

Risk Assessment and Mitigation Phase (Chapter SDG&E-Risk-3-WP) Incident Related to the High-Pressure System (Excluding Dig-in) Workpapers

May 17, 2021

								RECORD	ED DOLLARS									FORI	ECAST DOLLA	iRS						
	T	ORM Capital ORM											_			Capital			Shared Allocations	T						
RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	\$ Low	\$ High \$ Low	2023 \$ High	\$ Low	1024 \$ High	\$ Low	022 \$ High	\$ Low	2023 \$ High	\$ Low		(Yes/No)	Notes
	Incident Related to the High Pressure System																									
SDG&E-Risk-3 SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C15-T1 C15-T2	Integrity Assessments & Remediation (HCA) Integrity Assessments & Remediation (Non-HCA)	\$ 4,453		\$ 6,952	\$ 8,668 \$	2 188	\$ 2,982 \$ 1,408	\$ 3,279 \$ 529	\$ 2,506	\$ 5,226	\$ 3,302 \$	1,085	\$ 5,912 \$ 4,615 \$ 1,387 \$ 1,083	5 \$ 5,896	\$ 4,602	\$ 5,880	S 7,852 S 1,842	\$ 10,033	\$ 3,852	\$ 4,922 \$ 1,155		\$ 4,503 \$ 1,056	No No	SDG&E costs are not shared; however, SoCalGas shared services are allocated to SDG&E. SDG&E costs are not shared; however, SoCalGas shared services are allocated to SDG&E.
SDG&E-Risk-3	Incident Related to the High Pressure System	M2-T1	Gas Transmission Safety Rule - MADP Reconfirmation (HCA)	\$ -	\$.	\$.	5 - 5			\$.	\$ -	\$.		720	\$ 2,304 \$ 2,160	0 \$ 6,912	\$ 6,480	\$ 20,736	\$ 720	\$ 2,304	\$ 2,160	\$ 6,912	\$ 6,480	\$ 20,736	No	and the second s
SDG&E-Risk-3	Incident Related to the High Pressure System Incident Related to the High Pressure System	M2-T2	Gas Transmission Safety Rule - MADP Reconfirmation (Non-HCA)	\$ -	\$ -	ş -	\$ - \$	- 5	5 - :	\$ -	\$ -	\$ -	\$ · \$	30	\$ 96 \$ 90	0 \$ 288	\$ 270	\$ 864	\$ 30	\$ 96	\$ 90	\$ 288	\$ 270	\$ 864	No	
SDG&E-Risk-3	(Excluding Dig-in)	M3-T1	Gas Transmission Safety Rule - Material Verification (HCA)	\$ -	s -	s -	s - s	- 5	5 - 5	\$ -	s -	s -	s - s	13	S 40 S 15	5 \$ 46	\$ 18	\$ 56	\$ 7	\$ 21	\$ 8	\$ 24	\$ 9	\$ 29	No	
SDG&E-Risk-3	Incident Related to the High Pressure System Incident Related to the High Pressure System	M3-T2	Gas Transmission Safety Rule - Material Verification (Non-HCA)	\$.	\$ -	s -	\$ - \$		5 . :	\$.	\$ -	\$ -	s - s	3	\$ 8 5 3	3 \$ 10	\$ 4	\$ 11	\$ 2	\$ 5	\$ 2	\$ 5	\$ 2	\$ 5	No	
SDG&E-Risk-3	(Excluding Dig-in)	C1-T1	Cathodic Protection - Capital	ş -	ş -	ş -	\$ - \$	- 4	5 188	\$ 99	\$ 156	\$ 315	\$ 64 \$		s - s -	- s -	s -	ş -	S 25	S 31	5 82	S 100	\$ 85	S 103	No	
SDG&E-Risk-3	Incident Related to the High Pressure System	C1-T2	Cathodic Protection - Capital						\$ 381	\$ 201	\$ 316	\$ 639	S 130 S								\$ 167		\$ 173		No	
	(Excluding Dig-in) Incident Related to the High Pressure System	G-T1		\$.	\$.	\$.	5 - 5	- 1	> 381	> 201	\$ 316	> 639	\$ 130 \$	-	5 - 5 -	. 5 .	\$.	\$.	\$ 51	\$ 62		\$ 203		\$ 210	NO NO	-
SDG&E-Risk-3	(Excluding Dig-in)		Leak Repair	s -	s -	s -	s - s		5 - :	\$ -	\$ -	\$ -	s - s		s - s -	- s -	s -	\$ -	\$ 808	\$ 979	\$ 558	\$ 675	\$ 577	\$ 699	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C3-T2	Leak Repair	s .	s -	s -	s - s	. 9	s - :	s .	s -	s -	s - s		s - s -	. s .	s -	s -	\$ 1,641	S 1.987	S 1.133	\$ 1,371	\$ 1,172	\$ 1,419	No	
	Incident Related to the High Pressure System	C4-T1		i.													į.	i.								
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Pipeline Relocation/Replacement	\$ -	\$ -	\$ -	\$ - \$	- 5	5 2,022	\$ 633	\$ 1,398	\$ 38	\$ 148 \$	-	\$ - \$ -	- \$ -	\$ -	\$ -	\$ 755	\$ 913	\$ 521	\$ 630	\$ 539	\$ 652	No	
SDG&E-Risk-3	(Excluding Dig-in)	C4-T2	Pipeline Relocation/Replacement	ş .	ş -	ş .	s - s		5 4,104	\$ 1,286	\$ 2,839	\$ 76	\$ 301 \$		s - s -	. s .	s .	ş .	\$ 1,532	\$ 1,855	\$ 1,057	\$ 1,280	\$ 1,094	\$ 1,324	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	CS-T1	Shallow/Exposed Pipe Remediation	ς .	ς .	ς .	ς , ς		5 123	\$ 173	\$ 355	S 145	S 81 S		٠		ς .	ς .	S 1132	S 1 370	5 818	c oon	\$ 847	\$ 1.025	No	
	Incident Related to the High Pressure System	CS-T2		1												1		1						7		
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Shallow/Exposed Pipe Remediation	\$ -	\$ -	\$ -	s - s	- 5	5 249	\$ 249	\$ 721	\$ 294	\$ 165 \$	-	s - s -	- \$ -	\$ -	\$ -	\$ 2,298	\$ 2,782	\$ 1,661	\$ 2,011	\$ 1,719	\$ 2,081	No	
SDG&E-Risk-3	(Excluding Dig-in)	C8	Compressor Stations-Capital	ş -	s -	ş .	s - s		9,787	\$ 3,774	\$ 2,339	\$ 6,561	\$ 7,779 \$		s - s -	- s -	s -	\$ -	\$ 10,565	\$ 12,789	\$ 9,615	\$ 11,639	\$ 9,951	\$ 12,046	No	<u> </u>
engas ave.	Incident Related to the High Pressure System (Excluding Dig-in)	C10-T1	Measurement & Regulation - Capital					Π,	5 194	¢ 100	¢ 251	¢ ME	c 196 C				e		S 168	S 203	\$ 229	\$ 278	\$ 237	\$ 787	No	<u> </u>
	Incident Related to the High Pressure System	C10.T2		, .	, .	, .	, , 5	- 3		, 190	J 131	, 443	3 100 3		, , , , ,		-	, .								
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Measurement & Regulation - Capital	\$ -	s -	\$ -	\$ - \$	- 5	5 393	\$ 387	\$ 509	\$ 903	\$ 378 \$		s - s -	- \$ -	s -	\$ -	\$ 340	\$ 412	\$ 466	\$ 564	\$ 482	\$ 584	No	
SDG&E-Risk-3	(Excluding Dig-in)	C13	Security and Auxuliary Equipment	s -	ş -	ş .	s - s		5 1,925	\$ 150	\$ 85	\$ 319	\$ 730 \$		s - s -	- s -	s -	s -	\$ 382	\$ 462	\$ 842	\$ 1,019	\$ 871	\$ 1,055	No	1
SDG&E-Risk-3	Incident Related to the High Pressure System	C2-T1	Cathodic Protection – Maintenance (HCA)											-											No	
	(Excluding Dig-in) Incident Related to the High Pressure System			\$ 90	\$ 30	\$ 16	\$ 23 \$	30 3			\$ -	\$.	5 - 5	23	\$ 29 \$ Z	3 5 29	\$ 23	\$ 29	\$.	\$.	\$.	\$.	\$.	\$.	NO NO	-
SDG&E-Risk-3	(Excluding Dig-in)	C2-T2	Cathodic Protection – Maintenance (non-HCA)	\$ 60	\$ 60	\$ 33	\$ 47 \$	60 \$	5 - :	\$ -	\$ -	\$ -	s - s	47	\$ 60 \$ 4	7 \$ 60	\$ 47	\$ 60	\$ -	\$ -	s -	\$ -	\$ -	\$ -	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T1	Pipeline Maintenance (HCA)	S 237	S 182	S 187	S 210 S	194 5	s - :	s .	s -	s -	s - s	182	S 232 S 18	12 5 232	S 182	5 232	s -	s .	s -	s .	s -	s -	No	
	Incident Related to the High Pressure System		, , , , , , , , , , , , , , , , , , , ,				7 220 7			-							,									
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C6-T2	Pipeline Maintenance (non-HCA)	\$ 481	\$ 370	\$ 381	\$ 426 \$	393 \$	5 - :	\$ -	\$ -	\$ -	\$ - \$	369	\$ 472 \$ 36	9 \$ 472	\$ 369	\$ 472	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No	
SDG&E-Risk-3	(Excluding Dig-in)	C9	Compressor Station - Maintenance	\$ 2,318	\$ 2,356	\$ 2,356	\$ 2,132 \$	2,501	5 - :	ş -	s -	s -	s - s	2,099	\$ 2,683 \$ 2,099	9 \$ 2,683	\$ 2,099	\$ 2,683	ş -	ş -	s -	ş -	\$ -	\$ -	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C11-T1	Measurement & Regulation Station – Maintenance (HCA)	s 101	c 117	c 110	c 106 c	140			e .			105	S 134 S 10	15 5 134	¢ 105	e 124							No	
	Incident Related to the High Pressure System			7 101	,	,	3 100 3	-2		_	,	_	, ,	203		3 134	3 203	7 254	*	*	_	,	*	_	100	
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C11-T2	Measurement & Regulation Station – Maintenance (non-HCA)	\$ 204	\$ 238	\$ 241	\$ 214 \$	285	5 - :	\$ -	s -	s -	s - s	213	\$ 272 \$ 21	3 \$ 272	\$ 213	\$ 272	\$ -	\$ -	s -	\$.	\$.	s -	No	
SDG&E-Risk-3	(Excluding Dig-in)	C12	Odorization	ş -	s -	\$ 2	s - s	9 9	s - :	\$.	s -	s -	s - s	8	\$ 10 S	8 \$ 10	\$ 8	\$ 10	\$ -	ş -	s -	ş -	ş -	s -	No	
cocer out a	Incident Related to the High Pressure System (Excluding Dig-in)		Compressor Station Physical Security	\$ 248	\$ 181	\$ 212	\$ 233 \$	248 5						202	\$ 258 \$ 20	12 \$ 258	\$ 202	\$ 258						,	No	
	Incident Related to the High Pressure System	Ü									3 -		3 . 3	202									, .			
SDG&E-Risk-3	(Excluding Dig-in)	C14	Engineering, Oversight and Compliance Review	\$ 211	\$ 181	\$ 224	\$ 238 \$	229	5 - :	\$ -	\$ -	s -	s - s	195	\$ 249 \$ 19	15 \$ 249	\$ 195	\$ 249	\$ -	s -	s -	s -	\$ -	\$ -	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1.1	PSEP - Pipeline Replacement (Phase 2B, GRC base, HCA)	ş -	s -	ş -	s - s		5 - :	\$ -	s -	s -	s - s		s - s -	- s -	s -	\$ -	\$ -	ş -	s -	ş -	\$ 9,500	\$ 11,500	No	
	Incident Related to the High Pressure System																						s 9500	\$ 11.500	No	
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	M1-T1.2	PSEP - Pipeline Replacement (Phase 2B, GRC base, non-HCA)	ş .	ş .	ş .	\$ - \$	- 3	5 . :	\$.	\$ -	ş .	\$. \$	_	S - S -	. S .	ş .	\$.	\$.	ş .	S -	ş .	\$ 9,500	\$ 11,500	No	-
SDG&E-Risk-3	(Excluding Dig-in)	M1-T1.3	PSEP - Hydrotesting (Phase 2B, GRC base, HCA)	ş .	ş -	ş .	\$ - \$		5 - :	ş .	s -	s -	s - s		s - s -	. s .	\$ 6,650	\$ 8,050	\$ -	ş .	s -	ş .	\$ 2,850	\$ 3,450	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1.4	PSEP - Hydrotesting (Phase 2B, GRC base, non-HCA)	\$ -	ş -	ş .	s - s		s - l:	ş -	s -	\$ -	s - s		s - s -	- \$ -	\$ 6,650	\$ 8,050	\$ -	ş -	s -	ş .	\$ 2,850	\$ 3,450	No	
	Incident Related to the High Pressure System															i.										
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T1.1	PSEP - Pipeline Replacement (Phase 1A, refundable, HCA)	\$ ·	> -	٠ ،	> - \$	- 5	5 120,853	\$ 38,253	\$ 11,855	\$ 5,159	\$ 1,084 \$		\$ - \$ ·	- S -	S -	\$ -	> -	> .	١ .	> -	٠ .	٠ .	No	+
SDG&E-Risk-3	(Excluding Dig-in)	C16-T1.2	PSEP - Hydrotesting (Phase 1A, refundable, HCA)	\$ 1,044	\$ (32)	\$ 446	\$ 1,648 \$		913	\$ (813)	\$ 458	\$ 1,038	s - s		s - s -	- s -	s -	\$ -	\$ -	\$ -	\$ -	\$ -	s -	\$ -	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C16-T2.1	PSEP - L1600 Pipeline Replacement (Phase 1B, refundable, HCA)	s .	s .	s .	s	296 5	5 7.133	\$ 8.748	\$ 5.337	\$ 18.477	S 125.483 S		s - s -	- s -	s .	s -	\$ 106.066	\$ 128.395	\$ 32,392	\$ 39.212	s .	s -	No	
	Incident Related to the High Pressure System															T.	ľ.	ľ.								
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T2.2	PSEP - L1600 Pipeline Replacement (Phase 1B, refundable, non-HCA)	\$ -	\$ -	\$ -	\$ - \$	- 9	5 - :	\$.	\$ -	\$ 1,865	\$ 562 \$	-	s - s -	- \$ -	\$ -	\$ -	\$ 1,459	\$ 1,766	\$ 24,513	\$ 29,673	\$ 2,520	\$ 3,050	No	1
SDG&E-Risk-3	(Excluding Dig-in)	C16-T2.3	PSEP - L1600 Hydrotesting (Phase 1B, refundable, non-HCAs)	s -	s -	ş .	\$ 1,992 \$		5 - :	ş .	s -	\$.	s - s	4,742	\$ 5,741 \$ 22,39	3 \$ 27,107	\$ 17,411	\$ 21,076	\$ 1,844	\$ 2,232	\$ 8,708	\$ 10,542	\$ 6,771	\$ 8,196	No	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C16-T3.1	PSEP - Valve enhancement (refundable, HCA)	s .	s .	s .	s		5 4.879	\$ 3.324	\$ 2.572	S 1.728	s 94 c		s - s -	- s -	s .	s -	s -	s .	s -	s .	s .	s -	No	
	Incident Related to the High Pressure System							- 1		,,,,,,,	,	,.20						ľ		i i		i i				
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T3.2	PSEP - Valve enhancement (refundable, non-HCA)	\$ -	\$ -	\$ -	s - s	- 5	5 - :	\$ -	S -	\$ -	s - s	-	s - s -	- \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	s -	\$ -	No	
SDG&E-Risk-3	(Excluding Dig-in)	M4	Adobe Falls Relocation Project	ş -	s -	ş -	s - s	- 5	5 - :	ş -	ş -	\$ -	s - s		s - s -	- s -	s -	ş -	\$ 1,900	\$ 2,300	s -	ş .	ş -	s -	No	
SDG&F.Rick.3	Incident Related to the High Pressure System (Excluding Dig-in)	MS	Moreno Compressor Station Modernization	٠.					T.		٠.			_			٠.								No	
	Incident Related to the High Pressure System			-		, .	5	- 3							, , , , ,			1								
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	A1	Proactive Soil Sampling	\$ -	s -	\$ -	s - s	- 5	5 - :	\$.	\$ -	\$ -	s - s	108	\$ 138 \$ 10	18 \$ 138	\$ 108	\$ 138	\$ -	\$ -	\$ -	\$ -	s -	\$ -	No	1
SDG&E-Risk-3	(Excluding Dig-in)	A2	Expanding Geotechnical Analysis	s -	s -	ş .	s - s		s <u>-</u> :	s	s -	\$ -	s . s	54	\$ 69 \$ 5	4 5 69	\$ 54	\$ 69	s -	s -	s -	s -	s -	s -	No	<u> </u>
		•																								
																		1	1	1		1				
NOTES:											$\vdash \vdash$						1	1								1
[1] The figures prov	vided are direct charges and do not include compar	ry loaders, with the ex	ception of vacation and sick. The costs are also in 2020 dollars and hav	e not been e	calated to 2	021 amoun	its.				L						<u></u>	<u> </u>	<u> </u>	<u></u>		<u></u>				1
	ded, where available, for all activities regardless of																									
			s was performed. 1922 - 2024 for reasons discussed in the Chapter narrative: PSEP Refunda	ble (C16.T1 4	16.T2 C16	(3): MS: M	areno Comerco	cor Station	n Modificatio	in								1		†		†				†
(2) the ronowing in		genon pren 101 20		(***********		- ,, m.s. Mi	o compres	Jun 100	dtio							1	1	1	1	1		1				

2021 RAMP SDG&E-Risk-3-WP Risks Shared Allocations Workpaper Tab: Shared Allocations (2020 Direct \$000)

(2020 Direct \$000)					Sharad A	llocations		1
		Control / Mitigation				Sempra		
RAMP Chapter ID	RAMP Chapter Name	ID	Control / Mitigation Name	Retained	SoCalGas	Energy	Other	Notes
	Incident Related to the High Pressure System		,,,					
SDG&E-Risk-3	(Excluding Dig-in)	C15-T1	Integrity Assessments & Remediation (HCA)	100%	0%	0%	0%	100% of SDG&E costs are retained by SDG&E however, SCG has shared services that are allocated to SDG&E
CDC 9 E Diele 3	Incident Related to the High Pressure System	C15-T2	Integrity Assessments & Remodiation (Non-LICA)	100%	0%	0%	00/	1000/ of CDCSE pasts are retained by CDCSE, bourgues CCC has shared consists that are allocated to CDCSE
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C15-12	Integrity Assessments & Remediation (Non-HCA)	100%	0%	0%	0%	100% of SDG&E costs are retained by SDG&E however, SCG has shared services that are allocated to SDG&E
SDG&E-Risk-3	(Excluding Dig-in)	M2-T1	Gas Transmission Safety Rule - MAOP Reconfirmation (HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	M2-T2	Gas Transmission Safety Rule - MAOP Reconfirmation (Non-HCA)	100%	0%	0%	0%	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M3-T1	Gas Transmission Safety Rule - Material Verification (HCA)	100%	0%	0%	0%	
SDOCKE MISK S	Incident Related to the High Pressure System	WIS 11	das transmission safety fale Waterial Verification (free)	10070	070	070	070	
SDG&E-Risk-3	(Excluding Dig-in)	M3-T2	Gas Transmission Safety Rule - Material Verification (Non-HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System	C1-T1						
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Cathodic Protection - Capital	100%	0%	0%	0%	
SDG&E-Risk-3	(Excluding Dig-in)	C1-T2	Cathodic Protection - Capital	100%	0%	0%	0%	
	Incident Related to the High Pressure System	C2 T4						
SDG&E-Risk-3	(Excluding Dig-in)	C3-T1	Leak Repair	100%	0%	0%	0%	
	Incident Related to the High Pressure System	C3-T2		4000/		201	201	
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Leak Repair	100%	0%	0%	0%	
SDG&E-Risk-3	(Excluding Dig-in)	C4-T1	Pipeline Relocation/Replacement	100%	0%	0%	0%	
	Incident Related to the High Pressure System	C4-T2						
SDG&E-Risk-3	(Excluding Dig-in)	C4-12	Pipeline Relocation/Replacement	100%	0%	0%	0%	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C5-T1	Shallow/Exposed Pipe Remediation	100%	0%	0%	0%	
3DG&L-NISK-3	Incident Related to the High Pressure System		Sitallow/Exposed Fipe Refilediation	100%	078	078	076	
SDG&E-Risk-3	(Excluding Dig-in)	C5-T2	Shallow/Exposed Pipe Remediation	100%	0%	0%	0%	
	Incident Related to the High Pressure System	C8						
SDG&E-Risk-3	(Excluding Dig-in)	Co	Compressor Stations-Capital	100%	0%	0%	0%	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C10-T1	Measurement & Regulation - Capital	100%	0%	0%	0%	
SDOCKE MISK S	Incident Related to the High Pressure System		Weasarchieft & Regulation Capital	10070	070	070	070	
SDG&E-Risk-3	(Excluding Dig-in)	C10-T2	Measurement & Regulation - Capital	100%	0%	0%	0%	
	Incident Related to the High Pressure System	C13						
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Security and Auxuliary Equipment	100%	0%	0%	0%	
SDG&E-Risk-3	(Excluding Dig-in)	C14	Engineering, Oversight and Compliance Review	100%	0%	0%	0%	
	Incident Related to the High Pressure System		g g, g					
SDG&E-Risk-3	(Excluding Dig-in)	M1-T1.1	PSEP - Pipeline Replacement (Phase 2B, GRC base, HCA)	100%	0%	0%	0%	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1.2	PSEP - Pipeline Replacement (Phase 2B, GRC base, non-HCA)	100%	0%	0%	00/	
SDG&E-RISK-3	Incident Related to the High Pressure System	IVI1-11.2	PSEP - Pipeline Replacement (Phase 2B, GRC base, non-HCA)	100%	0%	0%	0%	
SDG&E-Risk-3	(Excluding Dig-in)	M1-T1.3	PSEP - Hydrotesting (Phase 2B, GRC base, HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	M1-T1.4	PSEP - Hydrotesting (Phase 2B, GRC base, non-HCA)	100%	0%	0%	0%	
SDG&E-Risk-3	(Excluding Dig-in)	C16-T1.1	PSEP - Pipeline Replacement (Phase 1A, refundable, HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C16-T1.2	PSEP - Hydrotesting (Phase 1A, refundable, HCA)	100%	0%	0%	0%	
CDCRE DI-L 2	Incident Related to the High Pressure System	CAC TO A	DCFD 14C00 Pineline Deplement (Phene 4D and and high 14C4)	4000/	00/	00/	00/	
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T2.1	PSEP - L1600 Pipeline Replacement (Phase 1B, refundable, HCA)	100%	0%	0%	0%	
SDG&E-Risk-3	(Excluding Dig-in)	C16-T2.2	PSEP - L1600 Pipeline Replacement (Phase 1B, refundable, non-HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C16-T2.3	PSEP - L1600 Hydrotesting (Phase 1B, refundable, non-HCAs)	100%	0%	0%	0%	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C16-T3.1	PSEP - Valve enhancement (refundable, HCA)	100%	0%	0%	0%	
SPGKE-NISK-3	Incident Related to the High Pressure System	C10-13.1	1 3ET Valve emancement (retundable, frex)	100%	U76	U%	U%	
SDG&E-Risk-3	(Excluding Dig-in)	C16-T3.2	PSEP - Valve enhancement (refundable, non-HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C2-T1	Cathodic Protection – Maintenance (HCA)	100%	0%	0%	0%	
SDG&E-Risk-3	(Excluding Dig-in)	C2-T2	Cathodic Protection – Maintenance (non-HCA)	100%	0%	0%	0%	
-2002 1138 3	/	12	and the state of t	100/8	070	070	070	

					Shared A	llocations		
		Control / Mitigation		Dot-less d	SoCalGas	Sempra	Other	
RAMP Chapter ID	RAMP Chapter Name	ID	Control / Mitigation Name	Ketained	Socaigas	Energy	Other	Notes
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C6-T1	Pipeline Maintenance (HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C6-T2	Pipeline Maintenance (non-HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C9	Compressor Station - Maintenance	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C11-T1	Measurement & Regulation Station – Maintenance (HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C11-T2	Measurement & Regulation Station – Maintenance (non-HCA)	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C12	Odorization	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	C7	Compresson Station Security - Maintenance	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	M4	Adobe Falls Relocation Project	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	M5	Moreno Compressor Station Modernization	100%	0%	0%	0%	
	Incident Related to the High Pressure System							
SDG&E-Risk-3	(Excluding Dig-in)	A1	Proactive Soil Sampling	100%	0%	0%	0%	
	Incident Related to the High Pressure System		-					
SDG&E-Risk-3	(Excluding Dig-in)	A2	Expanding Geotechnical Analysis	100%	0%	0%	0%	
				1	1	,		

2021 RAMP SDG&E-Risk-3-WP Risks Recorded and Forecast Costs After Allocations Workpaper Tab: After Allocations\$

Tab: After Alloc	ationsy																				
(2020 Direct \$000)							RECORDI	D DOLLARS								FORE	CAST DOLLARS				
	T	1			, ,	0&M				Capital				0&M					apital		
RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	2016	2017	2018 2019	2020	2016	2017	2018 201	9 2020	2022 \$ Low \$	High \$ L	2023 w \$ High		2024 \$ High	\$ Low		2023 \$ High	\$ Low	
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C15-T1	Integrity Assessments & Remediation (HCA)	\$ 4,080	\$ 4346	\$ 6,715 \$ 8,26	3 \$ 7,955	\$ 2,982	\$ 2 270	\$ 2,506 \$ 5,2	26 \$ 3,302		6,427 \$ 5		7 \$ 5,030	\$ 6,427	\$ 7,852				
	Incident Related to the High Pressure System																				
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C15-T2	Integrity Assessments & Remediation (Non-HCA)	\$ 1,927	\$ 701	\$ - \$ 33	1 \$ 1,243	\$ 1,408	\$ 529	\$ - \$ 2	09 \$ 516	,	1,000 4 1		8 \$ 1,180	\$ 1,508	\$ 1,842	\$ 2,353 \$ 904	\$ 1,155		, , , , , , ,
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	M2-T1	Gas Transmission Safety Rule - MAOP Reconfirmation (HCA)	\$ -	\$ -	s - s ·	\$ -	\$ -	\$ -	\$ - \$	- \$ -	\$ 720 \$	2,304 \$ 2	160 \$ 6,91	2 \$ 6,480	\$ 20,736	\$ 720	\$ 2,304 \$ 2,160	\$ 6,912	\$ 6,480	\$ 20,736
SDG&E-Risk-3	(Excluding Dig-in)	M2-T2	Gas Transmission Safety Rule - MAOP Reconfirmation (Non-HCA)	\$ -	s - :	s - s -	s -	\$ -	\$ -	s - s	- \$ -	\$ 30 \$	96 \$	90 \$ 28	8 \$ 270	\$ 864	\$ 30	\$ 96 \$ 90	\$ 288	\$ 270	\$ 864
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M3-T1	Gas Transmission Safety Rule - Material Verification (HCA)	ş -	s - :	ş - ş ·	ş -	s -	\$ -	s - s	- \$ -	\$ 13 \$	40 \$	15 \$ 4	6 \$ 18	\$ 56	\$ 7	\$ 21 \$ 8	\$ 24	\$ 9	\$ 29
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M3-T2	Gas Transmission Safety Rule - Material Verification (Non-HCA)	ş -	s -	s - s -	ş -	\$ -	\$ -	s - s	- s -	\$ 3 \$	8 \$	3 \$ 1	0 \$ 4	\$ 11	\$ 2	\$ 5 \$ 2	\$ 5	\$ 2	\$ 5
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C1-T1	Cathodic Protection - Capital	ς .	ς	ς - ς .	ς -	\$ 188	\$ 99	\$ 156 \$ 3	15 \$ 64	s - s	- <	- 9	s -	ς -	\$ 25	\$ 31 \$ 82	\$ 100	\$ 85	\$ 103
SDG&E-Risk-3	Incident Related to the High Pressure System	C1-T2					T.	\$ 381	\$ 201		39 \$ 130			1.			\$ 51	\$ 62 \$ 167	\$ 203	\$ 173	
	(Excluding Dig-in) Incident Related to the High Pressure System	C3-T1	Cathodic Protection - Capital	\$ -	\$ -	5 - 5	\$ -	\$ 381	\$ 201	\$ 316 \$ 6	39 \$ 130	5 - 5	- \$	- \$	5 -	\$ -					\$ 210
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Leak Repair	\$ -	\$ -	s - s ·	\$ -	\$ -	\$ -	\$ - \$	- \$ -	\$ - \$	- \$	- \$	\$ -	\$ -	\$ 808	\$ 979 \$ 558	\$ 675	\$ 577	\$ 699
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C3-T2	Leak Repair	\$ -	s - :	s - s ·	\$ -	ş -	\$ -	s - s	- \$ -	s - s	- \$	- \$	\$ -	\$ -	\$ 1,641	\$ 1,987 \$ 1,133	\$ 1,371	\$ 1,172	\$ 1,419
SDG&E-Risk-3	(Excluding Dig-in)	C4-T1	Pipeline Relocation/Replacement	ş -	s - :	ş - ş ·	ş -	\$ 2,022	\$ 633	\$ 1,398 \$	38 \$ 148	s - s	- \$	- s	ş -	ş -	\$ 755	\$ 913 \$ 521	\$ 630	\$ 539	\$ 652
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C4-T2	Pipeline Relocation/Replacement	ş -	s -	s - s	ş -	\$ 4,104	\$ 1,286	\$ 2,839 \$	76 \$ 301	s - s	- s	- s	s -	s -	\$ 1,532	\$ 1,855 \$ 1,057	\$ 1,280	\$ 1,094	\$ 1,324
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	CS-T1	Shallow/Exposed Pipe Remediation	٠.			٠.	\$ 123	\$ 123		45 \$ 81				۹ .	٠.	\$ 1,132	\$ 1,370 \$ 818			
	Incident Related to the High Pressure System	CS-T2					Ĭ.							Ĭ.							
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C8	Shallow/Exposed Pipe Remediation	\$ -	\$ - :	ş - ş ·	\$ -	\$ 249	\$ 249		94 \$ 165	\$ - \$	- \$	- \$	\$ -	\$ -	\$ 2,298	\$ 2,782 \$ 1,661			
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System		Compressor Stations-Capital	\$ -	\$ -	s - s -	s -	\$ 9,787	\$ 3,774	\$ 2,339 \$ 6,5	61 \$ 7,779	s - s	- \$	- \$	\$ -	\$ -	\$ 10,565	\$ 12,789 \$ 9,615	\$ 11,639	\$ 9,951	\$ 12,046
SDG&E-Risk-3	(Excluding Dig-in)	C10-T1	Measurement & Regulation - Capital	\$ -	\$ - :	ş - ş ·	ş -	\$ 194	\$ 190	\$ 251 \$ 4	45 \$ 186	\$ - \$	- \$	- \$	\$ -	\$ -	\$ 168	\$ 203 \$ 229	\$ 278	\$ 237	\$ 287
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C10-T2	Measurement & Regulation - Capital	ş -	s - :	s - s ·	ş -	\$ 393	\$ 387	\$ 509 \$ 9	03 \$ 378	s - s	- \$	- \$	\$ -	s -	\$ 340	\$ 412 \$ 466	\$ 564	\$ 482	\$ 584
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C13	Security and Auxuliary Equipment	s -	s - :	s - s	s -	\$ 1,925	\$ 150	\$ 85 \$ 3	19 \$ 730	s - s	- s	- s	s -	s -	\$ 382	\$ 462 \$ 842	\$ 1,019	\$ 871	\$ 1,055
SDG&E-Risk-3	Incident Related to the High Pressure System Incident Related to the High Pressure System	C14		\$ 211	\$ 181	\$ 224 \$ 23	8 \$ 229		\$ -	\$ - \$	- \$ -	\$ 195 \$	249 \$	195 \$ 24	9 \$ 195	\$ 249	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in)	M1-T1.1	PSEP - Pipeline Replacement (Phase 2B, GRC base, HCA)	ş -	s - :	ş - ş ·	ş -	s -	\$ -	\$ - \$	- \$ -	s - s	- \$	- s	ş -	ş -	ş -	s - s -	\$ -	\$ 9,500	\$ 11,500
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1.2	PSEP - Pipeline Replacement (Phase 2B, GRC base, non-HCA)	ş -	s -	s - s -	ş -	\$ -	\$ -	s - s	- s -	s - s	- \$	- s	\$ -	ş -	ş -	s - s -	\$ -	\$ 9,500	\$ 11,500
SDG&F-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1.3	PSEP - Hydrotesting (Phase 2B, GRC base, HCA)	٠.			٠.	٠.	٠.	٠. ،					\$ 6.650	\$ 8.050	٠.		٠.	\$ 2.850	
SDG&E-Risk-3	Incident Related to the High Pressure System	M1-T1.4					Ĭ.							Ĺ	\$ 6.650	\$ 8.050				\$ 2,850	,
	(Excluding Dig-in) Incident Related to the High Pressure System		PSEP - Hydrotesting (Phase 2B, GRC base, non-HCA)	\$ -	\$ -	5 - 5	\$ -	\$ -	\$ -	5 - 5	- \$ -	5 - 5	- \$	- \$	\$ 6,650	\$ 8,050	\$ -	\$ - \$ -	\$ -	\$ 2,850	\$ 3,450
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T1.1	PSEP - Pipeline Replacement (Phase 1A, refundable, HCA)	\$ -	\$ - :	\$ - \$	ş -	\$ 120,853	\$ 38,253	\$ 11,855 \$ 5,1	59 \$ 1,084	\$ - \$	- \$	- \$	\$ -	\$ -	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T1.2	PSEP - Hydrotesting (Phase 1A, refundable, HCA)	\$ 1,044	\$ (32)	\$ 446 \$ 1,64	8 \$ -	\$ 913	\$ (813)	\$ (458) \$ 1,0	38 \$ -	\$ - \$	- \$	- \$	\$ -	\$ -	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in)	C16-T2.1	PSEP - L1600 Pipeline Replacement (Phase 1B, refundable, HCA)	ş -	s -	s - s -	\$ 296	\$ 7,133	\$ 8,748	\$ 5,337 \$ 18,4	\$125,483	s - s	- \$	- s	\$ -	s -	\$ 106,066	\$ 128,395 \$ 32,392	\$ 39,212	\$ -	\$ -
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C16-T2.2	PSEP - L1600 Pipeline Replacement (Phase 1B, refundable, non-HCA)	ş -	s -	s - s -	ş -	\$ -	\$ -	\$ - \$ 1,8	65 \$ 562	s - s	- \$	- s	\$ -	ş -	\$ 1,459	\$ 1,766 \$ 24,513	\$ 29,673	\$ 2,520	\$ 3,050
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C16-T2.3	PSEP - L1600 Hydrotesting (Phase 1B, refundable, non-HCAs)	ς .	ς	S - S 1.99	2 5 -	ς -	ς -	s - s		\$ 4.742 S	5.741 \$ 22	393 S 27.10	7 \$ 17,411	\$ 21,076	S 1.844	\$ 2,232 \$ 8,708	\$ 10,542	\$ 6,771	\$ 8,196
SDG&F-Risk-3	Incident Related to the High Pressure System	C16-T3.1						\$ 4.879		\$ 2572 \$ 17	728 \$ 94	3 4,742 3	3,741 3 11		. 5 17,411	2 22,070	. 2,044	2,232 3 0,700	3 10,341	, 0,,,,	, 0,130
	(Excluding Dig-in) Incident Related to the High Pressure System		PSEP - Valve enhancement (refundable, HCA)	\$ -	5 -	\$ - \$	\$ -	\$ 4,879	\$ 3,324	\$ 2,5/2 \$ 1,/	28 \$ 94	5 - 5	- \$	- 5	\$ -	\$ -	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T3.2	PSEP - Valve enhancement (refundable, non-HCA)	\$ -	\$ -	s - s ·	\$ -	\$ -	\$ -	\$ - \$	- \$ -	\$ - \$	- \$	- \$	\$ -	\$ -	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C2-T1	Cathodic Protection – Maintenance (HCA)	\$ 30	\$ 30	\$ 16 \$ 2	3 \$ 30	\$ -	\$ -	s - s	- \$ -	\$ 23 \$	29 \$	23 \$ 2	9 \$ 23	\$ 29	\$ -	\$ - \$ -	\$ -	\$ -	ş -
SDG&E-Risk-3	(Excluding Dig-in)	C2-T2	Cathodic Protection – Maintenance (non-HCA)	\$ 60	\$ 60	\$ 33 \$ 4	7 \$ 60	s -	\$ -	\$ - \$	- \$ -	\$ 47 \$	60 \$	47 \$ 6	0 \$ 47	\$ 60	\$ -	s - s -	\$ -	\$ -	\$ -
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T1	Pipeline Maintenance (HCA)	\$ 237	\$ 182	\$ 187 \$ 21	0 \$ 194	\$ -	\$ -	s - s	- ş -	\$ 182 \$	232 \$	182 \$ 23	2 \$ 182	\$ 232	ş -	s - s -	\$ -	ş -	s -
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T2	Pipeline Maintenance (non-HCA)	\$ 481	\$ 370	\$ 381 \$ 42	6 \$ 393	ς -	ς -	s - s		s 369 s	472 \$	369 5 47	2 \$ 369	\$ 472	ς -		ς -	,	ς .
SDG&F-Risk-3	Incident Related to the High Pressure System	C9	Compressor Station - Maintenance	\$ 2.318		S 2.356 S 2.13					T.	\$ 2.099 \$	2 683 \$ 2	099 \$ 2.68		\$ 2683					
	(Excluding Dig-in) Incident Related to the High Pressure System							\$ -	\$ -	5 - 5	- \$ -		-,			7 2,000	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C11-T1	Measurement & Regulation Station – Maintenance (HCA)	\$ 101	\$ 117	\$ 119 \$ 10	6 \$ 140	\$ -	\$ -	\$ - \$	- \$ -	\$ 105 \$	134 \$	105 \$ 13	4 \$ 105	\$ 134	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in)	C11-T2	Measurement & Regulation Station – Maintenance (non-HCA)	\$ 204	\$ 238	\$ 241 \$ 21	4 \$ 285	\$ -	\$ -	s - s	- \$ -	\$ 213 \$	272 \$	213 \$ 27	2 \$ 213	\$ 272	\$ -	\$ - \$ -	\$ -	\$ -	ş -
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C12	Odorization	ş -	s - :	\$ 2 \$	\$ 9	s -	\$ -	s - s	- \$ -	\$ 8 \$	10 \$	8 \$ 1	0 \$ 8	\$ 10	ş -	s - s -	\$ -	\$ -	s -
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C7	Compressor Station Physical Security	\$ 248	\$ 181	\$ 212 \$ 23	3 \$ 248	\$ -	\$ -	s - s	- \$ -	\$ 202 \$	258 \$	202 \$ 25	8 \$ 202	\$ 258	ş -	s - s -	\$ -	\$ -	\$ -
SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M4	Adobe Falls Relocation Project	ς .	s	ς	ς .	ς .	ς .	ς	- 5	9		. c	5	ς .	S 1.900	\$ 2300 \$ -	ς .	ς .	s
	Incident Related to the High Pressure System						, .				, .		- 3	3	, .		, 1,500	2,300 3 -		-	<u>, </u>
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	M5	Moreno Compressor Station Modernization	\$ -	5 -	\$ - \$	\$ -	\$ -	\$ -	\$ - \$	- \$ -	5 - 5	- \$	- \$	\$ -	\$ -	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	A1	Proactive Soil Sampling	\$ -	s - :	\$ - \$	\$ -	\$ -	\$ -	ş - ş	- \$ -	\$ 108 \$	138 \$	108 \$ 13	8 \$ 108	\$ 138	\$ -	\$ - \$ -	\$ -	\$ -	\$ -
SDG&E-Risk-3	(Excluding Dig-in)	A2	Expanding Geotechnical Analysis	\$ -	s -	ş - ş ·	ş -	\$ -	\$ -	ş - ş	- \$ -	\$ 54 \$	69 \$	54 \$ 6	9 \$ 54	\$ 69	ş -	s - s -	\$ -	\$ -	ş -
																					I
NOTES:																					ı
	ided are direct charges and do not include comman	ny loaders, with the ex	ception of vacation and sick. The costs are also in 2020 dollars and have	not been e	scalated to 20	I21 amounts.															
	ed, where available, for all activities regardless of					annual today															i
			was performed. 122 - 2024 for reasons discussed in the Chapter narrative: PSEP Refundal	ble (C16-T1,	, C16-T2, C16-	T3); M5: Moreno Ci	mpressor Stat	ion Modificat	ion.												
	-	2								l	_1	1									

March Marc											RECORDED U	NITS										FORE	CAST UNIT				
Marche M					ı				0&M					Capital					M&0							Capital	
March Marc	RAMP Chanter ID	RAMP Chanter Name	Control / Mitigation	Control / Mitigation Name			2016	2017	2018	2019	2020 2	016	2017	2018	2019	2020											
Market Ma		Incident Related to the High Pressure System					36	31	14	25	32																
Mathematical Control of Math		(Excluding Dig-in)					17			- 1	E	-		-		-	3	4	-		-	7	-	-	-	-	
March Marc		Incident Related to the High Pressure System					- 1/										3	-	-	•							
Market Ma		(Excluding Dig-in)		Gas Transmission Safety Rule - MAOP Reconfirmation (HCA)			-	-	-		-	-	-	-	-	-			1.61		2.4		0.045	0.153			
Series Se		Incident Related to the High Pressure System											-				0.01	0.034	0.07	0.033	0.1	0.34			0.003	0.017	0.013 0.031
March Marc	SDG&E-Risk-3	(Excluding Dig-in)	M3-T1	Gas Transmission Safety Rule - Material Verification (HCA)	No Feasible Units	No Feasible Units	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
March Marc	SDG&E-Risk-3	(Excluding Dig-in)	M3-T2	Gas Transmission Safety Rule - Material Verification (Non-HCA)	No Feasible Units	No Feasible Units	-	-	-	-		-	-	-		-	-	-	-	-	-	-			-	-	
The Control of Management of The Control of The Con	EDGRE Birk 2		C1-T1	Cathodic Protection Canital (UCA)	# of Drojects	N/A						2	2	,												2	
March Marc		Incident Related to the High Pressure System	CI TI	Cathodic Protection - Capital (HCA)	# or Projects	N/A	-	-	-			- 2	3	2		3	-	-	-		-			3	-	3	1 3
March Marc	SDG&E-Risk-3	(Excluding Dig-in)	C1-12	Cathodic Protection - Capital (non-HCA)	# of Projects		-	-	-	-	-	5	9	5	3	3	-	-	-	-	-	-	4	5	4	5	4 5
March Marc		Incident Related to the High Pressure System	C2-T1																								
March September 19, 19, 19, 19, 19, 19, 19, 19, 19, 19,	SDG&E-Risk-3	(Excluding Dig-in)		Cathodic Protection – Maintenance (HCA)	N/A		72	73	74	72	51	-	-	-		-	61	78	61	78	61	78	-	-	-	-	
Amount of the control of the contr		Incident Related to the High Pressure System	C2-T2																								
Second	SDG&E-Risk-3			Cathodic Protection – Maintenance (non-HCA)	N/A	Maximo	145	149	150	145	105	-	-	-	-	-	125	160	125	160	125	160	-	-	-	-	
March Marc	SDG&E-Risk-3		C3-T1	Leak Repair (HCA)	# of Projects	N/A	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1 1
March Marc	COCOC DIAL 3	Incident Related to the High Pressure System	C3-T2			21/2																				,	
Marche M		Incident Related to the High Pressure System	C4.74			-	-		-	-	-	-	-	-		-	-	-	-	-	-		1	1	1	Z	2 2
Control Cont	SDG&E-Risk-3	(Excluding Dig-in)		Pipeline Relocation/Replacement (HCA)	# of Projects	N/A	-	-	-	-	-	-	1	2	1	1	-	-	-	-	-		2	2	1	3	1 3
Accordance from Management and Management Series (1964) Accordance from Management (1964) Accord	SDG&E-Risk-3	(Excluding Dig-in)	C4-T2	Pipeline Relocation/Replacement (non-HCA)	# of Projects	N/A	-	-	-		-	3	3	5	3	3	-	-	-	-	-		3	4	2	4	2 4
Secretary of the property of t	cocar and a	Incident Related to the High Pressure System	C5-T1		-	n/a																		_		_	
Mathematical Mat	SUG&t-Kisk-3	[Excluding Dig-In] Incident Related to the High Pressure System		Snallow/Exposed Pipe Remediation (HCA)	# of Projects	N/A	-	-	-	-			2	2	1	1	-	-	-	-	-	-	2	2	2	2	2 2
Control Section Control Se	SDG&E-Risk-3	(Excluding Dig-in)	C5-T2	Shallow/Exposed Pipe Remediation (non-HCA)	# of Projects		-	-	-		-	3	6	5	5	4	-	-	-	-	-	-	4	5	4	5	4 5
State February 1989 1989	SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C6-T1	Pipeline Maintenance (HCA)	N/A		146	146	146	146	146	-	-	-		_	131	168	131	168	131	168				_	
Content Cont		Incident Related to the High Pressure System	C6-T2			# of Miles																					
Security	SDG&E-Risk-3			Pipeline Maintenance (non-HCA)	N/A	Patrolled &	296	296	296	296	296		-	-	-	-	266	340	266	340	266	340	-	-	-	-	
Contract	SDG&E-Risk-3	(Excluding Dig-in)	C7	Compressor Station Physical Security	N/A	# of Labor Hours	8,760	8,760	8,760	8,760	8,760	-	-	-	-	-	7,884	10,074	7,884	10,074	7,884	10,074	-	-	-	-	
Part	SDG&E-Risk-3		C8	Compressor Stations-Capital	# of Projects	N/A			_		_	27	31	13	25	23			-	-			23	28	24	29	26 31
American Control and Primary Septem Control Contro		, , ,				# of Compressor																					
Contact Research of Private System Contact Research Private System Contact Research Private System Contact Research Resea			C9																								
Management Man		Incident Related to the High Pressure System				orders from																					
Contact Residence Contact Reputation Contact	SDG&E-Risk-3	(Excluding Dig-in)		Compressor Stations-Maintenance	N/A	Maximo	552	548	471	458	414	-	-	-	-	-	440	562	440	562	440	562	-	-	-	-	
Contact Read Scholler Dept. Contact Regulation (Contact State St	SDG&E-Risk-3	(Excluding Dig-in)	C10-T1	Measurement & Regulation - Capital (HCA)	# of Projects	N/A	-	-	-		-	2	3	3	3	2	-	-	-	-	-	-	3	4	2	4	3 5
Proceeding Region Coloration Coloratio	SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C10-T2	Measurement & Regulation - Capital (non-HCA)	# of Projects	N/A			_		_	6	8	8	7	6			-	-			6	8	6	8	7 8
Color Fall Color		, , ,																									
Postal Read Society Related to the High Pressure System Col. 17.2 Col. Read Col.			C11-T1																								
Color Related to the high Pressure System Color Related to the high Pressure System Color Related (and the h		Incident Related to the High Pressure System				upgrades in																					
Column C	SDG&E-Risk-3	(Excluding Dig-in)		Measurement & Regulation Station – Maintenance (HCA)	N/A		128	136	134	133	127	-	-	-		-	119	152	119	152	119	152	-	-	-	-	
Social Reliance Social Rel																											
COLDE Road Contracting Contract Related to the High Pressure System C12 Contracting Contract Related to the High Pressure System C2 Contracting Contract Related to the High Pressure System C2 Contracting Contract Related to the High Pressure System C3 Security and Auduliary Equipment 4 of Frogests N/A		Incident Related to the High Pressure System	C11-T2																								
Content and Content	SDG&E-Risk-3	(Excluding Dig-in)		Measurement & Regulation Station – Maintenance (non-HCA)	N/A		261	275	271	270	258	-	-	-	-	-	240	307	240	307	240	307	-	-	-	-	
Security and Australian Personal System Cold English Cold	SDG&F-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	C12	Odorization	N/A				40		185	-	_	_	_	_	167	213	167	213	167	213	_	_	_	_	
South Review 1, Control 1, Contro		Incident Related to the High Pressure System	C13																								
SCASE Reads Standard Deplay C1 Engineering Coveraging and Compliance Related to the High Pressure System (Phase 28, GRC base, RCA) Miles of pige N/A	SDG&E-Risk-3		CL)	Security and Auxuliary Equipment	# of Projects	N/A	-		-	-	-	3	3	4	4	5	-	-	-	-	-	-	4	5	4	5	4 5
DOGE-RINA-3 Chicheling Dig = 10 Pressure System (Link-Line Pressure System (Line P	SDG&E-Risk-3	(Excluding Dig-in)	C14	Engineering, Oversight and Compliance Review	N/A	# of Labor Hours	4,822	3,885	4,682	4,910	4,540	-	-	-		-	4,111	5,253	4,111	5,253	4,111	5,253	-	-	-	-	
Modern Related to the High Pressure System M1-T1.2 PSP - Pipeline Replacement (Phase 2B, GRC base, non-HCA) Miles of pipe N/A N/A Miles of pipe N/A N/	SDG&E-Risk-3		M1-T1.1		Miles of pipe	N/A	.	-	.		_	-	-	-				_	_		_			_		-1	1 1
SIGGE-Files Signature System		Incident Related to the High Pressure System				n/a																					
Excluding (Dg-in) M1-11.3 SEST-hydrotesting (Phase 28, GRC base, HCA) N/A Miles of pipe N/A N/A Miles of pipe N/A N/A Miles of pipe N/A	SuNuket-Hisk-3	[excluding Dig-in] Incident Related to the High Pressure System	M1-T1.2	PSEP - Pripeline Replacement (Phase 2B, GRC base, non-HCA)	rviiles of pipe	N/A	-	-	-	-			-	-	-	-	-	-	-		-	-	-	-	-	-	1 1
Excluding Dig in M1-71.4 SESP-1yydotesting (Phase 28, GRC base, non-HCA) N/A Miles of pipe N/A N/A Miles of pipe N/A N	SDG&E-Risk-3	(Excluding Dig-in)	M1-T1.3	PSEP - Hydrotesting (Phase 2B, GRC base, HCA)	N/A	Miles of pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-	-	
Modern Related to the Yeigh Pressure System C16-T1.1 PSEP - Pipeline Replacement (Phase 1A, refundable, HCA) Miles of pipe N/A	SDG&E-Risk-3	Incident Related to the High Pressure System (Excluding Dig-in)	M1-T1.4	PSEP - Hydrotesting (Phase 2B, GRC base, non-HCA)	N/A	Miles of pipe		-			-	-	-	-				_	- 1		,	3		_		-1	
Modes Related to the High Pressure System C16-T12 SSEP - Hydrotesting (Phase IA, refundable, HCA) N/A Miles of pipe		Incident Related to the High Pressure System																									
Excluding (Dg-in) C16-T1.2 PSEP-11600 Pipeline Replacement (Phase 18, refundable, NCA) N/A Miles of pipe N/A Simples N/A	SDG&E-Risk-3	(Excluding Dig-in) Incident Related to the High Pressure System	C16-T1.1	PSEP - Pipeline Replacement (Phase 1A, refundable, HCA)	Miles of pipe	N/A	-	-	-	-		7	8	-		-	-	-	-	-	-		-	-		-	
SDG&E risks 3 Excluding (Dg-in) C16-72.1 SSE7-1600 Pipeline Replacement (Phase 18, refundable, HCA) Miles of pipe N/A	SDG&E-Risk-3	(Excluding Dig-in)	C16-T1.2	PSEP - Hydrotesting (Phase 1A, refundable, HCA)	N/A	Miles of pipe	-	-	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	
Modes Related to the High Pressure System C16-T2 SEP-11600 Pipeline Replacement (Phase 1B, refundable, non-HCA) Miles of pipe N/A	SDG&E-Risk-R	Incident Related to the High Pressure System (Excluding Dig-in)	C16-T7 1	PSEP - L1600 Pipeline Replacement (Phase 1R refundable HCA)	Miles of nine	N/A	J	.]	I .T	_						15	I .T	T		. [12	15	٥	10	
No. Code-Risks No. Code-Risks Code-Ris		Incident Related to the High Pressure System										-				25							- 13	13	,	10	
SOGAE-Risk-3 (Excluding (b)-in) C.16-7.2.3 PSEP-1400 (hydrotesting (Phase 18, refundable, non-HCA) N/A Miles of pipe 4 5 8 10	SDG&E-Risk-3	(Excluding Dig-in)	C16-T2.2	PSEP - L1600 Pipeline Replacement (Phase 1B, refundable, non-HCA)	Miles of pipe	N/A	-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	2	3	
SOGAE-Risk-3 Excluding (ig-in) C16-T3.1 PSEP - Valve enhancement (refundable, MCA) Valve bundles N/A	SDG&E-Risk-3	(Excluding Dig-in)	C16-T2.3	PSEP - L1600 Hydrotesting (Phase 1B, refundable, non-HCAs)	N/A	Miles of pipe	-	-	-	-	-	-	-	-		-	-	-	4	5	8	10	-	-	-	-	
SOGE-Risk-3 No. of projects No. of project	SDG&F-Risk-3		C16-T3.1	PSEP - Valve enhancement (refundable HCA)	Valve hundles	N/A	I .T		I .T	_	_	5	5	,	1		I		_				_				
SOGAE-Risk-3 No. of projects No. of projec		Incident Related to the High Pressure System										-		-													
SOGAE-Risk-3 (Excluding (ije) in) M4 Adobe ralls Relocation Project Feet of pipe N/A 3,990 4,830 3,990 4,830	SDG&E-Risk-3		C16-T3.2	PSEP - Valve enhancement (refundable, non-HCA)	Valve bundles	N/A	-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-	
SGGE-Risk-3 (Excluding (Dig-in) MS Menon Compressor Station Modernization No. of projects N/A	SDG&E-Risk-3	(Excluding Dig-in)	M4	Adobe Falls Relocation Project	Feet of pipe	N/A	-	-	-		-	-	-	-		-	-	-	-	-	-		3,990	4,830		-	
Incident Related to the High Pressure System SDG&E-Risk-3 (Excluding Dig-in) A1 Proactive Soil Sampling N/A Samples 137 175 137 175 137 175	SDG&F-Risk-3		MS	Moreno Compressor Station Modernization	No of projects	N/A	I .T		I .T	_	_			J			I		_				_				
Incident Related to the High Pressure System		Incident Related to the High Pressure System										-															
SCORE Rick 2 (Exclusions Ricks) A3 Examples Controlled Applicit 10 Miles	SDG&E-Risk-3		A1	Proactive Soil Sampling	N/A	Samples	-	-	-	-	-	-	-	-		-	137	175	137	175	137	175		-	-	-	
2000 08C 7 10 NZ Expansing George-time, 81 ATBIT(SS 10/A MilleS 1 1 1 1 1 1 1 1 1	SDG&E-Risk-3	(Excluding Dig-in)	A2	Expanding Geotechnical Analysis	N/A	Miles											14	17	14	17	14	17				-	