



Risk Assessment and Mitigation Phase

(Chapter SCG -Risk-1-WP)

**Incident Related to the High-Pressure
System (Excluding Dig-in)**

Workpapers

May 17, 2021

2021 RAMP
 SCG-Risk-1-WP
 Risks Recorded and Forecast Costs Incurred Allocations Workpaper
 Tab: Incurred5
 (2020 Direct 500)

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	RECORDED DOLLARS										FORECAST DOLLARS										Shared Allocations (Yes/No)			
				O&M					Capital					O&M					Capital								
				2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2022	2023	2024	2022	2023	2024	\$ Low	\$ High	\$ Low	\$ High		\$ Low	\$ High	\$ Low
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C21-T1	Integrity Assessments & Remediation (HCA)	\$ 7,832	\$ 16,940	\$ 38,167	\$ 32,722	\$ 46,989	\$ 46,989	\$ 8,681	\$ 41,829	\$ 117,839	\$ 46,024	\$ 34,008	\$ 23,226	\$ 29,677	\$ 21,036	\$ 26,880	\$ 21,009	\$ 26,844	\$ 67,910	\$ 86,774	\$ 52,959	\$ 67,670	\$ 37,285	\$ 47,642	Yes
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C21-T2	Integrity Assessments & Remediation (Non-HCA)	\$ 35,377	\$ 30,175	\$ 28,265	\$ 43,988	\$ 58,789	\$ 40,466	\$ 74,615	\$ 86,611	\$ 61,702	\$ 42,387	\$ 55,245	\$ 70,590	\$ 33,742	\$ 43,115	\$ 33,679	\$ 43,034	\$ 115,279	\$ 147,301	\$ 86,407	\$ 110,409	\$ 60,844	\$ 77,732	Yes	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	M1-T1	Gas Transmission Safety Rule - MAOP Reconfirmation (HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,195	\$ 10,224	\$ 9,585	\$ 30,672	\$ 28,795	\$ 92,016	\$ 3,373	\$ 10,792	\$ 10,118	\$ 32,376	\$ 30,353	\$ 97,128	No
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	M1-T2	Gas Transmission Safety Rule - MAOP Reconfirmation (Non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,305	\$ 4,176	\$ 3,915	\$ 12,528	\$ 11,745	\$ 37,584	\$ 1,378	\$ 4,433	\$ 13,224	\$ 12,398	\$ 39,672	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	M2-T1	Gas Transmission Safety Rule - Material Verification (HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54	\$ 173	\$ 63	\$ 200	\$ 72	\$ 230	\$ 24	\$ 75	\$ 27	\$ 86	\$ 31	\$ 99	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	M2-T2	Gas Transmission Safety Rule - Material Verification (Non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 111	\$ 355	\$ 128	\$ 408	\$ 147	\$ 469	\$ 48	\$ 154	\$ 55	\$ 176	\$ 64	\$ 203	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C23-T2	Ventura Compressor Station Modernization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,370	\$ 4,532	\$ 3,231	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,744	\$ 91,690	\$ 91,202	\$ 110,402	\$ 2,782	\$ 3,367	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C20	Facilities Integrity Management Program (FIMP)	\$ -	\$ -	\$ -	\$ -	\$ 715	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,894	\$ 9,090	\$ 3,844	\$ 7,140	\$ 3,284	\$ 6,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C1-T1	Catholic Protection - Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,598	\$ 3,357	\$ 2,637	\$ 3,824	\$ 3,932	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,303	\$ 5,209	\$ 5,046	\$ 6,108	\$ 5,102	\$ 6,176	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C1-T2	Catholic Protection - Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,244	\$ 6,817	\$ 5,355	\$ 7,765	\$ 7,984	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,736	\$ 10,575	\$ 10,244	\$ 12,401	\$ 10,359	\$ 12,540	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C3-T1	Leak Repair	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,532	\$ 5,540	\$ 5,052	\$ 2,772	\$ 3,655	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,525	\$ 4,267	\$ 3,648	\$ 4,416	\$ 3,776	\$ 4,570	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C3-T2	Leak Repair	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,111	\$ 11,248	\$ 10,256	\$ 5,628	\$ 7,420	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,156	\$ 8,662	\$ 7,406	\$ 8,966	\$ 7,666	\$ 9,279	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C5-T1	Pipeline Relocation/Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,612	\$ 6,116	\$ 7,503	\$ 6,384	\$ 9,607	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,692	\$ 8,101	\$ 6,926	\$ 8,385	\$ 7,169	\$ 8,678	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C5-T2	Pipeline Relocation/Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,393	\$ 12,418	\$ 15,234	\$ 12,961	\$ 19,506	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,587	\$ 16,448	\$ 14,063	\$ 17,023	\$ 14,555	\$ 17,619	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C6-T1	Shallow/Exposed Pipe Remediations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160	\$ 843	\$ 1,331	\$ 2,597	\$ 2,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,345	\$ 1,628	\$ 1,392	\$ 1,685	\$ 1,441	\$ 1,744	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C6-T2	Shallow/Exposed Pipe Remediations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 324	\$ 1,712	\$ 2,702	\$ 5,272	\$ 4,363	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,731	\$ 3,306	\$ 2,827	\$ 3,422	\$ 2,925	\$ 3,541	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C10	Compressor Stations - Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,246	\$ 30,499	\$ 62,687	\$ 82,718	\$ 94,601	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,413	\$ 22,290	\$ 19,691	\$ 23,836	\$ 19,914	\$ 24,107	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C12-T1	Measurement & Regulation - Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,625	\$ 5,609	\$ 8,796	\$ 6,665	\$ 5,986	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,657	\$ 10,479	\$ 8,704	\$ 10,537	\$ 9,060	\$ 10,968	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C12-T2	Measurement & Regulation - Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,421	\$ 11,387	\$ 17,859	\$ 13,532	\$ 11,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,576	\$ 21,276	\$ 17,672	\$ 21,393	\$ 18,396	\$ 22,268	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C15	Security and Auxiliary Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,431	\$ 3,704	\$ 4,759	\$ 1,668	\$ 5,416	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,963	\$ 4,797	\$ 4,437	\$ 5,371	\$ 4,487	\$ 5,432	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C2-T1	Catholic Protection - Maintenance	\$ 333	\$ 387	\$ 381	\$ 410	\$ 402	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 340	\$ 434	\$ 340	\$ 434	\$ 344	\$ 440	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C2-T2	Catholic Protection - Maintenance	\$ 675	\$ 785	\$ 775	\$ 831	\$ 815	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 690	\$ 881	\$ 690	\$ 881	\$ 699	\$ 893	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C4-T1	Leak Survey & Patrol	\$ 269	\$ 306	\$ 296	\$ 269	\$ 242	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 256	\$ 328	\$ 256	\$ 328	\$ 249	\$ 318	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C4-T2	Leak Survey & Patrol	\$ 545	\$ 621	\$ 601	\$ 545	\$ 492	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 520	\$ 665	\$ 520	\$ 665	\$ 505	\$ 645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C7-T1	Pipeline Maintenance	\$ 145	\$ 165	\$ 159	\$ 145	\$ 131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 138	\$ 176	\$ 138	\$ 176	\$ 134	\$ 171	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C7-T2	Pipeline Maintenance	\$ 294	\$ 334	\$ 324	\$ 293	\$ 266	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 280	\$ 358	\$ 280	\$ 358	\$ 272	\$ 347	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C8-T1	Right of Way	\$ 282	\$ 862	\$ 535	\$ 1,324	\$ 1,263	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 677	\$ 865	\$ 677	\$ 865	\$ 768	\$ 981	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C8-T2	Right of Way	\$ 573	\$ 1,750	\$ 1,086	\$ 2,688	\$ 2,564	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,374	\$ 1,755	\$ 1,374	\$ 1,755	\$ 1,559	\$ 1,992	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C9-T1	Class Location (Hydrotest)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,208	\$ 4,099	\$ 3,208	\$ 4,099	\$ 214	\$ 273	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C9-T2	Class Location (Hydrotest)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,512	\$ 8,321	\$ 6,512	\$ 8,321	\$ 434	\$ 555	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C11	Compressor Station Maintenance	\$ 8,445	\$ 8,491	\$ 7,981	\$ 8,259	\$ 7,446	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,465	\$ 9,538	\$ 7,465	\$ 9,538	\$ 7,312	\$ 9,343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C13-T1	Measurement & Regulation Stations - Maintenance	\$ 724	\$ 702	\$ 670	\$ 646	\$ 682	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 617	\$ 788	\$ 617	\$ 788	\$ 601	\$ 767	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C13-T2	Measurement & Regulation Stations - Maintenance	\$ 1,470	\$ 1,426	\$ 1,359	\$ 1,311	\$ 1,385	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,252	\$ 1,600	\$ 1,252	\$ 1,600	\$ 1,219	\$ 1,558	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C14	Odorization	\$ 762	\$ 852	\$ 544	\$ 569	\$ 818	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 648	\$ 784	\$ 648	\$ 784	\$ 648	\$ 784	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C16	SCADA Operation	\$ 828	\$ 418	\$ 1,091	\$ 974	\$ 730	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 745	\$ 952	\$ 745	\$ 952	\$ 727	\$ 929	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C17	Control Room Monitoring, Operation and Fatigue Management	\$ 2,164	\$ 1,922	\$ 1,814	\$ 2,049	\$ 4,208	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,706	\$ 1,056	\$ 1,706	\$ 1,056	\$ 2,978	\$ 1,056	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C18	Gas Transmission Planning	\$ 525	\$ 467	\$ 557	\$ 602	\$ 750	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 485	\$ 620	\$ 485	\$ 620	\$ 522	\$ 667	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C19	Engineering, Oversight and Compliance Review	\$ 2,349	\$ 2,597	\$ 2,601	\$ 2,444	\$ 2,881	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,248	\$ 2,873	\$ 2,248	\$ 2,873	\$ 2,057	\$ 2,629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T1.1	PSEP - Pipeline Replacement (Phase 1A, refundable, HCA)	\$ (4)	\$ -	\$ 1	\$ -	\$ 259	\$ 242,800	\$ 133,836	\$ 62,264	\$ 21,898	\$ 6,826	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,117	\$ 8,616	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T1.2	PSEP - Hydrotesting (Phase 1A, refundable, HCA)	\$ 24,237	\$ 14,805	\$ 33,314	\$ 23,263	\$ 4,585	\$ 4,637	\$ 2,469	\$ 109	\$ 2,323	\$ 1,624	\$ 8	\$ 9	\$ -	\$ -	\$ -	\$ 2	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T2.1	PSEP - Pipeline Replacement (Phase 1B, refundable, HCA)	\$ 43	\$ (11)	\$ 777	\$ (59)	\$ -	\$ 2,275	\$ 375	\$ 20,369	\$ 8,702	\$ 14,437	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,652	\$ 17,736	\$ 30,681	\$ 37,140	\$ 20,411	\$ 24,708	No		
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T2.2	PSEP - Pipeline Replacement (Phase 1B, refundable, non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,706	\$ 5,397	\$ 13,091	\$ 45,757	\$ 13,976	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T3.3	PSEP - Hydrotesting (Phase 2A, refundable, non-HCA)	\$ 632	\$ 6,263	\$ (1,092)	\$ 12,432	\$ 4,500	\$ -	\$ -	\$ -	\$ -	\$ 2,177	\$ 2,549	\$ 3,085	\$ -	\$ -	\$ -	\$ 1,092	\$ 1,322	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T3.1	PSEP - Pipeline Replacement (Phase 2A, refundable, non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ 28	\$ -	\$ -	\$ -	\$ -	\$ 10,045	\$ 4,709	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T4.1	PSEP - Valve enhancement (refundable, HCA)	\$ -	\$ 3	\$ 1,256	\$ 370	\$ (402)	\$ 76,713	\$ 44,475	\$ 39,013	\$ 11,952	\$ 785	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T4.2	PSEP - Valve enhancement (refundable, non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,297	\$ 5,650	\$ 847	\$ 1,106	\$ (32)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T2.3	PSEP - Pipeline Replacement (Phase 1B, GRC base, HCA)	\$ 401	\$ 187	\$ (1,651)	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ 1,129	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident: Related to the High Pressure System (Excluding Dig-in)	C22-T2.4	PSEP - Pipeline Replacement (Phase 1B, GRC base, non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,897	\$ 34,155	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,991	\$ 48,410	\$ 25,794	\$ 31,225	\$ -	\$ -	\$ -	No	

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	RECORDED DOLLARS										FORECAST DOLLARS										Shared Allocations (Yes/No)			
				O&M					Capital					O&M					Capital								
				2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2022		2023		2024		2022		2023			2024		
														\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High		\$ Low	\$ High	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.3	PSEP - Valve enhancement (GRC base, HCA)	\$ -	\$ 1	\$ 266	\$ 68	\$ -	\$ -	\$ -	\$ 8,949	\$ 32,630	\$ 37,902	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,879	\$ 31,327	\$ 1,374	\$ 1,664	\$ -	\$ -	No	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.4	PSEP - Valve enhancement (GRC base, non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,978	\$ 8,277	\$ 3,837	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,297	\$ 9,991	\$ 813	\$ 984	\$ 1,056	\$ 1,279	No	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T1	Blythe Compressor Station Modernization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T3	Honor Rancho Storage Field	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	A1	Proactive Soil Sampling	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,692	\$ 2,160	\$ 1,692	\$ 2,160	\$ 1,692	\$ 2,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	A2	Expanding Geotechnical Analysis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 419	\$ 535	\$ 419	\$ 535	\$ 419	\$ 535	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No
NOTES:																											
[1] The figures provided are direct charges and do not include company loaders, with the exception of vacation and sick. The costs are also in 2020 dollars and have not been escalated to 2021 amounts.																											
[2] Costs are provided, where available, for all activities regardless of whether a RSE analysis was performed.																											
[3] The following mitigations are not included in this risk's control and mitigation plan for 2022 - 2024 for reasons discussed in the Chapter narrative: PSEP Refundable (C22-T1, C22-T2, C22-T3.1, C22-T3.3, C22-T4.1, C22-T4.2); Compressor Station Modifications C23-T1 and C23-T3.																											

2021 RAMP
 SCG-Risk-1-WP
 Risks Shared Allocations Workpaper
 Tab: Shared Allocations

(2020 Direct \$000)

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	Shared Allocations				Notes
				Retained	SDG&E	Sempra Energy	Other	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C21-T1	Integrity Assessments & Remediation (HCA)	98%	2%	0%	0%	% allocation applies to O&M only; % is based on 2022-2024 average
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C21-T2	Integrity Assessments & Remediation (Non-HCA)	99.8%	0.2%	0%	0%	% allocation applies to O&M only; % is based on 2022-2024 average
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1	Gas Transmission Safety Rule - MAOP Reconfirmation (HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T2	Gas Transmission Safety Rule - MAOP Reconfirmation (Non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M2-T1	Gas Transmission Safety Rule - Material Verification (HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M2-T2	Gas Transmission Safety Rule - Material Verification (Non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T2	Ventura Compressor Station Modernization	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C20	Facilities Integrity Management Program (FIMP)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C1-T1	Cathodic Protection - Capital	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C1-T2	Cathodic Protection - Capital	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C3-T1	Leak Repair	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C3-T2	Leak Repair	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C5-T1	Pipeline Relocation/Replacement	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C5-T2	Pipeline Relocation/Replacement	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T1	Shallow/Exposed Pipe Remediations	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T2	Shallow/Exposed Pipe Remediations	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C10	Compressor Stations - Capital	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C12-T1	Measurement & Regulation - Capital	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C12-T2	Measurement & Regulation - Capital	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C15	Security and Auxiliary Equipment	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T1.1	PSEP - Pipeline Replacement (Phase 1A, refundable, HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T1.2	PSEP - Hydrotesting (Phase 1A, refundable, HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T2.1	PSEP - Pipeline Replacement (Phase 1B, refundable, HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T2.2	PSEP - Pipeline Replacement (Phase 1B, refundable, non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T3.3	PSEP - Hydrotesting (Phase 2A, refundable, non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T3.1	PSEP - Pipeline Replacement (Phase 2A, refundable, non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.1	PSEP - Valve enhancement (refundable, HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.2	PSEP - Valve enhancement (refundable, non-HCA)	100%	0%	0%	0%	

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	Shared Allocations				Notes
				Retained	SDG&E	Sempra Energy	Other	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T2.3	PSEP - Pipeline Replacement (Phase 1B, GRC base, HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T2.4	PSEP - Pipeline Replacement (Phase 1B, GRC base, non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T3.2	PSEP - Pipeline Replacement (Phase 2A, GRC base, non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T3.4	PSEP - Hydrotesting (Phase 2A, GRC base, non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.3	PSEP - Valve enhancement (GRC base, HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.4	PSEP - Valve enhancement (GRC base, non-HCA)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C2-T1	Cathodic Protection - Maintenance	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C2-T2	Cathodic Protection - Maintenance	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C4-T1	Leak Survey & Patrol	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C4-T2	Leak Survey & Patrol	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C7-T1	Pipeline Maintenance	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C7-T2	Pipeline Maintenance	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C8-T1	Right of Way	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C8-T2	Right of Way	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C9-T1	Class Location (Hydrotest)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C9-T2	Class Location (Hydrotest)	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C11	Compressor Station Maintenance	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C13-T1	Measurement & Regulation Stations - Maintenance	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C13-T2	Measurement & Regulation Stations - Maintenance	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C14	Odorization	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C16	SCADA Operation	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C17	Control Room Monitoring, Operation and Fatigue Management	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C18	Gas Transmission Planning	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C19	Engineering, Oversight and Compliance Review	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T1	Blythe Compressor Station Modernization	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T3	Honor Rancho Storage Field	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	A1	Proactive Soil Sampling	100%	0%	0%	0%	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	A2	Expanding Geotechnical Analysis	100%	0%	0%	0%	

2021 RAMP
 SCG-Risk-1-WP
 Risks Recorded and Forecast Costs After Allocations Workpaper
 Tab: After Allocations\$
 (2020 Direct \$000)

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	RECORDED DOLLARS										FORECAST DOLLARS																		
				O&M					Capital					O&M				Capital														
				2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2022		2023		2024		2022		2023		2024								
														\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High							
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C21-T1	Integrity Assessments & Remediation (HCA)	\$ 7,459	\$ 16,659	\$ 37,930	\$ 32,317	\$ 46,410	\$ 8,681	\$ 41,829	\$ 117,839	\$ 46,024	\$ 34,008	\$ 22,823	\$ 29,162	\$ 20,621	\$ 26,349	\$ 20,581	\$ 25,297	\$ 67,910	\$ 86,774	\$ 52,955	\$ 67,670	\$ 37,285	\$ 47,642							
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C21-T2	Integrity Assessments & Remediation (Non-HCA)	\$ 34,769	\$ 29,716	\$ 27,879	\$ 43,326	\$ 57,844	\$ 40,466	\$ 74,615	\$ 86,611	\$ 61,702	\$ 42,387	\$ 55,150	\$ 70,469	\$ 33,645	\$ 42,990	\$ 33,579	\$ 42,906	\$ 115,270	\$ 147,301	\$ 86,407	\$ 110,409	\$ 60,834	\$ 77,732							
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1	Gas Transmission Safety Rule - MADP Reconfirmation (HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,195	\$ 10,224	\$ 9,585	\$ 30,672	\$ 28,755	\$ 92,016	\$ 3,373	\$ 10,782	\$ 10,118	\$ 32,376	\$ 30,353	\$ 97,128		
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T2	Gas Transmission Safety Rule - MADP Reconfirmation (Non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,305	\$ 4,176	\$ 3,915	\$ 12,528	\$ 11,745	\$ 37,584	\$ 1,378	\$ 4,408	\$ 4,133	\$ 13,224	\$ 12,398	\$ 39,672	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M2-T1	Gas Transmission Safety Rule - Material Verification (HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54	\$ 173	\$ 69	\$ 260	\$ 72	\$ 230	\$ 24	\$ 75	\$ 27	\$ 86	\$ 31	\$ 99		
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	M2-T2	Gas Transmission Safety Rule - Material Verification (Non-HCA)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 111	\$ 355	\$ 128	\$ 408	\$ 147	\$ 469	\$ 48	\$ 154	\$ 55	\$ 176	\$ 64	\$ 203		
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T2	Ventura Compressor Station Modernization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,370	\$ 4,532	\$ 3,231	N/A	N/A	N/A	N/A	N/A	N/A	\$ 75,744	\$ 91,690	\$ 91,202	\$ 110,402	\$ 2,782	\$ 3,367							
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C20	Facilities Integrity Management Program (FIMP)	\$ -	\$ -	\$ -	\$ 715	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,804	\$ 9,090	\$ 3,844	\$ 7,140	\$ 3,284	\$ 6,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C1-T1	Catholic Protection - Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,598	\$ 3,357	\$ 2,637	\$ 3,824	\$ 3,932	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,303	\$ 5,209	\$ 5,046	\$ 6,108	\$ 5,102	\$ 6,176						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C1-T2	Catholic Protection - Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,244	\$ 6,817	\$ 5,355	\$ 7,865	\$ 7,984	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,736	\$ 10,575	\$ 10,244	\$ 12,401	\$ 10,359	\$ 12,540						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C3-T1	Leak Repair	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,533	\$ 5,540	\$ 5,052	\$ 2,772	\$ 3,655	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,525	\$ 4,267	\$ 3,648	\$ 4,416	\$ 3,776	\$ 4,570						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C3-T2	Leak Repair	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,111	\$ 11,248	\$ 10,256	\$ 5,628	\$ 7,420	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,156	\$ 9,502	\$ 7,406	\$ 8,966	\$ 7,666	\$ 9,279						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C5-T1	Pipeline Relocation/Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,612	\$ 6,116	\$ 7,503	\$ 6,384	\$ 9,607	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,692	\$ 8,101	\$ 6,926	\$ 8,385	\$ 7,169	\$ 8,678						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C5-T2	Pipeline Relocation/Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,393	\$ 12,418	\$ 15,234	\$ 12,961	\$ 19,506	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,587	\$ 16,448	\$ 14,063	\$ 17,023	\$ 14,555	\$ 17,619						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T1	Shallow/Exposed Pipe Remediations	\$ -	\$ -	\$ -	\$ -	\$ 160	\$ 843	\$ 1,331	\$ 2,597	\$ 2,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,345	\$ 1,628	\$ 1,392	\$ 1,685	\$ 1,441	\$ 1,744						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T2	Shallow/Exposed Pipe Remediations	\$ -	\$ -	\$ -	\$ -	\$ 324	\$ 1,713	\$ 2,702	\$ 5,272	\$ 4,363	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,731	\$ 3,306	\$ 2,827	\$ 3,423	\$ 2,925	\$ 3,541						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C10	Compressor Stations - Capital	\$ -	\$ -	\$ -	\$ -	\$ 22,246	\$ 30,499	\$ 62,687	\$ 82,718	\$ 94,601	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,413	\$ 22,290	\$ 19,091	\$ 23,836	\$ 19,914	\$ 24,107						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C12-T1	Measurement & Regulation - Capital	\$ -	\$ -	\$ -	\$ -	\$ 5,625	\$ 5,609	\$ 8,796	\$ 6,665	\$ 5,836	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,657	\$ 10,479	\$ 8,704	\$ 10,537	\$ 9,060	\$ 10,968						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C12-T2	Measurement & Regulation - Capital	\$ -	\$ -	\$ -	\$ -	\$ 11,421	\$ 11,387	\$ 17,859	\$ 13,522	\$ 11,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,576	\$ 21,276	\$ 17,672	\$ 21,393	\$ 18,396	\$ 22,268						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C15	Security and Auxiliary Equipment	\$ -	\$ -	\$ -	\$ -	\$ 4,433	\$ 3,704	\$ 4,759	\$ 1,668	\$ 5,416	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,963	\$ 5,437	\$ 4,437	\$ 5,371	\$ 4,487	\$ 5,432						
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C2-T1	Catholic Protection - Maintenance	\$ 333	\$ 387	\$ 381	\$ 410	\$ 402	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 340	\$ 434	\$ 340	\$ 434	\$ 344	\$ 440	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C2-T2	Catholic Protection - Maintenance	\$ 675	\$ 785	\$ 775	\$ 831	\$ 815	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 690	\$ 801	\$ 690	\$ 881	\$ 699	\$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C4-T1	Leak Survey & Patrol	\$ 269	\$ 306	\$ 296	\$ 269	\$ 242	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 256	\$ 328	\$ 256	\$ 328	\$ 249	\$ 318	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C4-T2	Leak Survey & Patrol	\$ 545	\$ 621	\$ 601	\$ 545	\$ 492	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 520	\$ 665	\$ 520	\$ 665	\$ 505	\$ 645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C7-T1	Pipeline Maintenance	\$ 145	\$ 165	\$ 159	\$ 145	\$ 131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 138	\$ 176	\$ 138	\$ 176	\$ 134	\$ 171	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C7-T2	Pipeline Maintenance	\$ 294	\$ 334	\$ 324	\$ 293	\$ 266	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 280	\$ 358	\$ 280	\$ 358	\$ 272	\$ 347	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C8-T1	Right of Way	\$ 282	\$ 862	\$ 535	\$ 1,324	\$ 1,263	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 677	\$ 865	\$ 677	\$ 865	\$ 788	\$ 981	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C8-T2	Right of Way	\$ 573	\$ 1,750	\$ 1,086	\$ 2,688	\$ 2,564	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,374	\$ 1,755	\$ 1,374	\$ 1,755	\$ 1,559	\$ 1,992	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C9-T1	Class Location (Hydrotect)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,208	\$ 4,099	\$ 3,208	\$ 4,099	\$ 214	\$ 273	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C9-T2	Class Location (Hydrotect)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,512	\$ 8,321	\$ 6,512	\$ 8,321	\$ 434	\$ 555	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C11	Compressor Station Maintenance	\$ 8,445	\$ 8,491	\$ 7,981	\$ 8,259	\$ 7,446	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,465	\$ 9,538	\$ 7,465	\$ 9,538	\$ 7,312	\$ 9,343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C13-T1	Measurement & Regulation Stations - Maintenance	\$ 724	\$ 702	\$ 670	\$ 646	\$ 682	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 617	\$ 788	\$ 617	\$ 788	\$ 601	\$ 767	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C13-T2	Measurement & Regulation Stations - Maintenance	\$ 1,470	\$ 1,426	\$ 1,359	\$ 1,311	\$ 1,385	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,252	\$ 1,600	\$ 1,252	\$ 1,600	\$ 1,219	\$ 1,558	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C14	Odorization	\$ 762	\$ 852	\$ 544	\$ 569	\$ 816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 648	\$ 784	\$ 648	\$ 784	\$ 648	\$ 784	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C16	SCADA Operation	\$ 828	\$ 418	\$ 1,091	\$ 974	\$ 730	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 745	\$ 952	\$ 745	\$ 952	\$ 727	\$ 929	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C17	Control Room Monitoring, Operation and Fatigue Management	\$ 2,164	\$ 1,922	\$ 1,814	\$ 2,049	\$ 4,208	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,706	\$ 1,056	\$ 1,706	\$ 1,056	\$ 2,978	\$ 1,056	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C18	Gas Transmission Planning	\$ 525	\$ 467	\$ 557	\$ 602	\$ 750	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 485	\$ 620	\$ 485	\$ 620	\$ 522	\$ 667	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C19	Engineering, Oversight and Compliance Review	\$ 2,340	\$ 2,597	\$ 2,601	\$ 2,444	\$ 2,881	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,248	\$ 2,873	\$ 2,248	\$ 2,873	\$ 2,057	\$ 2,629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T1.1	PSEP - Pipeline Replacement (Phase 1A, refundable, HCA)	\$ (4)	\$ -	\$ 1	\$ -	\$ 250	\$ 242,800	\$ 133,836	\$ 62,264	\$ 21,898	\$ 6,826	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,117	\$ 8,616	\$ -	\$ -								

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	RECORDED DOLLARS										FORECAST DOLLARS									
				O&M					Capital					O&M					Capital				
				2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2022		2023		2024		2022		2023	
											\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	
NOTES: [1] The figures provided are direct charges and do not include company loaders, with the exception of vacation and sick. The costs are also in 2020 dollars and have not been escalated to 2021 amounts. [2] Costs are provided, where available, for all activities regardless of whether a RSE analysis was performed. [3] The following mitigations are not included in this risk's control and mitigation plan for 2022 - 2024 for reasons discussed in the Chapter narrative: PSEF Refundable (C22-T1, C22-T2, C22-T1.1, C22-T1.3, C22-T1.9, C22-T6.1, C22-T6.2); Compressor Station Modifications C23-T1 and C23-T1.																							

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	Units Description		RECORDED UNITS										FORECAST UNITS											
						O&M					Capital					O&M					Capital						
				Capital	O&M	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2022		2023		2024		2022		2023		2024	
																Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.2	PSEP - Valve enhancement (refundable, non-HCA)	Valve bundles	N/A	-	-	-	-	-	-	7	2	4	-	-	-	-	-	-	-	-	-	-	-		
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T2.3	PSEP - Pipeline Replacement (Phase 1B, GRC base, HCA)	Miles of pipe	N/A	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-		
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T2.4	PSEP - Pipeline Replacement (Phase 1B, GRC base, non-HCA)	Miles of pipe	N/A	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	12	15	6	8	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T3.2	PSEP - Pipeline Replacement (Phase 2A, GRC base, non-HCA)	Miles of pipe	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	19	12	14	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T3.4	PSEP - Hydrotesting (Phase 2A, GRC base, non-HCA)	N/A	Miles of pipe	-	-	-	-	20	-	-	-	-	-	136	164	78	95	143	173	-	-	-	-	-	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.3	PSEP - Valve enhancement (GRC base, HCA)	Valve bundles	N/A	-	-	-	-	-	-	-	10	19	-	-	-	-	-	-	-	-	12	15	1	1	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C22-T4.4	PSEP - Valve enhancement (GRC base, non-HCA)	Valve bundles	N/A	-	-	-	-	-	-	-	8	8	-	-	-	-	-	-	-	-	-	2	2	-	-
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T1	Blythe Compressor Station Modernization	No. of Projects	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	C23-T3	Honor Rancho Storage Field	No. of Projects	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	A1	Proactive Soil Sampling	N/A	Samples	-	-	-	-	-	-	-	-	-	-	2,023	2,585	2,023	2,585	2,023	2,585	-	-	-	-	-	
SCG-Risk-1	Incident Related to the High Pressure System (Excluding Dig-in)	A2	Expanding Geotechnical Analysis	N/A	Miles of pipe	-	-	-	-	-	-	-	-	-	-	95	121	95	121	95	121	-	-	-	-	-	