| Application of SAN DIEGO GAS & ELECTRIC |) |
|---|---|
| COMPANY for authority to update its gas and |) |
| electric revenue requirement and base rates |) |
| effective January 1, 2019 (U 902-M) |) |
| | |
| | |
| Application No. 17-10 | |
| Exhibit No · (SDG&F-05-WP) | |

WORKPAPERS TO PREPARED DIRECT TESTIMONY OF OMAR RIVERA ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

OCTOBER 2017



2019 General Rate Case - APP INDEX OF WORKPAPERS

Exhibit SDG&E-05-WP - GAS SYSTEM INTEGRITY

| DOCUMENT | PAGE |
|---|------|
| | |
| Overall Summary For Exhibit No. SDG&E-05-WP | 1 |
| Summary of Non-Shared Services Workpapers | 2 |
| Category: A. ASSET MANAGEMENT | 3 |
| 1SI000.000 - GAS CONTRACTOR CONTROLS | 4 |
| Category: B. PIPELINE SAFETY & COMPLIANCE | 12 |
| 1SI002.000 - PIPELINE SAFETY & COMPLIANCE | 13 |
| Category: C. DAMAGE PREVENTION | 18 |
| 1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS | 19 |
| Summary of Shared Services Workpapers | 26 |
| Category: A. CODES AND STANDARDS | 27 |
| 2100-3563.000 - CODES STANDARDS AND RECORDS | 28 |
| Appendix A: List of Non-Shared Cost Centers | 37 |

Overall Summary For Exhibit No. SDG&E-05-WP

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Description
Non-Shared Services
Shared Services
Total

| In 2016 \$ (000) Incurred Costs | | | | | | | | | |
|-------------------------------------|----------------|-------|-------|--|--|--|--|--|--|
| Adjusted-Recorded Adjusted-Forecast | | | | | | | | | |
| 2016 | 2017 2018 2019 | | | | | | | | |
| 151 | 483 | 633 | 958 | | | | | | |
| 0 | 600 | 600 | 600 | | | | | | |
| 151 | 1,083 | 1,233 | 1,558 | | | | | | |

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Summary of Non-Shared Services Workpapers:

Description

A. ASSET MANAGEMENT

B. PIPELINE SAFETY & COMPLIANCE

C. DAMAGE PREVENTION

Total

| In 2016 \$ (000) Incurred Costs | | | | | | | | | |
|--------------------------------------|------|----------------|-----|--|--|--|--|--|--|
| Adjusted- Recorded Adjusted-Forecast | | | | | | | | | |
| 2016 | 2017 | 2017 2018 2019 | | | | | | | |
| 0 | 127 | 127 | 127 | | | | | | |
| 31 | 31 | 31 | 106 | | | | | | |
| 120 | 325 | 475 | 725 | | | | | | |
| 151 | 483 | 633 | 958 | | | | | | |

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. ASSET MANAGEMENT

Workpaper: 1SI000.000

Summary for Category: A. ASSET MANAGEMENT

| | | In 2016\$ (000) Incu | urred Costs | | | | | |
|-----------|-------------------|----------------------|-------------|------|--|--|--|--|
| | Adjusted-Recorded | Adjusted-Forecast | | | | | | |
| | 2016 | 2017 | 2018 | 2019 | | | | |
| Labor | 0 | 115 | 115 | 115 | | | | |
| Non-Labor | 0 | 12 | 12 | 12 | | | | |
| NSE | 0 | 0 | 0 | 0 | | | | |
| Total | 0 | 127 | 127 | 127 | | | | |
| FTE | 0.0 | 2.0 | 2.0 | 2.0 | | | | |
| | | | | | | | | |

Workpapers belonging to this Category:

1SI000.000 GAS CONTRACTOR CONTROLS

| Labor | 0 | 115 | 115 | 115 |
|-----------|-----|-----|-----|-----|
| Non-Labor | 0 | 12 | 12 | 12 |
| NSE | 0 | 0 | 0 | 0 |
| Total | | 127 | 127 | 127 |
| FTE | 0.0 | 2.0 | 2.0 | 2.0 |
| | | | | |

Beginning of Workpaper
1SI000.000 - GAS CONTRACTOR CONTROLS

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. ASSET MANAGEMENT
Category-Sub 1. ASSET MANAGEMENT

Workpaper: 1SI000.000 - GAS CONTRACTOR CONTROLS

Activity Description:

Gas Contractor Controls collaborates with Company and industry leaders and subject matter experts to formulate and promote policy related to construction contractor safety and pipeline safety/quality oversight. To do this, they must perform the following duties:

•establish, maintain, and expand construction contractor oversight program, including safety (occupational and process), to systematically review, assess, and enhance the management practices related to contractors:

provide written guidance on inspection of workmanship on the pipeline;

- •facilitate invoice approval process via online training and invoice submittal system user support; and •construction fraud vigilance and training.
- Deliver pipeline construction fraud awareness training;
- •Author and maintain Company Gas Standards, Forms, and workflows related to construction contractor oversight and associated information/records collection, including those related to California Public Utilities Code Section 141 Construction and Safety Standards; and
- •Develop Safety Congress presentation/content and facilitate quarterly meetings.

Pipeline Safety Management System (PSMS)- Develop and implement a Company-wide PSMS API RP 1173, consistent with PHMSA's recommendation. "PHMSA fully supports the implementation of RP 1173 and plans to promote vigorous conformance to this voluntary standard."

Forecast Explanations:

Labor - Zero-Based

The forecast method developed for this cost category is a zero-based approach. The zero-based approach is used to account for new activities to enhance SDG&E's Gas Contractor Controls department, which do not have a five-year history for the newly inaugurated functions. Labor is composed of Gas Contractor Controls Department management direct salaries associated with the work to support the management and execution of large construction projects.

Non-Labor - Zero-Based

The Non-Labor cost is composed of employees' expenses, employee training costs, software license fees for project management and control systems, and consulting fees.

NSE - Zero-Based

NSE is not applicable to this workgroup

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. ASSET MANAGEMENT
Category-Sub 1. ASSET MANAGEMENT

Workpaper: 1SI000.000 - GAS CONTRACTOR CONTROLS

Summary of Results:

| | | In 2016\$ (000) Incurred Costs | | | | | | | | | | |
|-----------|------|--------------------------------|-------------|------|------|------|--------------|------|--|--|--|--|
| | | Adju | ısted-Recor | ded | | Ad | justed-Fored | cast | | | | |
| Years | 2012 | 2013 | 2014 | 2017 | 2018 | 2019 | | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 | 115 | 115 | 115 | | | | |
| Non-Labor | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 12 | | | | |
| NSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Total | 0 | 0 | 0 | 0 | 0 | 127 | 127 | 127 | | | | |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 2.0 | 2.0 | | | | |

Non-Shared Service Workpapers

GAS SYSTEM INTEGRITY Area:

Omar Rivera Witness:

A. ASSET MANAGEMENT Category: 1. ASSET MANAGEMENT Category-Sub:

1SI000.000 - GAS CONTRACTOR CONTROLS Workpaper:

115

115

Summary of Adjustments to Forecast:

| | In 2016 \$(000) Incurred Costs | | | | | | | | | | | |
|-----------|--------------------------------|-------|-------------------|------|------|------|------|------|------|------|--|--|
| Forecas | t Method | ments | Adjusted-Forecast | | | | | | | | | |
| Years | s | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 | | |
| Labor | Zero-Based | 0 | 0 | 0 | 115 | 115 | 115 | 115 | 115 | 115 | | |
| Non-Labor | Zero-Based | 0 | 0 | 0 | 12 | 12 | 12 | 12 | 12 | 12 | | |
| NSE | Zero-Based | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Total | | 0 | 0 | 0 | 127 | 127 | 127 | 127 | 127 | 127 | | |
| FTE | Zero-Based | 0.0 | 0.0 | 0.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | |

Forecast Adjustment Details:

| <u>Year</u> | Adj Group | <u>Labor</u> | <u>NLbr</u> | <u>NSE</u> | <u>Total</u> | <u>FTE</u> | Adj Type | <u>ReflD</u> |
|-------------|-----------------------|--------------|-------------|------------|--------------|------------|-------------|---------------------------|
| 2017 F | RAMP-Post Filing Incr | 115 | 12 | 0 | 127 | 2.0 | 1-Sided Adj | MGONZALX20170512174145383 |

Explanation:

2017 Total

2018 RAMP Incremental

RAMP Chapter 3- Employee Contractor and Public Safety SDG&E relies heavily on contractors. Major Projects, Construction Services Construction Management, Construction Services Contracting, Aviation Services, and Fire Coordination and Prevention provide construction management and field oversight of all construction performed by contractors on electric distribution. This includes safeguarding that all contracted work is built to SDG&E design and safety standards and in accordance with GO 95 (Rules for Overhead Electric Line Construction) and GO 128 (Rules for Construction of Underground Electric Supply and Communications Systems).

2 0

2.0

1-Sided Adj

MGONZALX20170512174210250

Labor costs will be 2 FTEs X \$57,500 = \$115K. Total non-labor is 2 FTEs X \$6K= \$12K. 127

127

| | 1.10 | | 2.0 | |
|--|------|------|-----|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Explanation: RAMP Chapter 3- Employee Contractor and Public Safety SDG&E relies heavily on contractors.

0

12

Major Projects, Construction Services Construction Management, Construction Services Contracting, Aviation Services, and Fire Coordination and Prevention provide construction management and field oversight of all construction performed by contractors on electric distribution. This includes safeguarding that all contracted work is built to SDG&E design and safety standards and in accordance with GO 95 (Rules for Overhead Electric Line Construction) and GO 128 (Rules for Construction of Underground Electric Supply and Communications Systems).

Labor costs will be 2 FTEs X \$57,500 = \$115K. Total non-labor is 2 FTEs X \$6K= \$12K.

| 2018 Total | 115 | 12 | 0 | 127 | 2.0 | | |
|-----------------------|-----|----|---|-----|-----|-------------|---------------------------|
| | | | | | | | |
| | | | | | | | |
| 2019 RAMP Incremental | 115 | 12 | 0 | 127 | 2.0 | 1-Sided Adj | MGONZALX20170512174319847 |

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. ASSET MANAGEMENT
Category-Sub: 1. ASSET MANAGEMENT

Workpaper: 1SI000.000 - GAS CONTRACTOR CONTROLS

Year Adj Group Labor NLbr NSE Total FTE Adj_Type RefID

Explanation: RAMP Chapter 3- Employee Contractor and Public Safety SDG&E relies heavily on contractors.

Major Projects, Construction Services Construction Management, Construction Services Contracting, Aviation Services, and Fire Coordination and Prevention provide construction management and field oversight of all construction performed by contractors on electric distribution. This includes

oversight of all construction performed by contractors on electric distribution. This includes safeguarding that all contracted work is built to SDG&E design and safety standards and in accordance with GO 95 (Rules for Overhead Electric Line Construction) and GO 128 (Rules for

Construction of Underground Electric Supply and Communications Systems).

Labor costs will be 2 FTEs X \$57,500 = \$115K. Total non-labor is 2 FTEs X \$6K= \$12K.

2019 Total 115 12 0 127 2.0

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. ASSET MANAGEMENT Category-Sub: 1. ASSET MANAGEMENT

Workpaper: 1SI000.000 - GAS CONTRACTOR CONTROLS

Determination of Adjusted-Recorded (Incurred Costs):

| ctermination of Adjustee | 1-Recorded (Incurred Cos 2012 (\$000) | 2013 (\$000) | 2014 (\$000) | 2015 (\$000) | 2016 (\$000) |
|----------------------------|--|--------------|--------------|--------------|--------------|
| ecorded (Nominal \$)* | | | , , | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| djustments (Nominal \$) ** | * | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ecorded-Adjusted (Nomin | nal \$) | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| acation & Sick (Nominal \$ | 5) | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| scalation to 2016\$ | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ecorded-Adjusted (Const | ant 2016\$) | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

^{*} After company-wide exclusions of Non-GRC costs

^{**} Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Non-Shared Service Workpapers

GAS SYSTEM INTEGRITY Area:

Witness: Omar Rivera

A. ASSET MANAGEMENT Category: 1. ASSET MANAGEMENT Category-Sub:

1SI000.000 - GAS CONTRACTOR CONTROLS Workpaper:

Summary of Adjustments to Recorded:

| In Nominal \$ (000) Incurred Costs | | | | | | | | |
|------------------------------------|-------|------|------|------|------|------|--|--|
| | Years | 2012 | 2013 | 2014 | 2015 | 2016 | | |
| Labor | | 0 | 0 | 0 | 0 | 0 | | |
| Non-Labor | | 0 | 0 | 0 | 0 | 0 | | |
| NSE | | 0 | 0 | 0 | 0 | 0 | | |
| | Total | | 0 | 0 - | 0 | 0 | | |
| FTE | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Year | Adj Group | Labor | <u>NLbr</u> | NSE FTE | Adj Type | <u>RefID</u> |
|------|-----------|-------|-------------|---------|----------|--------------|

Non-Shared Service Workpapers

GAS SYSTEM INTEGRITY Area:

Omar Rivera Witness:

Category: A. ASSET MANAGEMENT 1. ASSET MANAGEMENT Category-Sub:

1SI000.000 - GAS CONTRACTOR CONTROLS Workpaper:

RAMP Item #1 Ref ID: MGONZALX20170512174145383

RAMP Chapter: SDG&E-3

Program Name: Traffic Control Work Group and Equipment Program Description: Traffic control for construction work

Risk/Mitigation:

Risk: Employee, Contractor and Public Safety (O&M)

Mitigation: Safety Policies & Programs

| Forecast CPUC Cost Estimates (\$000) | | | | | | | | |
|--------------------------------------|-------------|-------------|------|--|--|--|--|--|
| | <u>2017</u> | <u>2018</u> | 2019 | | | | | |
| Low | 0 | 0 | 0 | | | | | |
| High | 0 | 0 | 0 | | | | | |
| Funding Source: CPUC-GRC | | | | | | | | |
| Forecast Method: Other | | | | | | | | |

Forecast Method: Other Work Type: Mandated Work Type Citation: n/a

Embedded Costs: 0

Explanation:

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: B. PIPELINE SAFETY & COMPLIANCE

Workpaper: 1SI002.000

Summary for Category: B. PIPELINE SAFETY & COMPLIANCE

| | In 2016\$ (000) Incurred Costs | | | | | | |
|-----------|--------------------------------|-------------------------------------|------|------|--|--|--|
| | Adjusted-Recorded | Adjusted-Recorded Adjusted-Forecast | | | | | |
| | 2016 | 2017 | 2018 | 2019 | | | |
| Labor | 26 | 26 | 26 | 101 | | | |
| Non-Labor | 5 | 5 | 5 | 5 | | | |
| NSE | 0 | 0 | 0 | 0 | | | |
| Total | 31 | 31 | 31 | 106 | | | |
| FTE | 0.3 | 0.3 | 0.3 | 1.0 | | | |

Workpapers belonging to this Category:

1SI002.000 PIPELINE SAFETY & COMPLIANCE

| Labor | 26 | 26 | 26 | 101 |
|-----------|-----|-----|-----|-----|
| Non-Labor | 5 | 5 | 5 | 5 |
| NSE | 0 | 0 | 0 | 0 |
| Total | 31 | 31 | 31 | 106 |
| FTE | 0.3 | 0.3 | 0.3 | 1.0 |

Beginning of Workpaper
1SI002.000 - PIPELINE SAFETY & COMPLIANCE

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: B. PIPELINE SAFETY & COMPLIANCE Category-Sub 1. PIPELINE SAFETY & COMPLIANCE

Workpaper: 1SI002.000 - PIPELINE SAFETY & COMPLIANCE

Activity Description:

The Pipeline Safety & Compliance department manages and coordinates SEU activities related to the General Order 112-F CPUC and DOT regulations. Provides counsel, guidance and information to Engineering & Operations and Field Services groups on pipeline safety issues relative to CPUC & DOT regulations. Specific activities associated with this work group include representing SDG&E in all interactions with the CPUC Utility Safety and Reliability Branch related to natural gas operations as well as provide direction and guidance to utility personnel to assure compliance with DOT/CPUC pipeline regulatory operations.

Forecast Explanations:

Labor - Base YR Rec

As the foundation for future labor expense requirements, the base year method was selected. This forecasting methodology serves to more accurately represent this work group. However, new State regulations and enhancements are emerging and thus requiring additional staffing and resources to comply. These incremental costs have been identified and added to the base year.

Non-Labor - Base YR Rec

As the foundation for future non-labor expense requirements, the base year method was selected. This forecasting methodology serves to more accurately represent this work group. However, new State regulations and enhancements are emerging and thus requiring additional staffing and resources to comply. These incremental costs have been identified and added to the base year.

NSE - Base YR Rec

NSE is not applicable to this workgroup

Summary of Results:

| | In 2016\$ (000) Incurred Costs | | | | | | | | | | |
|-----------|--------------------------------|------|-------------|------|------|------|-------------------|------|--|--|--|
| | | Adjι | ısted-Recor | ded | | Ad | Adjusted-Forecast | | | | |
| Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | | |
| Labor | 0 | 0 | 0 | 1 | 26 | 26 | 26 | 101 | | | |
| Non-Labor | 0 | 0 | 0 | 1 | 5 | 4 | 4 | 4 | | | |
| NSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Total | 0 | 0 | 0 | 2 | 31 | 30 | 30 | 105 | | | |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.3 | 1.0 | | | |

GAS SYSTEM INTEGRITY Area:

Witness: Omar Rivera

B. PIPELINE SAFETY & COMPLIANCE Category: 1. PIPELINE SAFETY & COMPLIANCE Category-Sub:

Workpaper: 1SI002.000 - PIPELINE SAFETY & COMPLIANCE

Summary of Adjustments to Forecast:

| | In 2016 \$(000) Incurred Costs | | | | | | | | | |
|--|--------------------------------|------|----------------|-----|-----|----------------|-----------|------|------|------|
| Forecast Method Base Forecast Forecast Adjustments Adjustments | | | | | | Adjus | ted-Forec | ast | | |
| Years | s | 2017 | 2017 2018 2019 | | | 2017 2018 2019 | | 2017 | 2018 | 2019 |
| Labor | Base YR Rec | 26 | 26 | 26 | 0 | 0 | 75 | 26 | 26 | 101 |
| Non-Labor | Base YR Rec | 5 | 5 | 5 | 0 | 0 | 0 | 5 | 5 | 5 |
| NSE | Base YR Rec | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tota | ıl | 31 | 31 | 31 | 0 | 0 | 75 | 31 | 31 | 106 |
| FTE | Base YR Rec | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.7 | 0.3 | 0.3 | 1.0 |

| Forecas | Forecast Adjustment Details: | | | | | | | | |
|-------------|------------------------------|------------------|-------------|------------|--------------|------------|-----------------|---------------------------|--|
| <u>Year</u> | Adj Group | Labor | <u>NLbr</u> | <u>NSE</u> | <u>Total</u> | <u>FTE</u> | Adj Type | RefID | |
| 2017 Tot | tal | 0 | 0 | 0 | 0 | 0.0 | | | |
| | | | | | | | | | |
| 2018 Tot | tal | 0 | 0 | 0 | 0 | 0.0 | | | |
| | | | | | | | | | |
| 2019 Otl | her | 75 | 0 | 0 | 75 | 0.7 | 1-Sided Adj | MGONZALX20170512151554380 | |
| Explana | tion: A | djustment to mak | ke the SDG | &E Pipe | line Safety | & Complia | ance advisor 10 | 0% | |
| | L | abor for 0.7 FTE | = \$75K | | | | | | |
| 2019 Tot | tal | 75 | 0 | 0 | 75 | 0.7 | | | |

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: B. PIPELINE SAFETY & COMPLIANCE Category-Sub: 1. PIPELINE SAFETY & COMPLIANCE

Workpaper: 1SI002.000 - PIPELINE SAFETY & COMPLIANCE

Determination of Adjusted-Recorded (Incurred Costs):

| Determination of Aujusted | 2012 (\$000) | 2013 (\$000) | 2014 (\$000) | 2015 (\$000) | 2016 (\$000) |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|
| Recorded (Nominal \$)* | | | | | |
| Labor | 0 | 0 | 0 | 1 | 23 |
| Non-Labor | 0 | 0 | 0 | 1 | 5 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | | 2 | 27 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Adjustments (Nominal \$) ** | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | | 0 | 0 | 0 | |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Recorded-Adjusted (Nomin | al \$) | | | | |
| Labor | 0 | 0 | 0 | 1 | 23 |
| Non-Labor | 0 | 0 | 0 | 1 | 5 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | | 0 | 0 | 2 | 27 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Vacation & Sick (Nominal \$ | 3) | | | | |
| Labor | 0 | 0 | 0 | 0 | 4 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 4 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Escalation to 2016\$ | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Recorded-Adjusted (Consta | ant 2016\$) | | | | |
| Labor | 0 | 0 | 0 | 1 | 26 |
| Non-Labor | 0 | 0 | 0 | 1 | 5 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 2 | 31 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |

^{*} After company-wide exclusions of Non-GRC costs

^{**} Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Non-Shared Service Workpapers

GAS SYSTEM INTEGRITY Area:

Witness: Omar Rivera

B. PIPELINE SAFETY & COMPLIANCE Category: 1. PIPELINE SAFETY & COMPLIANCE Category-Sub:

1SI002.000 - PIPELINE SAFETY & COMPLIANCE Workpaper:

Summary of Adjustments to Recorded:

| In Nominal \$ (000) Incurred Costs | | | | | | | | |
|------------------------------------|-------|-----|-----|-----|-----|-----|--|--|
| Years 2012 2013 2014 2015 2016 | | | | | | | | |
| Labor | - | 0 | 0 | 0 | 0 | 0 | | |
| Non-Labor | | 0 | 0 | 0 | 0 | 0 | | |
| NSE | | 0 | 0 | 0 | 0 | 0 | | |
| | Total | 0 | 0 | 0 | 0 | 0 | | |
| FTE | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Year | Adj Group | Labor | NLbr | NSE FTE | Adj Type | <u>RefID</u> |
|------|-----------|-------|------|---------|----------|--------------|

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: C. DAMAGE PREVENTION

Workpaper: 1SI003.000

Summary for Category: C. DAMAGE PREVENTION

| | In 2016\$ (000) Incurred Costs | | | | | | | |
|-----------|--------------------------------|------|-------------------|------|--|--|--|--|
| | Adjusted-Recorded | | Adjusted-Forecast | | | | | |
| | 2016 | 2017 | 2018 | 2019 | | | | |
| Labor | 0 | 0 | 0 | 0 | | | | |
| Non-Labor | 120 | 325 | 475 | 725 | | | | |
| NSE | 0 | 0 | 0 | 0 | | | | |
| Total | 120 | 325 | 475 | 725 | | | | |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

Workpapers belonging to this Category:

1SI003.000 DAMAGE PREVENTION AND PUBLIC AWARENESS

| Labor | 0 | 0 | 0 | 0 |
|-----------|-----|-----|-----|-----|
| Non-Labor | 120 | 325 | 475 | 725 |
| NSE | 0 | 0 | 0 | 0 |
| Total | 120 | 325 | 475 | 725 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 |

Beginning of Workpaper
1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: C. DAMAGE PREVENTION
Category-Sub 1. DAMAGE PREVENTION

Workpaper: 1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS

Activity Description:

SDG&E has developed and implemented a federally-mandated Public Awareness program, as prescribed in 49 CFR 192.616. The Public Awareness program contributes to enhanced public safety by providing certain risk mitigation measures. In adopting these Public Awareness program requirements, the Pipeline and Hazardous Materials Safety Administration (PHMSA) determined that "effective public awareness programs are vital to continued safe pipeline Operations" and that "such programs are an important factor in establishing communications with affected stakeholders, providing information necessary to enhance public awareness of pipelines, and communicating stakeholder roles relative to pipeline safety." The federal regulations directing the implementation of this program specifically require that the program include activities to educate the public, appropriate government organizations, and persons engaged in excavation-related activities regarding: (1) Use of the one-call notification system prior to excavation and other damage prevention activities; (2) possible hazards associated with unintended releases from a gas pipeline facility; (3) Physical indications that such a release may have occurred; (4) steps that should be taken for public safety in the event of a gas pipeline release; and (5) procedures for reporting such an event.

Forecast Explanations:

Labor - 5-YR Average

Labor is not applicable to this workgroup.

Non-Labor - 5-YR Average

The services provided within this workgroup fluctuate from year-to-year. For this reason, a historical five-year average of the recorded non-labor expenditures for the years 2012 through 2016 was determined to be most representative ongoing non-labor requirements. Our damage prevention data demonstrates that when we perform public awareness activities that the number of damages decrease while the number of calls to 811(Underground Service Alert) increases, therefore we plan to increase our cost in these areas to further contribute to lowering the numbers of damages to our system while also contributing to mitigate our number one threat to our system, third party damages.

NSE - 5-YR Average

NSE is not applicable to this workgroup.

Summary of Results:

| | In 2016\$ (000) Incurred Costs | | | | | | | | | |
|-----------|--------------------------------|------|-------------------------------------|------|------|------|------|------|--|--|
| | | Adjι | Adjusted-Recorded Adjusted-Forecast | | | | cast | | | |
| Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | |
| Labor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Non-Labor | 347 | 266 | 222 | 172 | 120 | 325 | 475 | 725 | | |
| NSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Total | 347 | 266 | 222 | 172 | 120 | 325 | 475 | 725 | | |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: C. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS

Summary of Adjustments to Forecast:

| | In 2016 \$(000) Incurred Costs | | | | | | | | | |
|-----------|--------------------------------|------|-----------|------|-------|------------|--------|-------------------|------|------|
| Forecast | t Method | Bas | se Foreca | st | Forec | ast Adjust | tments | Adjusted-Forecast | | |
| Years | s | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 |
| Labor | 5-YR Average | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 5-YR Average | 225 | 225 | 225 | 100 | 250 | 500 | 325 | 475 | 725 |
| NSE | 5-YR Average | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tota | ıl | 225 | 225 | 225 | 100 | 250 | 500 | 325 | 475 | 725 |
| FTE | 5-YR Average | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Forecast Adjustment Details:

2018 RAMP Incremental

| Year Adj Group | <u>Labor</u> | <u>NLbr</u> | <u>NSE</u> | <u>Total</u> | <u>FTE</u> | Adj Type | <u>ReflD</u> |
|-----------------------|--------------|-------------|------------|--------------|------------|-------------|---------------------------|
| 2017 RAMP Incremental | 0 | 100 | 0 | 100 | 0.0 | 1-Sided Adj | ANTROTTE20170626072327620 |

Explanation: RAMP Chapter 2- Catastrophic Damage Involving Third Party Dig-Ins

Adding RAMP Incremental \$100k for non-labor for Damage Prevention Public Awareness. Public Awareness is mandated pursuant to Title 49 CFR 192.616. Its purpose is to develop and implement a continuing public education program focused on use of the one-call notification system; hazards associated with the unintended release of gas; physical indications that an unintended release of gas has occurred; steps that should be taken to protect public safety in the event of gas release; and procedures for reporting unintended releases of gas. SDG&E utilizes multiple channels for this communication such as billboards, bill inserts, radio announcements, bumper stickers, safety events, press releases, social media, and sponsorships to capture a vast audience.

| 2017 Total | 0 | 100 | 0 | 100 | 0.0 | | |
|------------|---|-----|---|-----|-----|--|--|
| | | | | | | | |
| | | | | | | | |

250

Explanation: RAMP Chapter 2- Catastrophic Damage Involving Third Party Dig-Ins

250

Adding RAMP Incremental \$250k for non-labor for Damage Prevention Public Awareness. Public Awareness is mandated pursuant to Title 49 CFR 192.616. Its purpose is to develop and implement a continuing public education program focused on use of the one-call notification system; hazards associated with the unintended release of gas; physical indications that an unintended release of gas has occurred; steps that should be taken to protect public safety in the event of gas release; and procedures for reporting unintended releases of gas. SDG&E utilizes multiple channels for this communication such as billboards, bill inserts, radio announcements, bumper stickers, safety events, press releases, social media, and sponsorships to capture a vast audience.

0.0

1-Sided Adi

ANTROTTE20170626072537133

| 2018 Total | 0 | 250 | 0 | 250 | 0.0 | | |
|-----------------------|---|-----|---|-----|-----|-------------|---------------------------|
| | | | | | | | |
| | | | | | | | |
| 2019 RAMP Incremental | 0 | 500 | 0 | 500 | 0.0 | 1-Sided Adj | ANTROTTE20170626072632847 |

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: C. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS

<u>Year Adj Group Labor NLbr NSE Total FTE Adj Type ReflD</u>

Explanation: RAMP Chapter 2- Catastrophic Damage Involving Third Party Dig-Ins

Adding RAMP Incremental \$500k for non-labor for Damage Prevention Public Awareness. Public Awareness is mandated pursuant to Title 49 CFR 192.616. Its purpose is to develop and implement a continuing public education program focused on use of the one-call notification system; hazards associated with the unintended release of gas; physical indications that an unintended release of gas has occurred; steps that should be taken to protect public safety in the event of gas release; and procedures for reporting unintended releases of gas. SDG&E utilizes multiple channels for this communication such as billboards, bill inserts, radio announcements, bumper stickers, safety

events, press releases, social media, and sponsorships to capture a vast audience.

2019 Total 0 500 0 500 0.0

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: C. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS

Determination of Adjusted-Recorded (Incurred Costs):

| | 2012 (\$000) | 2013 (\$000) | 2014 (\$000) | 2015 (\$000) | 2016 (\$000) |
|------------------------------|--------------|--------------|--------------|--------------|--------------|
| Recorded (Nominal \$)* | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 334 | 260 | 220 | 171 | 120 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 334 | 260 | 220 | 171 | 120 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| djustments (Nominal \$) ** | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Recorded-Adjusted (Nominal S | \$) | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 334 | 260 | 220 | 171 | 120 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 334 | 260 | 220 | 171 | 120 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| acation & Sick (Nominal \$) | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| scalation to 2016\$ | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 13 | 6 | 1 | 1 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 13 | 6 | 1 | 1 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ecorded-Adjusted (Constant | 2016\$) | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 347 | 266 | 222 | 172 | 120 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 347 | 266 | 222 | 172 | 120 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

^{*} After company-wide exclusions of Non-GRC costs

^{**} Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: C. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS

Summary of Adjustments to Recorded:

| In Nominal \$ (000) Incurred Costs | | | | | | | | | | |
|------------------------------------|-------|--------------------------------|-----|-----|-----|-----|--|--|--|--|
| | Years | Years 2012 2013 2014 2015 2016 | | | | | | | | |
| Labor | - | 0 | 0 | 0 | 0 | 0 | | | | |
| Non-Labor | | 0 | 0 | 0 | 0 | 0 | | | | |
| NSE | | 0 | 0 | 0 | 0 | 0 | | | | |
| | Total | 0 | 0 | 0 | 0 | 0 | | | | |
| FTE | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Year | Adj Group | <u>Labor</u> | NLbr | NSE FTE | Adj Type | <u>RefID</u> |
|------|-----------|--------------|------|---------|----------|--------------|

Non-Shared Service Workpapers

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: C. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI003.000 - DAMAGE PREVENTION AND PUBLIC AWARENESS

RAMP Item # 1 Ref ID: ANTROTTE20170626072327620

RAMP Chapter: SDG&E-2

Program Name: Damage Prevention Public Awareness

Program Description: Promotion of excavation safety to contractors and the public

Risk/Mitigation:

Risk: Catastrophic Damage Involving Third Party Dig-Ins (O&M)

Mitigation: Public Awareness

| Forecast CPUC Cost Estimates (\$000) | | | | | | | | | |
|--------------------------------------|-------------|-------------|-------------|--|--|--|--|--|--|
| | <u>2017</u> | <u>2018</u> | <u>2019</u> | | | | | | |
| Low | 0 | 0 | 0 | | | | | | |
| High | 0 | 0 | 0 | | | | | | |

Funding Source: CPUC-GRC

Forecast Method: Other
Work Type: Mandated

Work Type Citation: Title 49 CFR 192.616

Historical Embedded Cost Estimates (\$000)

Embedded Costs: 124.831

Explanation:

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Summary of Shared Services Workpapers:

DescriptionA. CODES AND STANDARDS

Total

| In 2016 \$ (000) Incurred Costs | | | | | | | | |
|---------------------------------|-------------------|------|------|--|--|--|--|--|
| Adjusted- Recorded | Adjusted-Forecast | | | | | | | |
| 2016 | 2017 | 2018 | 2019 | | | | | |
| 0 | 600 | 600 | 600 | | | | | |
| 0 | 600 | 600 | 600 | | | | | |

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. CODES AND STANDARDS

Cost Center: 2100-3563.000

Summary for Category: A. CODES AND STANDARDS

| | In 2016\$ (000) Incurred Costs | | | | | | | | |
|-----------|--------------------------------|-------------------------------|------|------|--|--|--|--|--|
| | Adjusted-Recorded | ed-Recorded Adjusted-Forecast | | | | | | | |
| | 2016 | 2017 | 2018 | 2019 | | | | | |
| Labor | 0 | 0 | 0 | 0 | | | | | |
| Non-Labor | 0 | 600 | 600 | 600 | | | | | |
| NSE | 0 | 0 | 0 | 0 | | | | | |
| Total | 0 | 600 | 600 | 600 | | | | | |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |

Cost Centers belonging to this Category:

2100-3563.000 CODES STANDARDS AND RECORDS

| 0 | 0 | 0 | 0 |
|-----|-------------|---------------------|---------------------------------|
| 0 | 600 | 600 | 600 |
| 0 | 0 | 0 | 0 |
| 0 | 600 | 600 | 600 |
| 0.0 | 0.0 | 0.0 | 0.0 |
| | 0 0 0 | 0 600 0 0 600 | 0 600 600 0 0 0 0 600 600 |

Beginning of Workpaper 2100-3563.000 - CODES STANDARDS AND RECORDS

Shared Services Workpapers

GAS SYSTEM INTEGRITY Area:

Witness: Omar Rivera

A. CODES AND STANDARDS Category: 1. CODES AND STANDARDS Category-Sub

2100-3563.000 - CODES STANDARDS AND RECORDS Cost Center:

Activity Description:

Codes and Standards help the two utilities meet their regulatory obligations and allow for information exchange to enhance public and employee safety. The CPUC annually audits both companies and their gas standards. The cost reflects the non-labor support needed to manage and provide consistency across both companies with respect to the gas standards, and to prepare documentation and perform follow-up work resulting from CPUC audits.

Forecast Explanations:

Labor - Zero-Based

Labor is not applicable to this workgroup.

Non-Labor - Zero-Based

The forecast method developed for this cost category is a zero-based approach. The zero-based approach is used to account for new activities to enhance SDG&E's Codes Standards and Records non-labor, which do not have a five-year history for the newly inaugurated functions.

NSE - Zero-Based

NSE is not applicable to this workgroup.

Summary of Results:

| | | In 2016\$ (000) Incurred Costs | | | | | | | | | |
|-----------|------|--------------------------------|-------------|------|------|--------------|------|------|--|--|--|
| | | Adju | ısted-Recor | | Ad | justed-Fored | cast | | | | |
| Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | | |
| Labor | 0 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | | | |
| Non-Labor | 0 | 1 | 0 | 0 | 0 | 600 | 600 | 600 | | | |
| NSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Total | 0 | 8 | 5 | 0 | 0 | 600 | 600 | 600 | | | |
| FTE | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. CODES AND STANDARDS
Category-Sub: 1. CODES AND STANDARDS

Cost Center: 2100-3563.000 - CODES STANDARDS AND RECORDS

Cost Center Allocations (Incurred Costs):

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP

Unreg

| | 2016 Adju | sted-Reco | rded | | 2017 Adjusted-Forecast | | | | | |
|--------|-----------|-----------|-------|-----|------------------------|-----------|-----|-------|-----|--|
| Labor | Non-Labor | NSE | Total | FTE | Labor | Non-Labor | NSE | Total | FTE | |
| 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | |
| 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | |
| 0 | 0 | 0 | 0 | 0.0 | 0 | 600 | 0 | 600 | 0.0 | |
| 0 | 0 | 0 | 0 | 0.0 | 0 | 600 | 0 | 600 | 0.0 | |
| | | | | | | | | | | |
| 13.35% | 13.35% | | | | 13.35% | 13.35% | | | | |
| 86.65% | 86.65% | | | | 86.65% | 86.65% | | | | |
| 0.00% | 0.00% | | | | 0.00% | 0.00% | | | | |
| 0.00% | 0.00% | | | | 0.00% | 0.00% | | | | |

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP
Unreg

| | 2018 Adju | sted-Fore | cast | | 2019 Adjusted-Forecast | | | | | |
|--------|-----------|-----------|-------|-----|------------------------|-----------|-----|-------|-----|--|
| Labor | Non-Labor | NSE | Total | FTE | Labor | Non-Labor | NSE | Total | FTE | |
| 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | |
| 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | |
| 0 | 600 | 0 | 600 | 0.0 | 0 | 600 | 0 | 600 | 0.0 | |
| 0 | 600 | 0 | 600 | 0.0 | 0 | 600 | 0 | 600 | 0.0 | |
| | | | | | | | | | | |
| 13.35% | 13.35% | | | | 13.35% | 13.35% | | | | |
| 86.65% | 86.65% | | | | 86.65% | 86.65% | | | | |
| 0.00% | 0.00% | | | | 0.00% | 0.00% | | | | |
| 0.00% | 0.00% | | | | 0.00% | 0.00% | | | | |

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2016

Coming soon...

Cost Center Allocation Percentage for 2017

Coming soon...

Cost Center Allocation Percentage for 2018

Coming soon...

Cost Center Allocation Percentage for 2019

Coming soon...

GAS SYSTEM INTEGRITY Area:

Witness: Omar Rivera

A. CODES AND STANDARDS Category: 1. CODES AND STANDARDS Category-Sub:

2100-3563.000 - CODES STANDARDS AND RECORDS Cost Center:

Summary of Adjustments to Forecast:

| | In 2016 \$(000) Incurred Costs | | | | | | | | | | | |
|-------------------------------|--------------------------------|-----------------------|-----|-----|----------------------|------|------|-------|-------------------|------|--|--|
| Forecast Method Base Forecast | | | | st | Forecast Adjustments | | | Adjus | Adjusted-Forecast | | | |
| Years | s | 2017 2018 2019 2017 2 | | | | 2018 | 2019 | 2017 | 2018 | 2019 | | |
| Labor | Zero-Based | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Non-Labor | Zero-Based | 0 | 0 | 0 | 600 | 600 | 600 | 600 | 600 | 600 | | |
| NSE | Zero-Based | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Tota | ıl | 0 | 0 | 0 | 600 | 600 | 600 | 600 | 600 | 600 | | |
| FTE | Zero-Based | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |

Forecast Adjustment Details:

| Year Adj Group | <u>Labor</u> | <u>NLbr</u> | <u>NSE</u> | <u>Total</u> | <u>FTE</u> | Adj Type | <u>RefID</u> |
|-----------------------|--------------|-------------|------------|--------------|------------|-------------|---------------------------|
| 2017 RAMP Incremental | 0 | 600 | 0 | 600 | 0.0 | 1-Sided Adj | MGONZALX20170628165636900 |

Explanation:

RAMP Chapter 13- Records Management Incremental non-labor added of \$600K due to Records Management

While there are several current and planned IT applications and enhancements to support records management, SDG&E proposes an initiative to further digitize its records. SDG&E's records have evolved over the life of the operational assets, and transferring existing paper records to an electronic format (digitization) is one aspect of modernizing SDG&E's records. In addition to digitization, SDG&E's initiative will also add searchability and traceability functionality. Regulatory compliance standards increasingly require that utilities be able to efficiently and effectively identify specific attributes related to operational assets. As a result, having IT applications for records management that enable searchability and traceability functionality are important.

SDG&E has identified IT solutions to support the modernization effort. The intent of these projects is to leverage existing investments in information technology while providing improved functionality to address operational needs in the records management area.

| 2017 Total | 0 | 600 | 0 | 600 | 0.0 | | |
|-----------------------|---|-----|---|-----|-----|-------------|---------------------------|
| | | | | | | | |
| | | | | | | | |
| 2018 RAMP Incremental | 0 | 600 | 0 | 600 | 0.0 | 1-Sided Adj | MGONZALX20170628165652727 |

Shared Services Workpapers

GAS SYSTEM INTEGRITY Area:

Witness: Omar Rivera

A. CODES AND STANDARDS Category: 1. CODES AND STANDARDS Category-Sub:

Cost Center: 2100-3563.000 - CODES STANDARDS AND RECORDS

Adj Group Labor NLbr **NSE** FTE RefID <u>Year</u> **Total** Adj_Type

Explanation: RAMP Chapter 13- Records Management Incremental non-labor added of \$600K due to Records

Management

While there are several current and planned IT applications and enhancements to support records management, SDG&E proposes an initiative to further digitize its records. SDG&E's records have evolved over the life of the operational assets, and transferring existing paper records to an electronic format (digitization) is one aspect of modernizing SDG&E's records. In addition to digitization, SDG&E's initiative will also add searchability and traceability functionality. Regulatory compliance standards increasingly require that utilities be able to efficiently and effectively identify specific attributes related to operational assets. As a result, having IT applications for records management that enable searchability and traceability functionality are important.

SDG&E has identified IT solutions to support the modernization effort. The intent of these projects is to leverage existing investments in information technology while providing improved functionality to

0.0

address operational needs in the records management area.

600

600

2019 RAMP Incremental 0 0 600 600 0.0 1-Sided Adj MGONZALX20170628165707903

Explanation: RAMP Chapter 13- Records Management Incremental non-labor added of \$600K due to Records

Management

0

2018 Total

While there are several current and planned IT applications and enhancements to support records management, SDG&E proposes an initiative to further digitize its records. SDG&E's records have evolved over the life of the operational assets, and transferring existing paper records to an electronic format (digitization) is one aspect of modernizing SDG&E's records. In addition to digitization, SDG&E's initiative will also add searchability and traceability functionality. Regulatory compliance standards increasingly require that utilities be able to efficiently and effectively identify specific attributes related to operational assets. As a result, having IT applications for records management that enable searchability and traceability functionality are important.

SDG&E has identified IT solutions to support the modernization effort. The intent of these projects is to leverage existing investments in information technology while providing improved functionality to address operational needs in the records management area.

2019 Total 600 0 600 0.0

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. CODES AND STANDARDS
Category-Sub: 1. CODES AND STANDARDS

Cost Center: 2100-3563.000 - CODES STANDARDS AND RECORDS

Determination of Adjusted-Recorded (Incurred Costs):

| • | 2012 (\$000) | 2013 (\$000) | 2014 (\$000) | 2015 (\$000) | 2016 (\$000) |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|
| Recorded (Nominal \$)* | | | | | |
| Labor | 0 | 6 | 4 | 0 | 0 |
| Non-Labor | 0 | 1 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 7 | 4 | 0 | 0 |
| FTE | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Adjustments (Nominal \$) ** | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Recorded-Adjusted (Nomina | al \$) | | | | |
| Labor | 0 | 6 | 4 | 0 | 0 |
| Non-Labor | 0 | 1 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 7 | 4 | 0 | 0 |
| FTE | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| /acation & Sick (Nominal \$ | 5) | | | | |
| Labor | 0 | 1 | 1 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 1 | 1 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Escalation to 2016\$ | | | | | |
| Labor | 0 | 0 | 0 | 0 | 0 |
| Non-Labor | 0 | 0 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |
| FTE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Recorded-Adjusted (Consta | ant 2016\$) | | | | |
| Labor | 0 | 8 | 5 | 0 | 0 |
| Non-Labor | 0 | 1 | 0 | 0 | 0 |
| NSE | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 8 | 5 | 0 | 0 |
| FTE | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |

^{*} After company-wide exclusions of Non-GRC costs

^{**} Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. CODES AND STANDARDS
Category-Sub: 1. CODES AND STANDARDS

Cost Center: 2100-3563.000 - CODES STANDARDS AND RECORDS

Summary of Adjustments to Recorded:

| In Nominal \$ (000) Incurred Costs | | | | | | | | | |
|------------------------------------|-------|------|------|------|-------|------|--|--|--|
| | Years | 2012 | 2013 | 2014 | 2015 | 2016 | | | |
| Labor | | 0 | 0 | 0 | 0.409 | 0 | | | |
| Non-Labor | | 0 | 0 | 0 | 0 | 0 | | | |
| NSE | | 0 | 0 | 0 | 0 | 0 | | | |
| | Total | | 0 | 0 | 0.409 | 0 | | | |
| FTE | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |

Detail of Adjustments to Recorded:

| Year A | Adj Group | <u>Labor</u> | <u>NLbr</u> | <u>NSE</u> | <u>FTE</u> | Adj Type | <u>RefiD</u> |
|------------|-----------|--------------------------|-------------|------------|------------|--|----------------------------|
| 2012 Total | | 0 | 0 | 0 | 0.0 | | |
| | | | | | | | |
| 2013 Total | | 0 | 0 | 0 | 0.0 | | |
| | | | | | | | |
| 2014 Total | | 0 | 0 | 0 | 0.0 | | |
| | | | | | | | |
| 2015 | Other | 0 | 0 | 0 | 0.0 | 1-Sided Adj | MGONZALX20170511224532213 |
| Explanatio | - | ent to zero selected. | out the | credit s | hown | in this historical expenditure so that a p | roper forecast methodology |
| 2015 Total | | 0 | 0 | 0 | 0.0 | | |
| | | | | | | | |
| 2016 Total | | 0 | 0 | 0 | 0.0 | | |

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Category: A. CODES AND STANDARDS
Category-Sub: 1. CODES AND STANDARDS

Cost Center: 2100-3563.000 - CODES STANDARDS AND RECORDS

RAMP Item # 1 Ref ID: MGONZALX20170307130726653

RAMP Chapter: SDG&E-13

Program Name: Periodic Independent Internal Audits of Records Management

Program Description: Records Management Group performs an internal audit of selected departments annually

Risk/Mitigation:

Risk: Records Management (O&M)

Mitigation: Administrative

| <u>Forecast</u> | CPUC | Cost | <u>Estimates</u> | (\$000 <u>)</u> |
|-----------------|------|------|------------------|-----------------|
| | | | | |

| | <u>2017</u> | <u>2018</u> | <u>2019</u> |
|------|-------------|-------------|-------------|
| Low | 2 | 2 | 2 |
| High | 2 | 2 | 2 |

Funding Source: CPUC-GRC Forecast Method: Zero-Based

Work Type: Mandated

Work Type Citation: Pending

Historical Embedded Cost Estimates (\$000)

Embedded Costs: 0

Explanation: 0

Shared Services Workpapers

GAS SYSTEM INTEGRITY Area:

Omar Rivera Witness:

A. CODES AND STANDARDS Category: 1. CODES AND STANDARDS Category-Sub:

2100-3563.000 - CODES STANDARDS AND RECORDS Cost Center:

RAMP Item # 2 Ref ID: MGONZALX20170628165636900

RAMP Chapter: SDG&E-13

Program Name: Information Management Systems

Program Description: Regulatory compliance standards increasingly require that utilities be able to efficiently and

effectively identify specific attributes related to operational assets

Risk/Mitigation:

Risk: Insufficient data back-up policies, procedures or processes

Mitigation: Information Management Systems

| Forecast CPUC Cost Estimates (\$000) | | | | | |
|--------------------------------------|-------------|------|-------------|--|--|
| | <u>2017</u> | 2018 | <u>2019</u> | | |
| Low | 0 | 0 | 0 | | |
| High | 0 | 0 | 0 | | |

Funding Source: CPUC-GRC

Forecast Method: Other Work Type: Non-Mandated Work Type Citation: n/a

Historical Embedded Cost Estimates (\$000)

Embedded Costs: 0

Explanation:

Area: GAS SYSTEM INTEGRITY

Witness: Omar Rivera

Appendix A: List of Non-Shared Cost Centers

| Cost Center | Sub | Description |
|-------------|-----|---|
| 2100-3612 | 000 | SDG&E PUBLIC AWARENESS |
| 2100-3942 | 000 | PIPELINE SAFE & COMP |
| 2100-7200 | 000 | Gas Mapping - from 2100-3425 |
| 2100-7201 | 000 | GIS Strategy & App Support - from 2100-3821 |