



# SED – Utility Safety and Risk Assessment Branch- (URAB)



**R.18-04-018**  
**MHP Conversion Pilot Program**

**March 20-21, 2019**



## Safety and Emergency Information

- In the event of an emergency, please proceed calmly out the exits.
- The Evacuation Location is the courtyard between the War Memorial Building and Opera House.
- It is located on the other side of City Hall. Exit the building at Van Ness and McAlister streets and walk past City Hall.



# Practical Information

## WiFi Access:

**SSID: cpucguest**

**User: guest**

**Password: will provide**

**Restrooms: In the  
Lobby**

## Call in information:

- Phone line: 1-877-820-7831  
Participant code: 989872

## WebEx Day 1:

- Meeting Number: 710 021 114
- Password: R1804018

## WebEx Day 2:

- Meeting Number: 710 591 600
- Password: R1804018



# Agenda-Day 1

- **1:00-1:15**      **Staff Introduction & Emergency Procedures**
- **1:15-1:45**      **Annual Report Highlights-Fred Hanes, SED**
- **1:45-2:15**      **Project Cost Review-Eric Borden, TURN**
- **2:15-2:30**      **Cost Containment-Niki Kjensli, PAO**
- **2:30-2:45**      **Break**
- **2:45-3:15**      **MHP Electrification – Richard McCann, WMA**
- **3:15-3:45**      **MHP Electrification – SDG&E/SoCalGas**
- **3:45-4:30**      **Decarbonization-Hal Kane, Energy Division**



# Agenda-Day 2

- **9:30-9:45**      **Agenda Review**
- **9:45-10:30**      **Cost Containment/Recovery-SCG/SDGE**
- **10:30-10:45**      **Annual Report Template Update-SED**
- **10:45-11:30**      **Open Discussion**
- **11:30-1:00**      **Lunch Break**
- **1:00-2:00**      **Discussion of Other Scoping Memo Topics:**
  - **Coordination with Communication/Broadband Providers and Munis**
  - **Education and Outreach (Disadvantaged Communities)**
- **2:00-4:00**      **Discussion as needed**



# Annual Report Highlights

- Completed Conversions
- Demographics
  - Disadvantaged Community, CARE/FERA
- Costs per Space
  - To The Meter, Beyond The Meter
- Rate Impacts



# Conversion Results

	PG&E	SCE	SoCalGas	SDG&E	SWG	Bear Valley	Liberty Utils	Pacific-Corp	TOTALS
<b>Converted Spaces</b>	3804	9050	7410	2859	473	250	65	52	23963
<b>2015 Spaces*</b>	105318	106768	129231	34597	3308	608	633	507	380970
<b>% Converted</b>	<b>3.6%</b>	<b>8.5%</b>	<b>5.7%</b>	<b>8.3%</b>	<b>14.3%</b>	<b>41.1%</b>	<b>10.3%</b>	<b>10.3%</b>	<b>6.3%</b>
<b>*From 2018 Joint Staff Proposal</b>									



# Demographic Results

	PG&E	SCE	SCG	SDGE	SWG	Bear Valley	Liberty Utilities	Pacific Corp	TOTALS
<b>CARE/FERA customers</b>	1821	4831	2089	1629	153	98	23	26	10670
<b>Medical Baseline Customers</b>	182	113	12	149	5	16	1	1	479
<b>Disadvantaged Community Spaces</b>	1611	4142	4644	0	187	0	0	0	10584
<b>Rural Community Spaces</b>	102	0	0	0	31	250	0	52	435
<b>Urban Community Spaces</b>	4527	9050	8529	3122	463	0	65	0	25756
<b>Total Rural + Urban</b>	4629	9050	8529	3122	494	250	65	52	26191
<b>Gas (elec ) Register Spaces</b>	3804	9050	7410	2859	473	250	65	52	23963

CARE= California Alternate Rates for Energy. FERA= Family Electric Rate Assistance





# Disadvantaged Communities

- Per SB 535: 9.35 Million Disadvantaged\*
- CA Total Population: 40 Million people
- Proportion of Disadvantaged:
  - 24% of Californians

\*CAEnviroScreen 3.0 data at:

<https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>



# Disadvantaged Communities

- DAC Converted: 10,584 Spaces
- Total MHP Converted: 23,984 Spaces
  - DAC result is 44% of Spaces Converted
- Compares to 24% of all Californians



# CARE/FERA Customers

- 10,669 CARE/FERA Customers
- 23,984 Residential Spaces Converted
- Conversion Results:
  - 44.4% of Conversions were CARE/FERA



# Program Costs

- Annual Report data through 2018
- Add all years to get Total Costs
- Use register spaces + common area count
  - Gas spaces unless Elec. Utility.
- To date, only the larger program data incl.



# PROGRAM COSTS

UTILITY	TOTAL COSTS 2015-2018	SPACES*	COST/SPACE TOTAL	COST/SPACE TTM	COST/SPACE BTM	CONVERSION TYPE
<b>PG&amp;E</b>	\$173,574,334	4629	\$37,497	\$29,995	\$7,541	GAS + ELEC.
<b>SCE</b>	\$140,581,096	9,448	\$14,879	\$9,199	\$5,613	ELEC.
<b>SCG</b>	\$81,505,893	8,392	\$9,712	\$6,987	\$2,725	GAS
<b>SDG&amp;E</b>	\$91,870,259	3,000	\$30,623	\$22,866	\$7,757	GAS + ELEC.
<b>SWG</b>	\$5,695,824	494	\$11,530	\$8,413	\$3,117	GAS
<b>*Number of Gas Register plus Common Spaces converted; Electric plus Common spaces for Elec-only.            PG&amp;E Space Count corrected to 4629 based on clarification at Mar 20 Workshop.</b>						

## NOTES:

- 1) PG&E cost for dual conversion at \$37,497 exceeds SDG&E at \$30,623, and SCE+SCG at \$24,591.
- 2) Beyond the meter costs are more comparable: \$8294 for PG&E; \$7,757 for SDG&E; \$8,338 for SCE+SCG; The largest cost difference is in the To the Meter costs.



# TTM COSTS

## Cost/Space

UTILITY	SPACES	CIVIL/ TRENCH	LABOR	MATL'S/ STRUCT.	DESIGN/ CONST. MGMT	Project Mgt. Office	Overhead (other non- labor)	Other Materials
<b>PG&amp;E-GAS</b>	4209	\$4,117	\$6,198	\$955	\$3,380	\$1,370	\$997	\$250
<b>PG&amp;E-ELEC</b>	3914	\$4,399	\$6,679	\$1,360	-	-	-	-
<b>SCE-ELEC</b>	9448	\$4,757	\$1,175	\$454	\$38	-	\$495	\$483
<b>SCG-GAS</b>	8392	\$3,002	\$1,110	\$398	\$1,484	-	\$205	\$93
<b>SDG&amp;E-GAS</b>	3000	\$7,590	Incl*	\$384	\$3,591	\$1,441	\$2,668	\$382
<b>SDG&amp;E-ELEC</b>	3220	\$4,875	Incl*	\$440	-	-	-	-
<b>SWG</b>	494	\$6,652	\$761	\$307	\$342	\$0	\$23	\$0

\*Labor included in Civil/Trenching



# TTM COST FOCUS

## Major Categories, Cost/Space

UTILITY	SPACES	CIVIL/ TRENCHING	LABOR	MATL'S/ STRUCTURES	DESIGN/ CONST. MGMT
<b>PG&amp;E-GAS</b>	4209	\$4,117	\$6,198	\$955	\$3,718
<b>PG&amp;E-ELEC</b>	3914	\$4,399	\$6,679	\$1,360	-
<b>SCE-ELEC</b>	9448	\$4,757	\$1,175	\$454	\$38
<b>SCG-GAS</b>	8392	\$3,002	\$1,110	\$398	\$1,484
<b>SDG&amp;E-GAS</b>	3000	\$7,590	Incl*	\$384	\$3,591
<b>SDG&amp;E-ELEC</b>	3220	\$4,875	Incl*	\$440	-
<b>SWG</b>	494	\$6,652	\$761	\$307	\$342
<b>*Labor included in Civil/Trenching.</b>					



# Rate Impacts

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Electric Rates</b>											
<b>PG&amp;E</b>	0.00%	0.02%	0.01%	0.05%	0.16%	0.18%	0.18%	0.17%	0.16%	0.16%	0.15%
<b>SDG&amp;E</b>		0.01%	0.01%	0.03%	0.11%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%
<b>SCE</b>	0.01%	0.03%	0.08%	0.14%	-	-	-	-	-	-	-
<b>PacificCorp</b>				0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
<b>Liberty Utilities</b>				0.01%	0.01%	0.03%	0.03%	0.03%	0.04%	0.04%	0.04%
<b>Bear Valley</b>				1.87%	1.87%	1.87%	1.87%	1.87%	1.87%	1.87%	1.87%
<b>Gas Rates-Core</b>											
<b>PG&amp;E</b>	0.01%	0.08%	0.07%	0.17%	0.63%	0.71%	0.69%	0.66%	0.63%	0.61%	0.58%
<b>SCG</b>		0.04%	0.03%	0.24%	0.64%	0.61%	0.59%	0.57%	0.55%	0.53%	0.50%
<b>SDGE</b>		0.11%	0.13%	0.29%	1.66%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
<b>SWG</b>					0.54%	1.06%	1.59%	0.00%	0.00%	0.00%	0.00%





# Discussion Items

## **2.3. Coordination with Non-Energy Service Providers and Municipal Utilities**

- a. What efforts and/or program requirements could bring other utility services into the MHP during conversion project (e.g. broadband)?
- b. What efforts and/or program requirements could facilitate municipal utility participation during MHP conversion projects for those MHPs that receive municipal utility service?

## **2.4. Disadvantaged Communities**

- a. What efforts and/or program requirements enable MHPs in the state's most disadvantaged communities have the opportunity to participate in the program?



# New Template Process

- Technical Working Group
  - Met in Fall 2018
  - Reviewed Scoping Memo issues
  - Achieved Consensus on a new Template
  - New Template used for 2018 Reports



# Template Changes

- Add Demographic Data
  - CARE/FERA; DAC; Rural/Urban, etc.
- Space Conversions aligned with Recorded Costs
- Revenue and Rate Impact Data
- Standardized Template
- All program years included

# 2017 Report Examples

PG&E		
1	<b>To The Meter (TTM) Contractor Costs</b>	
2	Civil/ Trenching	\$ 8,803,001
3	Electric System	
4	Labor	\$ 1,383,265
5	Material/ Structure	\$ 649,274
6	Gas System	
7	Labor	\$ 1,205,983
8	Material/ Structure	\$ 423,348
10	<b>Sub-Total TTM Contractor Costs</b>	\$ 12,464,871
11		
12	<b>TTM Costs for Utility Crews supporting Program <sup>4</sup></b>	
13	Labor	\$ 182,818
14	Materials Purchasing, warehouse	\$ 106,958
15	<b>Sub-Total TTM Utility Crew Costs</b>	\$ 289,776
16		
17	<b>Other TTM Non-Labor Costs</b>	
18	Property Taxes	\$ -
19	AFUDC	\$ 240,354
20	<b>Sub-Total Other TTM Non-Labor Costs</b>	\$ 240,354
21	<b>Sub-Total TTM Costs</b>	\$ 12,995,002
22		
23		
24	<b>Beyond The Meter (BTM) Contractor Costs</b>	
25	Civil/ Trenching	N/A
26	Electric System	
27	Labor	\$ 1,673,185
28	Material/ Structure	\$ 398,140
29	Gas System	
30	Labor	\$ 2,148,304
31	Material/ Structure	\$ 337,459

SCE	Total Cost for MHPs Completed
<b>To The Meter (TTM)</b>	
Civil Work/Trenching	\$ 6,863,933.53
Electric System	
Labor	\$ 1,964,103.06
Materials/Structures (inclusive of easements)	\$ 785,790.55
Other (Additional Labor)	\$ 734,721.68
Contingency	
<b>Sub-Total TTM</b>	<b>\$ 10,348,548.82</b>
<b>Beyond The Meter (BTM)</b>	
Civil Work/Trenching	\$ 904,741.96
Electric System	
Labor	\$ 3,637,160.80
Materials/Structures	\$ 3,368,864.67
Other (City Permit Fees)	\$ 320,759.66
Contingency	
<b>Sub-Total BTM</b>	<b>\$ 8,231,527.09</b>
<b>Total Spaces Converted</b>	
Electric	1,622
<b>Average Cost / Space</b>	
Electric	



# Current Template 2018 PGE Excerpt

Cost Information					
To The Meter - Capital Costs					
Construction Direct Costs					
Civil/Trenching					
Electric	To the Meter Construction costs for civil related activities	\$ -	\$ 296,898.68	\$ 3,351,806.15	\$ 13,570,250.24
Gas		\$ -	\$ 655,265.45	\$ 3,462,823.85	\$ 13,208,651.91
Gas System					
Labor	Cost for installation of distribution Gas assets, pre-inspection testing, decommissioning of legacy system (Gas Design cost was previously incorporated here)	\$ -	\$ 1,392,314.75	\$ 5,288,448.91	\$ 19,408,335.63
Material / Structures	Pipes, fittings and other necessary materials required for gas construction	\$ -	\$ 483,901.17	\$ 864,088.89	\$ 2,670,895.42
Electric System					
Labor	Cost for installation of distribution Electric assets, pre-inspection testing, decommissioning of legacy system (Electric Design cost was previously incorporated here)	\$ -	\$ 753,867.37	\$ 5,370,860.01	\$ 20,017,794.27
Material / Structures	Cables, conduits, poles, transformers and other necessary materials for electrical construction	\$ -	\$ 427,405.26	\$ 1,808,431.90	\$ 5,516,482.14



# Current Template 2018 SCE Excerpt

	Descriptor	2015	2016	2017	2018
<b>Construction Direct Costs</b>					
<b>Civil/Trenching</b>					
Electric	To the Meter Construction costs for civil related activities		\$ 7,305,136	\$ 21,078,838	\$ 16,564,670
Gas		\$ -	\$ -	\$ -	\$ -
Gas System		\$ -	\$ -	\$ -	\$ -
Labor	Cost for installation of distribution Gas assets, pre-inspection testing, decommissioning of legacy system (Gas Design cost was previously incorporated here)	\$ -	\$ -	\$ -	\$ -
Material / Structures	Pipes, fittings and other necessary materials required for gas construction	\$ -	\$ -	\$ -	\$ -
<b>Electric System</b>					
Labor	Cost for installation of distribution Electric assets, pre-inspection testing, decommissioning of legacy system (Electric Design		\$ 1,990,644	\$ 5,331,343	\$ 3,777,688



# New Data-Demographics

2018 MOBILEHOME ANNUAL REPORT		Per-year costs; not cumulative			
	Descriptor	2015	2016	2017	2018
<b>Program Participation</b>					
CARE/FERA enrollment	Number of individuals enrolled in CARE/FERA after the conversion	0	1098	2219	1514
Medical Baseline	Number of individuals enrolled in Medical Baseline after the conversion	0	25	61	27
Disadvantaged Community	Number of converted spaces within geographic zones defined by SB 535 map.	0	1185	1707	1250
Rural Community**	Number of converted spaces within rural community	0	0	0	0
Urban Community**	Number of converted spaces within urban community	0	1516	4584	2950
Leak Survey (Optional)	Number of Leaks identified during preconstruction activity (if known)	n/a	n/a	n/a	n/a



# New Data-Rate Impacts

Annual Report Template*		Per-year costs; not cumulative											
Descriptor		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
<b>Rate Impact and Revenue Requirement</b>													
<b>Rate Impact</b>		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
<b>Gas</b>													
Average Rate w/o MMBA recovery - non CARE	Average Non-CARE Residential Rate w/o MHPBA recovery - Core (\$/therm)	\$ 1.496570	\$ 1.471460	\$ 1.596710	\$ 1.516020	\$ 1.602300	\$ 1.602300	\$ 1.602300	\$ 1.602300	\$ 1.602300	\$ 1.602300	\$ 1.602300	
Average Rate w/ MMBA recovery - non CARE	Average Non-CARE Residential Rate w/ MHPBA recovery - Core (\$/therm)	\$ 1.496660	\$ 1.472710	\$ 1.507840	\$ 1.518670	\$ 1.612440	\$ 1.613640	\$ 1.613290	\$ 1.612850	\$ 1.612430	\$ 1.612010	\$ 1.611590	
Rate Change - non Care	Non-CARE Residential Rate Change - Core (\$/therm)	\$ 0.000090	\$ 0.001250	\$ 0.001130	\$ 0.002650	\$ 0.010140	\$ 0.011340	\$ 0.010990	\$ 0.010550	\$ 0.010130	\$ 0.009710	\$ 0.009290	
% Rate Change - non Care	% Non-CARE Residential Rate Change - Core	0.01%	0.08%	0.07%	0.17%	0.63%	0.71%	0.69%	0.66%	0.63%	0.61%	0.58%	
Average Rate w/o MMBA recovery - Non-Core		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Average Rate w/ MMBA recovery - Non-Core		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Rate Change - Non-Core		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
% Rate Change - Non-Core		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Electric</b>													
Average Rate w/o MMBA recovery - Total System		\$ 0.171752	\$ 0.177724	\$ 0.187776	\$ 0.195360	\$ 0.195360	\$ 0.195360	\$ 0.195360	\$ 0.195360	\$ 0.195360	\$ 0.195360	\$ 0.195360	
Average Rate w/ MMBA recovery - Total System		\$ 0.171755	\$ 0.177762	\$ 0.187792	\$ 0.195450	\$ 0.195676	\$ 0.195719	\$ 0.195708	\$ 0.195694	\$ 0.195681	\$ 0.195667	\$ 0.195654	
Rate Change - Total System		\$ 0.000003	\$ 0.000038	\$ 0.000017	\$ 0.000091	\$ 0.000316	\$ 0.000360	\$ 0.000348	\$ 0.000335	\$ 0.000321	\$ 0.000308	\$ 0.000294	
% Rate Change - Total System		0.00%	0.02%	0.01%	0.05%	0.16%	0.18%	0.18%	0.17%	0.16%	0.16%	0.15%	
<b>Revenue Requirement</b>		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Present Value Revenue Requirement
Gas Revenue Requirement-TTM		\$ 3,008,794	\$ 1,940,069	\$ 4,012,942	\$ 12,653,985	\$ 18,226,604	\$ 19,562,465	\$ 19,102,637	\$ 18,602,911	\$ 18,026,694	\$ 17,463,480	\$ 16,916,713	\$ 113,324,174
Electric Revenue Requirement-TTM		\$ 2,948,668	\$ 1,743,681	\$ 3,709,280	\$ 13,209,572	\$ 18,896,451	\$ 20,134,466	\$ 19,711,265	\$ 19,084,547	\$ 18,472,035	\$ 17,872,307	\$ 17,286,794	\$ 115,832,027
Gas Revenue Requirement-BTM		\$ -	\$ 147,971	\$ 3,256,959	\$ 5,004,983	\$ 8,150,581	\$ 8,840,665	\$ 8,336,032	\$ 7,843,950	\$ 7,351,553	\$ 6,859,156	\$ 6,366,759	\$ 47,245,987
Electric Revenue Requirement-BTM		\$ -	\$ 134,950	\$ 3,384,210	\$ 4,250,109	\$ 7,559,478	\$ 8,356,323	\$ 7,878,868	\$ 7,414,811	\$ 6,950,399	\$ 6,485,997	\$ 6,021,595	\$ 44,387,743

\*An appendix can be provided to define each





**Thank You**

**For Additional Information:**

**[www.cpuc.ca.gov/RiskAssessment](http://www.cpuc.ca.gov/RiskAssessment)**

