

**TURN DATA REQUEST-08**  
**SDG&E-SOCALGAS 2019 GRC – A.17-11-007/8**  
**SDG&E\_SOCALGAS RESPONSE**  
**DATE RECEIVED: JANUARY 29, 2018**  
**DATE RESPONDED: FEBRUARY 7, 2018**

1. Please provide the number of advanced meters installed by month from 2014 through the latest available date in 2017 and forecast to be installed in each month through the end of 2018.

**Utility Response 01:**

**Advanced Meters Installed – Cumulative**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>2014</b>	1,270,170	1,406,763	1,564,725	1,730,950	1,894,906	2,059,340	2,229,245	2,398,467	2,565,415	2,735,149	2,840,507	2,877,639
<b>2015</b>	3,002,209	3,122,908	3,288,737	3,433,819	3,562,702	3,715,449	3,843,133	3,983,961	4,138,903	4,272,667	4,395,357	4,572,006
<b>2016</b>	4,718,461	4,855,714	5,032,623	5,168,428	5,329,264	5,435,846	5,537,364	5,624,901	5,694,437	5,744,807	5,781,060	5,796,833
<b>2017</b>	5,821,175	5,833,133	5,856,035	5,879,720	5,888,167	5,893,898	5,898,888	5,905,786	5,914,443	5,920,060	5,924,753	5,926,881

**Forecasted Advanced Meter Installs**

	<b>Jan - Dec</b>
<b>2018</b>	73,987

SoCalGas' forecasts are not provided on a monthly basis, therefore the annual forecast is provided for 2018.

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2. Please provide the amount of advanced meter O&M expense included in the balancing account on a monthly basis from 2014 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and non-standard escalation if available.

**Utility Response 02:**

**Advanced Meter O&M Expenses in AMI Balancing Account 2014-2016**  
(Nominal Direct \$ in millions)

	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total
<b>Labor</b>	1.003	0.856	1.116	1.531	1.697	1.241	1.463	1.147	1.116	1.616	0.892	1.155	14.835
<b>Non-Labor</b>	0.801	0.948	0.861	0.882	1.023	1.317	1.098	1.107	0.643	1.116	0.467	0.990	11.253

	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total
<b>Labor</b>	1.189	0.999	1.231	1.136	1.044	1.029	1.310	1.268	1.341	1.388	1.153	1.745	14.833
<b>Non-Labor</b>	1.138	0.731	0.554	0.476	1.051	1.234	0.425	1.056	0.998	0.843	0.773	2.401	11.679

	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Total
<b>Labor</b>	1.242	1.828	0.563	1.344	1.259	1.104	0.953	1.317	1.202	1.250	2.543	0.084	14.690
<b>Non-Labor</b>	-0.328	0.656	0.685	0.727	0.950	0.934	-0.208	1.387	1.359	0.624	0.983	1.611	9.381

The 2017 financials are not yet available.

See AMI-related O&M costs in the table below from the TY 2016 GRC testimony of Rene F. Garcia (Exhibit SCG-39). The costs shown for the Advanced Meter Network Operations and Information Technology areas represent the estimated TY 2019 GRC Advanced Meter Operations (AMO) forecast for 2018 that are anticipated in the AMI balancing account.

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Utility Response 02 Continued:

**Table RFG-2**  
**2018 AMI O&M Costs and Benefits by Business Area**  
**AMI Business Case Values, Escalated to 2018 Dollars<sup>10</sup>**

	Area	In Millions	
		Costs	Benefits
1.	Meter Reading and Customer Services Field	\$ 8.3	\$ 88.7
2.	Advanced Meter Network Operations	\$ 6.2	\$ -
3.	Customer Services -Office Operations	\$ 0.8	\$ 5.7
4.	Fleet Services; Real Estate, Land & Facilities	\$ -	\$ 5.7
5.	Information Technology	\$ 3.6	\$ -
6.	Gas Distribution	\$ 0.2	\$ 3.8
7.	Human Resources and Safety	\$ -	\$ 0.4
8.	Supply Management & Supplier Diversity	\$ 0.8	\$ -
	<b>Net Cost / Benefits</b>	<b>\$ 20.0</b>	<b>\$ 104.3</b>

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3. Please provide the amount of network management costs included in the AMI balancing account on a monthly basis from 2016 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and non-standard escalation if available.

**Utility Response 03:**

In 2016, costs for Advanced Meter Operations (AMO) included AMI deployment related costs for the different groups referenced in questions 3-6. Costs provided for these AMO groups include O&M and capital expenditures. The Network Management, Business Systems Analytics, and Network Maintenance & Construction groups have a common reporting structure, therefore capital costs associated with these groups collectively charge to the same internal order (IO). These three groups make up the Network group within AMO, while System Operations operates as its own group with a distinct IO.

**Network Management O&M Costs included in AMI Balancing Account – 2016**  
**(Nominal Direct \$ in millions)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Labor</b>	0.028	0.033	0.044	0.038	0.038	0.061	0.044	0.055	0.055	0.054	0.064	0.050	0.565
<b>Non-Labor</b>	0.015	0.016	0.016	0.026	0.024	0.021	0.024	0.026	0.024	0.019	0.025	0.221	0.459

**Business System Analytics O&M Costs included in AMI Balancing Account – 2016**  
**(Nominal Direct \$ in millions)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Labor</b>	0.024	0.030	0.036	0.035	0.035	0.034	0.031	0.032	0.029	0.036	0.032	0.031	0.384
<b>Non-Labor</b>	0.008	0.046	0.006	0.041	0.071	0.039	0.008	0.072	0.040	0.039	0.039	0.039	0.448

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Utility Response 03 Continued:

**Network Maintenance & Construction O&M Costs included in AMI Balancing Account – 2016**  
**(Nominal Direct \$ in millions)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Labor</b>	0.047	0.057	0.070	0.063	0.068	0.040	0.042	0.053	0.047	0.047	0.050	0.047	0.631
<b>Non-Labor</b>	0.079	0.049	0.077	0.076	0.024	0.023	0.055	0.193	0.249	0.055	0.110	0.122	1.112

**Network Capital Costs included in AMI Balancing Account – 2016**  
**(Nominal Direct \$ in millions)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Labor</b>	0.308	0.363	0.445	0.401	0.374	0.371	0.318	0.393	0.308	0.323	0.334	0.268	4.206
<b>Non-Labor</b>	0.365	0.500	1.342	0.326	0.368	0.893	0.776	0.214	1.222	0.550	0.790	1.688	9.034

The 2017 financials are not yet available. See response to Question 2 for 2018 AMO forecast.

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4. Please provide the amount of business system analytics costs included in the AMI balancing account on a monthly basis from 2016 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and non-standard escalation if available.

**Utility Response 04:**

See response to Question 3 for 2016 costs. The 2017 financials are not yet available. See response to Question 2 for 2018 AMO forecast.

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5. Please provide the amount of network maintenance and construction costs included in the AMI balancing account on a monthly basis from 2016 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and non-standard escalation if available.

**Utility Response 05:**

See response to Question 3 for 2016 costs. The 2017 financials are not yet available. See response to Question 2 for 2018 AMO forecast.

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6. Please provide the amount of systems operations costs included in the AMI balancing account on a monthly basis from 2016 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and non-standard escalation if available.

**Utility Amended Response 06:**

Due to an error that was found while responding to another data request, SoCalGas is correcting the response to question 6 from TURN Data Request-08, originally submitted February 20, 2018. The data in the table below has been revised.

**System Operations Costs included in AMI Balancing Account – 2016**  
**(Direct \$ in millions)**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>
<b>Labor</b>	0.236	0.275	0.308	0.307	0.325	0.205	0.355	0.248	0.292	0.305	0.267	0.244	3.367
<b>Non-Labor</b>	0.036	0.235	0.065	0.310	0.081	0.481	0.173	0.429	0.960	0.382	0.414	0.807	4.373



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6. Please provide the amount of systems operations costs included in the AMI balancing account on a monthly basis from 2016 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and non-standard escalation if available.

**Utility Response 06:**

**System Operations Costs included in AMI Balancing Account – 2016**  
**(Direct \$ in millions)**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>
<b>Labor</b>	0.245	0.290	0.326	0.323	0.344	0.221	0.366	0.265	0.309	0.317	0.282	0.257	3.545
<b>Non-Labor</b>	(0.012)	0.238	0.112	0.305	0.081	0.645	0.144	0.466	1.014	0.424	0.514	0.886	4.818

The 2017 financials are not yet available. See response to Question 2 for 2018 AMO forecast.

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7. Please provide the amount of Employee Contractor, Customer and Public Safety costs related to Consumption Analytics included in the AMI balancing account on a monthly basis from 2016 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and nonstandard escalation if available.

**Utility Response 07:**

There are no Employee Contractor, Customer and Public Safety costs related to Consumption Analytics in the balancing account for 2016 because it is an activity that began in 2017. The 2017 financials are not yet available. The costs for this activity are embedded in the forecast of the Business Systems Analytics group, which is a part of the AMO. Hence, these costs are embedded in the response to the 2018 portion of Question 2.

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8. Please provide the amount of Employee Contractor, Customer and Public Safety costs related to inspection of data collector unit poles included in the AMI balancing account on a monthly basis from 2016 through the latest available date in 2017 and forecast in each month through the end of 2018. Divide into labor, non-labor, and non-standard escalation if available.

**Utility Response 08:**

The 2016 costs below are embedded in the costs of the Network Maintenance & Construction group.

**Employee Contractor, Customer and Public Safety costs for DCU Inspections included in AMI Balancing Account – 2016**  
**(Direct \$ in millions)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Labor</b>	0.019	0.010	0.016	0.006	0.007	0.021	0.008	0.014	0.017	0.019	0.014	0.021	0.171
<b>Non-Labor</b>	0.016	0.008	0.013	0.005	0.008	0.019	0.009	0.014	0.011	0.017	0.010	0.018	0.148

The 2017 financials are not yet available. SoCalGas’ forecasts are not provided on a monthly basis, therefore the annual forecast is shown below for 2018. Please note that these 2016 costs and the 2018 forecast shown below are a portion of the total cost and forecast for the Network Maintenance & Construction group. The costs for this activity are embedded in the forecast of the Network Maintenance & Construction group, which is a part of the AMO. Hence, these costs are embedded in the response to the 2018 portion of Question 2.

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9. Please provide an organization chart for the functions contained in advanced meter operations (a) as of the present time and (b) as forecast in the GRC.

**Utility Response 09:**

Please see attachment TURN-SEU-008\_Q9a-b Attachment AMO Organization.pdf for response.

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10. Regarding SCG-17 WP 13-14

d. Please provide the number of FTE in the Systems Operation function in each month in 2016 and 2017.

**Utility Amended Response 10d:**

Due to an error that was found while responding to another data request, SoCalGas is correcting the response to question 10d from TURN Data Request-08, originally submitted February 20, 2018. The data in the table below has been revised.

**d. FTEs in Systems Operations**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>2016</b>	26.9	30.8	27.9	34.1	34.0	22.9	40.0	24.2	31.3	34.3	27.5	25.0

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10. Regarding SCG-17 WP 13-14

- a. Please provide the number of FTE in the Network Management function in each month in 2016 and 2017.
- b. Please provide the number of FTE in the Network Maintenance and Construction function in each month in 2016 and 2017.
- c. Please provide the number of FTE in the Business Analytics function in each month in 2016 and 2017.
- d. Please provide the number of FTE in the Systems Operation function in each month in 2016 and 2017.

**Utility Response 10:**

**a – c:**

In 2016, costs for Advanced Meter Operations (AMO) included AMI deployment related costs for the different groups referenced in 10a-10d. Costs for the FTEs in these AMO groups include O&M and capital expenditures. The Network Management, Business Systems Analytics, and Network Maintenance & Construction groups have a common reporting structure, therefore capital costs associated with these groups collectively charge to the same internal order (IO). These three groups make up the Network group within AMO, while System Operations operates as its own group with a distinct IO.

**O&M FTEs in Network Management**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2016</b>	3.1	3.5	4.2	4.0	3.8	6.8	4.9	4.9	5.3	6.5	7.4	5.9

**O&M FTEs in Network Maintenance and Construction**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2016</b>	6.4	7.9	8.5	8.5	8.3	5.1	5.5	6.5	5.8	6.2	6.2	5.8

**O&M FTEs in Business Systems Analytics**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2016</b>	3.1	3.8	4.0	4.3	4.1	4.0	3.9	3.5	3.4	4.3	3.9	3.7

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**Capital FTEs in Network**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>2016</b>	40.2	46.2	49.5	49.3	44.9	42.4	39.1	45.5	37.0	40.5	40.4	33.9

The 2017 FTE data is not yet available.

**d. FTEs in Systems Operations**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>2016</b>	27.7	32.1	29.2	35.4	35.5	24.0	40.9	25.5	32.6	35.4	28.6	26.1

The 2017 FTE data is not yet available.

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11. Regarding SCG-17 WP 13-27

d. Please provide the number of billing exceptions by month from 2014 through the latest month in 2017.

**Utility Response 11:**

Billing exceptions, as provided here, are Advanced Meter equipment and systems-related exceptions that may be preventing the transmission of the electronic meter read for billing. These exceptions are tracked, investigated and followed-up on by the Systems Health team and the meter may be manually read until the exception is resolved. Systems Health billing exception tracking began in 2015, so 2014 data is not available.

**System Health Billing Exceptions**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>2015</b>	1957	2462	2782	2883	2967	1450	1815	1694	1473	1492	1095	1232
<b>2016</b>	1413	1490	2249	2422	2424	2854	2774	3005	2695	2710	3907	2847
<b>2017</b>	n/a	2039	2414	3735	3742	3701	3971	4050	3544	4354	3613	2868



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11. Regarding SCG-17 WP 13-27

- a. Please provide the number of MTU exceptions by month from 2014 through the latest month in 2017.
- b. Please provide the number of field recommendation analysis tasks by month from 2014 through the latest month in 2017.
- c. Please provide the number of system health exceptions by month from 2014 through the latest month in 2017.
- d. Please provide the number of billing exceptions by month from 2014 through the latest month in 2017.
- e. Please provide the number of opt-out program exceptions by month from 2014 through the latest month in 2017.
- f. Please provide the number of non AMI-billed meters by month from 2014 through the latest month in 2017.
- g. Please provide the number of Pole Inspections by month from 2014 through the latest month in 2017.

**Utility Response 11:**

a. MTU Exceptions

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2014</b>	936	1,281	1,413	893	1,136	1,353	1,255	1,349	2,930	1,593	1,669	2,247
<b>2015</b>	1,973	1,597	2,301	1,987	1,786	3,740	2,440	2,795	6,804	2,727	1,830	1,868
<b>2016</b>	3,605	3,167	4,755	4,348	3,215	5,912	2,619	28,100	37,471	7,423	5,273	9,324
<b>2017</b>	17,374	10,825	8,113	3,351	3,334	15,557	17,553	7,414	7,471	5,069	3,873	3,645

b. Field Recommendation Analysis Tasks

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2014</b>	559	554	813	561	737	834	733	779	1,247	776	762	784
<b>2015</b>	1,117	881	1,149	805	709	1,319	969	1,301	1,515	1,395	855	1,069
<b>2016</b>	1,725	1,036	898	566	272	624	615	276	75	63	61	37
<b>2017</b>	105	96	147	69	0	364	161	502	495	499	455	398

c. System Health Exceptions

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2016</b>									28,840	26,783	24,256	22,759
<b>2017</b>	20,430	19,562	18,791	20,009	18,578	17,824	17,008	16,322	15,478	17,477	19,964	11,010

System Health exception tracking began in September 2016. Numbers are a snapshot in time of total exceptions in each month.

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**Utility Response 11:-Continued:**

d. To be provided on February 14, 2018.

e. Opt-out program exceptions

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2016</b>												2030
<b>2017</b>	2123	3850	1682			429		604	420			496

Opt-out program exception tracking by System Health did not begin until late 2016. Missing periods are not available.

f. Installed but Non-AM Billed

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2014</b>	189,119	179,305	202,231	214,496	240,675	249,798	193,191	226,089	224,525	168,652	182,645	129,129
<b>2015</b>	155,583	136,893	148,540	150,145	153,541	153,410	148,161	159,372	160,524	195,108	168,889	162,764
<b>2016</b>	198,390	172,748	196,513	165,592	142,287	139,108	110,776	74,120	85,775	61,189	61,959	52,850
<b>2017</b>	45,706	45,223	54,246	51,435	45,020	43,210	43,772	43,272	43,036	41,172	40,291	34,686

g. Pole Inspections

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2014</b>	103	65	302	62	36	372	212	222	177	530	122	310
<b>2015</b>	384	204	83	108	138	484	251	264	293	201	119	176
<b>2016</b>	405	202	343	123	141	441	162	302	356	395	285	438
<b>2017</b>	186	199	415	387	237	244	145	170	805	468	355	310

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12. Please provide the costs of each of the non-labor items on Workpapers 39 and 40 incurred in 2016 and through the latest month of 2017 in the AMI balancing account.

**Utility Response 12:**

Historical information for non-labor at the line item level of detail is not available. Please refer to responses to questions 3, 4, 5, and 6 for 2016 non-labor O&M costs by AMO sub-group.

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13. Please provide the number of DCU warranty and non-warranty incidents in 2016 and through the latest month of 2017.  
Identify the number requiring permits in each year.

**Utility Response 13:**

	<b>2016</b>	<b>2017</b>
DCU Warranty Incidents	559	1522
DCU Non-Warranty Incidents	141	240
DCU Incidents Requiring Permits	50	141

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14. Please provide the number and cost of battery replacements in 2016 and through the latest month of 2017. Identify the number requiring permits in each year.

**Utility Response 14:**

	<b>2016</b>	<b>2017</b>
Battery Replacements	305	1055
Battery Replacement Costs*	\$0	\$0
Battery Replacements Requiring Permits	21	83

\*Battery replacement costs during the AMI deployment were covered under vendor warranty. These costs will be incurred by SoCalGas in 2019 as part of a battery maintenance schedule.

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15. What is the basis for the assumptions regarding percentages of activities requiring permits on Workpapers 43-44?

**Utility Response 15:**

**Reference 2a & 2b DCU Maintenance Permits Workpaper p. 42; Reference 2j Battery Replacement Permits Workpaper p. 44**

At the commencement of AMI implementation, SoCalGas often conducted incident-related work under the same ministerial permits issued by jurisdictions for the initial deployment of the Data Collector Units (DCUs). These permits were open and available in association with the project deployment phase, and most jurisdictions issued permits, which covered multiple DCU installations under a single, jurisdiction-wide permit. These permits often contained longer timeframes to accommodate the large volume of DCUs being deployed within their respective areas.

During the deployment phase, SoCalGas submitted new maintenance permit applications for approximately 7.5% of DCU incident-related work orders. SoCalGas estimates the number of required permits for incidents to be doubled, based on subject-matter expertise (to 15%) by TY 2019, because once in operations (post-project deployment), many of the installation permits issued during the implementation phase of the project will be expired.

**Reference 2k New Business DCU Permits Workpaper p. 44**

Of the 41 New Business DCUs, we are forecasting that 32 will be installed on poles. SoCalGas anticipates, based on subject-matter expertise, that 50% of the 32 installations will require a permit. Hence, there will be 16 of 41 New Business installations requiring a permit, which equates to 38%.

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16. Please explain why bucket trucks and forklifts are separately requested on pages 43-44 rather than being included as part of fleet expenses.

**Utility Response 16:**

The bucket truck and forklift rentals are not included in SCG's fleet vehicle forecast presented in Ex. SCG-23-R. The bucket truck and forklift rentals are only reflected in AMI's workpapers (SCG-17-WP-R) as AMI has been renting the equipment (recorded in the Advanced Meter Infrastructure Balancing Account) through the deployment period; the TY 2019 GRC request is a continuation of those rentals in the post-AMI deployment period.

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17. Please identify costs of bucket trucks and forklifts in 2016 and through the latest available month in 2017.

**Utility Response 17:**

**Bucket Truck and Forklift Costs (\$ in millions)**

	<b>Jan - Dec</b>
<b>2016</b>	\$0.1060

SoCalGas is currently in the process of re-assessing the forecast for bucket trucks and forklifts. Once the re-assessment is completed SoCalGas may revise the forecast, if necessary, at the next available opportunity. Financials for 2017 are not yet available.



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18. Please separately identify the number of hours and total cost of professional services corresponding to references 3a and 4c in 2016 and through the latest available month in 2017.

**Utility Response 18:**

	<b>2016 Cost</b>	<b>Hours</b>
Reference 3a: NEMO, Siterra and Star Programming	\$ 306,305.80	889
Reference 4c: Headend/MDMS Software	\$ 186,700.00	N/A

2017 financials are not yet available.

**Reference 3a: NEMO, Siterra and Star Programming**

Star Programming professional services do not start until 2017 and are therefore not included in 2016 costs. NEMO professional services were part of a fixed fee contract with the vendor and therefore the number of hours cannot be determined. Thus, only the number of hours for Siterra professional is shown above.

**Reference 4c: Headend/MDMS Software**

Professional services for Headend/MDMS Software were part of a fixed fee contract with the vendor. Therefore, the number of hours cannot be determined.

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19. Please provide documents supporting (a) the initial cost and (b) the 8% escalation rate for maintenance fees for Headend Software and MDMS software.

**Utility Response 19:**

**This response contains Confidential and Protected Materials Pursuant to PUC Section 583, GO 66-D, and D.17-09-023.**

- a. See TURN-SEU-008\_Q19a\_ORA-SCG-031-MW5-Q4f & g Attachment CONFIDENTIAL for pricing matrix. HeadEnd maintenance fees are found on Tab 1, Line 12. MDMS maintenance fees are found on Tab 1, Line 17.
- b. See TURN-SEU-008\_Q19b\_ORA-SCG-031-MW5-Q5 Attachment CONFIDENTIAL for calculations for the 8% escalation rate. The supporting documentation for the escalation rate can be found in TURN-SEU-008\_Q19b\_ORA-SCG-031-MW5-Q5 Contract Attachment CONFIDENTIAL.