This rulemaking grapples with issues that have proven intractable for
13 decades. Central to them all is how to ensure the safe, reliable and fairly-
14 priced delivery of electricity, natural gas, or both, to the residents of
15 mobilehome parks and manufactured housing communities (collectively,
16 MHPs) located within the franchise areas of electric and/or natural gas
17 corporations, those Commission-regulated entities commonly referred to
18 as public utilities.⁹

19 Based on the results to date, the Commission-approved MHP Pilot Program has been
20 successful in enhancing the safety and reliability of the delivery of natural gas and electricity to
21 the residents of mobilehome parks and manufactured housing communities that have participated
22 in the MHP Pilot Program, and the MHP Pilot Program has been an effective means for
23 significantly increasing the number of conversions to direct utility service. Moreover, the
24 program team establishes a safety policy that achieves the MHP Pilot Program’s safety
25 objectives and is consistent with SDG&E’s safety-first foundation. To date, all MHP Pilot
26 Program projects have been executed with a zero-incident safety record for both internal
27 employees and contractor crews. SDG&E’s MHP Pilot Program annual safety statistics are
28 summarized further in my testimony.

29 **III. STANDARD OF REVIEW AND OTHER COMMISSION GUIDANCE**

30 This section of my testimony summarizes the applicable standard of review and other
31 applicable Commission guidance.

⁸ *Id.* at 77 (OP 8).

⁹ *Id.* at 3-4.

1 **A. Preponderance of the Evidence Standard**

2 The standard of proof to be applied by the Commission in an after-the-fact
3 reasonableness review is preponderance of the evidence.¹⁰ Preponderance of the evidence is
4 defined “in terms of probability of truth, e.g., ‘such evidence as, when weighed with that
5 opposed to it, has more convincing force and the greater probability of truth.’”¹¹ In other words,
6 SDG&E “must present more evidence that supports the requested result than would support an
7 alternative outcome.”¹²

8 **B. Reasonable Manager Standard**

9 To assess the reasonableness of incurred costs, the Commission applies the reasonable
10 manager standard.¹³ To meet this standard, “[t]he act of the utility should comport with what a
11 reasonable manager of sufficient education, training, experience and skills using the tools and
12 knowledge at his disposal would do when faced with a need to make a decision and act.”¹⁴ As
13 explained by the Commission, “reasonable and prudent acts do not require perfect foresight or
14 optimum outcomes, but may fall within a spectrum of possible acts consistent with utility needs,
15 ratepayer interests, and regulatory requirements.”¹⁵ Under this standard, the Commission holds
16 utilities to “a standard of reasonableness based upon the facts that are known or should be known
17 at the time.”¹⁶ In so doing, the Commission looks to the decision-making process and
18 information available to the manager to assess whether the course of action was within the
19 “bounds of reasonableness, even if it turns out not to have led to the best possible outcome.”¹⁷
20 As explained by the Commission, this is to “avoid the application of hindsight in reviewing the
21 reasonableness of a utility decision.”¹⁸

22 In the case of the MHP Pilot Program, the Commission recognized that “the physical
23 conditions at MHP master-meter / submeter systems will vary greatly, depending upon age, type

¹⁰ Application (A.) 14-12-016, *Assigned Commissioner and Administrative Law Judges’ Scoping Memo and Ruling*, filed April 1, 2015, at 5; *see also* D.14-06-007 at 13.

¹¹ D.14-06-007 at 13 (citing Witkin, *Calif. Evidence*, 4th Edition, Vol. 1, 184).

¹² *Id.*

¹³ A.14-12-016, *Assigned Commissioner and Administrative Law Judges’ Scoping Memo and Ruling*, filed April 1, 2015 at 5-6.

¹⁴ D.90-09-088 at 16.

¹⁵ D.97-08-055 at 54.

¹⁶ D.90-09-088 at 15 (citing D.88-03-036 at 5).

¹⁷ D.89-02-074 at 169 (Conclusion of Law 3).

¹⁸ D.90-09-088 at 15.

1 of materials used in prior construction, existing MHP design, terrain and other factors,”¹⁹ and
2 thus “numerous uncertainties”²⁰ existed before the MHP Pilot Program commenced and will
3 remain true for the duration of the MHP Pilot Program.

4 **III. PROGRAM ORGANIZATION AND GOVERNANCE CONTROLS**

5 **A. Master Meter Balancing Account (MMBA) and Nature of Costs**

6 The MMBA was authorized through Advice Letter 2601-E/2292-G on June 25, 2014.

7 SDG&E records to the MMBA TTM costs, which include costs for utility and contracted
8 labor, purchased services and materials, and trenching and paving. Utility labor costs include
9 civil construction, setting meters, gas and electric service turn-on, purging of gas legacy systems,
10 removal of master meters, and the procurement and warehousing of materials. TTM costs also
11 include MHP Pilot Program management costs, which are inclusive of: Program Outreach, such
12 as primary customer contact and coordination before, during, and after construction activities in
13 accordance with the Commission-reviewed statewide Outreach Plan; Program Construction
14 Management, which includes construction management (CM) and planning; and Program
15 Management Office (PMO) activities which include program strategy, project controls during the
16 project life cycle, regulatory reporting, and the MHP Pilot Program’s finance, budgeting, and
17 accounting functions. PMO activities also include communicating progress to various
18 stakeholders.

19 SDG&E also records to the MMBA BTM costs, which include work related to the
20 connection of new utility services from the utility meter to the mobile home. BTM work is
21 performed by contractors selected by the MHP owners/operators.²¹ As such, BTM costs are not
22 directly managed or under the control of SDG&E.

23 The regulatory accounting treatment of costs recorded to the MMBA is discussed in the
24 Regulatory Accounts testimony of Norma Jasso (Exhibit SDG&E-41).

25 **B. Program Management**

26 SDG&E’s MHP Pilot Program management team implemented a series of tools and
27 controls to enable early identification of risks and issues which could negatively impact scope,
28 schedule, or cost. These practices include the following.

¹⁹ D.14-03-021 at 49.

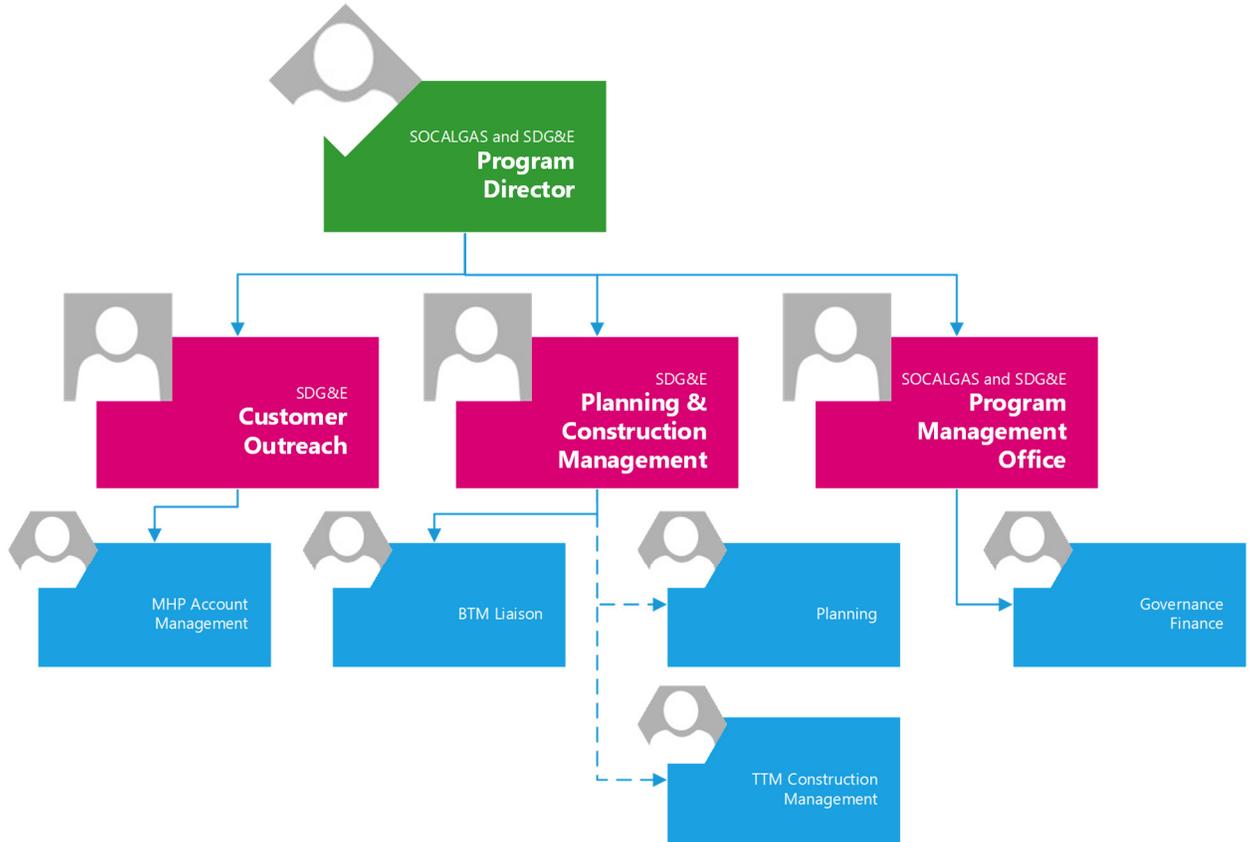
²⁰ *Id.*

²¹ *Id.* at 47.

1 **1. Experienced Management Staff**

2 To implement the MHP Pilot Program, SDG&E formed an organization led by
3 management personnel experienced in each of the core competencies required by the MHP Pilot
4 Program (i.e., Program Outreach, Planning and Construction, PMO Governance, and Finance).
5 In support of a lean organization that shares both costs and lessons learned, certain roles,
6 including the Program Directors, PMO Manager, Governance Manager, and Finance Manager,
7 are shared across SDG&E's and Southern California Gas Company's (SoCalGas) MHP Pilot
8 Programs. Figure JSV-1 depicts the MHP Pilot Program organizational structure.
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Figure JSV-1
SDG&E Company
SDG&E MHP Utility Upgrade Program Organizational Structure



4
5 The responsibilities of each workstream in the MHP Pilot Program organization are
6 briefly described as follows:

- 7
- 8 • Customer Outreach and MHP Account Management – The SDG&E Outreach
9 team is responsible for outreach and education to impacted communities,
10 MHPs, and residents before, during, and after execution of the program and
11 individual projects. To promote efficient and streamlined project execution,
12 the Outreach team works closely with the Planning and CM team to assess
13 and resolve project risks and issues. Additionally, the Account Management
14 executives work closely with MHP Owners/Operators to implement project-
15 driven outreach and education plans compliant with the statewide MHP
Utility Upgrade Program Outreach and Education Plan.
 - 16 • Planning and CM – The SDG&E Planning and Construction team manages
17 the design through construction components of the MHP utility upgrades.
 - 18 • Planning – The Planning team assesses each individual project and designs
19 the new gas and electric distribution system per SDG&E standards.

- 1 • CM – The CM team consists of project managers and inspectors responsible
2 for reviewing and assessing TTM work performed in the MHPs. The
3 construction management team manages the schedule, scope, and budget of
4 each individual project. While the construction management team does not
5 manage the BTM construction work performed by MHP owner/operator-
6 selected contractors, it reviews the scope and costs of BTM bids. This team
7 also coordinates with the BTM contractor to ensure that the interconnection
8 with the SDG&E meters is consistent with utility standards.

- 9 • PMO – The PMO defines and maintains standards of project management and
10 compliance within the MHP Pilot Program.
 - 11 ○ Governance – As part of the PMO, the Governance team is responsible
12 for establishing and implementing program controls and processes
13 needed to execute the MHP Pilot Program. This includes risk
14 management, issue management, schedule management, change
15 management, monitoring of key performance indicators (KPIs), project
16 reporting, and business process design.
 - 17 ○ Finance – The Finance team, also part of the PMO, is responsible for
18 establishing and implementing cost and budget controls to confirm
19 accurate cost tracking. Activities include cost accounting and invoice
20 processing, change management, budgeting, and financial reporting.

21 **2. MHP Pilot Program’s Ongoing Efforts To Minimize Project** 22 **Execution Costs**

23 The procurement of services (construction contractors, inspectors, etc.) is the largest
24 individual category of MHP Pilot Program expenditures. Approximately 44% of MHP Pilot
25 Program costs are for purchased services and materials. As such, an important aspect of the
26 prudent execution of the MHP Pilot Program is sourcing and retaining capable contractors
27 and vendors at reasonable rates. In an effort to control program costs through pre-
28 negotiated rates, SDG&E conducted a competitive solicitation for to-the-meter construction
29 activities within its service territory to identify and select qualified and licensed
30 construction contractors. Contractors known to perform the type of work needed for MHP
31 projects were selected by an experienced team of construction management and sourcing
32 employees. A total of twenty-one contractors responded to a Request for Information and
33 seven of those contractors participated in a Request for Proposal process. Using a
34 competitive bidding process, SDG&E awarded Program Master Service Agreements to all
35 seven contractors.

- 1 • Partnerships/Cost Saving/Trench Splitting – When allowed due to service
2 territory overlap, SDG&E works with SoCalGas or willing Communication
3 Infrastructure Providers (CIPs) to share the costs for relevant MHP
4 conversion costs, such as trenching costs, which enables utilities to share the
5 civil construction costs.
- 6 • Project Monitoring – SDG&E’s MHP Construction Services team oversees to-
7 the-meter construction activities to confirm that work is safely performed in
8 accordance with project scope, schedule, and budget. Each project is
9 assigned a contract administrator responsible for reviewing and assessing the
10 activities of the TTM contractor. At the onset of each project, the contract
11 administrator, account executive, and BTM advisor hold a pre-construction
12 meeting with the selected TTM and BTM contractors to review project
13 details, reporting, safety, and other deliverables. Frequent monitoring is
14 performed by the contract administrator and changes, issues, or questions that
15 arise are timely addressed.
- 16 • Estimation – SDG&E tracks the costs of construction for each project through
17 internal Work Order Authorizations (WOAs) which are used to track actual
18 costs against the original estimate of total project costs. Costs in excess of
19 estimates require further review and approval through reauthorizations.
- 20 • Invoice Validation – Each invoice for TTM or BTM work is reviewed by the
21 program’s Finance group and Construction Project Managers to validate that
22 work has been completed in accordance with contractual agreements at the
23 negotiated rates and within authorized limits.
- 24 • Project Close-Out/Quality Assurance – SDG&E performs reconciliation and
25 quality assurance following completion of every project to affirm that:
26 (1) records in support of both program and project compliance are reviewed;
27 (2) oversight was provided for project decisions and/or associated changes
28 that occurred; (3) documents are stored in centralized repositories for proper
29 records management; and (4) when final costs have been recorded, total
30 project financial records are reviewed for validity and compared against
31 estimates.
- 32 • Diverse Business Enterprises (DBE) – The MHP Pilot Program supports
33 SDG&E’s commitments consistent with GO 156 through inclusion of DBE
34 participation as a KPI of the program. During the TTM construction
35 contractor competitive solicitation process, expanding opportunities to DBE
36 contractors was a consideration in the evaluation of contractors. The Project is
37 performing at an approximate forty (40%) DBE level.
- 38 • Program Monitoring – SDG&E produces periodic financial and schedule
39 reporting for its management teams to allow continuous oversight over the
40 program, to monitor project progress, and enable early identification of risks
41 and issues impacting schedule and costs.

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- Policies and Procedures – SDG&E established a Program Governance Plan (PGP) to document the MHP Pilot Program’s guidelines and core processes and to facilitate uniformity of repeatable processes. The PGP and supporting documentation are periodically modified and updated to reflect lessons learned through MHP Pilot Program activities. In addition, the PGP documents major decisions, including alternatives contemplated, that affect program activities.
- Clarity of Engagement Scope – SDG&E strives to maintain clearly defined program goals with contributing and impacted program stakeholders by working closely with MHP owners/operators through focused outreach efforts to clarify MHP Pilot Program components and the commitments required to reduce the risk of ambiguity in covered and non-covered costs. Through outreach efforts, SDG&E works with MHP owners/operators to seek multiple bids for BTM activities, thereby promoting cost awareness and competition. SDG&E also provides workshops to BTM contractors to promote awareness of the program, including its components and goals, and engages BTM contractors throughout the planning processes, including inviting participation in MHP site walks to more accurately estimate scope, schedule, and budget.
- Communication and Guidance – SDG&E fosters open channels of communication with external program stakeholders, including the Commission’s Safety and Enforcement Division (SED), the California Department of Housing and Community Development (HCD), and other local and state entities to promote awareness of the program, share observations and findings, seek guidance, and provide information to better coordinate activities such as inspections.
- Zero Incident Safety Record – Safety is a primary driver of the SDG&E MHP Pilot Program and one of its KPIs. The program team consulted with SDG&E’s Construction Services team and Safety Advisor, as well as other Major Projects teams, to establish a safety policy that achieves the program’s safety objectives and is consistent with SoCalGas’ safety-first foundation. Additionally, SDG&E continues to work with SED to review projects, as requested. To date, all MHP Pilot Program projects have been executed with a zero-incident safety record for both internal employees and contractor crews. SDG&E’s annual safety statistics are summarized in Table JSV-2 below.

Table JSV-2
SDG&E Company
SDG&E MHP Utility Upgrade Program Safety Statistics

INCIDENT TYPE	2014	2015	2016	2017 (YTD)
Lost Time Injury (LTI)	0	0	0	0
OSHA-Recordable	0	0	0	0

- Continuous Improvement – Consistent with SDG&E’s ongoing commitment to continuous improvement, SDG&E continually evaluates and implements improvements to its MHP Pilot Program processes. Though not exhaustive, the following are examples of continuous improvements applied through program implementation:
 - Organizational changes to improve planning and estimation at the onset of individual projects;
 - Organizational changes to support sufficient regional coverage and address workload and geographical spread;
 - Improving cost controls through adoption and improvement of unit-based tasking with TTM contractors and bid and bid-review templates for BTM contractors;
 - Introduction and adaptation of change management and close-out processes;
 - Working closely with each MHP owner/operator to adapt the Outreach and Education Plan to best suit their needs and minimize project issues;
 - Regularly cadenced joint meetings with partner utilities to discuss project schedules, risks, and issues; and
 - Development of multiple MHP owner/operator funding options for BTM costs (*i.e.*, payment assignment) to further encourage participation.

Through continuous efforts to improve existing processes and the implementation of each of these changes, the efficiency and cost effectiveness of future MHP Pilot Program projects are also improved.

1 **C. Preliminary Cost Summary**

2 As directed by the MHP Decision, on February 1, 2017, SDG&E filed its second Annual
 3 MHP Utility Upgrade Program Report,²² which summarizes the MHP Pilot Program's
 4 preliminary findings and includes: (1) a program timeline and progress towards that timeline,
 5 and (2) a preliminary quantification of construction costs recorded per space, with TTM and
 6 BTM costs of conversions incurred through December 31, 2016 identified separately.²³ These
 7 costs are summarized in Table JSV-3 below.

8 **Table JSV-3**
 9 **SDG&E Company**
 10 **MHP Pilot Conversion Preliminary Costs through 12/31/2016**

SDG&E Preliminary Costs to 12/31/2016			
TTM			
Contractor Costs	Gas	Electric	Total
Civil / Trenching	\$2,702,707	\$1,955,993	\$4,658,700
Gas/Electric System			
Labor	\$1,469	\$4,179	\$5,648
Materials/Structures	\$134,652	\$231,336	\$365,988
Program Management Costs (PMC)			
PMO	\$265,110	\$239,781	\$504,891
Outreach	\$77,360	\$69,968	\$147,328
CM	\$677,299	\$612,588	\$1,289,886
Other TTM Costs			
Labor	\$528,985	\$260,545	\$789,529
Non-Labor	\$343,874	\$164,239	\$508,114
Property Taxes	\$10,827	\$18,696	\$29,523
AFUDC	\$28,988	\$69,567	\$98,555
Subtotal TTM Costs	\$4,771,272	\$3,626,891	\$8,398,162
BTM Contractor Costs			
Civil / Trenching	\$29,824	\$48,056	\$77,881
Gas/Electric System			
Labor	\$750,896	\$1,085,355	1,836,252
Materials/Structures	\$329,517	\$643,795	\$973,312
Other	\$165,162	\$90,312	\$255,473
Subtotal BTM Costs	\$1,275,400	\$1,867,518	\$3,142,918
Total (Preliminary Costs) to 12/31/2016	\$6,046,671	\$5,494,409	\$11,541,080

²² See SDG&E MHP Utility Upgrade Program Report, February 2, 2017 included herein as Appendix A.

²³ D.14-03-021 at 78 (OP 10).

1
2 Table JSV-3 details preliminary costs for each of the following categories:

- 3
- 4 • TTM Contractor Costs, which include trenching and paving.
 - 5 • Other TTM Costs – This includes the costs of Company labor in support of the
6 program, including TTM work for selected MHPs, setting meters and turning on
7 gas and electric service, purging the legacy system, removal of the master meter,
8 and the procurement and warehousing of materials.
 - 9 • Beyond-the-Meter Contractor Costs, which are costs reimbursed to the MHP
10 owner/operator to perform BTM construction work. BTM contractors are
11 selected by the MHP owner/operator.
 - 12 • Program Management Costs (PMC), which are comprised of:
 - 13 ○ PMO Costs, which include overall Program Management (*e.g.*, Program
14 strategy, risk management, change management, schedule management)
15 and the Program’s Finance functions;
 - 16 ○ CM Costs, which include: construction project management; preliminary
17 planning and full design activities; planners and designers who perform
18 work for multiple parks; Project Managers, Construction Contractor
19 Administration staff, and other support personnel who also perform work
20 at multiple construction sites; and
 - 21 ○ Outreach activities, which include primary customer and stakeholder
22 contact and coordination before, during and after construction, consistent
23 with the Commission-approved statewide Outreach Plan.

24 PMC are tracked separately from TTM costs and BTM contractor costs and allocated to
25 each MHP as part of the project close-out process based on the number of spaces converted. To
26 most efficiently utilize PMO resources, selected PMO staff provide management and services to
27 both SDG&E and SoCalGas and costs for such staff are allocated at a rate of 50% to each utility.

28 The above costs are fully loaded and include Company Overheads consisting of Payroll
29 Tax, Incentive Compensation Plan, Pension and Benefits, Worker’s Compensation, Vacation and
30 Sick, Personal Liability and Property Damage Overhead, Purchasing, Warehouse, Shop
31 Overhead, Small Tools, and Administrative and General capital. The overheads applied to the
32 Program are driven by incremental costs incurred as a result of implementing the MHP Pilot
33 Program.

34 Please see Appendix A for supplemental workpapers providing additional information
regarding recorded MHP Pilot Program costs.

1 The observed preliminary average per-space costs for the period ending December 31,
2 2016 are summarized in Table JSV-4.

3 **Table JSV-4**
4 **SDG&E Company**
5 **MHP Utility Upgrade Preliminary Average Per-Space Cost**
6 **as of December 31, 2016**

SDG&E	Average Cost Per Space (GAS)	Average Cost Per Space (ELECTRIC)	Overall Average Cost Per Space	Spaces Converted
TTM	\$11,609	\$8,825	\$20,433	411
BTM	\$3,103	\$4,544	\$7,647	411
Total Average Cost Per Space	\$14,712	\$13,368	\$28,080	

7
8 **IV. CONCLUSION**

9 My testimony demonstrates that the \$11.5 million in costs recorded by SDG&E through
10 December 31, 2016 in the ongoing execution of the MHP Pilot Program have been reasonably
11 incurred. These costs directly support achievement of the Commission's stated objective to
12 convert higher risk master-meter/submeter systems that supply natural gas to MHPs or
13 manufactured housing communities to enhance the safety and reliability of MHP communities.²⁴
14 In accordance with the reasonable manager standard, SDG&E designed and executed the MHP
15 Pilot Program to enhance the safety and reliability of utility service to the many MHP
16 communities that have participated in the MHP Pilot Program while maintaining reasonable
17 conversion costs through prudent planning and oversight.

²⁴ D.14-03-021 at 75 (OP 3).

1 **V. WITNESS QUALIFICATIONS**

2 My name is Joseph S. Velasquez. My business address is 8306 Century Park Court, San
3 Diego, California 92123. I am employed by Southern California Gas Company (SoCalGas) and
4 San Diego Gas & Electric Company (SDG&E) as the Director of the Master Meter Customer
5 Program for SoCalGas and SDG&E. My present responsibilities include the overall
6 management and implementation of SoCalGas' and SDG&E's MHP Utility Upgrade Program.

7 I have been employed by SoCalGas/SDG&E since 1986 and have held various positions
8 of responsibilities including Director of Supply Management and Supplier Diversity for SDG&E,
9 Director of Commercial and Industrial Services for SDG&E and Interim Director of Commercial
10 and Industrial Services for SoCalGas.

11 I received a Bachelor of Science Degree in Chemical Engineering from California State
12 University, Northridge and a Master in Business Administration from Pepperdine University.

13 I have previously testified before this Commission.
14

LIST OF ACRONYMS

ACRONYMS	DEFINITION
BTM	Beyond The Meter
CM	Construction Management
(D.)	Decision
DBE	Diverse Business Enterprises
GRC	General Rate Case
HCD	Housing and Community Development
KPI	key performance indicators
LTI	Lost Time Injury
MHP	Mobile Home Park
MMBA	Master Meter Balancing Account
O&M	Operations and Maintenance
OP	Ordering Paragraph
PGP	Program Governance Plan
PMC	Program management costs
PMO	Program Management Office
SDG&E	San Diego Gas and Electric
SoCalGas	Southern California Gas
SED	Safety and Enforcement Division
TTM	To The Meter
WOA	Work Order Authorizations

APPENDIX A
SDG&E Company
2017 MHP UTILITY UPGRADE PROGRAM REPORT
FEBRUARY 1, 2017

On February 1, 2017, in accordance with Ordering Paragraph 10 of the Decision, SDG&E filed its second Annual Report, which summarizes the MHP Pilot Program's preliminary quantification of construction costs incurred per space identified separated by To-the-Meter (TTM) and Beyond the Meter (BTM) costs for mobilehome park (MHP) conversions through December 31, 2016. This Appendix provides a copy of this report



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).

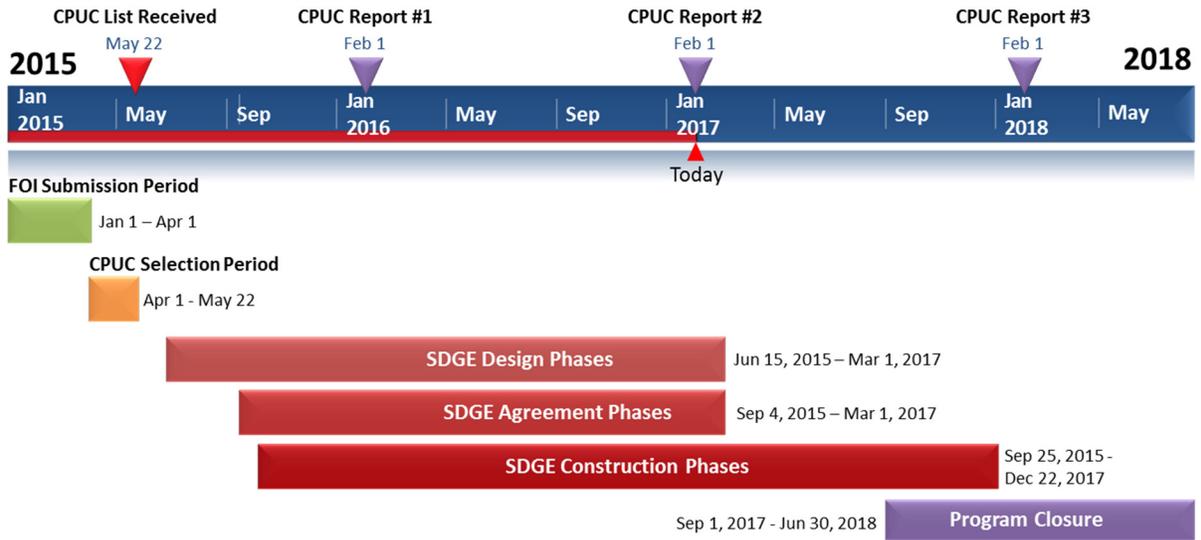
A number of assumptions are inherent in the Schedule, specifically; it assumes that there are no constraints which may prevent the MHP's participation in the Program, such as the MHP owner's ability and willingness to complete and move forward with a detailed application, execute the Program Agreement, 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) PMC, which are comprised of:
 - (a) 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	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>.

APPENDIX B

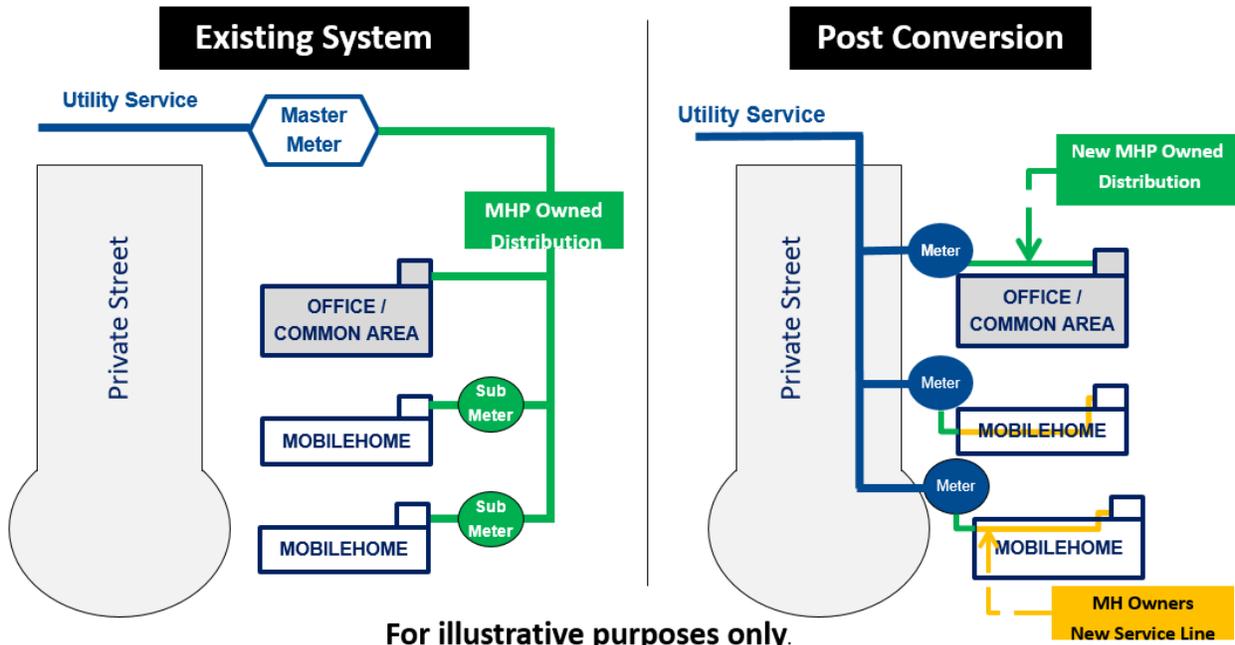
SAN DIEGO GAS & ELECTRIC COMPANY

MOBILEHOME PARK UTILITY UPGRADE PROGRAM CONSTRUCTION DETAILS

TABLE OF CONTENTS

<i>Workpaper</i>	<i>Page No.</i>	<i>Workpaper Chapter Title</i>
WP-MHP- MHPConversionChanges	JSV-B-2	Changes between the legacy system owned by the MHP Owner/Operator and the new system owned by SDG&E and the MHP Owner/Operator.
WP-MHP-ConstructionProcess	JSV-B-3 TO JSV-B-1#	Mobilehome Park Utility Upgrade Program Construction Process and Photographic examples

Fig. 1: Changes between the legacy system owned by the MHP Owner/Operator and the new system owned by SDG&E and the MHP Owner/Operator.



For illustrative purposes only.

Actual design will be dependent upon individual MHP characteristics and utility engineering standards, which could change degree of MH or MHP infrastructure-ownership.

Mobilehome Park Utility Upgrade Program Construction

The conversion of a mobilehome park under the MHP Utility Upgrade Program can be categorized by two components: To-The-Meter (TTM) Construction and Beyond-The-Meter (BTM) Construction.

The TTM Construction consists of trenching and installation of the natural gas and/or electrical facilities necessary to complete the distribution line and service extensions to the Service Delivery Point. This includes but is not limited to distribution pipe, electrical conduit, substructures, and cable within the MHP, as well as the paving upon project completion. This work is completed almost exclusively by the contractors selected in the RFP process. Fig. 2 – 16 below illustrate examples of TTM Construction activities.

The BTM Construction consists of installation of the natural gas and/or electrical facilities required to establish the Service Delivery Point (e.g. metering facility), along with the infrastructure necessary to connect the Service Delivery Point to the point of connection on the mobilehome. This includes but is not limited to houselines, meter pedestals, and power supply cords. This work is completed exclusively by the contractor selected by the MHP's Owner/Operator. Fig. 10 - 16 illustrates examples of BTM Construction activities.

Upon completion of BTM Construction and inspection by the California Department of Housing and Community Development (HCD) and/or the authority having jurisdiction (AHJ), SDG&E's internal Customer Service Field technicians install meters, perform gas appliance safety checks, and jointly – with the BTM Contractor (when possible) – perform cutover of the park to the new MHPUUP-installed gas and electric systems.

The legacy gas and/or electric system is then purged and disconnected per SDG&E standards with oversight by SDG&E. Subsequent legacy system abandonment is performed by the MHP owner's representative and conducted as directed per the park's AHJ.

Fig. 2: Contractors must pothole the MHP prior to full commencement of construction. This minimizes the risk of striking existing utility lines.



Fig. 3: Laying conduit in the trench



Fig. 5: Hard-digging leads to unforeseen costs that cannot be predicted during design. In this instance, it took several days to break through blue granite at Heart O' the Hills. Discovery of boulders in the trench route can also increase dump fees.



Fig. 6: Hard-digging leads to additional costs that cannot be predicted during design and estimation. In this instance at Westward Ho, it took several days to break through rock, causing unforeseen dumping fees and unavoidable pavement repairs.



Fig. 7: Pulling cable after civil construction



Figure 8: Pulling cable up to the electric pedestal



Fig. 9: Gas BTM houseline drawing as provided in HCD inspection standards for BTM Contractors

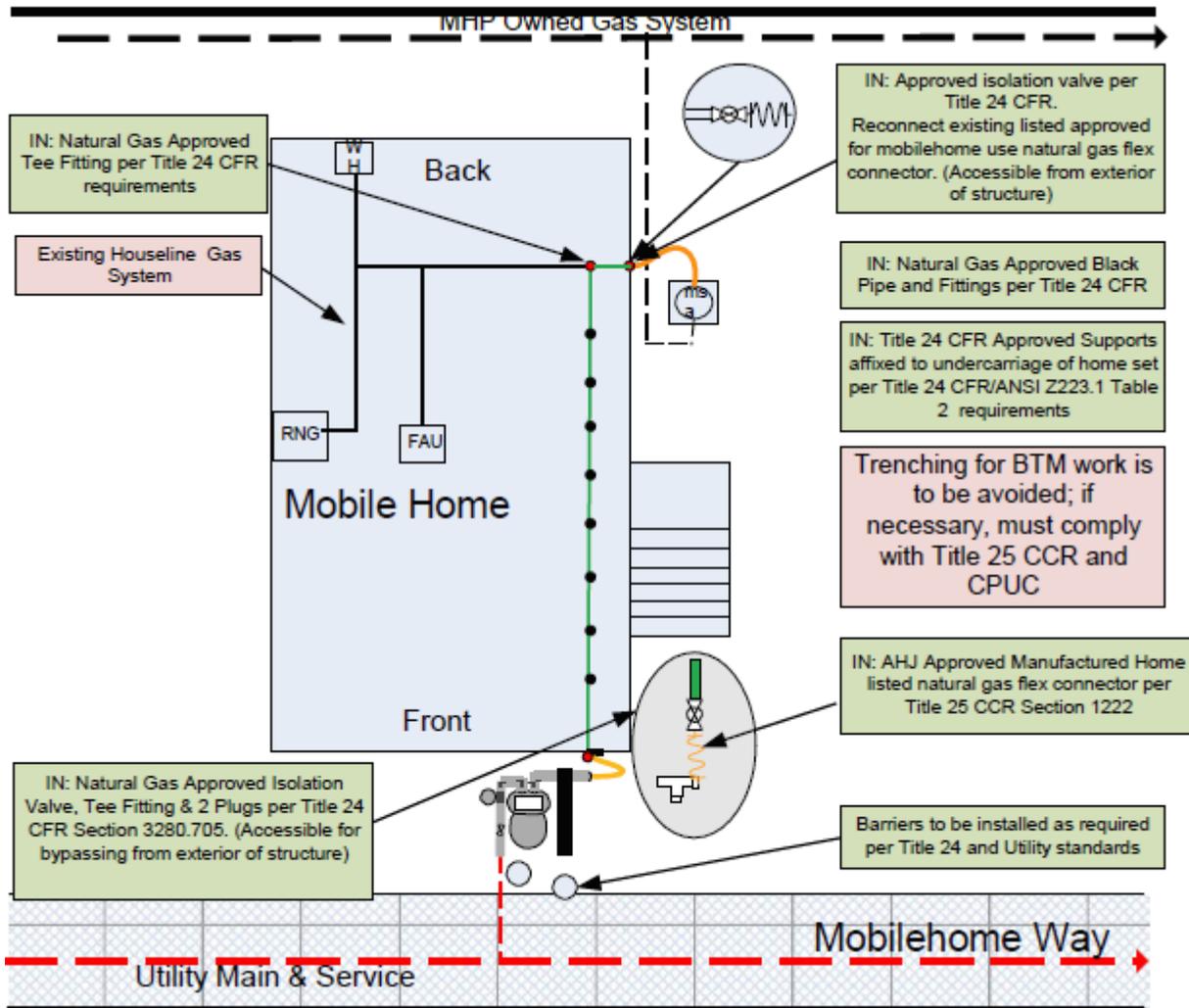


Fig. 10: Electric BTM houseline drawing as provided in HCD inspection standards for BTM Contractors

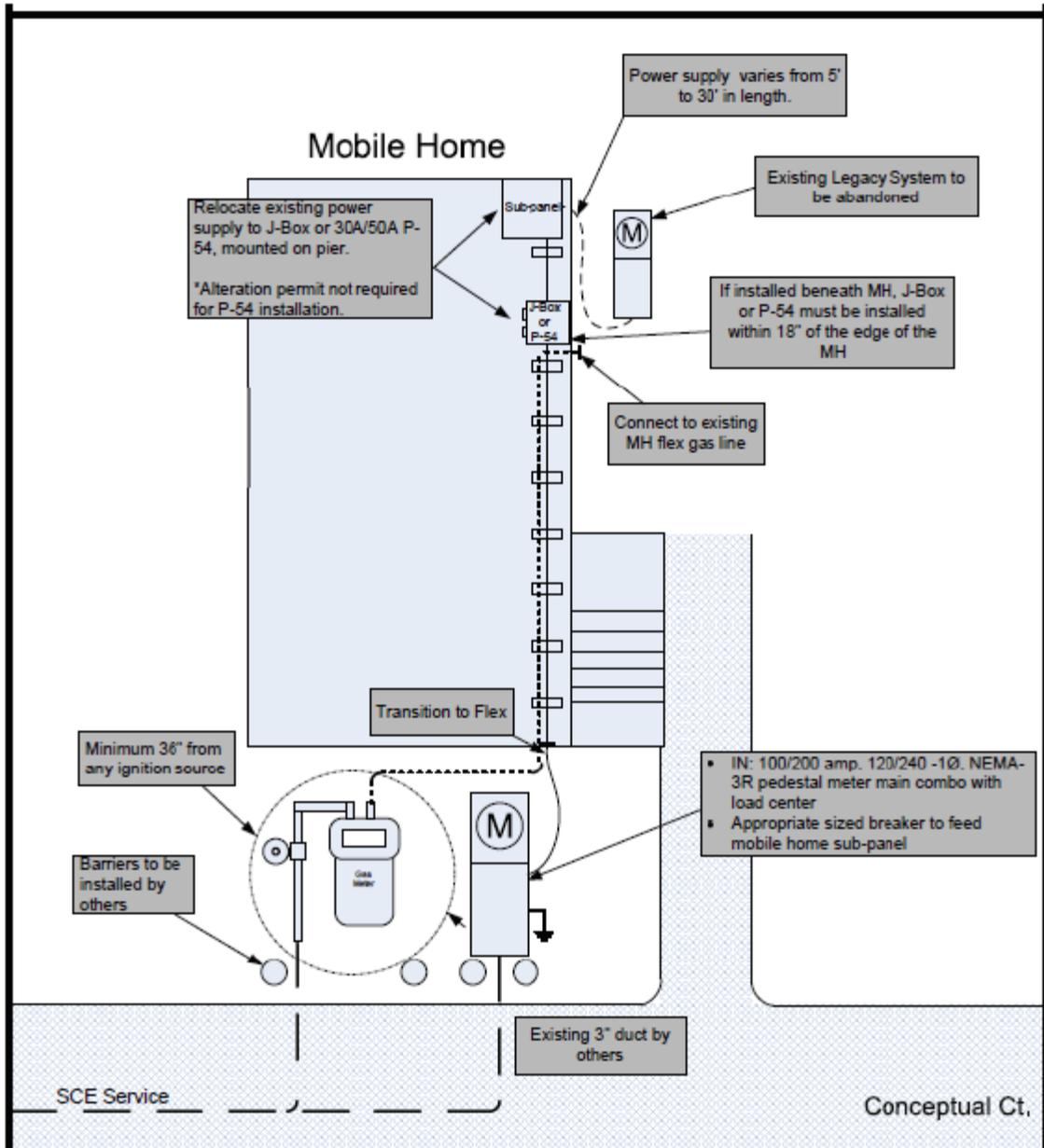


Fig. 11: Gas and electric house lines on hangers per HCD inspection and installation guidelines



Fig. 12: Gas and electric house lines on hangers per HCD inspection and installation guidelines



Fig.13: Maintaining a clear and level workspace around the gas and electric metering facilities per SDG&E standards sometimes requires modifications to the current mobile home layout



Fig.14: Unexpected changes can occur in the scope of work. In this instance, due to FEMA flood zone requirements, the BTM Contractor had to install a concrete pier for the pedestal to raise it to sufficient height.



Fig. 15: Newly installed gas and electric meters and protective bollards at the front of a mobile home lot



