

**2016 Risk Assessment Mitigation Phase
Investigation 16-10-015
Workpapers to
Catastrophic Damage Involving Third
Party Dig-Ins
(Chapter SDG&E-2-WP)**

January 2017



2016 Risk Assessment Mitigation Phase
SDGE-02-WP
Risk: Catastrophic Damage Involving Third Party Dig-Ins (O&M)

| Line No. | Mitigation | Project/Program | Project/Program Description | Status | Recorded (Directs, 2015 \$000) | | | | | Forecast Range (Directs, 2015 \$000) | | | | | | Forecast Methodology |
|----------|--|--------------------------------------|---|--------|--------------------------------|-----------------|-----------------|-----------------|-----------------|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|
| | | | | | 2011 | 2012 | 2013 | 2014 | 2015 | 2017 Low | 2017 High | 2018 Low | 2018 High | 2019 Low | 2019 High | |
| 1 | Training | Locate & Mark Training | Training, certification and compliance of Federal and State laws | B | \$ 65 | \$ 65 | \$ 65 | \$ 65 | \$ 65 | \$ 62 | \$ 68 | \$ 62 | \$ 68 | \$ 62 | \$ 68 | 5-Year Average |
| 2 | | Locate & Mark Operator Qualification | Qualification program to ensure operators/employees are trained properly in accordance to CFR 49 | B | 64 | 64 | 64 | 64 | 64 | 62 | 68 | 62 | 68 | 62 | 68 | 5-Year Average |
| 3 | Training Subtotal | | | | 129 | 129 | 129 | 129 | 129 | 124 | 136 | 124 | 136 | 124 | 136 | |
| 4 | Locate & Mark Activities | Locate & Mark Field Activities | Prevention of damage to substructures due to unsafe excavation practices | B/P | 1,572 | 1,657 | 1,675 | 1,700 | 1,828 | 1,908 | 2,109 | 2,079 | 2,298 | 2,122 | 2,345 | Base Year |
| 5 | | Staff Support | Staff to translate federal and state regulations into company Gas Standards | B/P | 212 | 212 | 212 | 212 | 212 | 391 | 433 | 391 | 433 | 391 | 433 | Base Year |
| 6 | | Pipeline Observation (Standby) | Surveillance of excavations in the vicinity of high pressure gas lines to prevent damage | B | 27 | 73 | 97 | 81 | 154 | 82 | 90 | 82 | 90 | 82 | 90 | 5-Year Average |
| 7 | Locate & Mark Activities Subtotal | | | | 1,811 | 1,942 | 1,984 | 1,993 | 2,195 | 2,381 | 2,632 | 2,552 | 2,821 | 2,595 | 2,868 | |
| 8 | Public Awareness | Damage Prevention Public Awareness | Promotion of excavation safety to contractors and the public | B/P | 21 | 21 | 20 | 20 | 20 | 19 | 21 | 19 | 21 | 19 | 21 | 5-Year Average |
| 9 | Public Awareness Subtotal | | | | 21 | 21 | 20 | 20 | 20 | 19 | 21 | 19 | 21 | 19 | 21 | |
| 10 | Prevention and Improvements | Issue Smart Devices to Locators | Smart phones issued to Locators used to confirm locate markings and functionality to verify USA ticket information in the field | P | | | | | | 33 | 37 | 23 | 25 | 23 | 25 | Zero-Based |
| 11 | Prevention and Improvements Subtotal | | | | - | - | - | - | - | 33 | 37 | 23 | 25 | 23 | 25 | |
| 12 | TOTAL | | | | \$ 1,961 | \$ 2,091 | \$ 2,133 | \$ 2,142 | \$ 2,343 | \$ 2,557 | \$ 2,825 | \$ 2,718 | \$ 3,003 | \$ 2,761 | \$ 3,050 | |

Notes:

- Baseline (B) and Proposed (P).
- Numbers in risk chapter tables may differ due to rounding.
- The purpose of Risk Assessment Mitigation Phase (RAMP) is not to request funding. Any funding requests will be made in the General Rate Case (GRC). The forecasts for mitigations are not for funding purposes, but are rather to provide a range for the future GRC filing. This range will be refined with supporting testimony in the GRC.

2016 Risk Assessment Mitigation Phase
SDGE-02-WP
Risk: Catastrophic Damage Involving Third Party Dig-Ins (Capital)

| Line No. | Mitigation | Project/Program | Project/Program Description | Status | Recorded (Directs, 2015 \$000) | | | | | Forecast Range (Directs, 2015 \$000) | | | | | | 2017-2019 Low (Sum) | 2017-2019 High (Sum) | Forecast Methodology |
|----------|--------------------------------------|--------------------------------------|---|--------|--------------------------------|--------|--------|--------|--------|--------------------------------------|-----------|----------|-----------|----------|-----------|---------------------|----------------------|----------------------|
| | | | | | 2011 | 2012 | 2013 | 2014 | 2015 | 2017 Low | 2017 High | 2018 Low | 2018 High | 2019 Low | 2019 High | | | |
| 1 | Training | Locate & Mark Training | Training, certification and compliance of Federal and State laws | B | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | |
| 2 | | Locate & Mark Operator Qualification | Qualification program to ensure operators/employees are trained properly in accordance to CFR 49 | B | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 3 | Training Subtotal | | | | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 4 | Locate & Mark Activities | Locate & Mark Field Activities | Prevention of damage to substructures due to unsafe excavation practices | B/P | 208 | 210 | 208 | 212 | 211 | 220 | 243 | 239 | 264 | 243 | 269 | 702 | 776 | Base Year |
| 5 | | Staff Support | Staff to translate federal and state regulations into company Gas Standards | B/P | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 6 | | Pipeline Observation (Standby) | Surveillance of excavations in the vicinity of high pressure gas lines to prevent damage | B | - | 7 | 2 | 1 | 41 | 12 | 14 | 12 | 14 | 12 | 14 | 37 | 41 | 4-Year Average |
| 7 | Locate & Mark Activities Subtotal | | | | 208 | 217 | 210 | 213 | 253 | 232 | 257 | 251 | 278 | 256 | 283 | 739 | 817 | |
| 8 | Public Awareness | Damage Prevention Public Awareness | Promotion of excavation safety to contractors and the public | B/P | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 9 | Public Awareness Subtotal | | | | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 10 | Prevention and Improvements | Issue Smart Devices to Locators | Smart phones issued to Locators used to confirm locate markings and functionality to verify USA ticket information in the field | P | | | | | | - | - | - | - | - | - | - | - | |
| 11 | Prevention and Improvements Subtotal | | | | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 12 | TOTAL | | | | \$ 208 | \$ 217 | \$ 210 | \$ 213 | \$ 253 | \$ 232 | \$ 257 | \$ 251 | \$ 278 | \$ 256 | \$ 283 | \$ 739 | \$ 817 | |

Notes:

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