Application of SOUTHERN CALIFORNIA GAS)
COMPANY for authority to update its gas revenue)
requirement and base rates)
effective January 1, 2016 (U 904-G))

Application No. 14-11-___
Exhibit No.: (SCG-15-CWP)

CAPITAL WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF CARMEN L. HERRERA
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

NOVEMBER 2014

2016 General Rate Case - APP

INDEX OF WORKPAPERS

Exhibit SCG-15-CWP - FACILITIES/OTHER

Overall Summary For Exhibit No. SCG-15-CWP

Area: FACILITIES/OTHER

Witness: Carmen L. Herrera

	In 2013 $ (000) Adjusted-Forecast		
	2014	2015	2016
A. Infrastructure & Improvements	18,066	18,066	18,066
B. Facility Renovations for Future Requirements	5,880	7,000	12,000
C. Sustainability Projects	1,500	2,855	1,840
D. Compliance/Systems Upgrades	2,201	4,009	1,650
E. NGV Refueling Stations	3,450	4,120	4,455
Total	**31,097**	**36,050**	**38,011**

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Category: A. Infrastructure & Improvements
Workpaper: 006530

Summary for Category: A. Infrastructure & Improvements

	In 2013$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	374	267	267	267
Non-Labor	18,949	17,799	17,799	17,799
NSE	0	0	0	0
Total	**19,323**	**18,066**	**18,066**	**18,066**
FTE	3.7	3.0	3.0	3.0

006530 Infrastructure & Improvements

Labor	374	267	267	267
Non-Labor	18,949	17,799	17,799	17,799
NSE	0	0	0	0
Total	**19,323**	**18,066**	**18,066**	**18,066**
FTE	3.7	3.0	3.0	3.0

Note: Totals may include rounding differences.

Beginning of Workpaper Group
006530 - Infrastructure & Improvements

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: A. Infrastructure & Improvements
Category-Sub: 1. Infrastructure & Improvements
Workpaper Group: 006530 - Infrastructure & Improvements

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	178	223	242	88	374	267	267	267
Non-Labor	Zero-Based	12,552	17,879	16,215	15,676	18,949	17,799	17,799	17,799
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**12,730**	**18,101**	**16,457**	**15,764**	**19,323**	**18,066**	**18,066**	**18,066**
FTE	Zero-Based	0.9	1.3	2.2	0.8	3.7	3.0	3.0	3.0

Business Purpose:

The SoCalGas capital renewal program is based on a systematic management process to plan for known recurring repairs and replacement requirements that extend the life and retain usable condition of facilities and systems. The Infrastructure & Improvements forecast funds necessary facility improvements and equipment upgrades to adequately support business operations. Facility Operations identifies requirements based on the criticality of the facility, the age of the asset, and the implications for failure to complete the replacement or upgrade.

Physical Description:

The following are examples of necessary improvements: Boilers, Chillers, Water Heaters, Cooling Towers, Flooring & Carpeting, Generators, Air Handlers, Stormwater Protection, HVAC Systems, Lighting, Plumbing, Electrical, ADA Compliance, Security Systems, Ceiling Tiles, and Parking Lots.

Project Justification:

This funds numerous facility improvements to adequately support business operations, extend the life of the asset, protect employees and company property, adhere to codes and regulations, and maintain safety and environmental compliance. The requested capital expenditure costs are needed to maintain safety of company facilities and assets, support operational needs, and achieve cost avoidance. These basic infrastructure improvements maintain the functional integrity of our facilities.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements

Forecast Methodology:

Labor - Zero-Based

Our calculations support Four (4) FTE's that have their labor costs spread over multiple projects for each annual budget.

Non-Labor - Zero-Based

The forecast for this cost category was determined using the aggregate current replacement value ("CRV") of SoCalGas owned buildings and applying a capital renewal rate based on an industry benchmarking index that supports the investment necessary to maintain our existing infrastructures.

I applied an index from the International Facility Management Association ("IFMA") Utility Council benchmarking study conducted in 2012 to the CRV. The IFMA benchmarking study indicated capital renewal ranges from 1.16% to 3.77% for current year capital and 1.21% to 4.52% for 5-year average capital.

Taking into consideration the IFMA ranges above in conjunction with the condition and average age of the properties (44 years), I applied a 2.5% capital renewal rate to our current replacement value to determine the forecasted amount. My forecast approach recognizes that facilities require ongoing investments to maintain their functional and operational integrity, as the conditions continually deteriorate over time. This method is most appropriate because it is based on industry standards and reputable benchmarking index. Please see supplemental for additional details.

NSE - Zero-Based

Not applicable.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: A. Infrastructure & Improvements
Category-Sub: 1. Infrastructure & Improvements
Workpaper Group: 006530 - Infrastructure & Improvements

Adjustments to Forecast

In 2013 $ (000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
Years		**2014**	**2015**	**2016**	**2014**	**2015**	**2016**	**2014**	**2015**	**2016**
Labor	Zero-Based	267	267	267	0	0	0	267	267	267
Non-Labor	Zero-Based	17,799	17,799	17,799	0	0	0	17,799	17,799	17,799
NSE	Zero-Based	0	0	0	0	0	0	0	0	0
Total		**18,066**	**18,066**	**18,066**	**0**	**0**	**0**	**18,066**	**18,066**	**18,066**
FTE	Zero-Based	3.0	3.0	3.0	0.0	0.0	0.0	3.0	3.0	3.0

Forecast Adjustment Details

Year/Explanation	Labor	NLbr	NSE	Total	FTE	RefID
2014 Total	0	0	0	0	0.0	
2015 Total	0	0	0	0	0.0	
2016 Total	0	0	0	0	0.0	

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: A. Infrastructure & Improvements
Category-Sub: 1. Infrastructure & Improvements
Workpaper Group: 006530 - Infrastructure & Improvements

Determination of Adjusted-Recorded:

	2009 ($000)	2010 ($000)	2011 ($000)	2012 ($000)	2013 ($000)
Recorded (Nominal $)*					
Labor	11	16	178	51	321
Non-Labor	6	37	9,954	14,617	18,949
NSE	0	0	0	0	0
Total	**17**	**52**	**10,133**	**14,668**	**19,270**
FTE	0.1	0.2	1.8	0.5	3.2
Adjustments (Nominal $) **					
Labor	112	145	14	25	0
Non-Labor	10,214	15,146	5,117	1,109	0
NSE	0	0	0	0	0
Total	**10,326**	**15,291**	**5,132**	**1,134**	**0**
FTE	0.7	0.9	0.1	0.2	0.0
Recorded-Adjusted (Nominal $)					
Labor	123	161	193	76	320
Non-Labor	10,220	15,182	15,071	15,726	18,949
NSE	0	0	0	0	0
Total	**10,343**	**15,343**	**15,264**	**15,802**	**19,270**
FTE	0.8	1.1	1.9	0.7	3.2
Vacation & Sick (Nominal $)					
Labor	22	28	32	12	53
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	**22**	**28**	**32**	**12**	**53**
FTE	0.1	0.2	0.3	0.1	0.5
Escalation to 2013$					
Labor	33	34	17	0	0
Non-Labor	2,332	2,696	1,143	-50	0
NSE	0	0	0	0	0
Total	**2,365**	**2,730**	**1,160**	**-50**	**0**
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013$)					
Labor	178	223	242	88	374
Non-Labor	12,552	17,879	16,215	15,676	18,949
NSE	0	0	0	0	0
Total	**12,730**	**18,101**	**16,457**	**15,764**	**19,323**
FTE	0.9	1.3	2.2	0.8	3.7

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments
Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: A. Infrastructure & Improvements
Category-Sub: 1. Infrastructure & Improvements
Workpaper Group: 006530 - Infrastructure & Improvements

Adjustments to Recorded:

In Nominal $(000)					
Years	**2009**	**2010**	**2011**	**2012**	**2013**
Labor	112	145	14	25	0
Non-Labor	10,214	15,146	5,117	1,109	0
NSE	0	0	0	0	0
Total	**10,326**	**15,291**	**5,132**	**1,134**	**0**
FTE	0.7	0.9	0.1	0.2	0.0

Detail of Adjustments to Recorded in Nominal $:

Year/Explanation	Labor	NLbr	NSE	Total	FTE	RefID
2009	112	10,214	0	10,326	0.7	SLI20140218145421370
Adjustment to add back SoCalGas inter-Comp Receiving Billing Orders.						
2009 Total	112	10,214	0	10,326	0.7	
2010	145	15,146	0	15,291	0.9	SLI20140218145530567
Adjustment to add back SoCalGas inter-Comp Receiving Billing Orders.						
2010 Total	145	15,146	0	15,291	0.9	
2011	14	5,117	0	5,132	0.1	SLI20140218145601887
Adjustment to add back SoCalGas inter-Comp Receiving Billing Orders.						
2011 Total	14	5,117	0	5,132	0.1	
2012	25	1,109	0	1,134	0.2	SLI20140218145622273
Adjustment to add back SoCalGas inter-Comp Receiving Billing Orders.						
2012 Total	25	1,109	0	1,134	0.2	
2013	-0.456	0.199	0	-0.257	0.0	SLI20140218145643220
Adjustment to add back SoCalGas inter-Comp Receiving Billing Orders.						
2013 Total	-0.456	0.199	0	-0.257	0.0	

Note: Totals may include rounding differences.

Beginning of Workpaper Sub Details for
Workpaper Group 006530

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: A. Infrastructure & Improvements
Category-Sub: 1. Infrastructure & Improvements
Workpaper Group: 006530 - Infrastructure & Improvements
Workpaper Detail: 006530.001 - Infrastructure & Improvements

In-Service Date: Not Applicable

Description:

Types of work in this category includes basic building systems and infrastructure such as boilers, water heaters, carpet, chillers, cooling towers, doors, energy management systems, fences, flooring, gates, generators, hoists, HVAC, lighting, roofs, awnings, security systems, storm water mitigation and other general tenant improvements.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	267	267	267
Non-Labor	17,799	17,799	17,799
NSE	0	0	0
Total	**18,066**	**18,066**	**18,066**
FTE	3.0	3.0	3.0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group 006530

Infrastructure & Improvements Supplemental

The purpose of this supplemental is to outline the procedures performed to determine the amount for the Infrastructure and Improvement capital forecast of $18,066 million for each of the following years: 2014, 2015, and 2016. The table below is a summary of the facility replacement value and forecast:

Type	Count	Facilities Estimated Replacement Value
Base and Sub Bases	49	$267,724,213
Branch Offices	6	$7,443,141
Multi-Purpose	6	$301,392,059
Regional HQ	4	$108,088,644
Stations	11	$18,758,250
Storage Fields	4	$19,236,404
Grand Total	**80**	**$722,642,711**
		2.5%
		$ 18,066,068

My forecast method involved the following:

- My forecast is based on the replacement value of only the SoCalGas facilities maintained by Facility Operations. The current replacement value is routinely updated by SoCalGas Plant Accounting, where the original acquisition or development costs are escalated by a historic construction cost escalation index (the Handy- Whitman Index of Public Utility Construction Costs, the "Handy-Whitman Index").

- I then applied an index from the International Facility Management Association ("IFMA") Utility Council benchmarking study conducted in 2012 to the current aggregate replacement value. The IFMA benchmarking study indicated capital renewal ranges from 1.16% to 3.77% for current year capital and 1.21% to 4.52% for 5-year average capital.

Taking into consideration the IFMA ranges above in conjunction with the condition and average age of the properties, I applied a 2.5% capital renewal rate to our aggregate replacement value to determine the forecasted amount. My forecast approach recognizes that facilities require ongoing investments to maintain their functional and operational integrity, as the conditions continually deteriorate over time. This method is most appropriate because it is based on industry standards and reputable benchmarking.

IFMA UTILITY COUNCIL
BENCHMARKING

ALL SITES	CURRENT YEAR CAPITAL RENEWAL / GSF	FIVE YEAR AVERAGE CAPITAL RENEWAL / GSF
U01	1.64	1.26
U02	1.71	1.19
U04	0.57	0.43
U05	2.75	3.43
U09	17.99	25.15
U10	4.59	1.65
U13	2.05	1.68
U18	1.46	2.55
U19-H	45.69	35.05
U21	1.25	0.78
U27	3.50	4.88
U29	1.11	1.72
U30	1.18	
U31	0.00	
U34	10.12	9.10
U44	2.05	2.05
U54	6.51	5.95
U56	3.24	3.25
U61	0.60	0.48
U72	0.43	1.20
1ST Q	1.16	1.21
MEDIAN	1.88	1.88
3RD Q	3.77	4.52

Source: IFMA Utility Council Benchmarking

Sorted by Company	Code
AEPCO - Benson	U05
Alliant Energy	U37
Ameren	U01
American Electric Power	U02
Arizona Public Service	U03
BC Hydro	U53
BGE	U15
Connecticut Light and Power	U43
Connecticut Natural Gas Company	U36
DTE (Detroit Energy)	U27
Duke	U16
Duquesne Light	U54
Entergy	U06
Exelon - Chicago-R	U19
Exelon - PECO	U26
First Energy	U08
Florida Power and Light	U04
Idaho Power	U57
LRCA	U12
National Grid	U52
NiSource - CPG	U78
NiSource - IN	U71
NiSource - KY	U73
NiSource - MA	U77
NiSource - MD	U75
NiSource - OH	U72
NiSource - PA	U74
NiSource - VA	U76
Northeast Utilities	U10
Nstar	U11
NV Energy - NP	U30
NV Energy - SP	U31
Omaha Public Power District	U13

Name	Code
Ameren	U01
American Electric Power	U02
Arizona Public Service	U03
Florida Power and Light	U04
AEPCO - Benson	U05
Entergy	U06
TEP	U07
First Energy	U08
SMUD	U09
Northeast Utilities	U10
Nstar	U11
LRCA	U12
Omaha Public Power District	U13
Progress Energy-FL	U14
BGE	U15
Duke	U16
Southern California Edison	U18
Exelon - Chicago-R	U19
United Illuminating	U20
Tennessee Valley Authority	U21
Xcel Energy - Northern	U22
Tampa Electric Company	U25
Exelon - PECO	U26
DTE (Detroit Energy)	U27
WE Energies	U29
NV Energy - NP	U30
NV Energy - SP	U31
PGE	U34
Connecticut Natural Gas Company	U36
Alliant Energy	U37
Southern Connecticut Gas	U38
Connecticut Light and Power	U43
Public Service of NH	U44

Source: IFMA Utility Council Benchmarking

PacifiCorp	U55
PGE	U34
Portland General Electric	U61
PPL Services Corp	U64
Progress Energy-FL	U14
Public Service of NH	U44
San Diego Gas and Electric	U60
SMUD	U09
Southern California Edison	U18
Southern California Gas	U58
Southern Connecticut Gas	U38
SRP	U56
Tampa Electric Company	U25
Tennessee Valley Authority	U21
TEP	U07
United Illuminating	U20
WE Energies	U29
Western MA	U46
Xcel Energy - Northern	U22
Yankee Gas Services	U45

Yankee Gas Services	U45
Western MA	U46
National Grid	U52
BC Hydro	U53
Duquesne Light	U54
PacifiCorp	U55
SRP	U56
Idaho Power	U57
Southern California Gas	U58
San Diego Gas and Electric	U60
Portland General Electric	U61
PPL Services Corp	U64
NiSource - IN	U71
NiSource - OH	U72
NiSource - KY	U73
NiSource - PA	U74
NiSource - MD	U75
NiSource - VA	U76
NiSource - MA	U77
NiSource - CPG	U78

Source: IFMA Utility Council Benchmarking

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Category: B. Facility Renovations for Future Requirements
Workpaper: 00653B

Summary for Category: B. Facility Renovations for Future Requirements

	In 2013$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	0	83	98	141
Non-Labor	0	5,797	6,902	11,859
NSE	0	0	0	0
Total	**0**	**5,880**	**7,000**	**12,000**
FTE	0.0	1.0	1.1	1.6

00653B Facility Renovations for Future Requirements

Labor	0	83	98	141
Non-Labor	0	5,797	6,902	11,859
NSE	0	0	0	0
Total	**0**	**5,880**	**7,000**	**12,000**
FTE	0.0	1.0	1.1	1.6

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00653B - Facility Renovations for Future Requirements

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: B. Facility Renovations for Future Requirements
Category-Sub: 1. Facility Renovations for Future Requirements
Workpaper Group: 00653B - Facility Renovations for Future Requirements

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	83	98	141
Non-Labor	Zero-Based	0	0	0	0	0	5,797	6,902	11,859
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**5,880**	**7,000**	**12,000**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	1.0	1.1	1.6

Business Purpose:

These renovations are necessary due to the aging facilities that no longer meet workforce space requirements. These renovations will support SoCalGas' changing workplace requirements and improve the functionality of our buildings and/or sites, which support the work patterns of SoCalGas employees. Additionally, we need facilities that provide flexibility so that the space can evolve as people, technology, and business needs change over time. These improvements typically include space reconfiguration, building modifications, technology and furniture upgrades.

Physical Description:

The types of improvements include space reconfigurations, building modifications, technology and furniture upgrades needed to support future business requirements and increase functionality.

Project Justification:

Facility Operations manages a portfolio of 80 owned and manned utility facilities averaging 44 years old. These renovations are necessary to update the aging facilities that no longer meet workforce space requirements. These renovations will support SoCalGas' changing workplace requirements and work patterns of SoCalGas employees. We need facilities that provide flexibility so that the space can evolve as people, technology, and business needs change over time.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00653.0
Category:	B. Facility Renovations for Future Requirements
Category-Sub:	1. Facility Renovations for Future Requirements
Workpaper Group:	00653B - Facility Renovations for Future Requirements

Forecast Methodology:

Labor - Zero-Based

Our calculations support Four (4) FTE's that have their labor costs spread over multiple projects for each annual budget. Due to the magnitude and complexity, these projects will transpire over several phases which can span from 6 to 12 months.

Non-Labor - Zero-Based

Projects have been estimated based on unique and specific scope requirements and professional expert judgement, including vendor estimates from qualified industry professionals such as licensed architects and designers, construction industry professionals, facility management professionals, and IT domain experts.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00653B

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: B. Facility Renovations for Future Requirements
Category-Sub: 1. Facility Renovations for Future Requirements
Workpaper Group: 00653B - Facility Renovations for Future Requirements
Workpaper Detail: 00653B.001 - Facilities Renovations for Future Requirements - Chatsworth

In-Service Date: 09/30/2015

Description:

Types of work included in this category are facility redesign, space reconfiguration, technology & furniture upgrades.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	55	28	0
Non-Labor	3,845	1,972	0
NSE	0	0	0
Total	**3,900**	**2,000**	**0**
FTE	0.7	0.3	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: B. Facility Renovations for Future Requirements
Category-Sub: 1. Facility Renovations for Future Requirements
Workpaper Group: 00653B - Facility Renovations for Future Requirements
Workpaper Detail: 00653B.002 - Facilities Renovations for Future Requirements - Compton

In-Service Date: 03/31/2015

Description:

Types of work included in this category are facility redesign, space reconfiguration, technology and furniture upgrades.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	28	14	0
Non-Labor	1,952	986	0
NSE	0	0	0
Total	**1,980**	**1,000**	**0**
FTE	0.3	0.2	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: B. Facility Renovations for Future Requirements
Category-Sub: 1. Facility Renovations for Future Requirements
Workpaper Group: 00653B - Facility Renovations for Future Requirements
Workpaper Detail: 00653B.003 - Facilities Renovations for Future Requirements - Anaheim

In-Service Date: 03/31/2016

Description:

Types of work included in this category are facility redesign, space reconfiguration, technology and furniture upgrades.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	21	53
Non-Labor	0	1,479	4,447
NSE	0	0	0
Total	**0**	**1,500**	**4,500**
FTE	0.0	0.2	0.6

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: B. Facility Renovations for Future Requirements
Category-Sub: 1. Facility Renovations for Future Requirements
Workpaper Group: 00653B - Facility Renovations for Future Requirements
Workpaper Detail: 00653B.004 - Facilities Renovations for Future Requirements - Pico Rivera

In-Service Date: 09/30/2016

Description:

Types of work included in this category are facility redesign, space reconfiguration, technology and furniture upgrades.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	35	88
Non-Labor	0	2,465	7,412
NSE	0	0	0
Total	**0**	**2,500**	**7,500**
FTE	0.0	0.4	1.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Category: C. Sustainability Projects
Workpaper: VARIOUS

Summary for Category: C. Sustainability Projects

	In 2013$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	0	50	50	50
Non-Labor	0	1,450	2,805	1,790
NSE	0	0	0	0
Total	**0**	**1,500**	**2,855**	**1,840**
FTE	0.0	0.4	0.5	0.6
00653C Sustainability - Solar				
Labor	0	0	45	41
Non-Labor	0	0	2,460	1,409
NSE	0	0	0	0
Total	**0**	**0**	**2,505**	**1,450**
FTE	0.0	0.0	0.4	0.5
00653D Sustainability - Water Conservation				
Labor	0	50	5	9
Non-Labor	0	875	270	291
NSE	0	0	0	0
Total	**0**	**925**	**275**	**300**
FTE	0.0	0.4	0.1	0.1
00712A Sustainability - Energy Management System				
Labor	0	0	0	0
Non-Labor	0	575	75	90
NSE	0	0	0	0
Total	**0**	**575**	**75**	**90**
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00653C - Sustainability - Solar

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: C. Sustainability Projects
Category-Sub: 1. Sustainability - Solar
Workpaper Group: 00653C - Sustainability - Solar

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	0	45	41
Non-Labor	Zero-Based	0	0	0	0	0	0	2,460	1,409
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**2,505**	**1,450**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5

Business Purpose:

Sustainability is a key factor in business planning. Our sustainability efforts are to improve energy conservation and to reduce our carbon footprint. Our goal is to become a sustainable Corporation that improves cost containment while protecting the environment and improving the lives of those with whom we share it. Our initiative offers an opportunity for SoCalGas to bring innovation, leadership and sustainability to company operations.

Physical Description:

The solar systems we plan to install at various facilities will generate renewable energy from solar photovoltaic (“PV”) panels as follows:

Solar photovoltaic systems require poly or mono-crystalline solar panels, an inverter(s) and wiring to connect the panels to the inverter. The system is built like a tree, in that the panels act as "leaves", converting sunlight to electricity which then flows through “branches” made of wires to the “trunk” (the inverter) for use. The electric current from all the panels is then conducted to an inverter, which converts the direct current (DC) electricity to alternating current (AC), so it can be used by the buildings lighting and HVAC systems.

Project Justification:

These projects improve energy conservation and reduce our carbon footprint. Additionally, these projects provide an opportunity to partially help offset rising electrical costs. The power generated by the solar PV system will provide more energy security by lowering our energy consumption.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00653.0
Category:	C. Sustainability Projects
Category-Sub:	1. Sustainability - Solar
Workpaper Group:	00653C - Sustainability - Solar

Forecast Methodology:

Labor - Zero-Based

Costs forecasted based on the assumption that 1/2 FTE will be devoted to the Sustainability projects.

Non-Labor - Zero-Based

Forecast based on project spending and quotes from vendors.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00653C

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: C. Sustainability Projects
Category-Sub: 1. Sustainability - Solar
Workpaper Group: 00653C - Sustainability - Solar
Workpaper Detail: 00653C.002 - Sustainability project - Solar system installation at various sites

In-Service Date: 09/30/2015

Description:

Install solar systems at locations such as: El Centro; Yucca Valley, and San Luis Obispo to generate renewable energy from solar PV panels that will partially help offset rising electric costs.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	45	0
Non-Labor	0	2,460	0
NSE	0	0	0
Total	**0**	**2,505**	**0**
FTE	0.0	0.4	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: C. Sustainability Projects
Category-Sub: 1. Sustainability - Solar
Workpaper Group: 00653C - Sustainability - Solar
Workpaper Detail: 00653C.003 - Sustainability project - Solar system installation at Anaheim

In-Service Date: 12/31/2016

Description:

Install solar systems at Anaheim base to generate renewable energy from solar PV panels that will partially help offset rising electric costs.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	41
Non-Labor	0	0	1,409
NSE	0	0	0
Total	**0**	**0**	**1,450**
FTE	0.0	0.0	0.5

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00653D - Sustainability - Water Conservation

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: C. Sustainability Projects
Category-Sub: 2. Sustainability - Water Conservation
Workpaper Group: 00653D - Sustainability - Water Conservation

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	50	5	9
Non-Labor	Zero-Based	0	0	0	0	0	875	270	291
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**925**	**275**	**300**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.1

Business Purpose:

Our sustainability plan includes water conservation projects to help reduce water consumption and support the State drought concerns. Additionally, these projects provide an opportunity to partially help offset escalating water costs.

Physical Description:

Xeriscape conversions, which are also called drought-tolerant landscape conversions, requires the removal of more water intensive grass/turf landscapes, replaced with native and drought-tolerant plants that are able to survive without any irrigation. This process can involve the removal of vegetation and old irrigation systems, replacing them with native trees and water efficient irrigation systems.

Project Justification:

Sixty percent of our water consumption at company sites is used for landscape irrigation. By converting grass and turf to drought-tolerant plants, we can greatly reduce water consumption. Governor Jerry Brown's recent drought declaration for California makes water conservation a new moral imperative for all.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00653.0
Category:	C. Sustainability Projects
Category-Sub:	2. Sustainability - Water Conservation
Workpaper Group:	00653D - Sustainability - Water Conservation

Forecast Methodology:

Labor - Zero-Based

Costs forecasted based on the assumption that 1/2 FTE will be devoted to the Sustainability projects.

Non-Labor - Zero-Based

Forecast based on project spending and quotes from vendors.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00653D

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00653.0
Category:	C. Sustainability Projects
Category-Sub:	2. Sustainability - Water Conservation
Workpaper Group:	00653D - Sustainability - Water Conservation
Workpaper Detail:	00653D.001 - Water Conservation projects at various facilities
In-Service Date:	09/30/2014

Description:

Installation of water conservation projects such as Xeriscape conversions, also called drought-tolerant landscape conversions at the following locations: Valencia, Murrieta, Chatsworth, Palm Desert, Azusa, Redlands and Anaheim. This requires the removal of more water intensive grass/turf landscapes and replaced with native and drought-tolerant plants that are able to survive without any or minimal irrigation.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	50	0	0
Non-Labor	875	0	0
NSE	0	0	0
Total	**925**	**0**	**0**
FTE	0.4	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: C. Sustainability Projects
Category-Sub: 2. Sustainability - Water Conservation
Workpaper Group: 00653D - Sustainability - Water Conservation
Workpaper Detail: 00653D.002 - Water Conservation - San Dimas

In-Service Date: 12/31/2015

Description:

Installation of water conservation projects such as Xeriscape conversions, also called drought-tolerant landscape conversions, at the San Dimas facility. This requires the removal of more water intensive grass/turf landscapes and replaced with native and drought-tolerant plants that are able to survive without any or minimal irrigation.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	5	0
Non-Labor	0	270	0
NSE	0	0	0
Total	**0**	**275**	**0**
FTE	0.0	0.1	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00653.0
Category: C. Sustainability Projects
Category-Sub: 2. Sustainability - Water Conservation
Workpaper Group: 00653D - Sustainability - Water Conservation
Workpaper Detail: 00653D.003 - Water Conservation - Monterey Park

In-Service Date: 09/30/2016

Description:

Installation of water conservation projects such as Xeriscape conversions, also called drought-tolerant landscape conversions, at the Monterey Park facility. This requires the removal of more water intensive grass/turf landscapes and replaced with native and drought-tolerant plants that are able to survive without any or minimal irrigation.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	9
Non-Labor	0	0	291
NSE	0	0	0
Total	**0**	**0**	**300**
FTE	0.0	0.0	0.1

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00712A - Sustainability - Energy Management System

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00712.0
Category: C. Sustainability Projects
Category-Sub: 3. Sustainability - Energy Management System
Workpaper Group: 00712A - Sustainability - Energy Management System

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	575	75	90
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**575**	**75**	**90**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Business Purpose:

The primary business purpose of the Energy Management System ("EMS") is to use electricity more efficiently and to reduce energy consumption at company facilities. EMS systems are a tool used by facility managers to monitor, measure, and control electrical building loads. EMS can be used to centrally control devices like HVAC units and lighting systems across multiple physical locations. Energy management systems can also provide metering, sub-metering, and monitoring functions. These functions allows facility and building managers to gather data and insight to make more informed decisions about energy activities across the remaining sites that do not have energy conservation measures.

Physical Description:

Energy management systems consist of software and hardware systems that are integrated with the building's HVAC and lighting systems. Depending whether the EMS is wireless or analog, wiring will also be required to connect the EMS with a site's building systems.

Project Justification:

This project is important for energy management and lowering our energy consumption at some of the remaining sites that do not have energy conservation measures. EMS systems can provide facility managers with the ability to pre-program the building lighting and HVAC systems remotely. The EMS provides facility managers with essential building controls and energy monitoring features to reduce energy waste and help with cost containment due to rising electricity costs.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00712.0
Category:	C. Sustainability Projects
Category-Sub:	3. Sustainability - Energy Management System
Workpaper Group:	00712A - Sustainability - Energy Management System

Forecast Methodology:

Labor - Zero-Based

Not applicable.

Non-Labor - Zero-Based

Forecast based on project spending and quotes from vendors.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00712A

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00712.0
Category: C. Sustainability Projects
Category-Sub: 3. Sustainability - Energy Management System
Workpaper Group: 00712A - Sustainability - Energy Management System
Workpaper Detail: 00712A.001 - Sustainability - Energy Management System installation at various remaining facilities

In-Service Date: 12/31/2014

Description:

Installation of an Energy Management System at remaining sites that do not have such a system, which consist of software and hardware that are integrated with the building's HVAC and lighting systems. Depending whether the EMS is wireless or analog, wiring will also be required to connect the EMS with a site's building systems.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	575	0	0
NSE	0	0	0
Total	**575**	**0**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00712.0
Category: C. Sustainability Projects
Category-Sub: 3. Sustainability - Energy Management System
Workpaper Group: 00712A - Sustainability - Energy Management System
Workpaper Detail: 00712A.002 - Sustainability - Energy Management System installation at San Luis Obispo

In-Service Date: 12/31/2015

Description:

Installation of an energy management system which consist of software and hardware that are integrated with the building's HVAC and lighting systems. Depending whether the EMS is wireless or analog, wiring will also be required to connect the EMS with a site's building systems.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	75	0
NSE	0	0	0
Total	**0**	**75**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00712.0
Category: C. Sustainability Projects
Category-Sub: 3. Sustainability - Energy Management System
Workpaper Group: 00712A - Sustainability - Energy Management System
Workpaper Detail: 00712A.003 - Sustainability - Energy Management System at Belvedere and San Pedro

In-Service Date: 11/30/2016

Description:

Installation of an energy management system which consist of software and hardware that are integrated with the building's HVAC and lighting systems. Depending whether the EMS is wireless or analog, wiring will also be required to connect the EMS with a site's building systems.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	0	90
NSE	0	0	0
Total	**0**	**0**	**90**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Category: D. Compliance/Systems Upgrades
Workpaper: VARIOUS

Summary for Category: D. Compliance/Systems Upgrades

	In 2013$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	0	40	119	0
Non-Labor	0	2,161	3,890	1,650
NSE	0	0	0	0
Total	**0**	**2,201**	**4,009**	**1,650**
FTE	0.0	0.4	1.1	0.0
00712B Facility & Capital System Upgrade				
Labor	0	0	0	0
Non-Labor	0	1,102	0	0
NSE	0	0	0	0
Total	**0**	**1,102**	**0**	**0**
FTE	0.0	0.0	0.0	0.0
00716A Fleet Capital Tool Replacement				
Labor	0	0	0	0
Non-Labor	0	250	250	250
NSE	0	0	0	0
Total	**0**	**250**	**250**	**250**
FTE	0.0	0.0	0.0	0.0
00716B Fleet Fuel System Upgrade				
Labor	0	40	119	0
Non-Labor	0	809	2,427	0
NSE	0	0	0	0
Total	**0**	**849**	**2,546**	**0**
FTE	0.0	0.4	1.1	0.0
00716C Fleet UST Replacement Program				
Labor	0	0	0	0
Non-Labor	0	0	1,050	1,400
NSE	0	0	0	0
Total	**0**	**0**	**1,050**	**1,400**
FTE	0.0	0.0	0.0	0.0
00716D Fleet Smog Tools				
Labor	0	0	0	0
Non-Labor	0	0	163	0
NSE	0	0	0	0
Total	**0**	**0**	**163**	**0**
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00712B - Facility & Capital System Upgrade

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00712.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 1. Facility & Capital System Upgrade
Workpaper Group: 00712B - Facility & Capital System Upgrade

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	1,102	0	0
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**1,102**	**0**	**0**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Business Purpose:

SoCalGas is currently using a system that is at the end of its useful life and no longer supported by the vendor. As a result, we run the risk of having a system that is not functional without the proper support. Our goal is to implement a centralized single integrated software system that provides various modules in space planning management; real estate portfolio management and capital projects management.

We have selected a system replacement, which will provide a comprehensive solution that addresses the broad array of real estate, infrastructure, and facility management functions with a fully integrated approach to manage the cost of occupancy, mitigate risks, and optimize service levels.

Physical Description:

A centralized single integrated software system that provides various modules in Space Planning and Management for areas such as; Real Estate, Capital Projects, Workplace Services, and Building Operations.

Project Justification:

Space management and capital project tracking systems are at the end of their useful life and no longer supported by the vendor. Implementation of a system replacement will gain efficiencies and process improvements through enhanced system integration of space planning, facility, and lease management. This system gives immediate access to graphical and non-graphical reports, forms and views using module design to tailor system to client needs. It improves a two-way exchange of information to/from a centralized repository to mobile-enabled personnel. It supports hybrid mobile deployments, with an open-standard development environment for easy enhancement. It also supports semi-connected native mobile apps to maintain work continuity and productivity enhancements.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00712.0
Category:	D. Compliance/Systems Upgrades
Category-Sub:	1. Facility & Capital System Upgrade
Workpaper Group:	00712B - Facility & Capital System Upgrade

Forecast Methodology:

Labor - Zero-Based

Not Applicable.

Non-Labor - Zero-Based

Funding for this system upgrade includes modules in Space Planning and Management; Real Estate Portfolio Management and Capital Project Management; Workplace Services and Asset Management; and Building Operations that is based on a complete operating system including servers, software, computers, monitors and portable devices.

NSE - Zero-Based

Not Applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00712B

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00712.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 1. Facility & Capital System Upgrade
Workpaper Group: 00712B - Facility & Capital System Upgrade
Workpaper Detail: 00712B.001 - Facility & Capital System Upgrade

In-Service Date: 12/31/2014

Description:

A centralized single integrated software system that provides various modules in Space Planning and Management; Real Estate Portfolio Management and Capital Project Management; Workplace Services and Asset Management; and Building Operations.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	1,102	0	0
NSE	0	0	0
Total	**1,102**	**0**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00716A - Fleet Capital Tool Replacement

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 2. Fleet Capital Tool Replacement
Workpaper Group: 00716A - Fleet Capital Tool Replacement

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	250	250	250
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**250**	**250**	**250**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Business Purpose:

This request funds the replacement of fleet equipment and tools needed to operate the 48 SoCal Gas garages.

Physical Description:

New/Replacement garage equipment such as tire changing and balancing machines, diagnostic tools, parts cleaners, brake lathe, alignment machines, Air Conditioning/Freon machines, emissions related equipment for gasoline, diesel, and NGV/LNG vehicles.

Project Justification:

As newer vehicles are added to the fleet, technology upgrades for diagnostic equipment are required for maintenance. In addition, normal wear and tear on older equipment requires replacement.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00716.0
Category:	D. Compliance/Systems Upgrades
Category-Sub:	2. Fleet Capital Tool Replacement
Workpaper Group:	00716A - Fleet Capital Tool Replacement

Forecast Methodology:

Labor - Zero-Based

Not applicable.

Non-Labor - Zero-Based

Estimated blank budget is based upon historical spending and future forecast necessary to meet the company requirements and needs.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00716A

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 2. Fleet Capital Tool Replacement
Workpaper Group: 00716A - Fleet Capital Tool Replacement
Workpaper Detail: 00716A.001 - Fleet Capital Tool Replacement - 2014

In-Service Date: Not Applicable

Description:

New/Replacement garage equipment such as tire changing and balancing machines, diagnostic tools, parts cleaners, brake lathe, alignment machines, Air Conditioning/Freon machines, emissions related equipment for gasoline, diesel, and NGV/LNG vehicles.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	250	0	0
NSE	0	0	0
Total	**250**	**0**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 2. Fleet Capital Tool Replacement
Workpaper Group: 00716A - Fleet Capital Tool Replacement
Workpaper Detail: 00716A.002 - Fleet Capital Tool Replacement - 2015

In-Service Date: Not Applicable

Description:

New/Replacement garage equipment such as tire changing and balancing machines, diagnostic tools, parts cleaners, brake lathe, alignment machines, Air Conditioning/Freon machines, emissions related equipment for gasoline, diesel, and NGV/LNG vehicles.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	250	0
NSE	0	0	0
Total	**0**	**250**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 2. Fleet Capital Tool Replacement
Workpaper Group: 00716A - Fleet Capital Tool Replacement
Workpaper Detail: 00716A.003 - Fleet Capital Tool Replacement - 2016

In-Service Date: Not Applicable

Description:

New/Replacement garage equipment such as tire changing and balancing machines, diagnostic tools, parts cleaners, brake lathe, alignment machines, Air Conditioning/Freon machines, emissions related equipment for gasoline, diesel, and NGV/LNG vehicles.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	0	250
NSE	0	0	0
Total	**0**	**0**	**250**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00716B - Fleet Fuel System Upgrade

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 3. Fleet Fuel System Upgrade
Workpaper Group: 00716B - Fleet Fuel System Upgrade

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	40	119	0
Non-Labor	Zero-Based	0	0	0	0	0	809	2,427	0
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**849**	**2,546**	**0**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.4	1.1	0.0

Business Purpose:

The current Fuel Management System, EJ Ward, was installed in 2003 and has reached the end of its useful life and will not be supported by the vendor in the near future. In addition to obtaining the necessary customer support, the installation of a new system will enable the company to track information not available in the current system such as improved mileage data and other vehicle diagnostics. Another key benefit is the new system can be an integrated system with the Fleet Asset Management System. The new system will also allow the gathering of data from units that run on CNG that we currently are not able collect. This new system will allow for better reporting that will be used in improving maintenance practices.

Physical Description:

The work will be contracted with a vendor to remove and replace the existing fuel management terminals, software, and vehicle mounted equipment. The new system will also interface with all fuel locations Underground Storage Tank ("UST") monitoring system to allow for better monitoring of the site fuel tanks. All necessary permits will be obtained and any remediation will occur at that time if required. The basic plan is as follows:

• Installation of the new enterprise system on SoCalGas servers
• Configure the Fleet Asset Management System and Fuel Management System to properly interface with each other
• Test the software to to check the stability of the system
• Remove and replace the current vehicle equipment with the new system equipment to facilitate the communication of data and authorization of fuel transactions at any location in the SoCalGas service territory

Project Justification:

Since the current system will no longer be supported in the near future, we are required to replace it. The replacement system will allow for wireless communication of vehicle data once the unit drives into any base location, to provide more accurate mileage reads, upload diagnostic trouble codes from the vehicles, allow data from dedicated CNG vehicles to be collected, allow data from units not housed at locations with fueling capabilities to be collected, and provide a wireless method for authorizing small equipment and fuel cans to receive fuel. The system will interface directly with the Fleet Asset Management System as well as the Veeder Root system used to monitor the USTs. Better data will allow us to make better business decisions.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00716.0
Category:	D. Compliance/Systems Upgrades
Category-Sub:	3. Fleet Fuel System Upgrade
Workpaper Group:	00716B - Fleet Fuel System Upgrade

Forecast Methodology:

Labor - Zero-Based

Forecast based on percentage of time assigned employees will be committed to the project.

Non-Labor - Zero-Based

Estimated project costs are based upon estimates provided from preliminary project bids provided by the potential vendors for the project for their time and materials.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00716B

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 3. Fleet Fuel System Upgrade
Workpaper Group: 00716B - Fleet Fuel System Upgrade
Workpaper Detail: 00716B.001 - Fleet Fuel System Upgrade

In-Service Date: 12/31/2015

Description:

The work will be contracted with a vendor to remove and replace the existing fuel management terminals, software, and vehicle mounted equipment. The new system will also interface with all fuel locations UST (Underground Storage Tanks) monitoring system to allow for better monitoring of the site fuel tanks. All necessary permits will be obtained and any remediation will occur at that time, if required.

Forecast In 2013 $(000)

Years	2014	2015	2016
Labor	40	119	0
Non-Labor	809	2,427	0
NSE	0	0	0
Total	**849**	**2,546**	**0**
FTE	0.4	1.1	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00716C - Fleet UST Replacement Program

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	0	1,050	1,400
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**1,050**	**1,400**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Business Purpose:

SoCalGas currently has 77 USTs of which 38 were placed in service on or about 1987. As a result, SoCalGas is establishing a routine replacement plan for all USTs in the system so that any UST is either under warranty or within the standard life expectancy for the tank. We are also standardizing unleaded tanks to a 15,000 gallon capacity to maintain adequate inventory levels, allow for emergency response fuel requirements, and to allow for a more strategic ordering process so that fuel is purchased at the best price possible at the time of ordering. Diesel tanks will be standardized so that fuel inventory is used in no more than six months to prevent the degradation of the diesel fuel, algae contamination, or sludge buildup.

Physical Description:

This work will include the following:

1) UST removal and replacement
2) Piping removal and replacement
3) Under Dispenser Containment (UDC) removal and replacement
4) Removal and replacement of obsolete dispenser

Items 1 -3 noted above will trigger the upgrades to meet the Assembly Bill (“AB”) 2481 standards.

Project Justification:

In 1984, new law requirements were passed designed to protect the public from the effects of gasoline leaking from underground storage tanks and other petroleum releases. This new law required the EPA to develop a comprehensive regulatory program for underground storage tanks (USTs) storing petroleum and other hazardous substances. The new law enacted required owners to close, upgrade, or replace tanks to meet the secondary containment requirements no later than December 22, 1998. The USTs at SoCalGas were proactively replaced starting in 1985 with a majority of the sites (38) being completed by 1987. The tanks came with a manufacturer warranty of 30 years.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00716.0
Category:	D. Compliance/Systems Upgrades
Category-Sub:	4. Fleet UST Replacement Program
Workpaper Group:	00716C - Fleet UST Replacement Program

Forecast Methodology:

Labor - Zero-Based

Not applicable.

Non-Labor - Zero-Based

Estimated project costs are based upon vendor estimates for a 15,000 gallon UST and permitting, and remediation costs estimated by the Environmental Department.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00716C

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program
Workpaper Detail: 00716C.001 - Fleet UST Replacement Program ISD 6/2015 - Lancaster Base

In-Service Date: 06/30/2015

Description:

The work will be contracted to remove and replace existing UST(s). All piping requiring replacement will also be done at that time. All necessary permits will be obtained and any remediation will also be addressed.

Forecast In 2013 $(000)			
Years	2014	2015	2016
Labor	0	0	0
Non-Labor	0	350	0
NSE	0	0	0
Total	**0**	**350**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program
Workpaper Detail: 00716C.002 - Fleet UST Replacement Program ISD 9/2015 - Riverside Base

In-Service Date: 09/30/2015

Description:

The work will be contracted to remove and replace existing UST(s). All piping requiring replacement will also be done at that time. All necessary permits will be obtained and any remediation will also be addressed.

Forecast In 2013 $(000)			
Years	2014	2015	2016
Labor	0	0	0
Non-Labor	0	350	0
NSE	0	0	0
Total	**0**	**350**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program
Workpaper Detail: 00716C.003 - Fleet UST Replacement ISD 12/2015 - Ramona Base

In-Service Date: 12/31/2015

Description:

The work will be contracted to remove and replace existing UST(s). All piping requiring replacement will also be done at that time. All necessary permits will be obtained and any remediation will also be addressed.

Forecast In 2013 $(000)			
Years	2014	2015	2016
Labor	0	0	0
Non-Labor	0	350	0
NSE	0	0	0
Total	**0**	**350**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program
Workpaper Detail: 00716C.004 - Fleet UST Replacement ISD 2/2016 - San Bernardino

In-Service Date: 02/29/2016

Description:

The work will be contracted to remove and replace existing UST(s). All piping requiring replacement will also be done at that time. All necessary permits will be obtained and any remediation will also be addressed.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	0	350
NSE	0	0	0
Total	**0**	**0**	**350**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program
Workpaper Detail: 00716C.005 - Fleet UST Replacement ISD 4/2016 - San Pedro

In-Service Date: 04/30/2016

Description:

The work will be contracted to remove and replace existing UST(s). All piping requiring replacement will also be done at that time. All necessary permits will be obtained and any remediation will also be addressed.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	0	350
NSE	0	0	0
Total	**0**	**0**	**350**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program
Workpaper Detail: 00716C.006 - Fleet UST Replacement ISD 6/2016 - Santa Monica

In-Service Date: 06/30/2016

Description:

The work will be contracted to remove and replace existing UST(s). All piping requiring replacement will also be done at that time. All necessary permits will be obtained and any remediation will also be addressed.

Forecast In 2013 $(000)			
Years	2014	2015	2016
Labor	0	0	0
Non-Labor	0	0	350
NSE	0	0	0
Total	**0**	**0**	**350**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 4. Fleet UST Replacement Program
Workpaper Group: 00716C - Fleet UST Replacement Program
Workpaper Detail: 00716C.007 - Fleet UST Replacement ISD 8/2016 - Canoga

In-Service Date: 08/31/2016

Description:

The work will be contracted to remove and replace existing UST(s). All piping requiring replacement will also be done at that time. All necessary permits will be obtained and any remediation will also be addressed.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	0	350
NSE	0	0	0
Total	**0**	**0**	**350**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00716D - Fleet Smog Tools

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 5. Fleet Smog Tools
Workpaper Group: 00716D - Fleet Smog Tools

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	0	163	0
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**163**	**0**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Business Purpose:

The opacity test equipment required for testing diesel engines for output of diesel particulate matter (PM) that is regulated by the EPA. The equipment is also required to verify the annual maintenance performed on diesel particulate filters (DPF) does not compromise the system and performing its function of removing PM from the exhaust stream.

Physical Description:

The opacity test equipment measures the concentration and density of the diesel particulate matter emissions.

Project Justification:

To meet and comply with mandated regulations set by EPA.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00716.0
Category:	D. Compliance/Systems Upgrades
Category-Sub:	5. Fleet Smog Tools
Workpaper Group:	00716D - Fleet Smog Tools

Forecast Methodology:

Labor - Zero-Based

Not applicable.

Non-Labor - Zero-Based

Estimated project cost is based upon estimates from bids provided by vendors.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for
Workpaper Group 00716D

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00716.0
Category: D. Compliance/Systems Upgrades
Category-Sub: 5. Fleet Smog Tools
Workpaper Group: 00716D - Fleet Smog Tools
Workpaper Detail: 00716D.001 - Fleet Smog Tools

In-Service Date: 12/31/2015

Description:

Opacity test equipment measuring the concentration and density of particulate matter emissions.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	0	0
Non-Labor	0	163	0
NSE	0	0	0
Total	**0**	**163**	**0**
FTE	0.0	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Category: E. NGV Refueling Stations
Workpaper: 00734A

Summary for Category: E. NGV Refueling Stations

	In 2013$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	0	470	663	691
Non-Labor	0	2,980	3,457	3,764
NSE	0	0	0	0
Total	**0**	**3,450**	**4,120**	**4,455**
FTE	0.0	4.7	6.7	7.2

00734A NGV Refueling Stations

Labor	0	470	663	691
Non-Labor	0	2,980	3,457	3,764
NSE	0	0	0	0
Total	**0**	**3,450**	**4,120**	**4,455**
FTE	0.0	4.7	6.7	7.2

Note: Totals may include rounding differences.

Beginning of Workpaper Group
00734A - NGV Refueling Stations

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00734.0
Category: E. NGV Refueling Stations
Category-Sub: 1. NGV Refueling Stations
Workpaper Group: 00734A - NGV Refueling Stations

Summary of Results (Constant 2013 $ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast		
Years		2009	2010	2011	2012	2013	2014	2015	2016
Labor	Zero-Based	0	0	0	0	0	470	663	691
Non-Labor	Zero-Based	0	0	0	0	0	2,980	3,457	3,764
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		**0**	**0**	**0**	**0**	**0**	**3,450**	**4,120**	**4,455**
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	4.7	6.7	7.2

Business Purpose:

To enhance the refueling reliability, capacity and response time for SoCalGas Fleet and public Compressed Natural Gas (CNG) users at SoCalGas Natural Gas Vehicle (NGV) fueling stations. SoCalGas owns and operates 24 NGV fleet refueling stations. Eleven (11) of these stations also provide for public vehicle fueling access. The requested capital will fund the following enhancements to SoCalGas' current infrastructure:
• Added fueling capacity;
• Secondary compression at select NGV Fleet/Public fueling stations;
• Standardization of critical equipment;
• Replacement of outdated NGV fuel dispensers;
• Expand SoCalGas' utilization of existing Natural Gas Vehicles.

Physical Description:

The NGV fueling station enhancements will embody:
• Added fueling capacity at 3 existing public accessible and heavy use stations;
• Secondary compression at select SoCalGas NGV Fleet/Public fueling stations to improve the reliability of capacity;
• Upgrade of existing public fueling station driveways and fueling islands to allow access for larger fleet vehicles;
• Replacement of outdated NGV fuel dispensers which will provide for added reliability and data security for public fueling customers who use a credit card.

Project Justification:

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00734.0
Category:	E. NGV Refueling Stations
Category-Sub:	1. NGV Refueling Stations
Workpaper Group:	00734A - NGV Refueling Stations

SoCalGas is committed to operating and maintaining a reliable and effective fueling infrastructure to power its own NGV fleet to; support the use of lower emission vehicles in its operation and to provide the public with reliable fueling stations where such can be supported as a cost-effective derivative of SoCalGas' fleet fueling assets and mission. There were 24 Company fueling stations at the time this document was prepared, with 11 of these stations serving the public in the fueling of CNG powered fleet and private vehicles. Many of these stations were commissioned over 15 years ago, when vehicle fueling profiles were different and station use was not as impacted by larger capacity vehicles and fleet sizes. Routine aging and its effects on reliability has also impacted station operations in recent years. The capital outlay proposed will allow for sustained support for SoCalGas fleet operations and service to public NGV fleets.
Specifically, the proposed redundant compressors at sites will increase operating reliability and effectiveness fueling capacity at the targeted stations. Limited redundancy will allow for problems associated with critical equipment to be resolved without interfering with NGV fueling operations. Upgrading the station operating and storage pressure to 4500 PSIG and installing new priority panels and incorporating direct fill features will enable NGV customer and fleet vehicles to experience a true “full-fill” at the SoCalGas NGV station each and every fueling stop (the target stations are all subject to vehicles experiencing less than full tank fillings due to capacity limitations.) In addition, it is expected the improvements will reduce the time stations are unavailable for public and fleet fueling by 90% over the next 5 years.

Note: Totals may include rounding differences.

Area:	FACILITIES/OTHER
Witness:	Carmen L. Herrera
Budget Code:	00734.0
Category:	E. NGV Refueling Stations
Category-Sub:	1. NGV Refueling Stations
Workpaper Group:	00734A - NGV Refueling Stations

Forecast Methodology:

Labor - Zero-Based

The direct labor costs are based on SoCalGas labor requirements experienced on historical NGV station projects of similar scope and complexity. Associated costs include company labor for project management, engineering, planning, quality assurance and field commissioning of newly-installed assets.

Non-Labor - Zero-Based

The forecast method developed for this cost category is zero-based. This method is most appropriate because each project has been estimated based on unique and specific scope and budgetary considerations. The estimates do, however, reflect SoCalGas encountered cost and vendor estimates for projects with similar scope and complexity completed over the prior three-year period. For more information, please refer to Table 734-A1 in the Supplemental.

NSE - Zero-Based

Not Applicable

Beginning of Workpaper Sub Details for
Workpaper Group 00734A

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00734.0
Category: E. NGV Refueling Stations
Category-Sub: 1. NGV Refueling Stations
Workpaper Group: 00734A - NGV Refueling Stations
Workpaper Detail: 00734A.001 - NGV Refueling Stations for 2014

In-Service Date: 12/31/2014

Description:

Construction of Natural Gas Vehicle (NGV) fueling station infrastructure in support of utility fleet operations and public service. SoCalGas is committed to the continued and expanded use of compressed natural gas (CNG) as fuel for its fleet/vehicle operations, and intends to construct new or modify fueling stations at its operating bases over the period 2014-2016 in support of this objective.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	190	0	0
Non-Labor	1,410	0	0
NSE	0	0	0
Total	**1,600**	**0**	**0**
FTE	1.9	0.0	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00734.0
Category: E. NGV Refueling Stations
Category-Sub: 1. NGV Refueling Stations
Workpaper Group: 00734A - NGV Refueling Stations
Workpaper Detail: 00734A.002 - NGV Refueling Stations - 2015

In-Service Date: 12/31/2015

Description:

Construction of Natural Gas Vehicle (NGV) fueling station infrastructure in support of utility fleet operations and public service. SoCalGas is committed to the continued and expanded use of compressed natural gas (CNG) as fuel for its fleet/vehicle operations, and intends to construct new or modify fueling stations at its operating bases over the period 2014-2016 in support of this objective.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	280	463	0
Non-Labor	1,570	2,457	0
NSE	0	0	0
Total	**1,850**	**2,920**	**0**
FTE	2.8	4.7	0.0

Note: Totals may include rounding differences.

Area: FACILITIES/OTHER
Witness: Carmen L. Herrera
Budget Code: 00734.0
Category: E. NGV Refueling Stations
Category-Sub: 1. NGV Refueling Stations
Workpaper Group: 00734A - NGV Refueling Stations
Workpaper Detail: 00734A.003 - NGV Refueling Stations - 2016

In-Service Date: 12/31/2016

Description:

Construction of Natural Gas Vehicle (NGV) fueling station infrastructure in support of utility fleet operations and public service. SoCalGas is committed to the continued and expanded use of compressed natural gas (CNG) as fuel for its fleet/vehicle operations, and intends to construct new or modify fueling stations at its operating bases over the period 2014-2016 in support of this objective.

Forecast In 2013 $(000)			
Years	**2014**	**2015**	**2016**
Labor	0	200	691
Non-Labor	0	1,000	3,764
NSE	0	0	0
Total	**0**	**1,200**	**4,455**
FTE	0.0	2.0	7.2

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group 00734A

TABLE 734-A1 - NGV Infrastructures Improvement Summary

NGV Infrastructures Improvement	2014	2015	2016
Public NGV Stations			
Azusa	$ 300,000		
Garden Grove		$ 300,000	
Riverside		300,000	
Oxnard	300,000		
ERC		100,000	$ 500,000
Santa Barbara		600,000	280,000
Compton	300,000		
Pico Rivera*	350,000		
San Pedro		600,000	400,000
Private NGV Stations			
Yukon		120,000	
Huntington Park			200,000
Proposed New NGV Stations			
Murrieta*	350,000		
Bakersfield	650,000	350,000	
2 New Station	1,200,000	800,000	
New Fleet Expansion Station Incremental Capital			
Existing Public NGV Stations			
Oxnard (add fueling posts)		237,500	
ERC (add fueling posts)		237,500	
Compton (add fueling posts)		237,500	
Existing Private NGV Stations			
Canoga (add fueling posts)		237,500	
Other Existing Bases			
Alhambra (add fueling station)			768,625
Beaumont (add fueling station)			768,625
Belvedere (add fueling station)			768,625
Blythe (add fueling station)			768,625
Proposed Annual Budget	**$ 3,450,000**	**$ 4,120,000**	**$4,454,500**

* Started prior to 2014.