First Errata to San Diego Gas and Electric Company's 2022 Wildfire Mitigation Plan

San Diego Gas and Electric Company (SDG&E) identified 16 errata to the 2022 Wildfire Mitigation Plan Update (WMP Update) submitted on February 11, 2022. The errata consist of additional information that was identified and included in response to data requests, corrections to typographical errors contained within the WMP Update, and corrections to information contained within Appendix B Tables 1-12.

The updates to the 2022 WMP Update are described below and this document.

Table 1: Summary of Updates to the WMP

Location	Updated Information
	This information was provided in response to OEIS-SDGE-22-
(p. 200)	002
Section 8.1	Additional information provided in Section 8.1 and Attachment
	A – Long Term Vision in response to OEIS-SDGE-22-001
(4)	
Section 8.3	Additional information provided in response to OEIS-SDGE-22-
	2001
(p. 304)	501
Section 4.4.2.9 U	Updated rows for Table 4-15 to correct calculation errors
	Opuated fows for Table 4-13 to correct calculation effors
(p. 76)	
	FPI was incorrectly listed as a factor, the correct acronym is FBI
(p. 108)	(Fire Behavior Index)
Section 7.3.3.3	The correct title for Table 7-6 is "Average Ignition Rate"
(p. 214)	
	Removes reference to Enhanced Inspections in Section 7.3.5.15
(p. 283)	ar a
	Updates the language to clarify inspection activity referenced in
	7.3.5.2.
(p. 232)	1.5.5.2.
Section 7.3.5.15	Correct Title for Table 7-31 is "Risk Reduction Estimation for
	Enhanced Vegetation Management"
(p. 298)	Elinanced Vegetation Management
Amandiy D. Table 1	Corrected data in Table 1, Section 1.g.ii and 1.i.ii (2021 level 2
	findings for patrol and other inspections of distribution lines)
Appendix B – Table 7.1	All forecasted ignitions from splice wire down corrected to 0
	Updated 2022 projected line miles to be treated with traditional
h	hardening in the HFTD to 5
Appendix B – Table 12	Correct actual 2021 Drone Transmission inspection count to
	1,028

Appendix B – Table 12	Reflects increased scope for Transmission Overhead Hardening: Updated estimated RSE in HFTD Tier 2 to 26.95; Updated 2022 projected line miles to be treated in the HFTD to 18.5
Appendix B – Table 12	Updated Distribution Underbuilt Transmission target: Updated estimated RSE in HFTD Tier 2 to 19; Updated 2022 projected line miles to be treated in the HFTD to 7.6
Appendix B – Table 12	Updated 2022 projected units for Generator Grant Program to 3,000

Corrections to Provide Additional Information or Clarify Statements

<u>Section 7.3.1.2:</u> In response to OEIS-SDGE-22-002, SDG&E provided additional information regarding initiative 7.3.1.2 "Climate-driven risk map and modelling based on various relevant weather scenarios." The question and response is provided below.

OEIS Question:

- a. Initiative 7.3.1.2 "Climate-driven risk map and modelling based on various relevant weather scenarios" (2022 SDG&E WMP Update p. 200) doesn't include the details on initiative (parts 1-5). Please provide these details as follows:
 - 1. Risk to be mitigated / problem to be addressed
 - 2. Initiative selection ("why" engage in initiative)
 - 3. Region prioritization ("where" to engage initiative)
 - 4. Progress on initiative since the last WMP submission and plans, targets, and/or goals for the current year
 - 5. Future improvements to initiative—include known future plans (beyond the current year) and new/novel strategies the utility may implement in the next five years (e.g., references to and strategies from pilot projects and research detailed in Section 4.4)
- b. Please point to the document page number where SDG&E's 2022 WMP Update describes how the utility incorporates the climate trends seen in the climate-driven risk map into risk models or other risk-informed analyses that inform mitigation selection/prioritization and decision-making processes.

SDG&E Response:

- a. Initiative 7.3.1.2
 - 1. Risk to be mitigated / problem to be addressed: The risk to be mitigated is that climate change is contributing to environmental factors that are increasing wildfire risk across the SDG&E Service Territory. This increased wildfire risk is documented in California's Fourth Climate Assessment.
 - 2. Initiative selection ("why" engage in initiative): It is important to engage in the integration of climate effects into risk mapping because climate science is indicating that the baseline wildfire risk in increasing over time, which is important to long-term planning and decision making.

- **3.** Region prioritization ("where" to engage initiative): When assessing wildfire risk, the regions prioritized are primarily the High Fire Threat District, though analysis is conducted across the entire region to better understand the potential impacts across coastal canyons and the wildland urban interface.
- **4.** Progress on initiative since the last WMP submission and plans, targets, and/or goals for the current year: Since the last WMP submission, SDG&E's climate adaptation team analyzed the latest available climate science to determine the most applicable analysis to inform the internal wildfire risk modeling. Based on this analysis, SDG&E determined the following research was most applicable due to the focus on the increased occurrence of fire weather conditions during the fall months, which represent the highest risk events across San Diego County and Orange County. "Climate change is increasing the likelihood of extreme autumn wildfire

"Climate change is increasing the likelihood of extreme autumn wildfire conditions across California" by Michael Goss et al 2020.

Below is a link to the full scientific paper.

https://iopscience.iop.org/article/10.1088/1748-9326/ab83a7

- 5. Future improvements to initiative—include known future plans (beyond the current year) and new/novel strategies the utility may implement in the next five years (e.g., references to and strategies from pilot projects and research detailed in Section 4.4): Regarding future improvements, SDG&E will continue to engage with the scientific community in the development and enhancement of climate science and the impacts on wildfire risk. Specifically, SDG&E remains engaged with the climate analysis being conducted by research teams funded by the California Energy Commission to develop the next California Climate Assessment.
- b. As described in the response above, SDG&E incorporates climate trends directly into the WiNGS Planning risk model via probability of ignition and the consequence of a potential wildfire, which is further described in section 4.2 and sections 4.5.1.7. It should be noted that the WiNGS Ops model is intended to look at current and short-term forecasted weather conditions, and not long-term climate trends.

<u>Section 8.1:</u> In response to OEIS-SDGE-DR-001, SDG&E provided additional information regarding Section 8.1 "Directional Vision for Necessity of PSPS. The question and response is provided below.

OEIS Question: In Section 8.1 "Directional Vision for Necessity of PSPS," the 2022 Wildfire Mitigation Plan Update Guidelines Template directs utilities to "[d]escribe any lessons learned from PSPS since the last WMP submission and describe expectations for how the utility's PSPS program will evolve over the coming 1, 3, and 10 years" (p. 79). While SDG&E describes recent progress in its 2022 WMP Update with a significant focus on the past year, it doesn't describe its expectations for the future. There is some relevant information in Table 8.1-1 "Anticipated Characteristics of PSPS Use Over Next 10 Years" (p. 353), however, Energy Safety is seeking to understand the broad, organization-wide vision for the future. Where can this information be found in the WMP Update?

a. If this information can't be found in the WMP Update, please provide it.

SDG&E Response: To further elaborate on the efforts and vision described in the 2022 WMP Update including Section 8 and Attachment A – Long Term Vision, SDG&E is continuously exploring ways to improve its PSPS programs across the enterprise – from meteorology to customer programs to grid hardening. SDG&E has outlined several initiatives in the 2022 WMP Update designed to reduce the number customers impacted by PSPS and mitigate the impacts of PSPS for those who may continue to experience them. SDG&E uses PSPS as a last-resort tool to reduce wildfire risk in extreme circumstances. But it may be impossible to eliminate the use of PSPS as a result of ongoing changes to the climate and the cost-efficiencies of hardening efforts such as undergrounding, as discussed in SDG&E's 2022 WMP Update.

In an effort to maintain the safety of our customers while mitigating future wildfire risk, some examples of our evolution over the next ten years based on our current trajectory are:

- Strategic undergrounding average of 90 miles per year, 13 customers per mile will reduce customer impacts by approximately 1,170 customers per year and 11,170 customers over the next ten years.
- PSPS Sectionalizing average of 10 devices installed per year, 371 customers per device will reduce customer impacts by approximately 3,710 per year. SDG&E will continue to investigate the locations with the largest impact to deploy these sectionalizing devices as more PSPS data is gathered over the next ten years.
- Customer Generation Programs continuing to offer programs to our customers for backup generation or battery storage will reduce PSPS impacts to approximately 2,000 customers per year. Knowing that the rate of participation in these programs will reduce over time, we can anticipate a maximum of 20,000 customers seeing reduced PSPS impacts over ten years.

Having one of the leading Meteorology teams in the nation has put SDG&E at the forefront of predictive weather and fire risk modeling. In addition to all of the technological advances the Meteorology team has made and continues to make, SDG&E has been rebuilding existing weather stations to provide 30-second reads on wind speed data and adding particulate sensors to provide additional information around air quality. This will allow SDG&E to more strategically pinpoint fire weather impacts and execute PSPS events with increased precision.

SDG&E continues to focus on the safety and comfort of our customers. In order to limit the impacts of PSPS events to our customers, we have participated in customer generation programs that provide portable or fixed generators and backup batteries to our most vulnerable customers. In recent years, SDG&E has increased customer engagement and communications surrounding PSPS events. Looking forward, SDG&E will continue to engage the community and make enhancements to the PSPS notification process based on community feedback.

<u>Section 8.3:</u> In response to OEIS-SDGE-DR-002, SDG&E provided additional information regarding Section 8.3 "Projected changes to PSPS impact". The question and response is provided below.

OEIS Question: Section 8.3 "Projected changes to PSPS impact" (2022 SDG&E WMP Update p. 364) doesn't directly answer the question posed in the Guidelines Template (ps. 81-82). Indicate where in the WMP Update (section and page number) this description is provided, or provide these details as follows:

Describe utility-wide plan to reduce scale, scope and frequency of PSPS for each of the following time periods, highlighting changes since the prior WMP report and including key program targets used to track progress over time:

- 1. By June 1 of current year
- 2. By September 1 of current year
- 3. By next WMP submission

See ps. 81-82 of the 2022 Wildfire Mitigation Plan Update Guidelines Template for more information.

SDG&E Response: SDG&E plans to reduce the scope, scale and frequency of PSPS events in 2022 through customer resiliency and microgrid programs, the PSPS sectionalizing enhancement program, and strategic undergrounding (see section 7.3.3.8 Grid topology improvements to mitigate or reduce PSPS events, section 7.3.3.11 Mitigation of impact on customers and other residents affected during PSPS events, and section 7.3.3.16 Undergrounding of electric lines and/or equipment). Though SDG&E does not anticipate having any PSPS events by June 1, 2022, it is projected that 4,526 customers could be saved should the need for a PSPS event occur. By September 1, 2022, it is projected that 9,149 customers could be saved from PSPS impacts. And by year-end 2022, it is projected that 11,695 customers could be saved from PSPS impacts. See Table 8-4: Projected PSPS Reduced Impacts (p. 365) for projected program goals and comparison to prior year-end results.

Section 7.3.5.9: This section is updated to read as follows:

See Section 7.3.5.2 Detailed inspections and management practices for vegetation clearances around distribution electrical lines and equipment.

Other discretionary inspections, otherwise referred to as "enhanced inspections" or "tree trimming", are comprised of detailed inspections, both routine and off-cycle and may result in the need to achieve an enhanced post-trim clearances of greater than 12' in the HFTD. Trees identified as "at-risk species" may also warrant enhanced inspection to achieve clearances of up to 25' but only as a factor, not as a designator. See Section 7.3.5.15. Identification and remediation of "at-risk-species."

Corrections to Typographical Errors

1. SDG&E has discovered an error in the formula used to calculate the expected outages for the 17.5' and 25' line clearance rows in Table 4-15. The expected outages are corrected from the initial filing and are provided in the table below.

Adjust min line clearance	% of Records Changed	Predicted Outages by Model	Assumed true positive outage ratio	Expected Outage (T)	Non-Risk Trees Identified by Model	Assume False Negative Outage Rate	Expected Outage (F)	Total Outages	Difference
adjust									
<17.5 to									
17.5	92%	235,561	1.92E-04	45	1,276,097	1.11E-05	14	59	(19)
adjust									
<25 to 25	98%	153,119	1.92E-04	29	1,358,539	1.11E-05	15	44	(34)

- 2. SDG&E has discovered a typographical error in Section 4.5.1.3. On page 108, under section 9 "Timeline for model development" SDG&E lists "Additional conditional impact factors were incorporated..." and lists FPI instead of FBI. The correct factor is FBI (Fire Behavior Index) and not FPI (Fire Potential Index).
- 3. SDG&E has discovered a typographical error in Section 7.3.3.3. On page 214, Table 7-6 utilizes the term "Ignition Rate." This should read "Average Ignition Rate," as these are the average five-year historical ignition rates.
- 4. SDG&E has discovered a typographical error in Section 7.3.5.15. On page 298, the title of Table 7-31 should read "Risk Reduction Estimation for Enhanced Vegetation Management."

Corrections to Attachment B Tables 1-12

Revised Tables 1, 7.1, and 12 are attached. Revisions to the original filing of the 2022 WMP Update are entered in red text and summarized in Table 1 above.

Utility SDGE Notes:
Table No.
1 Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines at or above 65kV, and distribution lines refer to all lines at or above 65kV.

Date Modified	3/15/202	I fransmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 4	bbKV.															
Table 1: Recent performance or	n progress m	etrics						Q1	Q2	Q3	Q4	Q1	Q2	umns are piai Q3	holders for future QR submiss Q4 Q1 Q2	ions. Q3 (Q4	
Metric type . Grid condition findings from	#	Progress metric name Number of circuit miles inspected from patrol inspections in HFTD - Distribution lines	2015	2016	2017 3448.9	2018 3448.9	2019 3448.9	2020 1297.5	2020	2020	2020	2021	2021		2021 2022 202		2022 Unit(s) # circuit n	Comments
spection - Distribution lines in	1.0.	Number of circuit miles inspected from patrol inspections in H-1D - Distribution lines	3448.9	3448.9	3448.9	3448.9	3448.9	1297.5	1247.5	800.8	102.5	1245.0	0 12/2	2.1 920.1	34.2		# circuit n	ins
FTD	1.b.	Number of circuit miles inspected from detailed inspections in HFTD - Distribution lines	15246	1475.6	1227 4	1450 4	942.1	957.6	799 1	90.7	10.0	873.7	204	0 129.2	61.2		# circuit m	illes 1. In earlier submissions, the HFTD Tier 3 inspections was placed in the "other" category; these inspections are now
			39.8	78.5		712.4						228.4			997.8			grouped in the "Detailed" inspections, 2. The gaps in the "other" category with regards to HFTD miles is primarily driven by
	1.c.	Number of circuit miles inspected from other inspections (list types of "other" inspections in comments) in HFTD - Distribution lines	39.8	78.5	256.9	712.4	733.9	832.7	1056.8	707.0	247.9	228.4	186.	9 508.9	997.8		# circuit n	Sum of all other distribution inspections in HFTD- intrusive poles, infrared and drone inspections.
	1.d.	Level 1 findings in HFTD for patrol inspections - Distribution lines	15.0	3.0	4.0	8.0	8.0	1.0	4.0	1.0	0.0	1.0	0.0		0.0		# findings	
	1.e. 1.f.	Level 1 findings in HFTD for detailed inspections - Distribution lines Level 1 findings in HFTD for other inspections (list types of "other" inspections in comments) -	235.0	192.0 3.0	11.0 25.0	67.0 5.0	8.0 36.0	9.0	9.0 32.0	2.0 11.0	1.0	3.0	3.0 8.0	1.0	72.0		# findings	Sum of all level 1 findings for intrusive poles, infrared and drone inspections in HFTD.
		Distribution lines																
	1.g. 1.h.	Level 2 findings in HFTD for patrol inspections - Distribution lines Level 2 findings in HFTD for detailed inspections - Distribution lines	175.0 1066.0	212.0 952.0	234.0 638.0	171.0 737.0	240.0 666.0	71.0 919.0	66.0 303.0	51.0 81.0	16.0 6.0	22.0 284.0			85.0 392.0		# findings	
	1.i.	Level 2 findings in HFTD for other inspections (list types of "other" inspections in comments) -	35.0	52.0	327.0	261.0	1350.0	4356.0			228.0	44.0	41.0		6128.0		# findings	Sum of all level 2 findings for intrusive poles, infrared and drone inspections in HFTD.
	1.j.	Distribution lines Level 3 findings in HFTD for patrol inspections - Distribution lines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		# findings	All inspections are followed up based on level 2 requirement, level 3 does not apply to distribution inspection
	1.k.	Level 3 findings in HFTD for detailed inspections - Distribution lines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		# findings	HE EMPECTOR'S SHE TOTOWED BY DESIGN OF TEVER 2. TEXAS ELEMENT, TEVER 3 DOES NOT SUPPLY TO DESTRUCE OF TRADECTOR
	1.1.	Level 3 findings in HFTD for other inspections (list types of "other" inspections in comments) - Distribution lines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		# findings	
Grid condition findings from	1.a.ii.	Number of total circuit miles inspected from patrol inspections - Distribution lines	6445.4	6445.4	6445.4	6445.4	6445.4	2242.0	2188.4	1564.4	450.6	2186.5	5 2266	5.3 1809.	208.5		# circuit n	iles
pection - Distribution lines al																		
	1.b.ii.	Number of total circuit miles inspected from detailed inspections - Distribution lines	2129.1	1877.5	1898.3	2159.7	1637.3	992.9	492.8	261.8	105.7	993.1	423.	5 288.5	110.3		# circuit n	
	1.c.ii.	Number of total circuit miles inspected from other inspections (list types of "other" inspections in comments) - Distribution lines	440.8	550.2	578.2	820.5	849.3	934.4	1133.9	738.5	282.8	242.4	260.	4 581.9	1107.5		# circuit n	Sum of infrared and drone inspections in HFTD and intrusitive pole inspection in all territory.
	1.d.ii.	Level 1 findings for patrol inspections - Distribution lines	49.0	19.0	26.0	24.0	21.0	9.0 22.0	16.0	2.0	3.0	5.0	2.0	3.0	1.0		# findings	
	1.e.ii.	Level 1 findings for detailed inspections - Distribution lines Level 1 findings for other inspections (list types of "other" inspections in comments) - Distribution	261.0 59.0	218.0 39.0	57.0 52.0	101.0	28.0 37.0	22.0 67.0	18.0 33.0	9.0 11.0	2.0	11.0	9.0		1.0 72.0		# findings	Sum of infrared and drone inspections in HFTD and intrusitive pole inspection in all territory.
		lines																
	1.g.ii. 1.h.ii.	Level 2 findings for patrol inspections - Distribution lines Level 2 findings for detailed inspections - Distribution lines	704.0 2553.0	1130.0 2314.0	1005.0 1966.0	969.0 1746.0	933.0 1760.0	387.0 1271.0	345.0 670.0	213.0 349.0	129.0 77.0	10.0 528.0	1370	107.0 0.0 1286	1114.0		# findings # findings	
	1.1.1.	Level 2 findings for other inspections (list types of "other" inspections in comments) - Distribution			1127.0		1433.0						107.	0 19.0	24.0		# findings	Sum of infrared and drone inspections in HFTD and intrusitive pole inspection in all territory.
	1.01.	lines Level 3 findings for patrol inspections - Distribution lines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		# findings	All inspections are followed up based on level 2 requirement, level 3 does not apply to distribution inspection
	1.k.ii.	Level 3 findings for detailed inspections - Distribution lines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		# findings	
	1.U.	Level 3 findings for other inspections (list types of "other" inspections in comments) - Distribution lines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		# findings	
Grid condition findings from	1.a.iii.	Number of circuit miles inspected from patrol inspections in HFTD - Transmission lines	940.9	971.4	972.0	987.0	1000.0	716.6	183.6	101.0	0.0	510.4	370.	3 101.0	0.0		# circuit n	
ection - Transmission lines																		metrics (patrol and details). Historical values are updated based on the automated output in Feb 2022. Due to the new requirement of HFTD breakdown, SDG&E continues to validate the output and improve the data process accordingly.
HFTD	1.b.iii.	Number of circuit miles inspected from detailed inspections in HFTD - Transmission lines	349.9	278.6	343.5	328.9	298.9	46.8	112.8	79.5	133.1	90.5	69.5	133.9	30.5		# circuit n	
	1.c.iii.	Number of circuit miles inspected from other inspections (list types of "other" inspections in	981.0	956.0	955.0	984.0	985.7	16.7	0.0	478.3	649.1	26.2	4.0	898.4	136.7			illes Sum of all other transmission inspections-infrared and drone inspections in HFTD. SDG&E drone inspection program only
	1.d.iii.	comments in HETD - Transmission lines Level 1 findings in HETD for patrol inspections - Transmission lines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		# findings	increets the structures and the conductors: in order to calculate the circuit miles. GIS coan length associated with the
	1.e.iii.	Level 1 findings in HFTD for detailed inspections - Transmission lines	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		# findings	
	1.f.iii.	Level 1 findings in HFTD for other inspections (list types of "other" inspections in comments) - Transmission lines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0		# findings	Sum of all other transmission inspections-infrared and drone inspections in HFTD.
	1.g.iii.	Level 2 findings in HFTD for patrol inspections - Transmission lines	19.0	18.0	7.0	10.0	4.0	0.0	3.0	0.0	0.0	1.0	1.0	0.0	0.0		# findings	
	1.h.iii.	Level 2 findings in HFTD for detailed inspections - Transmission lines	323.0	100.0	161.0	385.0	365.0	0.0 170.0	126.0	49.0	44.0 16.0	80.0 2.0	62.0		40.0 18.0		# findings	
	1.1.111.	Level 2 findings in HFTD for other inspections (list types of "other" inspections in comments) - Transmission lines	5.0	1.0	35.0	0.0	1.0	0.0	0.0	0.0			3.0	27.0			# findings	Sum of all other transmission inspections-infrared and drone inspections in HFTD.
	1,56.	Level 3 findings in HFTD for patrol inspections - Transmission lines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		# findings	
	1.k.iii. 1.l.iii.	Level 3 findings in HFTD for detailed inspections - Transmission lines Level 3 findings in HFTD for other inspections (list types of "other" inspections in comments) -	26.0	36.0	41.0 0.0	31.0	27.0	0.0	8.0	0.0	3.0 0.0	0.0	8.0	2.0	0.0		# findings	
		Distribution lines																
Grid condition findings from pection - Transmission lines	1.a.iv.	Number of total circuit miles inspected from patrol inspections - Transmission lines	1810.4	1868.4	1876.8	1898.0	1914.0	1228.6	564.3	133.9	0.0	979.0	794.	4 133.9	0.0		# circuit n	illes SDG&E has implemeted centrolized data repository and automated solution for computing transmission asset-inspection metrics (patrol and details). Historical values are updated based on the automted output in Feb 2022. Due to the new
	1.b.iv.	Number of total circuit miles inspected from detailed inspections - Transmission lines	658.5	593.3	654.4	605.9	586.4	150.3	230.0	156.0	177.6	213.0	140.	2 200.2	66.5		# circuit n	
	1.c.iv.	Number of total circuit miles inspected from other inspections (list types of "other" inspections in	18505	1828.4	1020.2	1861.5	1074.6	16.7	30.0	1032.5	956.2	2 26.2	35.0	2545	250.1		Market de la	illes Sum of all other transmission inspections-infrared (all territory) and drone inspections in HFTD.
	2.0.14.	comments) - Transmission lines	1000.5	1010.4	10131	1001.3	1074.0	10.7	30.0	1032.3	, ,,,,,	. 20.2	33.0	1043.	230.2		w circuit ii	and July of the Guide Containing and Imprecious annual (an entropy) and drone imprecious in the Co.
	1.d.iv.	Level 1 findings for patrol inspections - Transmission lines	1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		# findings	
	1.e.iv.	Level 1 findings for detailed inspections - Transmission lines Level 1 findings for other inspections (list types of "other" inspections in comments) - Transmission	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0		# findings	
		lines					0.0	0.0		0.0		0.0	0.0		0.0			
	1.g.iv. 1.h.iv.	Level 2 findings for patrol inspections - Transmission lines Level 2 findings for detailed inspections - Transmission lines	70.0 1060.0	42.0 353.0	11.0 470.0	11.0 934.0	8.0 799.0	1.0 398.0	4.0 254.0	0.0 117.0	0.0 89.0	1.0	2.0	0.0	0.0 180.0		# findings	
	1.i.iv.	Level 2 findings for other inspections (list types of "other" inspections in comments) - Transmission		4.0	37.0	1.0	2.0	0.0	0.0	1.0	16.0	2.0	4.0		18.0		# findings	
	1.i.lv.	lines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		# findings	
	1,i.v. 1.k.iv.	Level 3 findings for patrol inspections - Transmission lines Level 3 findings for detailed inspections - Transmission lines	60.0	69.0	66.0	66.0	55.0	10.0	9.0	1.0	19.0	4.0	30.0		4.0		# findings	
	1.l.iv.	Level 3 findings for other inspections (list types of "other" inspections in comments) - Transmission	n 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		# findings	
egetation clearance findings	s 2.a.i	Number of spans insepcted where at least some vegetation was found in non-compliant condition	- 2559.0	2815.0	3085.0	3404.0	3044.0	548.0	605.0	995.0	1317	.0 558.0	699.	.0 852.0	940.0		# of spans	
m inspection - total		total															inspected	with
	2.a.ii	Number of spans insepcted for vegetation compliance - total										2.0 43501.					# of spans	
egetation clearance findings	s 2.b.i	Number of spans insepcted where at least some vegetation was found in non-compliant condition	999.0	1092.0	1407.0	1624.0	1250.0	297.0	359.0	428.0	383.0	312.0	446.	0 280.0	219.0		# of spans	
n inspection - in HFTD		In HFTD															inspected	
ommunity outreach metrics	2.b.ii	Number of spans insepted for vegetation compliance in HFTD # Customers in an evacuation zone for utility-ignited wildfire	76949.0 NA	76856.0 NA	76541.0 NΔ	76324.0 NA	76698.0 NA	19190.0 NA	19128 NA	.0 19059. NΔ	.0 19104 NA	4.0 19175. NA	i.0 1904 NA	41.0 19207 NΔ	19268.0 NA		# of spans	
																	curtomer	The state of the s
	3.b. 3.c.	# Customers notified of evacuation orders % of customers notified of evacuation in evacuation zone of a utility-ignited wildfire	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		# custome Percentag	
rid condition findings from		% or customers notined or evacuation in evacuation zone or a utility-ignited wildnire Number of circuit miles inspected from other inspections (intrusive Pole) in HFTD - Distribution	39.8	78.5	NA 256.9	712.4	NA 619.6	NA 163.3				NA 2 175.0			NA 15.0		# circuit n	
r inspections - Distribution	T.W.	Number of circuit miles inspected from other inspections (intrusive Pole) in HFID - Distribution lines	33.0	, 0.3	2.0.9	1224	019.0	103.3	231.6	204.6	102.2	1/5.0	72.0	31.0	-3.0		# circuit n	
	4.b.	Number of circuit miles inspected from other inspections (infrared) in HFTD - Distribution lines	0.0	0.0	0.0	0.0	0.0	0.0	267.4	370.6	49.2	53.4	114.	9 166.2	428.8		# circuit n	iles
	4.c.	Number of circuit miles inspected from other inspections (Drone) in HFTD - Distribution lines	0.0	0.0	0.0	0.0	114.3	669.4	637.8		36.6		0.0		554.0		# circuit n	
	4.d.	Level 1 findings in HFTD for other inspections (Intrusive Pole) - Distribution lines	0.0	3.0	25.0	5.0	13.0	1.0	0.0	0.0	0.0	0.0	2.0		0.0		# findings	
	4.e. 4.f.	Level 1 findings in HFTD for other inspections (Infrared) - Distribution lines Level 1 findings in HFTD for other inspections (Drone) - Distribution lines	0.0	0.0	0.0	0.0	0.0 23.0	0.0 62.0	0.0 32.0	11.0	1.0	0.0	0.0 6.0		72.0		# findings	
	4.g. 4.h.	Level 2 findings in HFTD for other inspections (Intrusive Pole) - Distribution line Level 2 findings in HFTD for other inspections (Infrared) - Distribution lines	35.0	52.0	327.0	261.0	228.0	18.0	26.0 1.0	26.0	54.0	44.0	32.0 9.0		13.0		# findings	
	4.h. 4.i	Level 2 findings in HFTD for other inspections (Drone) - Distribution lines	0.0	0.0	0.0	0.0	1122.0	4338.0		880.0	174.0	0.0	0.0	2074.	0.0 6115.0		# findings	
	4.j.	Level 3 findings in HFTD for other inspections (Intrusive Pole) - Distribution line	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		# findings	
	4.k. 4.l.	Level 3 findings in HFTD for other inspections (Infrared) - Distribution lines Level 3 findings in HFTD for other inspections (Drone) - Distribution lines	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		# findings	
irid condition findings from	4.m	Number of circuit miles inspected from other inspections (Infrared) in HFTD - Transmission lines	981.0	956.0	955.0	984.0	985.7	0.0	0.0	478.3	488.0		0.0	882.7	85.7		# circuit n	iles
	4.n	Number of circuit miles inspected from other inspections (Drone) in HFTD - Transmission lines	N/A	N/A	N/A	N/A	N/A	16.7	0.0	0.0	161.2	26.2	4.0	15.7	51.0		# circuit n	dec
er inspections -	****	Number of circuit miles inspected from other inspections (brone) in HFID - Transmission lines Level 1 findings in HFTD for other inspections (Infrared) - Transmission lines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		# findings	
	4.0	Level 1 findings in HFTD for other inspections (Drone) - Transmission lines	N/A	N/A	N/A	N/A	N/A	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0		# findings	
	4.p																	
		Level 2 findings in HFTD for other inspections (Infrared) - Transmission lines	5.0	1.0 N/A	35.0 N/A	0.0 N/A	1.0 N/A	0.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0		# findings	
	4.p			1.0 N/A 0.0	35.0 N/A 0.0	0.0 N/A 0.0	1.0 N/A 0.0	0.0 0.0 0.0	0.0	0.0	0.0 16.0 0.0	0.0 2.0 0.0	0.0 3.0 0.0	0.0 27.0 0.0	0.0 18.0 0.0		# findings # findings # findings	

I MILITANI		T																									
Utility Table No.	SDG&E 7.1		: mission lines refer to all lines at or	above 651	kV. and dist	ribution lines	s refer to all I	ines below	65kV.																		
Date Modified	2022 02 09		nission lines refer to all lines at or rom 2015 - 2021 Q4 should be act		ers. 2022 Q	1 - 2024 sho	uld be projec			ns update pr	ojected nun	nbers with a	ctuals														
Table 7.1: Vou ross	and projected drivers of risk even	nte			Number	of risk event	ts			01	02	Q3	04	Q1	02	03	04	Projected r Q1		03	04	01	02	Q3	04		
Risk Event category			Sub-cause category	Are risk	e 2015	2016	2017	2018	2019	2020	2020	2020	2020	2021	2021	2021	2021						2023	2023		Unit(s)	Comments
	1. Contact from object -		Veg. contact- Distribution	Yes	10	22	31	13	12	3	4	2	4	4	2	3	2				3.869745	3.68949				# risk event	
Wire down event - Distr	ri Distribution	1.b.	Animal contact- Distribution	Yes	0	8	2	2	0	1	1	1	0	0	2	0	2	0.504376	0.54/376	0.54/376	0.54/376	0.538752	0.538753	0.538753	0.538752	# risk event	
		1.c.	Balloon contact- Distribution	Yes	1	5	8	3	5	1	2	1	1	0	3	0	0	1.195143	1.195143	1.195143	1.195143	1.190287	1.190287	1.190287	1.190287	# risk event	s
		1.d. 1.e.	Vehicle contact- Distribution Other contact from object - Dist	Yes	6	13 15	17 18	23	28 13	11	6	7	9	6	5	3	8	6.132285	6.132285	6.132285	6.132285	6.114569	6.114569	6.114569	6.114569	# risk event # risk event	s
	2. Equipment / facility failure -		Other contact from object - Dist	Yes	7	2	0	7	6	4	2	2	3	6	4	3	2	1.920313	1.920313	1.920313	1.920313	1.890626	1.890626	1.890626	1.890626	# risk event	s
	Distribution		Connector damage or failure- D																		_	_					
			Splice damage or failure — Distr Crossarm damage or failure -	ril No Yes	0	0	0	1	3	0	0	1	0	0	0	0	0					0 295703	0 295703	0 295703		# risk event # risk event	
			Distribution																								
		2.d.	Insulator damage or failure- Distribution	Yes	0	0	0	0	0	1	0	0	0	0	0	0	0	0.049543	0.049543	0.049543	0.049543	0.047878	0.047878	0.047878	0.047878	# risk event	s
		2.e.	Lightning arrestor damage or	Yes	0	1	0	0	1	0	0	0	0	0	0	0	0	0.049494	0.049494	0.049494	0.049494	0.048989	0.048989	0.048989	0.048989	# risk event	s
		2.f.	failure- Distribution Tap damage or failure -	No	0		0	0	0						^	^	^	^	0	0	0	0	0	0	0	# risk event	
		Z.T.	Distribution	No	U	1	0	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0	# risk event	S
		2.g.	Tie wire damage or failure -	No	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
		2.h.	Distribution Other - Distribution	Yes	27	71	60	35	40	4	4	3	7	8	4	2	19	9 227681	9 227681	9 227681	9 227681	9.020624	9 020624	9.020624	9.020624	# risk event	
		3.a.	Wire-to-wire contact / contamir	na Yes	0	0	0	0	1	0	0	0	0	0	0	0	0	0.049219	0.049219	0.049219	0.049219	0.048438	0.048438	0.048438	0.048438	# risk event	s
	Distribution 4. Contamination - Distribution	4.5	Contamination Distribution	Yes	0	0	0	2	2	1	0	1	2	0	0	0	0	0.200142	0.200142	0.200142	0.200142	0.200206	0 200206	0 200206	0.200206	# risk event	
					U	U		-	-				-	U	0	0											
			Utility work / Operation	Yes	1	1	1	2	1	0	0	0	0	0	1	0	0									# risk event	
	Vandalism / Theft - Distribution	6.a.	Vandalism / Theft - Distribution	Yes	0	0	0	1	1	0	0	2	0	2	0	1	1	0.399818	U.399818	0.399818	U.399818	0.399636	0.399636	0.399636	0.399636	# risk event	S
	7. Other- Distribution		All Other- Distribution	No	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	
Wire down event -		8.a. 9.a.	Unknown - Distribution Veg. contact- Transmission	Yes	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event # risk event	
Transmission	9. Contact from object - Transmission		-		U	U		0		U		0	U	U	0	0		Ü	,	,	~	,	J		Ü		
			Animal contact- Transmission Balloon contact- Transmission	Yes Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event # risk event	
			Vehicle contact- Transmission		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event # risk event	
		9.e.		ns Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
	 Equipment / facility failure - Transmission 	- 10.a.	_ Connector damage or failure- Tr	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
		10.b.	Splice damage or failure — Tran	s No	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	
		10.c.	Crossarm damage or failure - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
		10.d.	Insulator damage or failure-	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	
			Transmission																								
		10.e.	Lightning arrestor damage or failure- Transmission	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
		10.f.	Tap damage or failure -	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
		10.g.	Transmission Tie wire damage or failure -	No	0	0	0	0	0						^	^	^	^	^	^	^	0	0	0	0	# risk event	
			Transmission	INO	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	# risk event	5
		10.h.	Other - Transmission	Yes	0	0	1	0	0	1	0	0	0	0	0	0	0	0.0995	0.0995	0.0995	0.0995	0.099	0.099	0.099	0.099	# risk event	
	 Wire-to-wire contact - Transmission 	11.a.	Wire-to-wire contact / contamir	na Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	S
	12. Contamination -	12.a.	Contamination - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
	Transmission 13. Utility work / Operation	12 2	Utility work / Operation	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	
			Vandalism / Theft - Transmission		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	
	Transmission 15. Other- Transmission	15.	All Other-Transmission	Yes	0	0	0	0	0						^	^	^	^	^	0	^	0	0	0	0	# risk event	
			Unknown - Transmission	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	
Outage - Distribution	17. Contact from object -		Veg. contact- Distribution	Yes	27	61	70	34	27	11	7	5	8	17	4	8	12	9.69825	9.69825	9.69825	9.69825	9.2465	9.2465	9.2465	9.2465	# risk event	
	Distribution	17 h	Animal contact- Distribution	Yes	70	80	77	74	89	16	31	32	16	12	33	24	17	20.83475	20.83475	20.83475	20.83475	20 6195	20 6195	20 6195	20 6195	# risk event	
		17.c.	Balloon contact- Distribution	Yes	70	84	120	112	93	19	40	27	25	33	53	33	17	28.48425	28.48425	28.48425	28.48425	28.3685	28.3685	28.3685	28.3685	# risk event	s
		17.d.	Vehicle contact- Distribution Other contact from object - Dist	Yes ri Yes	94 34	96 58	93 40	99 39	100 59	30	25	25	27	28	37	25	30	25.87525 9.011	25.87525	25.87525 9.011	25.87525	25.8005	25.8005	25.8005 8.972		# risk event # risk event	
	18. Equipment / facility failure -	- 18.a.		Yes	13	5	3	11	12	4	2	3	2	7	3	4	1	2.57625	2.57625	2.57625	2.57625	2.5525	2.5525	2.5525	2.5525	# risk event # risk event	
	Distribution		Capacitor bank damage or failur	re																							
		18.b.	Conductor damage or failure — Fuse damage or failure -	E Yes Yes	35 67	87 109	71 57	49 55	56 66	7	6 22	6 30	13 20	30 11	7	3 19	20 25	13.3345 15.904	13.3345	13.3345 15.904	13.3345	13.219 15.708	13.219 15.708	13.219 15.708	13.219 15.708	# risk event # risk event	ss
			Distribution																								
		18.d.	Lightning arrestor damage or failure- Distribution	Yes	22	28	26	20	28	2	4	6	11	11	5	10	12	6.68175	6.68175	6.68175	6.68175	6.6135	6.6135	6.6135	6.6135	# risk event	s
		18.e.	Switch damage or failure-	Yes	8	15	10	19	15	5	4	3	5	5	2	1	4	3.613	3.613	3.613	3.613	3.576	3.576	3.576	3.576	# risk event	s
			Distribution																								
			Pole damage or failure - Distribution	Yes	20	32	62	23	67	9	9	5	8	17	7	12	10	11.34875	11.34875	11.34875	11.34875	10.97875	10.97875	10.97875	10.97875	# risk event	s
			Insulator and brushing damage	Yes	2	7	7	9	10	2	2	0	0	1	4	5	1	2.03125	2.03125	2.03125	2.03125	1.963	1.963	1.963	1.963	# risk event	s
			or failure - Distribution																								
		18.h.	Crossarm damage or failure -	Yes	4	14	20	30	33	10	3	5	11	9	12	8	14	7.6945	7.6945	7.6945	7.6945	7.639	7.639	7.639	7.639	# risk event	s
			Distribution																								
		18.i.	Voltage regulator / booster damage or failure - Distribution	Yes	0	0	1	1	0	0	0	0	1	1	2	0	0	0.299	0.299	0.299	0.299	0.298	0.298	0.298	0.298	# risk event	s
		18.j.	Recloser damage or failure - Distribution	Yes	4	0	0	1	2	0	0	5	0	0	0	1	0	0.448	0.448	0.448	0.448	0.446	0.446	0.446	0.446	# risk event	
		18.k.	Anchor / guy damage or failure	- Yes	2	3	1	2	1	0	0	1	0	1	0	0	1	0.345	0.345	0.345	0.345	0.34	0.34	0.34	0.34	# risk event	s
			Distribution																								
		18.I.	Sectionalizer damage or failure Distribution	- No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk event	s
		18.m.	Connection device damage or	Yes	54	57	40	50	64	24	9	17	15	24	17	15	15	14.27925	14.27925	14.27925	14.27925	14.0585	14.0585	14.0585	14.0585	# risk event	s
		18.n.	failure - Distribution Transformer damage or failure -	V	72	52	20	C2	46	14	11	23	-	15	2	28	27	12.002	12.002	12.002	12.002	12.454	12.454	12.454	12.454	# risk event	
			Distribution	res	72	52	36	03	40	14	11	23	,	15	3	20	21										
		18.0.	Other - Distribution	Yes	2	12	13	19	25	4	0	0	0	1	0	44	29	6.712	6.712	6.712	6.712	6.674	6.674	6.674	6.674	# risk event	s Includes weather caused equipment failure

Utility Table No. Date Modified

SDG&E Notes:
7.1 Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV.
First Novo 7015 - 7071 O4 should be actual numbers. 2022 Q1 - 2024 should be projected. In future submissions update projected numbers with actuals

Date Modified	2022 02 09	Data fi	from 2015 - 2021 Q4 should be act	tual numb	bers. 2022 C	Q1 - 2024 sh	ould be proje	ected. In futi	ure submissio	ns update p	rojected nu	mbers with a	actuals														
					Number	r of risk ever	nts											Projected	risk events								
Table 7.1: Key recent	and projected drivers of risk eve																										
Risk Event category	Cause category	#	Sub-cause category	Are ris	sk e 2015	2016	2017	2018	2019	2020	2020	2020	2020	2021	2021	2021	2021	2022	2022	2022	2022	2023	2023	2023	2023	Unit(s) C	Comments
mak Event tategory	19. Wire-to-wire contact -		Wire-to-wire contact / contami		3	6	8	2	4	1	0	0	1	0	0	0	0	0.7875	0.7875	0.7875	0.7875	0.775	0.775	0.775	0.775	# risk events	omments.
	Distribution		,																								
	20. Contamination -	20 a	Contamination - Distribution	Yes	1	0	0	0	2	0	0	0	0	2	0	2	1	0.34925	0.34925	0.34925	0.34925	0.3485	0.3485	0.3485	0.3485	# risk events	
	Distribution				-	-	-	-	-	-	-	-	-	-	-	-	-										
	21. Utility work / Operation	21.a.	Utility work / Operation	Yes	6	9	5	9	9	2	8	9	11	4	5	5	2	3.45	3.45	3.45	3.45	3.3	3.3	3.3	3.3	# risk events	
	22. Vandalism / Theft -		Vandalism / Theft - Distribution		2	4	1	3	2	1	4	1	0	2	5	1	2	1.0995	1.0995	1.0995	1.0995	1.099	1.099	1.099	1.099	# risk events	
	Distribution																										
	23. Other- Distribution	23.a.	All Other- Distribution	No	1	0	0	1	0	0	0	2	0	0	0	0	0	0.1495	0.1495	0.1495	0.1495	0.149	0.149	0.149	0.149	# risk events	
	24. Unknown- Distribution	24.a.	Unknown - Distribution	Yes	325	361	310	249	264	35	52	121	58	86	52	66	54	66.41525	66.4152	5 66.41525	66.4152	65.4805	65.4805	65.4805	65.4805	# risk events	
Outage - Transmission	25. Contact from object -	25.a.	Veg. contact- Transmission	Yes	1	1	0	1	0	0	0	0	0	0	0	0	0	0.04925	0.04925	0.04925	0.04925	0.0485	0.0485	0.0485	0.0485	# risk events	
	Transmission																										
		25.b.	Animal contact- Transmission	Yes	9	5	4	2	5	2	2	0	1	1	2	0	0	0.943	0.943	0.943	0.943	0.936	0.936	0.936	0.936	# risk events	
		25.c.	Balloon contact- Transmission	Yes	17	24	22	25	16	6	8	2	7	7	8	2	4	5.32	5.32	5.32	5.32	5.29	5.29	5.29	5.29	# risk events	
		25.d.	Vehicle contact- Transmission	Yes	1	2	0	3	1	1	0	0	0	0	3	0	2	0.5	0.5	0.5	0.5	0.125	0.125	0.125	0.125	# risk events	
		25.e.	Other contact from object - Tra	ns Yes	1	0	2	1	3	0	0	0	0	0	0	0	0	0.298	0.298	0.298	0.298	0.296	0.296	0.296	0.296	# risk events	
	26. Equipment / facility failure	- 26.a.		No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
	Transmission		Capacitor bank damage or failu	ire																							
		26.b.	Conductor damage or failure —	- T Yes	2	6	6	2	0	4	0	2	0	0	0	1	0	0.7455	0.7455	0.7455	0.7455	0.741	0.741	0.741	0.741	# risk events	
		26.c.	Fuse damage or failure -	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
			Transmission																								
		26.d.	Lightning arrestor damage or	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
			failure- Transmission																								
		26.e.	Switch damage or failure-	Yes	3	0	1	0	0	0	1	1	0	0	1	0	0	0.19875	0.19875	0.19875	0.19875	0.1975	0.1975	0.1975	0.1975	# risk events	
			Transmission																								
		26.f.	Pole damage or failure -	Yes	1	0	0	4	3	0	0	0	0	0	0	0	0	0.34775	0.34775	0.34775	0.34775	0.3455	0.3455	0.3455	0.3455	# risk events	
			Transmission																								
		26.g.	Insulator and brushing damage	Yes	29	13	6	3	8	0	0	0	0	0	0	11	11	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	# risk events	
			or failure - Transmission																								
		26.h.	Crossarm damage or failure -	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
			Transmission													_											
		26.i.	Voltage regulator / booster	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
			damage or failure - Transmissio	on																							
		001					_	_				_					_							_			
		2b.j.	Recloser damage or failure - Transmission	No	0	0	U	0	U	0	U	U	U	U	U	U	U	U	0	0	U	0	0	0	0	# risk events	
		20.1		V	0	0		0	0	0	0	0	0	0	0	^	^	0.04075	0.04075	0.04975	0.04075	0.0405	0.0495	0.0495	0.0495	Martel accepta	
		20.K.	Anchor / guy damage or failure Transmission	- res	U	U	1	U	U	U	U	U	U	U	U	U	U	0.04975	0.04975	0.04975	0.04975	0.0495	0.0495	0.0495	0.0495	# risk events	
		26 1	Sectionalizer damage or failure	No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
		20.1.	Transmission	- 140	U	U	U	U		U	U	U	U	U	0	U	U	0	0	U	U	U	U	v	U	# 113% GAGUEZ	
		26 m	Connection device damage or	Voc	0	0	0	1	1	0	0	0	0	n	0	0	0	0.0995	0.0995	0.0995	0.0995	0.099	0.099	0.099	0.099	# risk events	
		20.111.	failure - Transmission					-	-									0.0555	5.0555	0.0555	0.0555	0.055	0.055	0.055	0.055		
		26 n	Transformer damage or failure	- No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
		20.11.	Transmission	140	•	•		•			•	•			•		•	•	•				•	•	Ü	W Hak CVCHES	
		26 n	Other - Transmission	Yes	1	0	0	0	0	0	2	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	# risk events	
	27. Wire-to-wire contact -		Wire-to-wire contact / contami		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	# risk events	
	Transmission																										
	28. Contamination -	28.a.	Contamination - Transmission	Yes	3	8	0	3	1	0	1	0	0	0	0	1	0	0.29575	0.29575	0.29575	0.29575	0.2915	0.2915	0.2915	0.2915	# risk events	
	Transmission																										
	29. Utility work / Operation	29.a.	Utility work / Operation	Yes	0	0	2	0	0	1	0	0	1	1	0	0	0	0.25	0.25	0.25	0.25	0.0625	0.0625	0.0625	0.0625	# risk events	
	30. Vandalism / Theft -		Vandalism / Theft - Transmissio		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	# risk events	
	Transmission		,																								
	31. Other- Transmission	31.a.	All Other- Transmission	Yes	1	0	0	0	0	0	0	0	0	0	2	2	0	0.2	0.2	0.2	0.2	0.05	0.05	0.05	0.05	# risk events	
	32. Unknown- Transmission		Unknown - Transmission	Yes	10	10	8	10	4	1	3	1	1	1	1	2	2	1.686	1.686	1.686	1.686	1.672	1.672	1.672	1.672	# risk events	

Initative activity

A summarized risk map that shows the overall ignition probability and estimated wildfire consequence ent & 7.3.1.2 Climate-driven risk map and modelling based on various relevant weather scenarios & 7.3.1.5 Match drop simulations showing t potential wildfire consequence of ignitions that occur along the Forecasting
Situational
Awareness &
Forecasting
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Awareness & Other Other 7.3.2.6. Weather forecasting and estimating impacts on electric lines and 7.3.2.2.1 Air Quality Index Forecasting Situational Other 7.3.2.2.2 Satellite-based remote sensin Awareness & Forecasting Situational Awareness & Forecasting Other Situational Awareness & Forecasting Other Situational Awareness & Forecasting Other Situational Awareness & Forecasting Grid Grid Design & hardenin System Hardenin S 8
Grid Grid Design & 7.3.3.2. Circuit breaker maintenance and nstallation to de-energia upon detecting a fault Grid Design & 7.3.3.4. Covered conductor main nin System Hardening Grid Design & 7.3.3.6. Distribution pole replacement and iiin Grid Design & Grid topology Improvements to System Hardening 7.3.3.8. mitigate or reduce PSPS events Grid Design & 7.3.3.9. installation of system automation in System Hardening equipment (advanced protection) section.iii continued in the continued of the sectionaliz ation, etc. PSPS - for A.3.3.0. Maintenance, regain; and reglacement of connections, including beginner of connections, including beginner and continuers and continuers and continuers and continuers and continuers. The continuers are continued to the continuers and continuers and continuers. The continuers are continued to the continuers and continuers.

| Value | V 8
Grid Grid Design & 7.3.3.13. Pole loading infrastructure hardenin Syxtem Hardening and replacement program based on pole loading Grid Grid Design & 7.3.3.14. Transformer maintenance and replacement Grid Design & 7.3.3.15. Transmission tower r System Hardening and replacement in Grid Design & Updates to grid topology to System Hardening 7.3.3.17. minimize risk of ignition in HFTDs Grid Design & 7.3.3.8.1 PSFS Sectionalizing in System Hardening PSPS - for sectionaliz ation, etc. PSPS - for sectionaliz ation, etc. PSPS - for sectionaliz ation, etc. Grid Design & 7.3.3.8.2 Microgrids
System Hardening 2,310 355 735 7.3.3.11.2 Standby Power Program 8,934 8,934 Grid Design & 7.3.3.11.3 Generator Assis PSPS - for

Utility SDG&E Notes:

Table No. 12 Risk Spend
oute expenditure.

Modified 2022 02 14 In future submissions update planned spend,

most company crude() - on comp 2,982 2,982 30 559 30 559 37,982 37,982 3 Grid Grid Design & 7.3.3.17.3 CNF(Distribution Overhead) hardenin System Hardening 37,237 37,237 46,282 46,282 8
Grid Grid Design & 7.3.3.18.1 Distribution Commu
hardenin System Hardening reliability improvem 35,476 35,476 reliability improvements (LTE) 1d Grid Design & 7.3.3.18.2 Lightning Arrestors Removal & ardenin System Hardening Replacement rid Grid Design & 7.3.3.18.3 Avian Mitigation ardenin System Hardening sset Asset Management 7.3.4.1 Detailed inspections of distril respectio & Inspections electric lines and equipment sset Asset Management 7.3.4.2 Detailed inspections of transi spectio & inspections electric lines and equipment sset Asset Management 7.3.4.5 Infrared inspections of transn spectio & Inspections electric lines and equipment Asset Asset Management 7.3.4.6 Intrusive pole inspections 803 330 1,151 1,151 Asset Management 7.3.4.7 LIDAR inspections of distribution tio & inspections electric lines and equipment NA 2019 GRC NA Exceeds G.O. 95 P.U. Code NA NA Exceeds § 451 Other discretionary inspection of distribution electric lines and o Asset Management equipment, beyond inspections mandated by rules and regulations Asset inspectio Asset Management Other discretionary inspection of n 8. Inspections 7.3.4.10. transmission electric lines and Axaet Asset Management 7.3.4.11 Patrol Impections of distribution inspectio 8. Inspections Asset Asset Management 7.3.4.13. Pole loading assessment program nspectio & inspections determine safety factor Asset Asset Management 7.3.4.15. Substation inspections inspectio & Inspections Asset Asset Management 7.3.4.9.1 HFTD Tier 3 Distribution Pole Asset Asset Management 7.3.4.9.3 Circuit ownership impacts
7.3.5.2. Detailed inspections and
management practices for
wegetation clearances around
7.3.5.3. Detailed inspections and
management practices for
wegetation clearances around Inspection imprecions

7.3.5.4. Emergency response vegetation

7.3.5.4. Emergency response vegetation

7.3.5.4. Emergency response vegetation

management due to red flag

managem inspections warning or other urgent weather 7.3.5.5. Fuel management (including all wood management) and management of "slash" from /egetatio Vegetation Management & nagem Inspections 7.3.5.6. Improvement of inspections Vegetatio Vegetation
n Management & inspection Inspections Remote sensing inspections of vegetation around distribution electric lines and equipment (LIDAR) Remote sensing inspections of vegetation around transmission electric lines and equipment (LIDAR) Other discretionary inspections of vegetation around distribution with electric lines and equipment vegetation 7.3.5.10. Other discretionary inspections of vegetation around transmission electric lines and equipment 7.3.5.11. Patrol inspections of vegetation around distribution electric lines and equipment 7.3.5.12 Patrol inspections of vegetation around transmission electric lines and equipment
7.3.5.13 Quality assurance / quality control of vegetation management

Utility SDG&E Notes:

Table No. 12/Risk-Spend
Date expenditure.

Modified 2022 02 14 In future submissions update planned spend,

rtions & 7.3.6.2 Protective equipment and device Protocols settings 7.3.6.3. Crew accompanying ignition prevention and suppression recourses and service of tailure tailure took 8.0 Resources and service of territorial prevention of elevated the fire risk. Trailors 8.0 Resources of the risk ns & O with

7.3.6.6. PSPS events and mitigation of PSPS Other Equipm contact tailure with Srid Operations & O 7.3.6.7 Stationed and on-call ignition prevention and suppression resources and services Srid Operations & 7.3.6.1.2 Sensitive/Fast Protection settings P.U. Code NA Exceeds § 451 7.3.6.7.1 Aviation firefighting program Grid Operations & O Centralized repository for data 7.3.7.2. Collaborative research on utility ignition and/or wildfire 7.3.7.3. Documentation and disclosure of wildfire-related data and algorith NA WMPMA Exceeds § 451 7.3.7.4. Tracking and analysis of risk event data 7.3.7.4.1 Ignition Management Program 7.3.7.4.2 Reliability Database 7.3.8.1. Allocation methodology development and application 7.3.10.4 Forest service and fuel reduction cooperation and joint roadmap 7.3.10.1.1 PSPS Communication Practices P.U. Code 2013 NA NA NA NA NA 2019 GRC NA Exceeds § 451