

**2016 Risk Assessment Mitigation Phase
Investigation 16-10-016
Workpapers to
Physical Security of Critical Gas
Infrastructure
(Chapter SCG-6-WP)**

January 2017



2016 Risk Assessment Mitigation Phase
SCG-06-WP
Risk: Physical Security of Critical Gas Infrastructure (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	Physical Security	Physical Security Systems	Physical security measures put in place for the security/safety of employees and infrastructure	B/P	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11	\$ 12	\$ 13	\$ 15	\$ 15	\$ 17	Zero-Based
2		Contract Security	Security guard staffing	B/P	1,238	1,274	1,281	1,150	1,674	2,855	3,055	3,141	3,361	3,455	3,697	5-Year Average
3	Physical Security Subtotal				1,238	1,274	1,281	1,150	1,674	2,866	3,067	3,154	3,375	3,470	3,714	
4	Operational Resiliency	Operational Resiliency	Develop and implement operational flexibility, which may include redundant pipeline system capabilities, backup equipment and resources, resumption planning and exercises	B/P	-	-	-	-	-	-	-	-	-	-	-	
5	Operational Resiliency Subtotal				-	-	-	-	-	-	-	-	-	-	-	
6	Planning, Awareness, and Incident Management	Security Awareness Training	Training, bulletins, communication to employees regarding safety/security	B/P	112	173	118	342	162	141	221	141	221	141	221	5-Year Average
7		Law Enforcement Liaison and Trade Groups	Liaison with public safety and other industry groups	B/P	38	39	44	45	47	45	49	45	49	45	49	5-Year Average
8		California Utilities Liaison	Liaison with public safety and other industry groups	B/P	10	10	10	10	11	11	11	11	11	11	11	5-Year Average
9		Critical Asset Security Team (CAST)	CAST was developed to identify and mitigate vulnerabilities in security	B	-	-	-	30	31	26	36	26	36	26	36	Base Year
10		Business Resumption Plans	Emergency planning	B	1	1	1	1	1	1	1	1	1	1	1	5-Year Average
11		Gas Security Plans	Development/updates of security plans	B	1	1	1	1	1	1	1	1	1	1	1	5-Year Average
12		Investigations	Corporate Security agent investigations on incidents or reports that may involve workplace violence	B/P	112	116	109	124	140	140	160	140	160	140	160	Base Year
13		Site Security Reviews	Onsite security surveys of infrastructure	B/P	6	11	8	17	13	9	13	9	13	9	13	5-Year Average
14		Risk Management Program	Risk Management Program	B/P					100	180	220	180	220	180	220	Zero-Based
15		Security Agent	Additional agent to focus on critical infrastructure	P						110	130	110	130	110	130	Zero-Based
16	Planning, Awareness, and Incident Management Subtotal				280	351	291	572	505	663	842	663	842	663	842	
17	TOTAL				\$ 1,518	\$ 1,625	\$ 1,572	\$ 1,722	\$ 2,179	\$ 3,529	\$ 3,909	\$ 3,817	\$ 4,217	\$ 4,134	\$ 4,556	

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
SCG-06-WP
Risk: Physical Security of Critical Gas Infrastructure (Capital)

Line No.	Mitigation	Project/Program	Project/Program Description	Status	Recorded (Directs, 2015 \$000)					Forecast Range (Directs, 2015 \$000)								
					2011	2012	2013	2014	2015	2017 Low	2017 High	2018 Low	2018 High	2019 Low	2019 High	2017-2019 Low (Sum)	2017-2019 High (Sum)	Forecast Methodology
1	Physical Security	Physical Security Systems	Physical security measures put in place for the security/safety of employees and infrastructure	B/P	\$ 1,008	\$ 177	\$ 260	\$ 3,285	\$ 4,480	\$ 3,481	\$ 4,255	\$ 3,870	\$ 4,730	\$ 3,600	\$ 4,400	\$ 10,951	\$ 13,385	Zero-Based
2		Contract Security	Security guard staffing	B/P	63	-	72	384	42	123	131	136	153	149	179	408	464	5-Year Average
3	Physical Security Subtotal				1,071	177	331	3,668	4,522	3,605	4,386	4,006	4,883	3,749	4,579	11,359	13,849	
4	Operational Resiliency	Operational Resiliency	Develop and implement operational flexibility, which may include redundant pipeline system capabilities, backup equipment and resources, resumption planning and exercises	B/P	363	23	-	-	432	600	1,000	5,500	7,500	6,200	9,200	12,300	17,700	Zero-Based
5	Operational Resiliency Subtotal				363	23	-	-	432	600	1,000	5,500	7,500	6,200	9,200	12,300	17,700	
6	Planning, Awareness, and Incident Management	Security Awareness Training	Training, bulletins, communication to employees regarding safety/security	B/P	-	-	-	-	-	-	-	-	-	-	-	-	-	
7		Law Enforcement Liaison and Trade Groups	Liaison with public safety and other industry groups	B/P	-	-	-	-	-	-	-	-	-	-	-	-	-	
8		California Utilities Liaison	Liaison with public safety and other industry groups	B/P	-	-	-	-	-	-	-	-	-	-	-	-	-	
9		Critical Asset Security Team (CAST)	CAST was developed to identify and mitigate vulnerabilities in security	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
10		Business Resumption Plans	Emergency planning	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
11		Gas Security Plans	Development/updates of security plans	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
12		Investigations	Corporate Security agent investigations on incidents or reports that may involve workplace violence	B/P	-	-	-	-	-	-	-	-	-	-	-	-	-	
13		Site Security Reviews	Onsite security surveys of infrastructure	B/P	-	-	-	-	-	-	-	-	-	-	-	-	-	
14		Risk Management Program	Risk Management Program	B/P	-	-	-	-	-	-	-	-	-	-	-	-	-	
15		Security Agent	Additional agent to focus on critical infrastructure	P						-	-	-	-	-	-	-	-	
16	Planning, Awareness, and Incident Management Subtotal				-	-	-	-	-	-	-	-	-	-	-	-	-	
17	TOTAL				\$ 1,433	\$ 200	\$ 331	\$ 3,668	\$ 4,955	\$ 4,205	\$ 5,386	\$ 9,506	\$ 12,383	\$ 9,949	\$ 13,779	\$ 23,659	\$ 31,549	

Notes:

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