

**DRA DATA REQUEST
DRA-SCG-050-KCL
SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS RESPONSE
DATE RECEIVED: MARCH 1, 2011
DATE RESPONDED: MARCH 15, 2011**

Exhibit Reference: SCG-05 and SCG-05-CWP

Subject: Gas Engineering and Transmission Capital Expenditures

Please provide the following:

1. Please provide annual recorded data for each category of capital expenditures (see Table SCG-RCK-17 on Pages RKS-70 and -71 of direct testimony Exhibit No. SCG-05) in 2009 dollars for Years 2005 to 2008.

SoCalGas Response:

Shown below are recorded-adjusted amounts for years 2005 through 2008 used in preparing 2010 through 2012 estimates. Adjustments made are:

- All years adjusted to 2009 levels, and shown in thousands of dollars (\$000);
- Vacation & Sick added to labor amounts;
- Amounts provided for in other CPUC proceedings removed;
- In BC 3X1, a late New Business deposit refund was moved from year 2007 to the year in which its credit was posted, 2005. (\$000 in 2009\$).

Category Description	2005 Adjusted Recorded	2006 Adjusted Recorded	2007 Adjusted Recorded	2008 Adjusted Recorded
1. 276 – Pipeline Integrity - Distribution	1,836	204	3,531	269
2. 277 – Distribution Integrity Management Program (DIMP)	0	0	0	0
3. 3X1 – Transmission Pipelines – New Additions	31,682	5,565	16,062	17,201
4. 3X2 – Transmission Pipelines – Replacements and Pipeline Integrity Program (PIP)	56,162	50,270	44,947	30,577
5. 3X3 – Transmission Pipeline – Relocations - Freeway	1,673	685	6,063	493
6. 3X4 – Transmission Pipeline Relocations – Franchise/Private	8,236	5,600	7,862	3,169
7. BC 3X5 – Gas Transmission – Compressor Stations	7,066	5,559	3,722	1,831
8. BC 3X6 – Gas Transmission Pipelines – Cathodic Protection	293	211	337	314

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Response to Question 1 (Continued)

9.	BC 3X8 -- Gas Transmission – Meter and Regulator	2,354	1,833	7,015	5,820
10.	BC 3X9 – Gas Transmission – Auxiliary Equipment	1,055	3,326	1,782	1,228
11.	BC 6X7 -- Gas Transmission – Pipeline Land Rights	0	3	1	1
12.	BC 730 – Gas Transmission – Laboratory Equipment	252	565	183	225
13.	BC 736 – Gas Transmission & Storage – Capital Tools	334	148	649	239
14.	BC 1001 – Gas Storage – S&E Direct Overheads	367	124	69	224
15.	BC 1002 Gas Transmission – S&E Direct Overheads	515	912	909	716
16.	BC 01100 – Gas Transmission – Coastal Region Conservation Program	0	0	0	0
17.	BC 00399 – Sustainable SoCal Program	0	0	0	0

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2. In Capital Workpapers SCG-05-CWP, several projects under Budget Code 276 (such as projects with Budget Numbers 00276.01 to .06) are very similar in characteristics to those under Budget Code 312 (such as projects with Budget Numbers 00312.00 to .19). What criteria were used to determine which of the two budget codes each project should fall under?

SoCalGas Response:

DRA is correct in observing that projects in BC 276 and many of those in BC 3X2 are similar in characteristics. For reporting convenience, BC 276 is used exclusively for Pipeline Integrity-related projects for Transmission Lines (DOT definition) operated/maintained by the Distribution organization. BC 3X2 is used for Pipeline Integrity-related and other replacement projects for Transmission Lines (DOT definition) operated/maintained by the Transmission organization. This budget code distinction has been made purely to facilitate internal reporting.

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3. What is the status of each of the projects with Budget Numbers 00311.01 to .05 listed in Capital Workpapers SCG-05-CWP?

SoCalGas Response:

Listed below are the status and cost layout for each of the projects in question as SoCalGas knows them in March, 2011. Please refer to SCG-05-CWP for the status and costs as SoCalGas knew them in early 2010. As will be noted by DRA there are changes in both the amounts estimated for these projects and in their timing. As these projects near their start dates, customer and permit requirements become more closely defined and costs and timing change as a result.

00311.01 – Anaheim Peaker UEG. This project is expected to be complete by April 30, 2011 and will incur costs in 2011, as shown below, that were not part of our GRC application.

PROJECT COST (\$000 IN 2009\$)						
Prior years	2009	2010	2011	2012	Remaining years	TOTAL
17	58	1,497	721	0	0	2,293

00311.02 – City of Palmdale UEG. This project is currently on hold pending the City of Palmdale obtaining financing upon completion of the California Energy Commission (CEC) permit processing. We expect to begin incurring costs in late 2011 and those costs will continue into mid-2013 as shown below.

PROJECT COST (\$000 IN 2009\$)						
Prior years	2009	2010	2011	2012	Remaining years	TOTAL
0	0	0	777	11,196	8,878	20,851

00311.03 – Mandalay Peaker UEG. This project is on hold pending a lawsuit between the City of Oxnard and Southern California Edison Co. The City of Oxnard in the interim has refused to issue SCE a permit for construction of their plant. Nonetheless, costs are expected to begin in 2011 and the project is expected to be complete in 2012 as shown below.

PROJECT COST (\$000 IN 2009\$)						
Prior years	2009	2010	2011	2012	Remaining years	TOTAL
363	42	9	1,433	56	0	1,903

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Response to Question 3 (Continued)

00311-04 – Hydrogen Energy. This project is on hold pending completion of Hydrogen Energy’s feasibility study, gas supply route study, and the CEC permit application process completion. SoCalGas expects costs to begin in late 2011 and continue into 2012 and later years as shown below.

PROJECT COST (\$000 IN 2009\$)						
Prior years	2009	2010	2011	2012	Remaining years	TOTAL
0	0	0	326	2,844	12,610	15,780

00311-05 – North/South Interconnect. This project, originally expected to be complete in 2010 is expected to run through 2011 and will incur costs much greater than originally estimated, as shown below. Higher costs are due to:

- More-restrictive working conditions in project-specific state and federal permits;
- Discovery of debris in the pipeline during pigging;
- More than expected anomalies discovered during smart-pigging that will require approximately fifty short-section replacements.

In addition, initial analysis of smart-pig data indicates the possibility of additional replacement of between five and six miles of line at a cost that could exceed \$15 million. This is not included in the numbers shown below because data analysis is incomplete.

PROJECT COST (\$000 IN 2009\$)						
Prior years	2009	2010	2011	2012	Remaining years	TOTAL
118	5,632	11,170	7,211	0	0	24,131

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4. Please provide the HCA mileage for each of the projects with Budget Numbers 00276.01 to .06 listed in Capital Workpapers SCG-05-CWP. Why is the cost of launcher/receiver \$618.53K for some and \$628.03 for others?

SoCalGas Response:

HCA Mileage for each of the Budget Numbers 00276.01 to 00276.06:

Budget Number	Project	HCA Mileage
276.01	36-7-06	.01
276.02	36-7-04	.03
276.03	41-6903	.21
276.04	38-573	.48
276.05	36-8-01	7.64
276.06	38-504	1.32

The \$618.53K cost for a launch/receive installation, was based upon a 2009 winning vendor bid for these installations.

Install:	\$73,120	(Vendor bid range: \$73,120 to \$83,266)
Closures	\$5,000	
Radiography	\$7,000	
Materials (Launch/Receiver)	\$87,859	
Site Materials (perm site)	<u>\$110,000</u>	
Total	\$282,267	

Add 8.5% for supervision \$309,267

(times 2 for launch & receive site) \$618,533

\$618.53K is broken out according to our 8.5% / 91.5%, labor/non-labor split. The vacation and sick loader is applied to the labor component and combined back to equal \$628.03K. This was used for all baseline assessments unless there was already an active work order on the project.

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5. Please provide detailed calculations showing how the cost factor of \$358,103/HCA mile used in Budget Numbers 00276.01 to .06 and 00312.00 to .19 was derived. Please also provide examples of awarded bids used to derive the cost per launcher-receiver used for these same projects.

SoCalGas Response:

SoCalGas based the \$358,103/HCA mile used in Budget Numbers 00276.01 to 00276.06 and 00312.00 to 00312.19 upon the capital cost of 45 prior inline inspection (ILI) projects worked between 2002 and 2009, including some completed in early 2010. The \$358,103/HCA mile is the retrofit-only portion of these projects and does not include the costs of launchers and receivers. (The total capital cost portion of an ILI project, is a retrofit/HCA mile cost plus a capital launch/receive installation cost.)

In order to estimate the retrofit-only portion of these 45 projects, SoCalGas first calculated the launcher/receiver cost (to be removed) as follows:

The \$618,533 cost for a launch/receive installation was based upon a 2009 winning vendor bid for these installations.

Install:	\$73,120	(Vendor bid range: \$73,120 to \$83,266)
Closures	\$5,000	
Radiography	\$7,000	
Materials (Launch/Receiver)	\$87,859	
Site Materials (perm site)	<u>\$110,000</u>	
Total	\$282,267	
Add 8.5% for supervision	\$309,267	

(times 2 for launch & receive site) \$618,533

Calculation of the retrofit-only portion was done by taking the direct cost of each of the 45 projects and subtracting the launcher/receiver portion of each at \$618,533. The reduced direct cost was then divided by each project's HCA miles to arrive at a cost/HCA mile for each project. These ranged from a low of approximately \$26,100/HCA mile to a high of approximately \$1,198,000/HCA mile. SoCalGas then calculated the average of the 45 projects at \$358,103 and used that as representative of the retrofit component for planning purposes.

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6. Please provide detailed step-by-step calculations of the total cost for each of Budget Numbers 00276.07 to .16 and 00312.22 to .28.

SoCalGas Response:

Budget Number 00276.07

These SoCalGas replacement projects were forecast by applying one of three project size-dependent cost factors explained in Capital Project Workpaper 00276.07 Pgs. 2-4. The cost factors were derived by using historic replacement cost data from 2006 through 2009. This is the period since the PSIA (Pipeline Safety Improvement Act) was passed where an increase in the level of this activity has occurred. (\$000 in 2009\$)

Type	Line Number	Project Type	HCA Miles	Replacement Feet	Estimate w/ V&S, Escalation Factors					
					2010 Labor	2010 Non Labor	2011 Labor	2011 Non Labor	2012 Labor	2012 Non Labor
Replacement	32-6520	Small	0.01	53	5,756	37,500	1,625	12,500	0	0
Replacement	37-6183	Small	0.01	53	5,756	37,500	1,625	12,500	0	0
Replacement	30-08	Medium	0.09	475	2,946	124,740	832	41,580	0	0
Replacement	32-6521	Small	0.02	106	0	0	4,875	37,500	1,625	12,500
Replacement	35-6524	Small	0.01	53	5,756	37,500	1,625	12,500	0	0
Replacement	45-3206	Small	0.01	53	5,756	37,500	1,625	12,500	0	0
Replacement	41-25-A	Medium	0.14	739	0	0	3,881	194,040	1,294	64,680
Replacement	43-30	Small	0.00	80	5,756	37,500	1,625	12,500	0	0
Replacement	35-6425	Small	0.01	53	5,756	37,500	1,625	12,500	0	0
Replacement	41-153	Small	0.01	53	5,756	37,500	1,625	12,500	0	0
Replacement	30-78	Small	0.02	106	5,756	37,500	1,625	12,500	0	0
Replacement	37-15	Small	0.02	106	5,756	37,500	1,625	12,500	0	0
Replacement	30-58	Medium	0.04	211	1,309	55,440	370	18,480	0	0
Replacement	32-8042	Medium	0.04	211	1,309	55,440	370	18,480	0	0
Replacement	41-128	Medium	0.10	528	3,273	138,600	924	46,200	0	0
Replacement	36-1006	Medium	0.14	739	4,582	194,040	1,294	64,680	0	0
Replacement	41-111	Medium	0.20	1,067	6,614	280,088	1,867	93,363	0	0
Regulator Station	36-7-02	Regulator Station	0.89	0	5,756	112,500	1,625	37,500	0	0
Replacement	42-12	Medium	2.61	500	3,099	461,250	875	153,750	0	0
Replacement	41-25-A	Medium	3.37	17,794	0	0	0	0	0	0
Replacement	30-6205	Small	0.04	110	0	0	4,875	37,500	1,625	12,500
Replacement	41-6557	Medium	0.31	1,637	0	0	3,437	171,864	1,146	57,288
Regulator Station	41-84-A	Regulator Station	0.23	0	0	0	4,875	112,500	1,625	37,500
Replacement	41-53	Medium	0.17	898	0	0	4,712	235,620	1,571	78,540
Replacement	45-8036	Medium	0.04	240	0	0	1,260	63,000	420	21,000
Replacement	30-66	Small	0.03	158	0	0	4,875	37,500	1,625	12,500
Replacement	32-6523	Medium	0.09	475	0	0	2,495	124,740	832	41,580
Replacement	30-6799	Small	0.01	53	0	0	4,875	37,500	1,625	12,500
Replacement	30-68	Small	0.03	158	0	0	4,875	37,500	1,625	12,500
Replacement	32-8027	Small	0.03	158	0	0	4,875	37,500	1,625	12,500
Replacement & Regulator Station	32-8043	Medium & Reg. Station	0.08	422	0	0	2,218	223,380	739	74,460
Replacement	31-50	Small	0.01	53	0	0	4,875	37,500	1,625	12,500
Replacement	30-6200	Small	0.02	106	0	0	4,875	37,500	1,625	12,500
Replacement	30-6209	Small	0.03	158	0	0	4,875	37,500	1,625	12,500
Replacement	30-6543	Medium	0.10	606	0	0	3,182	159,075	1,061	53,025
Regulator Station	35-6405	Regulator Station	0.13	0	0	0	4,875	112,500	1,625	37,500
Regulator Station	35-40	Regulator Station	0.23	0	0	0	4,875	112,500	1,625	37,500
Replacement	36-9-09	Medium	0.9	4,752	0	0	9,979	498,960	3,326	166,320
Replacement	3004	Small	0.03	158	0	0	4,875	37,500	1,625	12,500
Regulator Station	38-230	Regulator Station	0.28	0	5,756	112,500	1,625	37,500	0	0
Replacement	32-6522	Medium	0.30	1,584	3,927	166,320	1,109	55,440	0	0
Regulator Station	37-49	Regulator Station	0.56	0	5,756	112,500	1,625	37,500	0	0
Replacement	38-959	Medium	0.63	3,326	8,248	473,022	2,328	157,674	0	0
Replacement	38-200	Medium	0.68	3,590	8,902	459,492	2,513	153,164	0	0
					\$113,281	\$3,083,432	\$126,520	\$3,410,990	\$31,513	\$794,393

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Budget Number 00276.08 through 00276.15

(\$000 in 2009\$)

Budget Number	Type	Line Number	Project Type	HCA Miles	Replacement Feet	Estimate w/ V&S, Escalation Factors					
						2010 Labor	2010 Non Labor	2011 Labor	2011 Non Labor	2012 Labor	2012 Non Labor
00276.08	Replacement	38-366	Medium	0.83	8,000	0	0	16,800	922,500	5,600	307,500
00276.09	Replacement & Regulator Station	38-528	Medium & Reg Station	1.98	5,280	13,092	1,038,150	3,696	346,050	0	0
00276.10	Replacement & Regulator Station	38-351	Medium & Reg Station	0.90	14,752	0	0	30,979	1,867,710	10,326	622,570
00276.11	Replacement	42-46	Medium	6.34	5,280	0	0	11,088	1,090,650	3,696	363,550
00276.12	Replacement	42-46-F	Medium	2.47	1,000	6,199	633,750	1,750	211,250	0	0
00276.13	Replacement	41-43	Medium	1.19	12,000	0	0	25,200	1,383,750	8,400	461,250
00276.14	Replacement	36-1008-A	Medium	1.12	5,914	0	0	12,419	620,970	4,140	206,990
00276.15	Replacement	38-202	Medium	1.67	8,818	21,863	1,049,598	6,172	349,866	0	0

Budget Number 00276.16

Capital Project Workpaper 00276.16 is the sum of many individual Casing Removal or Tethered Inline Inspection projects, each with its own scope and characteristics. The majority of the costs to remove a casing or to conduct a tethered inspection are contract labor and equipment charges with very little material required to complete the work. Our estimating methodology is based on historic contractor labor and equipment costs which is distilled down to a cost per day for the anticipated contract resources needed to accomplish the scope of work. In both cases the scope will require a contract crew size of 7 to 8 employees, a backhoe, welder, dump truck, crew truck and various other equipment such as traffic signage, shoring, sand blaster, coating application equipment and so on. A typical daily cost for these resources comes to about \$7,700 per day, including all overheads and support costs for the primary contractor. A one time unit cost of between \$6,677 and \$10,000 is added to cover other contract support services like coating abatement, traffic control, etc.

The estimated duration required to fully complete a casing removal will vary with each site and the length of the casing but should be approximately 15 days. Tethered inspections will also vary. Some will be 25 days or more and will carry the extra cost of the inspection tool vendor of \$75,000 per casing.

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Budget Number 00276.16 (cont'd)

(\$000 in 2009\$)

Estimate w/ V&S, Escalation Factors (\$000)							
Project Type	Line Number	2010 Labor	2010 Non Labor	2011 Labor	2011 Non Labor	2012 Labor	2012 Non Labor
CAP Casing Removal	41-17 Casing Removal	9.0	122.0				
CAP Casing Removal	45-163 Casing Removal	18.0	244.0				
CAP Casing Removal	30-18 Casing Removal	9.0	122.0	18.0	244.0		
CAP Casing Removal	32-21X Casing Removal	26.0	367.0				
CAP Casing Removal	36-1007 Casing Removal	9.0	122.0				
CAP Casing Removal	37-18 Casing Removal	9.0	122.0				
CAP Casing Removal	37-18J Casing Removal	18.0	244.0				
CAP Casing Removal	35-02-H Casing Removal			9.0	122.0		
CAP Casing Removal	35-20-A Casing Removal			9.0	122.0		
CAP Casing Removal	35-6526 Casing Removal			9.0	122.0		
CAP Casing Removal	36-1032 Casing Removal			9.0	122.0		
CAP Casing Removal	36-9-09 South Casing Removal			9.0	122.0		
CAP Casing Removal	37-07Casing Removal			9.0	122.0		
CAP Casing Removal	43-1106 Casing Removal			9.0	122.0		
CAP Casing Removal	45-1106 Casing Removal			18.0	244.0		
CAP Casing Removal	30-02 Casing Removal					18.0	244.0
CAP Casing Removal	35-6416 Casing Removal					9.0	122.0
CAP Casing Removal	36-37 Casing Removal					9.0	122.0
CAP Casing Removal	41-19 Casing Removal					9.0	122.0
CAP Casing Removal	41-05 Casing Removal					18.0	244.0
CAP Casing Removal	41-54 Casing Removal					9.0	122.0
CAP Casing Removal	42-46 Casing Removal					9.0	122.0
Tether ILI Casing	32-60 Casing Tether ILI			47.0	427.0		
Tether ILI Casing	30-02 Casing Tether ILI					172.0	1,564.0
Tether ILI Casing	30-09-A Casing Tether ILI					31.0	284.0
Tether ILI Casing	30-18 Casing Tether ILI			47.0	427.0		
Tether ILI Casing	30-58 Casing Tether ILI					16.0	142.0
Tether ILI Casing	31-09 Casing Tether ILI				78.0	78	711.0
Tether ILI Casing	32-21X Casing Tether ILI			16.0	142.0		
Tether ILI Casing	31-6346 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	32-25 Casing Tether ILI					16.0	142.0
Tether ILI Casing	33-120 Casing Tether ILI			32.0	284.0	16.0	142.0
Tether ILI Casing	35-02-H Casing Tether ILI			31.0	284.0		
Tether ILI Casing	35-20-A Casing Tether ILI			16.0	142.0		
Tether ILI Casing	35-6405 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	35-6416 Casing Tether ILI					31.0	284.0
Tether ILI Casing	35-6526 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	36-7-02 Casing Tether ILI					31.0	284.0
Tether ILI Casing	36-9-06-E Casing Tether ILI			16.0	142.0		
Tether ILI Casing	36-9-09 South Casing Tether ILI			16.0	142.0		
Tether ILI Casing	36-9-21 Casing Tether ILI					16.0	142.0
Tether ILI Casing	36-1006 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	36-1032 North Casing Tether ILI			16.0	142.0		
Tether ILI Casing	36-6588 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	37-07 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	37-18 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	37-49 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	38-351 Casing Tether ILI					31.0	284.0
Tether ILI Casing	38-501 Casing Tether ILI					16.0	142.0
Tether ILI Casing	38-504 Casing Tether ILI					47.0	427.0
Tether ILI Casing	38-959 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-09 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-21 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-23-N Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-25-A1 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-25-A Casing Tether ILI			16.0	142.0		
Tether ILI Casing	41-36 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-54 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-113 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-6000-2 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-6001-2 Casing Tether ILI					31.0	284.0
Tether ILI Casing	41-6501 Casing Tether ILI					16.0	142.0
Tether ILI Casing	41-6505 Casing Tether ILI					16.0	142.0
Tether ILI Casing	42-46 Casing Tether ILI					47.0	427.0
Tether ILI Casing	43-16 Casing Tether ILI					16.0	142.0
Tether ILI Casing	43-121 Casing Tether ILI					31.0	284.0
Tether ILI Casing	43-1106 Casing Tether ILI			16.0	142.0		
Tether ILI Casing	44-635 Casing Tether ILI					16.0	142.0
Tether ILI Casing	45-163 Casing Tether ILI	31.0	284.0				
Tether ILI Casing	45-1106 Casing Tether ILI						
		\$ 129.0	\$ 1,627.0	\$ 527.0	\$ 5,256.0	\$ 899.0	\$ 8,487.0

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Response to Question 6 (Continued)

Budget Number 00312.22

(\$000 in 2009\$)

Type	Line Number	Project Type	HCA Miles	Replacement Feet	Estimate w/ V&S, Escalation Factors					
					2010 Labor	2010 Non Labor	2011 Labor	2011 Non Labor	2012 Labor	2012 Non Labor
Replacement	1234	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	0.04	211	1,309	55,440	370	18,480	0	0
Regulator Station	1129	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	1.63	8,606	0	0	0	225,000	0	75,000
Replacement	1221	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	0.06	0	0	0	0	0	2,218	110,880
Replacement	2007	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	0.05	264	0	0	0	0	1,848	92,400
Replacement	5041	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	0.29	1,531	3,797	160,776	1,072	53,592	0	0
Replacement	1031	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	0.78	4,118	8,855	367,500	2,500	122,500	0	0
Replacement	1003	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	0.26	1,373	0	0	3,750	746,250	1,250	248,750
					\$13,961	\$583,716	\$7,691	\$1,165,822	\$5,316	\$527,030

**DRA DATA REQUEST
DRA-SCG-050-KCL
SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS RESPONSE
DATE RECEIVED: MARCH 1, 2011
DATE RESPONDED: MARCH 15, 2011**

Response to Question 6 (Continued)

Budget Number 00312.23 through 00312.28

(\$000 in 2009\$)

Budget Number	Type	Line Number	Project Type	HCA Miles	Replacement Feet	Estimate w/ V&S, Escalation Factors					
						2010 Labor	2010 Non Labor	2011 Labor	2011 Non Labor	2012 Labor	2012 Non Labor
00312.23	Replacement	103	Based on Similar Job L5041 in 2009	0.17	1,100	21,253	882,000	6,000	294,000	0	0
00312.24	Replacement & Pressure Reduction Station	307	Based on Similar Job Mission Rd. Reg Station in 2008	1.53	8,078	0	0	10,500	514,500	3,500	171,500
00312.25	No 00312.25 Capital Project Workpaper Submitted										
00312.26	Replacement & Pressure Reduction Station	8109	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	0.8	4,224	21,253	882,000	6,000	294,000	0	0
00312.27	Replacement & Pressure Reduction Station	1171	Based on Similar Jobs, L1172 & L1173	1.14	6,019	56,674	2,352,000	16,000	784,000	0	0
00312.28	Replacement	317	Forecast was based on an on the spot estimate by a planner very experienced with projects of similar scope and dimension	1.19	6,283	15,579	742,236	4,398	247,412	0	0

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SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS RESPONSE
DATE RECEIVED: MARCH 1, 2011
DATE RESPONDED: MARCH 15, 2011**

7. What is the current status of NESHAPS Subpart ZZZZ (see Budget Number 00315.07)?

SoCalGas Response:

EPA finalized RICE/NESHAPS Subpart ZZZZ in August 20, 2010. The effective date for the finalized rule was October 19, 2010. The final compliance date is October 19, 2013.

The estimated costs as a result of the finalized rule are lower than the estimated costs of the March 2009 proposed rule. The SoCalGas costs for the finalized rule are shown below.

	2011		2012		2013	
	Workpapers as filed Dec 2010*	Adjusted costs based on final NESHAP Rule**	Workpapers as filed Dec 2010*	Adjusted costs based on final NESHAP Rule**	Workpapers as filed Dec 2010*	Adjusted costs based on final NESHAP Rule**
Capital	\$407	\$407	\$3,588	\$1,707	\$10,506	\$150

The original proposed rule crafted by EPA impacted 71 engines and 10 locations. The August 2010 amendments, that is, the finalized rule, impacted only 7 locations and 19 engines. The finalized rule did not include lean burn engines at Major Sources over 500 hp. The finalized rule also assigned “work practices” as opposed to emissions limits for engines previously proposed to have emission limits.

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8. What is the current status of Rule 1160 (see Budget Number 00315.08)?

SoCalGas Response:

Mojave Desert Air Quality Management District (MDAQMD) has calendared Rule 1160 for amendment in 2011. The rule will be amended to analyze particulate matter measures for cost effectiveness, to update for Reasonably Available Control Technology and to conform to Air Toxic Control Measure from the California Air Resources Board. The current cost estimates only reflect anticipated changes for volatile organic compounds, oxides of nitrogen and carbon monoxide limits. At this time, there is no change in the original estimate of cost for complying with the anticipated revisions to MDAQMD Rule 1160.

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9. SoCalGas requests capital expenditures for Budget Code 00399-Sustainable SoCal Program. How is this program different from that SoCalGas requests in Advice Letter No. 4172, “Request for Authorization to Offer Biogas Conditioning Services and Bioenergy Production Facilities Services on a Non-Tariffed Basis”, filed with the Commission on November 22, 2010?

SoCalGas Response:

The Biogas Conditioning Services and Bioenergy Production Facilities Services, as proposed in Advice Letter No. 4172, are fee based services SoCalGas requests to offer to potential customers, generally having raw biogas volumes, or feedstock sufficient to produce raw biogas volumes, greater than 1,000 scfm. SoCalGas believes the economics of biogas production and/or conditioning for facilities in this size range are feasible without further financial assistance. SoCalGas’ shareholders will be responsible for all costs and risks associated with these Services and ratepayers will not be responsible for any losses that may occur in providing the Services. The customer retains ownership of the biogas commodity.

In contrast, the Sustainable SoCal Program seeks to install four biogas conditioning systems at wastewater treatment plants having raw biogas volumes in the range of 200 to 600 scfm. The economics of biogas projects in the range of 200 to 600 scfm do not provide the necessary financial return for biogas producers to move forward with the installation of biogas conditioning facilities. However, this size is relatively more common, particularly for wastewater treatment plants, and as air quality regulations have become more and more strict it is becoming increasingly difficult to use the biogas for generation and other uses at the plant site. As a result, producers may have no other option but to flare the gas, wasting a renewable fuel source. The goals of the Sustainable SoCal program are to demonstrate that small scale biomethane development is feasible, and to potentially enhance the economics of small biomethane projects, while reducing local area pollution and the carbon footprint of SoCalGas’ own operations.

The matrix below provides a side-by-side comparison of some of the key components for both the Sustainable SoCal Program and the Biogas Conditioning Services and Bioenergy Production Facilities Services (as requested in Advice Letter No. 4172).

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Response to Question 9 (Continued)

Program Detail	Sustainable SoCal Program	Biogas Conditioning Services and Bioenergy Production Facilities Services
What market sector(s) will be offered the program or services?	Small to medium wastewater treatment facilities	Various sectors, including but not limited to, large wastewater treatment facilities, municipal solid waste, dairy waste, food waste, and other biogas sources.
Does the biogas project/producer site need to have a digestion facility?	Yes, the small to medium wastewater treatment facility needs to have a digestion facility to produce the raw biogas.	No, there could be a feedstock owner who wants to build a complete bioenergy facility. An example of this would be a dairy that has feedstock (manure) and is currently using it for compost. In this case, in order for the dairy to produce biogas, they need to have a digester in order to produce raw biogas from their feedstock. Under this scenario, SoCalGas could provide both Bioenergy Production Facilities (ex: digester) and Biogas Conditioning Services.
What are the expected raw biogas volumes?	200-600 scfm	Generally, 1,000 scfm or greater
What is the funding source for the biogas projects?	Ratebase	SoCalGas Shareholders
Who will own, operate and maintain the equipment?	SoCalGas	SoCalGas
What type of biogas equipment will be installed?	Biogas conditioning system	Biogas conditioning system and/or bioenergy production system (ex: digester)
Who owns the raw biogas?	Wastewater treatment facility	Biogas developer or customer
Who owns the conditioned/pipeline quality biogas?	SoCalGas (ratepayers receive 100% of benefits)	Biogas developer or customer
Who receives the GHG credits/benefits?	SoCalGas (ratepayers receive 100% of benefits)	Likely the biogas developer or customer. It could be SoCalGas if the GHG credits are negotiated as part of the Service Agreement.