BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric
Company (U 902 M) for Review of its Safety
Model Assessment Proceeding Pursuant to
Decision 14-12-025.

Application 15-05-002 (Filed May 1, 2015)

And Related Matters.

Application 15-05-003 Application 15-05-004 Application 15-05-005 (Consolidated)

(NOT CONSOLIDATED)

Application of San Diego Gas & Electric Company				
(U 902 M) for Authority, Among Other Things, to				
Update its Electric and Gas Revenue Requirement				
and Base Rates Effective on January 1, 2019.				

Application 17-10-007 (Filed October 6, 2017)

And Related Matter.

Application 17-10-008 (Filed October 6, 2017)

2020 SAFETY PERFORMANCE METRICS REPORT OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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And Related Matter.	Application 17-10-008 (Filed October 6, 2017)

2020 SAFETY PERFORMANCE METRICS REPORT OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)

In compliance with Decision (D.) 19-04-020, Safety Model Assessment Proceeding

Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety

Performance Metrics For Investor-Owned Utilities (S-MAP Phase Two Decision), San Diego

Gas & Electric Company (SDG&E) timely submits its annual Safety Performance Metrics

Report (2020 SPMR). This 2020 SPMR reports on the applicable 26 safety performance

metrics to measure achieved safety improvements, including how metrics are used to improve

In compliance with D.19-04-020, the S-MAP Phase Two Decision, this 2020 SPMR is being filed in and served on Application (A.) 17-10-007/008 (cons.), the "applicable GRC proceeding in which funding for the risk mitigation activities and spending was authorized," on A.15-05-002, and on the S-MAP successor proceeding, Rulemaking (R.) 20-07-013. D.19-04-020 (issued May 6, 2019) at Ordering Paragraph 1, p. 61.

Of the currently adopted safety performance metrics, 18 are applicable to SDG&E.

safety training, take corrective action and support risk-based decision making; information on any metrics that may be linked to financial incentives; and a summary of how the reported data reflects progress against the risk mitigation and management goals in the Test Year (TY) 2019 General Rate Cases (GRCs) of Southern California Gas Company (SoCalGas) and SDG&E and the 2016 SoCalGas and SDG&E Risk Assessment Mitigation Phase (RAMP) filing. Attachment "A" constitutes the 2020 Safety Performance Metrics Report and Attachment "B" constitutes 10 years of monthly historical data, where available, for all applicable metrics.³

Respectfully submitted,

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March 30, 2021

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The Commission's Safety and Enforcement Division staff, via the S-MAP Technical Working Group, instructed the utilities to provide metric data in a native file format. Excel is not an accepted format for filing at the Commission, accordingly a PDF version of Attachment B will be filed and a native Excel version of Attachment B will be separately served on parties to the S-MAP proceeding A.15-05-002, the S-MAP successor proceeding R.20-07-013, and SDG&E's Test Year 2019 GRC proceeding.



2020 Safety Performance Metrics Report

March 30, 2021



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2020 Safety Performance Metrics Report

March 30, 2021

I. Introduction/Overview

The Commission's *Phase Two Decision Adopting Risk Spending Accountability Report*Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a

Safety Model Approach for Small and Multi-Jurisdictional Utilities (S-MAP Phase Two

Decision)¹ requires the California investor-owned utilities (IOUs), including San Diego Gas &

Electric Company (SDG&E or Company), to annually report on 26 safety performance metrics

to measure achieved safety improvements.² SDG&E submits this annual Safety Performance

Metrics Report in compliance with the Commission's directives in the S-MAP Phase Two

Decision. For this 2020 report, SDG&E includes ten years of monthly historical data from

January 1, 2011, through December 31, 2020, where such data exists, in the accompanying Excel

file as Attachment B.³

SDG&E submitted its first Safety Performance Metrics Report (the 2019 Report) on March 30, 2020.⁴ On February 1, 2021, the CPUC Safety Policy Division (SPD) provided its

Not all metrics adopted in D.19-04-020 are applicable to SDG&E. Of note, D.19-04-020, Attachment 1 indicates that metric #12 (Natural Gas Storage Baseline Inspections Performed) is applicable to SDG&E. However, SDG&E does not own or operate any natural gas storage facilities. Accordingly, metric #12 is not applicable to SDG&E and, therefore, it is not included in this Safety Performance Metrics Report.

Decision (D.)19-04-020 (issued May 6, 2019).

The Commission's Safety and Enforcement Division staff, via the S-MAP Technical Working Group, instructed the IOUs to provide metric data in a native file format. Excel is not an accepted format for filing at the Commission; Attachment B is therefore being served on parties to the S-MAP proceeding, Application (A.)15-05-002, the S-MAP successor proceeding, Rulemaking (R.) 20-07-013, and SDG&E's Test Year 2019 GRC proceeding, A.17-10-007 (cons.), as directed by the S-MAP Phase Two Decision.

A Revised Report was served on July 30, 2020.



review, conclusion, and recommendations for SDG&E's 2019 Report. SDG&E has addressed SPD recommendations in this year's report.⁵

While this annual Safety Performance Metrics Report is still in its infancy, SDG&E has been tracking safety-related metrics for numerous years and uses such metric data as part of its risk-based decision-making and continuous improvement processes. Safety metrics provide a baseline for how well our organization is performing in this area. Tracking both leading and lagging indicators and comparing historical results provides a baseline of safety and processes and offers the ability to identify opportunities for continuous improvement. Common metrics (e.g., employee injury, controllable motor vehicle incidents, and near-miss incidents) are tracked and analyzed and recommendations for safety performance improvements are made, including training, tools, equipment, processes, and procedures.

SDG&E's safety efforts start at the top with appropriate safety governance. Governed by the Executive Safety Counsel and led by SDG&E's Chief Safety Officer, SDG&E has various safety committees to help inform and educate employees about safety issues throughout all levels of the Company and set meaningful and attainable safety goals throughout the organization. The safety committees also provide an opportunity to receive employee feedback on key safety issues. Company employees attend safety meetings, tailgates (*i.e.*, onsite safety meetings for field employees), and safety congresses and are surveyed every two years to solicit their candid feedback.

SDG&E has processes, programs, and committees in place that encourage feedback on safety from employees on the management of risks and unsafe practices or incidents. To

Given the timing of when the recommendations were received and the due date for this report, SDG&E addressed SPD recommendations where possible.



promote strong safety principles throughout the Company, and foster a culture of continuous safety improvement, SDG&E continuously strives for a work environment where employees at all levels can raise pipeline and electric infrastructure, customer safety, and employee safety concerns and offer suggestions for improvement. SDG&E encourages two-way formal and informal communication between the company and the public, employees and management, and contractors and the company, in order to identify and manage safety risks before incidents occur. The vision and emphasis on risk management begin at the top, with strong support for the risk management process. SDG&E has an open-door policy that promotes open communication between employees and their direct supervisors. In addition to these culture-based items, there are formal programs designed to encourage employees to speak up if they see unsafe behaviors, such as "Stop the Job." SDG&E also has a Safety Congress as well as safety meetings for field employees that provide safety training, share best practices and promote leadership and employee engagement. If an employee does not feel comfortable reporting unsafe behaviors and incidents through the above-mentioned avenues, there are anonymous means to do so, including the Ethics & Compliance Hotline, employee engagement surveys, and the National Safety Council Culture Survey.

SDG&E management reviews results from a variety of safety metrics, including injuries, motor vehicle accidents, near-miss incidents, and safety observations, and is actively involved in evaluating risk and developing necessary action plans. Safety goals are set with continuous improvement in mind by focusing on increasing current goals and developing new leading indicators. The Company has a continuous commitment to mitigating both occupational and process safety risks. At all levels, SDG&E, including the Board of Directors, is deeply



committed to implementing an enterprise-wide Safety Management System (SMS). The SMS is a company-wide effort throughout the various organizations involved in safety.

While SDG&E has been tracking many leading and lagging safety-related metrics for numerous years, there are some instances where the definition of the reportable Safety Performance Metric, as adopted by the S-MAP Phase Two Decision, differs from previous external reporting requirements, or data required by the metric has not previously been collected. SDG&E notes these nuances within each metric narrative included in Section V below. SDG&E will continue to track the Safety Performance Metrics adopted by the Commission and will build upon the data in future Safety Performance Metric Report submissions where ten years of monthly historical data is not yet available as well as continue to improve its data collection efforts.⁶

A. Compliance with S-MAP Phase Two Decision Directives

The S-MAP Phase Two Decision approved 26 Safety Performance Metrics (Version 1.0) and requires the IOUs to annually file the metrics and accompanying narratives in any future S-MAP proceedings and in their respective GRC proceedings. The S-MAP Phase Two Decision includes additional reporting requirements that IOUs 1) describe how metrics are used to improve risk-based decision-making, corrective actions and/or enhance training, and 2) explain whether any linkage to financial incentives creates a potential for bias in individual metrics. Sections II and III below provide additional detail on these requirements.

While the Safety Performance Metrics Report requires SDG&E to provide a historical look back of data, over time, the applicable law or the underlying metric definition may have changed. Such changes to the metric or law may have an impact on both the data collected and its comparability to prior metrics. Where a change has occurred, SDG&E will note the modification in succeeding Safety Performance Metric Reports.



The S-MAP Phase Two Decision requested the Commission's Safety and Enforcement Division (SED) reconvene the S-MAP technical working group (TWG) to complete a proposal on SMS metrics and a revised version of an "Electric Overhead Conductor" Index and associated metrics. SDG&E is an active participant in the S-MAP TWG. The S-MAP Phase Two Decision also directed the IOUs to work with SED staff to develop a standardized Safety Performance Metrics Report format. SDG&E worked with SED staff (via the S-MAP TWG) prior to submittal of its first Safety Performance Metrics report to develop a standardized template and an agreed upon format for submittal of this data.

For the Public Serious Injuries and Fatalities (Pub-SIF) metric, Metric No. 22, the S-MAP Phase Two Decision requires the IOUs to provide Commission staff with their individual Public-SIF metric data 60 days prior to the due date for each annual Safety Performance Metrics Report. SDG&E complied with this requirement and provided Safety Policy Division (SPD) with a preview of its Pub-SIF data on January 29, 2021. After submission and review of SDG&E's draft Pub-SIF data, SPDD informed the IOUs on March 11, 2021, of the designated subcategories for final reporting in this Safety Performance Metrics report. SDG&E includes the designated subcategories for its 2020 Pub-SIF data in Section V.Q, below.

SDG&E acknowledges that S-MAP and metric data collection is an iterative process and SDG&E will continue to work with Commission staff, and stakeholders to revise and/or add metrics for future report submissions. To this end, on February 1, 2021, SPD provided its review, conclusion, and recommendations for SDG&E's inaugural 2019 Safety Performance Metric Report. SDG&E has carefully considered SPD's comments and has integrated additional

⁷ D.19-04-020 at 19.



information into this submission for 2020 where appropriate and to the extent data and information was available to include.

II. Metrics Overview (D.19-04-020, Ordering Paragraph 6D.)

A. Summary

The currently-approved Safety Performance Metrics (Version 1.0) contain four metrics in the "electric" category, nine metrics in the "gas" category, ten metrics in the "injuries" category, and three metrics in the "vehicle" category. Of these 26 metrics, 18 are currently applicable to SDG&E and included within this Safety Performance Metrics Report. In addition to data for the 18 Safety Performance Metrics, included as Attachment B, SDG&E provides the below narrative for the additional reporting requirements established in D.19-04-020.

*Table 1- Summary of Applicable Metrics Adopted in D.19-04-020*⁸

Category	Risk(s)	Metric Name	Units	2020
	Wildfire; Transmission	1. Transmission &	Number of	
	Overhead Conductor;	Distribution	wire down	89
	Distribution Overhead	(T&D) Overhead	events	89
	Conductor Primary	Wires Down ⁹		
Electric	Wildfire; Transmission	2. Transmission &	Number of	
Electric	Overhead Conductor;	Distribution	wire down	
	Distribution Overhead	(T&D) Overhead	events	179
	Conductor Primary	Wires Down -		1/9
		Major Event		
		Days ¹⁰		

⁸ Category, Risks, Metric Names and Units as provided in D.19-04-020, Attachment 1. Of the 26 reportable safety metrics adopted in D.19-04-020, 18 are applicable to SDG&E and are included herein. Ten years of monthly historical data, where available, is provided in the accompanying Excel file labeled Attachment B.

Metric No. 1 excludes down distribution secondary wires and "Major Event Days" (typically due to severe storm events) as defined by the Institute of Electrical and Electronics Engineers (IEEE).

Metric No. 2 tracks the number of wire down events including secondary distribution wires and Major Event Days (whereas Metric No. 1 tracks only primary wire down events and excludes secondary wire and Major Event Days). Instances of secondary damage are tracked; however, SDG&E has not previously tracked secondary wire down events. SDG&E began tracking this metric as of 2020 and will include such data in its annual Safety Performance Metrics Report submissions going forward.



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Category	Risk(s)	Metric Name	Units	2020
	Wildfire; Overhead	3. Electric	Percentage	
	Conductor; Public Safety;	Emergency	of time	
	Worker Safety	Response	response is	78.21%
			within 60	
			mins	
	Overhead Conductor;	4. Fire Ignitions	Number of	
	Wildfire		ignitions	• 0
	Public Safety; Worker			29
	Safety; Catastrophic Event			
	Preparedness			
	Transmission Pipeline	5. Gas Dig-in	The number	
	Failure - Rupture with		of 3rd party	
	Ignition; Distribution		gas dig-ins	
	Pipeline Rupture with		per 1,000	1.61
	Ignition (non-Cross Bore);		USA	
	Catastrophic Damage		tags/tickets	
	involving Gas			
	Infrastructure (Dig-Ins)		2 611	
	Catastrophic Damage	6. Gas In-Line	Miles	
	Involving High-Pressure	Inspection	Inspected ¹¹	62
	Pipeline Failure			
	Distribution Pipeline	8. Shut In The Gas	Average	
Gas	Rupture with Ignition	Average Time –	(median)	
	(non-Cross Bore)	Mains	time in	600 73
			minutes	699.73
			required to	
			stop the	
	D' 4 '1 4' D' 1'	0.01 (1.77) 0	flow of gas	
	Distribution Pipeline	9. Shut In The Gas	Average	
	Rupture with Ignition	Average Time - Services	(median)	
	(non-Cross Bore)	Services	response time in	
			minutes	221.32
			required to stop the	
			-	
		1	flow of gas	

.

Transmission pipelines are required to be assessed at an interval not to exceed seven years. Therefore, intervals may vary year-to-year over the seven-year inspection cycle and data should be viewed across the entire seven-year cycle. Ten years of historical data is included in the accompanying Excel file, Attachment B.



A	Sempra	Energy	utility®
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Category	Risk(s)	Metric Name	Units	2020
	Catastrophic Damage Involving Medium Pressure Pipeline Failure	10. Cross Bore Intrusions ¹²	Number of cross bore intrusions per 1,000 inspections	0
	Distribution Pipeline Rupture with Ignition	11. Gas Emergency Response	Average response time in minutes (mean)	30.36
	Catastrophic Damage Involving High-Pressure Pipeline Failure	13. Percentage of the Gas System that can be Internally Inspected - the ratio of transmission pipe miles that can be inspected internally to all transmission pipe miles ¹³	Percentage	65
	Employee Safety	14. Employee Serious Injuries and Fatalities	Number of Serious Injuries/ Fatalities	3/0
Injuries	Employee Safety	15. Employee Days Away, Restricted and Transfer (DART) Rate	DART Cases times 200,000 divided by employee hours worked	0.89
	Contractor Safety	18. Contractor OSHA Recordables Rate	OSHA recordable times 200,000 divided by	0.97

SDG&E completed all sewer lateral inspections by 2012; only one cross bore intrusion was found and repaired. Monthly data for 2012 is included in the accompanying Excel file, Attachment B.

This metric represents the percentage of the gas system that can be internally inspected, otherwise known as in-line inspection or "piggable." All of SDG&E's transmission pipeline is inspected in accordance with 49 Code of Federal Regulations (CFR) §192, Subpart O, which identifies in-line inspection, pressure test, and direct assessment.



Cate	egory	Risk(s)	Metric Name	Units	2020
				contractor	
				hours	
				worked	
				associated	
				with work	
				for the	
				reporting	
				utility	
		Contractor Safety	20. Contractor	Number of	
			Serious Injuries /	work-related	
			Fatalities	injuries or	
				illnesses	
				associated	3/0
				with work	2, 0
				for the	
				reporting	
				utility	
		Contractor Safety	21. Contractor	Number of	
		Contractor Surety	Lost Workday	Lost	
			Case Rate	Workday	
			Case Rate	(LWD)	
				cases	
				incurred for	
				contractors	
					0.26
				per 200,000 hours	0.20
				worked	
				associated	
				with work	
				for the	
				reporting	
		D 11' C C	22 D 11: C :	utility	
		Public Safety	22. Public Serious	Number of	
			Injuries and	Serious	3/0
			Fatalities	Injuries/	-
			22 11 11	Fatalities	
		Aviation Safety;	23. Helicopter/	Number of	
		Helicopter Operations;	Flight Accident or	accidents or	
		Public Safety; Worker	Incident	incidents (as	
		Safety; Employee Safety		defined in	•
Vehic	cle			49 CFR	0
				Section	
				830.5	
				"Immediate	
				Notification	



Category	Risk(s)	Metric Name	Units	2020
			") per	
			100,0000	
			flight hours	

B. Examples of Improved Training and Corrective Actions

A key objective of the Commission in adopting S-MAP safety metrics is not just tracking but improving the utilities' safety performance.¹⁴ The S-MAP Phase Two Decision, therefore, requires the IOUs to provide examples of how data contained in this report is used to improve employee and/or contractor training and to take corrective actions aimed at minimizing top risks or risk drivers. SDG&E has been focused on safety metrics, taking corrective actions, and improving training courses throughout the Company's long history. SDG&E is proud to have a strong safety culture and is committed to developing processes and programs designed to manage employee, contractor, customer, and public safety risks.

SDG&E's continuous improvement efforts begin with the continuous assessment of risks identified through the Enterprise Risk Management (ERM) and Asset Management processes. The observations and information captured through the ERM and Asset Management work are used to develop the strategic risk mitigations. The mitigations are implemented through operating and functional units. The implementation status, results and lessons learned are then captured through on-going managerial oversight throughout all layers of management. The results of these oversight efforts are reviewed with the Executive Safety Council and SDG&E's leadership on a regular basis.

SDG&E management reviews results from a variety of safety metrics, including injuries, motor vehicle accidents, near-miss incidents, safety observations, and is actively involved in

¹⁴ D.19-04-020 at 28.



evaluating risk and developing necessary action plans. SDG&E has a healthy safety culture that encourages continuous improvement based on feedback from the front lines and findings from investigating incidents and near misses. Safety goals are set with continuous improvement in mind by focusing on increasing current goals and developing new leading indicators.

The Commission has stated that "[a]n effective safety culture is a prerequisite to a utility's positive safety performance record," and defines "safety culture" as follows:

An organization's culture is the collective set of that organization's values, principles, beliefs, and norms, which are manifested in the planning, behaviors, and actions of all individuals leading and associated with the organization, and where the effectiveness of the culture is judged and measured by the organization's performance and results in the world (reality). Various governmental studies and federal agencies rely on this definition of organizational culture to define 'safety culture.' ¹⁶

The Commission has further stated that, under the above definition, a positive safety culture includes a "[a] clearly articulated set of principles and values with a clear expectation of full compliance," and "[e]ffective communication and continuous education and testing." SDG&E fully agrees and has developed values, goals, and practices for a safety culture by advancing its programs, policies, procedures, guidelines, and best practices to improve the safety of its operations. As such, SDG&E created an enterprise-wide SMS to drive continuous

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Investigation (I.)15-08-019, Order Instituting Investigation on the Commission's Own Motion to Determine Whether Pacific Gas and Electric Company and PG&E Corporation's Organizational Culture and Governance Prioritize Safety (August 27, 2015) at 4.

I.19-06-014, Order Instituting Investigation on the Commission's Own Motion to Determine Whether Southern California Gas Company's and Sempra Energy's Organizational Culture and Governance Prioritize Safety (June 27, 2019) at 3 (citation omitted).

¹⁷ *Id*

See, e.g., A.17-10-007/-008 (cons.), Application of San Diego Gas & Electric Company (U902M) for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019 (October 6, 2017) [Proceedings A17-10-007 and A17-10-008 are consolidated by Ruling of November 8, 2017], Ex. 03 (SCG/SDGE Day Direct) at DD-28.



improvement in both its electric and gas operations. Below are three illustrations of recent improvements to training or corrective actions, as directed by the S-MAP Phase Two Decision:

1. Example 1: Energized Skills Training and Testing Yard – Metric No. 14, 15, 18, 20, and 21

Employee Safety standards and equipment are continually evolving, and SDG&E must introduce and review new standards, procedures and/or equipment to impacted employees.

SDG&E has converted undisturbed land owned by SDG&E to an Energized Skills Training and Testing Yard to allow for hands-on training for electric crews, linemen foreman, and/or trouble-shooters on electrical equipment. This converted area provides a space for vendors to demonstrate new equipment and show how the equipment safely operates under controlled energized scenarios. SDG&E believes that employees benefit from having this hands-on training and testing yard in lieu of a classroom setting, resulting in safer operation of such equipment.

2. Example 2: Enhanced Employee Safe Driving Training – Metric Nos. 14, 15, 18, 20, 21, and 22

SDG&E has installed vehicle technology in its company fleet vehicles. The vehicle technology platform allows the company to evaluate driving behaviors by understanding hard braking, hard acceleration, hard cornering, speeding, and seatbelt use. Using data-driven vehicle analytics, SDG&E can develop a program based upon a comprehensive view of the vehicle driver and fleet performance. In 2020, this data enabled SDG&E to provide coaching and specific driver training to employees to reinforce safe driving habits. Additionally, by installing monitoring devices, vehicle information such as utilization, idle time, fuel usage, vehicle health, and vehicle location is communicated through a dashboard and can be analyzed in real-time. This technology improves employee safety by providing information on vehicle location,



providing an opportunity for driver feedback, discouraging risky driving behaviors, and detecting engine issues and fault codes so they can be corrected.

3. Example 3: Enhanced "Safety in Action" Program – Metric Nos. 14, 20, and 22

Through the enhanced Safety in Action (SIA) program, SDG&E is developing a Serious Injury and Fatality (SIF) exposure reduction process. This process goes beyond traditional classification and recording of incidents to evaluate both the exposures that resulted in an actual SIF and those with reasonable potential to result in a SIF. The process will provide the tools necessary to identify and understand the Company's specific SIF precursors and to design effective steps to mitigate SIF exposure. Tools include a SIF definition for SDG&E, SIF exposure decision trees, a precursor analysis procedure to assess SIF exposure potential, and leading and lagging SIF metrics. Subject matter experts (SMEs) throughout the Company will be trained on the process and effective use of the tools. Goals and objectives for the SIA program will be defined and measured and will consist of clear, concise wording that demonstrates a forward-moving effort to improve safety.

C. Examples of How Safety Performance Metrics Data is Used to Support Risk-Based Decision-Making

Safety is a core value and a foremost consideration at SDG&E. Safety is a major factor in any operational decision. The S-MAP Phase Two Decision requires each IOU to summarize and provide three to five examples of how it is using Safety Performance Metrics Report data to support risk-based decision making.

1. Example 1: Wildfire Next Generation System (WiNGS) – Metric Nos. 1, 2, and 4

In 2020, SDG&E developed a new risk model to inform decision-making related to wildfires. The Wildfire Next Generation System (WiNGS) evaluates the wildfire and Public



Safety Power Shut-off (PSPS) risks at a sub-circuit or segment level and is used to inform grid-hardening strategies in the future. WiNGS uses ignition history to evaluate the risk of wildfires for each segment in the model based on the unique characteristics of the segment. The factors considered include its location in the defined High Fire Threat District (HFTD), identified tree strike potential, weather patterns, and the age and condition of the assets on the segment. The model also evaluates the impacts of PSPS on customers based on the likelihood of shut-offs as a function of weather patterns during fire season as well as the different types of customers that the shut-off might impact. The overall goal of WiNGS is to identify and prioritize projects to reduce wildfire risk and PSPS impacts to customers.

2. Example 2: Safety Management System - Metrics Nos. 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 18, 20, 21, 22, 23

In Fall 2019, SDG&E began the strategic initiative to develop a Safety Management System (SMS) for both its gas and electric operations. SDG&E has strong safety performance, a robust safety culture, and many effective established safety programs and initiatives. The SMS is not a new safety initiative; SDG&E's SMS is the framework that ties together each of our existing and future safety initiatives, aligns our core operating units, integrates risk and safety, and allows us to assess risk across the entire organization for continuous improvement and enhanced safety performance. The SMS moves SDG&E forward in its journey towards "Target Zero." SDG&E's SMS is a systematic, enterprise-wide framework to manage and reduce risk and promote continuous improvement in safety performance through deliberate, routine, and intentional processes.

The SMS framework enhances SDG&E's safety-related programs and initiatives by providing:

• Greater communication, broad sharing of information and utilization of lessons learned



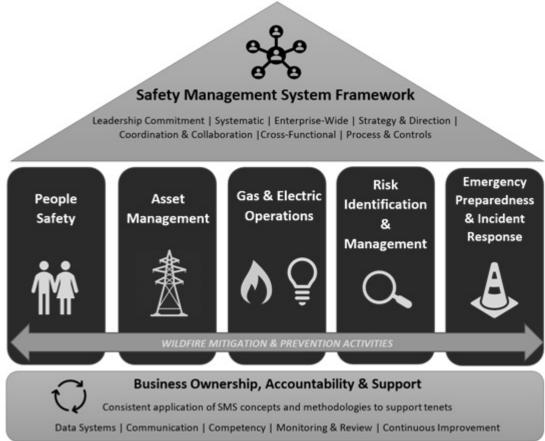
- Enhanced documentation in the form of standardized processes and widely accessible document and data repositories
- Strengthened employee feedback mechanisms, additional means/resources for consistent follow-up and communication
- Early identification of risks, integration of risk and asset management with operations
- Strong Management of Change where employees and contractors have the knowledge and tools to anticipate, identify and assess risk and are empowered to communicate risks to drive change
- Continual learning and improvement with greater reliance on data and analytics,
 increased use of leading indicators with strong review processes to continually measure
 effectiveness

SDG&E's SMS provides a standardized approach for managing risk and safety across all assets and operations by implementing standardized processes and risk assessment methodologies that can be consistently applied enterprise-wide. The SMS framework creates an integrated approach and a Company-wide resource to guide our actions, decisions, and behaviors to efficiently and effectively manage risk and continually improve upon all aspects of our safety performance. SDG&E's SMS focuses on process safety, which broadly encompasses procedures, hazard analysis, training, equipment integrity, change management, incident investigation, emergency preparedness, and compliance. These factors and others may affect the likelihood and consequence of incidents and contribute to their identification and prevention.



SDG&E's framework for its SMS is summarized in Figure 1 below:

Figure 1: SDG&E SMS Framework



SDG&E established and formally adopted this SMS Framework in 2020, which includes the Five Pillars of Safety, to focus on both individual safety behaviors and process safety management. The Five Pillars of Safety are: (1) People Safety, (2) Asset Management, (3) Gas and Electric Operations, (4) Risk Identification and Management, and (5) Emergency Preparedness and Incident Response. These pillars are the core of an integrated, comprehensive, and risk-informed approach to managing safety under the SMS, in line with basic safety principles and a broader process safety management focus. Activities to effectively manage the risks SDG&E faces, including wildfire mitigation and prevention activities, are integrated throughout the Five Pillars of Safety and the SMS Framework.



As stated above, a primary objective of SDG&E's SMS is improved safety performance and enhanced safety culture. The SMS aims to identify safety and risk concerns early and take proactive action to prevent future safety incidents. The SMS increases SDG&E's utilization of leading indicator data and will assess trends and observations broadly to further improve safety performance.

3. Example 3: Enterprise Asset Management Platform (EAMP) – Metric Nos. 1, 2, and 4

In 2019, Asset Management started developing an Enterprise Asset Management Platform (EAMP), a centralized repository for asset data, which will enable SDG&E to predict and assign asset health indexes on its critical electric assets to identify and compare assets based on their likelihood of failure. In 2020, Asset Management implemented consolidated data views pulling asset attributes of different categories, including nameplate data, inspection and maintenance data, outage history, and weather data for distribution poles, cables, tees, and wires. Additionally, asset health and risk indices were completed for distribution wood poles, cables, wires, and tees utilizing machine learning, artificial intelligence (AI), and statistical analysis. The EAMP has the ability to perform granular analysis, which enables data-driven decision-making and supports timely and accurate responses to quantitative data requests.

Over the past few years, Asset Management established the Asset Integrity Management program and its centralized group to develop and implement a holistic and sustainable asset management system (people, process, and technology) for electric assets with an integrative approach for governance, strategy, analytics, and continuous improvement. In 2020, Asset Management continued with a phased approach to developing the asset management system with a focus on electric transmission, substation, and distribution business segments. In parallel, the Investment Prioritization workstream began developing business processes and a system for



capital investment optimization using a multi-attribute value framework for evaluating capital investments through a data-driven, quantitative risk- and safety-based lens focusing on transmission and substations to support SDG&E's Federal Energy Regulatory Commission (FERC) filings.

III. Executive Compensation and Bias Controls – Overview (D.19-04-020, Ordering Paragraph 6.A - C.)

A. Executive Incentive Compensation

SDG&E's strong safety culture is demonstrated by using compensation metrics and key performance indicators to drive improved safety performance. As the Commission stated in D.16-06-054, "[o]ne of the leading indicators of a safety culture is whether the governance of a company utilizes any compensation, benefits or incentive to promote safety and hold employees accountable for the company's safety record." Benefits programs that promote employee health and welfare also contribute to SDG&E's safety performance and culture.

In her Test Year (TY) 2019 GRC testimony, Compensation and Benefits witness Debbie Robinson explained how SDG&E's compensation and benefits programs are designed to focus employees on safety and that SDG&E has increased emphasis on employee and operational safety measures in their variable pay plans, commonly referred to as the Incentive Compensation Plans (ICP), thus bolstering their already strong safety culture and safety performance. Ms. Robinson testified that SDG&E had increased the weighting of the employee and operational safety measures in their variable pay plans since the TY 2016 GRC. Providing even stronger alignment between SDG&E's safety programs and the ICP helps to strengthen the Company's safety culture and signal to employees that safety is the number-one priority.

¹⁹ D.16-06-054 at 153.

²⁰ A.17-10-007/-008 (cons.), Ex. 208 (SCG/SDG&E Robinson Direct) at DSR-10.

²¹ *Id.* at DSR-11.



The S-MAP Phase Two Decision directs the IOUs to identify all metrics linked to or used in any way to determine executive compensation levels and/or incentives. ²² In the narrative for each Safety Performance Metric reported herein, SDG&E indicates whether that specific metric is linked to determining executive compensation levels and/or incentives (See Section V, below). For this 2020 Safety Performance Metrics Report, SDG&E references its 2020 Executive ICP and 2020 non-executive ICP and indicates whether each metric was tied to these ICPs in 2020. Since this is an annual submission, SDG&E intends to reference the reporting year's ICP (i.e., next year's submission will reference the 2021 ICPs) as these plans are reviewed and may change annually.

SDG&E uses a comprehensive, market-based approach to executive compensation. The compensation and benefits for SDG&E executives are designed to attract, motivate and retain high-performing executives using benchmarks to confirm competitiveness. SDG&E's executive compensation structure is intended to focus executives on SDG&E's key priorities, the most important of which is safety. Safety is a core value of SDG&E, and thus compensation metrics and key performance indicators are used to drive improved safety performance, as discussed below.

The primary components of SDG&E's executive officer compensation are Base Pay, Variable Pay (i.e., ICP), and long-term incentives under Sempra Energy's Long-term Incentive Plan. Variable Pay is considered an essential component of a competitive total compensation package because it creates focus on and accountability for desired results, improves performance, and facilitates ideas and operational improvements. Variable Pay plans are a prevalent market practice. Under SDG&E's Variable Pay plan, a portion of employee total cash compensation is

D.19-04-020, Ordering Paragraph 6.A at 63.



placed at risk. The Variable Pay plan – at threshold, target, and maximum company performance – is expressed as a percentage of each executive officer's base salary. SDG&E has increased the weighting of safety measures in variable pay plans over the past years, such that safety-related measures comprise 59% of SDG&E's 2020 Executive Incentive Compensation Plan.

Performance measures are reviewed and updated annually.

Assembly Bill 1054 (2019) added Section 8389(e)(4) and Section 8389(e)(6) to the Public Utilities Code. These provisions concern an electrical corporation's executive incentive compensation structure and principles of executive compensation, respectively. An electrical corporation's demonstration of compliance with these statutory provisions is among the requirements necessary for obtaining an annual safety certification.

SDG&E's executive incentive compensation structure complies with Public Utilities

Code § 8389(e)(4), which requires that the structure "promote safety as a priority and to ensure public safety and utility financial stability with performance metrics, including incentive compensation based on meeting performance metrics that are measurable and enforceable, for all executive officers, as defined in Section 451.5."

The SDG&E compensation component that comprises "executive incentive compensation" is Variable Pay. Safety measures or goals are an important focus of the SDG&E's Variable Pay, as reflected in the performance goals included within the "Employee & Public Safety Operations" category of SDG&E's 2020 Executive and non-executive Incentive Compensation Plans. These measures, as further described in each applicable metric in Section V below, are designed to incent employees and executives to meet

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²³ California Public Utilities Code Section 451.5(c) defines "executive officer" as "any person who performs policy making functions and is employed by the public utility subject to the approval of the board of directors, and includes the president, secretary, treasurer, and any vice president in charge of a principal business unit, division, or function of the public utility."



specified safety targets. Safety measures in Variable Pay Plans apply to all non-represented employees. The ICP targets for goals within the Employee & Public Safety Operations category are the same for every non-represented employee, regardless of their role in the company.

SDG&E's Board of Directors determines the safety performance measures and targets to be included in each year's ICP and approves the results. The Board meets on at least a quarterly basis, where meetings begin with a safety briefing and include a regular review of year-to-date safety performance as well as current safety and risk-related topics. As a part of their oversight roles, the Board may exercise discretion to reduce or eliminate payout for any given safety measure(s) in the event of a work-related fatality or serious injury.

Safety is the top priority for SDG&E, and the weighting of the safety measures in the 2020 Executive ICP reflects this priority. There are no guaranteed monetary incentives in SDG&E's Executive ICP. In years performance goals (including safety goals) are not met, Variable Pay is reduced or not paid.

B. Bias Controls

Regularly scheduled internal audits are performed by Sempra Energy Audit Services.

Audit Services provides an independent internal audit function, with the VP of Audit Services functionally reporting to the Sempra Energy Board of Directors through its Audit Committee, and administratively to Sempra Energy's Executive Vice President and Chief Financial Officer.

Audit Services develops an audit plan each year after consultation with SDG&E management to identify and assess risks to the business. Audit Services then implements its plan by independently reviewing and evaluating the business controls in place. Audit Services has full access to all levels of SDG&E management, and to all organizational activities, records, property and personnel relevant to activities under review. Audit Services is authorized to select activities



for audit, allocate resources, determine audit scope and apply techniques required to accomplish audit objectives. Audit Services is further authorized to obtain other specialized services from within or outside the organization.

The scope of work conducted by Audit Services includes ascertaining whether SDG&E's processes and business controls, as designed and maintained by SDG&E management, are adequate and functioning in a manner to help ensure compliance with policies, plans, procedures, laws, regulations and contracts, safeguarding of assets, effectiveness and efficiency of operations, and reliability and integrity of operating and financial information. Strong business controls increase the likelihood of achieving these important objectives. SDG&E management is responsible for taking ownership of, and being accountable for, understanding, establishing, and maintaining effective business controls. Through its independent audit function, Audit Services identifies whether appropriate business controls are in place and evaluates whether they are designed and functioning properly. These collective efforts provide a basis for Audit Services to provide an independent evaluation to SDG&E management and the Board of Directors as to the adequacy of the Company's overall system of business control. SDG&E management will addresses identified deficiencies by Audit Services and develops management corrective actions to resolve the findings. Management corrective actions are assigned a completion date and must be addressed prior to Audit Services closing the audit.

The S-MAP Phase Two Decision directs the IOUs to "[d]escribe the bias controls that the utility has in place to ensure that reporting of the metric(s) has not been gamed or skewed to support a financial incentive goal."²⁴ SDG&E's 2020 Executive ICP and 2020 non-executive

²⁴ D.19-04-020, Ordering Paragraph 6.C. at 63.



ICP each include seventeen separate safety-related performance measures.²⁵ These safety-related performance measures comprise a mixture of leading and lagging measures and span all lines of business – fire and public safety, gas safety, and electric safety - in order to prevent bias. Bias controls for specific metrics included in this Safety Performance Metrics Report possessing an ICP component are discussed in each metric section below. However, SDG&E's inclusion of 17 separate safety-related performance metrics within the ICP, generally serves as its own control because the company must perform on all measures to achieve target performance goals; rather than a single measure.

At the request of management, Sempra's Audit Services department conducts an independent review of SDG&E's annual ICP results and calculations prior to SDG&E Board approval, which includes examining that financial and operational goal results included in the ICP calculations are approved by the responsible officer and supported with documentation. Each safety-related performance metric is well defined in the approved annual ICP plan. SDG&E's annual ICP plans further specify how each metric is tracked.

- IV. Interim Risk Mitigation Accountability Report (RMAR) Requirements (D.19-04-020, Ordering Paragraphs 6E 6F)
 - A. How Safety Metrics Reflect Progress Against SDG&E's RAMP and GRC Safety Goals

SDG&E's Test Year (TY) 2019 GRC testimony outlined the Company's goals for future risk management and safety initiatives and presented a vision to integrate risk, asset, and

For the period of January 1, 2020 to December 31, 2020, SDG&E had in place a "2020 Executive Incentive Compensation Plan" and a "2020 Incentive Compensation Plan." The S-MAP Phase Two Decision defines "executive" as "director or above." SDG&E directors are covered by SDG&E's 2020 Incentive Compensation Plan (*i.e.*, the 2020 non-executive Incentive Compensation Plan). Therefore, SDG&E refers to both the 2020 Executive Incentive Compensation Plan and the 2020 Incentive Compensation Plan" herein.



investment management activities over future GRC cycles.²⁶ SDG&E is progressing on that trajectory, further integrating risk, asset, and investment management into the Company's culture. In its TY 2019 GRC testimony, SDG&E stated that it would continue to expand the use of probabilistic models, data and quantification and explore areas where further quantification would help address other enterprise-level risks. SDG&E's risk management practices continue to mature.

SDG&E is undertaking considerable efforts to align risks with asset management practices and provide additional granularity of risks and asset health through development of operating unit risk registries. As explained by SDG&E witness Diana Day, "[t]he operating unit risk registries are intended to provide each operating unit with a tool to capture its specific risks and enable a more structured management of lower consequence risks that occur more frequently and are dealt with at the operating unit levels. As the operating unit risk registries evolve and mature, they will inform the assessment of risks at the enterprise level and provide improved risk quantification and granularity across the Company."²⁷

SDG&E also leverages its operating unit risk registries to inform internal asset management strategies for the continued integration of risk and asset management. SDG&E has developed an enterprise-wide SMS,²⁸ which, according to the former Office of Safety Advocate (OSA), is "a key tool for achieving safety goals, managing risks and opportunities, and meeting requirements and expectations."²⁹ A prudent SMS will further integrate risk, safety, and asset

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²⁶ A.17-10-007/-008 (cons.), Ex. 03 (SCG/SDGE Day Direct) at DD-25 – DD-26, Figure DD-4.

²⁷ A.17-10-007/-008 (cons.), Ex. 03 (SCG/SDGE Day Direct) at DD-23.

A.17-10-007/-008 (cons.), Ex. 90 (SCG/SDG&E Buczkowski and Geier Rebuttal) at DLB/DLG-5.

A.17-10-007/-008 (cons.), Ex. 442 (OSA Contreras Prepared Testimony) at 2-20. OSA was created in response to Senate Bill (SB) 62 (Chapter 806, Statutes of 2016) to advocate, on behalf of the interest of public utility customers, for the continuous and cost-effective improvement of the safety management and safety performance of public utilities. Pursuant to the same statute, OSA's mandate expired on January 1, 2020.



management under one framework. SDG&E continually seeks to implement metrics into its risk-based decision-making processes. Metrics span risk, asset, and investment management and provide a framework to evaluate and monitor asset health and potentially inform and demonstrate progress related to investments.

B. High-level Summary of SDG&E's Total Estimated Risk Mitigation Spending Level as Approved in the TY 2019 GRC

D.14-12-025 required the IOU's Risk Mitigation Accountability Report (RMAR) and Risk Spending Accountability Report (RSAR) to together explain how IOU risk mitigation activities and spending are meeting the goals for managing and minimizing the risks identified in the utility's RAMP and GRC submissions. D.19-04-020 found that it was "premature to approve specific RMAR requirements or to require separate, more general RMARs at this time," and instead adopted interim RMAR requirements to be included in this Safety Performance Metrics Report. "In the interim, we direct the IOUs to include in their annual Safety Performance Metrics Reports some of the information originally envisioned as belonging in the RMARs."

SDG&E filed its TY 2019 GRC Application on October 6, 2017.³² Among other things, SDG&E's GRC Application included requests related to mitigating their key safety risks and integrated the results from the Company's RAMP filed on November 30, 2016 (2016 RAMP).³³ SDG&E's 2016 RAMP filing significantly informed the latest TY 2019 General Rate Case

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³⁰ D.19-04-020 at 32.

 $^{^{31}}$ Id

A.17-10-007, Application of San Diego Gas & Electric Company (U902M) for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019 (October 6, 2017).

I.16-10-015, Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company (November 30, 2016).



results.³⁴ The below tables provide a high-level summary of SDG&E's total estimated risk mitigation spending as presented in the 2016 RAMP filing and approved in the TY 2019 GRC.

The TY 2019 GRC Decision did not explicitly authorize RAMP activities differently from non-RAMP activities. Instead, the TY 2019 GRC Decision assessed and authorized funding for SDG&E in many instances based on "standard GRC methods, such as the quality of the forecast, counterarguments by intervenors, and whether a given showing met the burden of proof." For purposes of TY GRC 2019 authorized amounts (based on SDG&E's 2016 RAMP submission), SDG&E had to impute authorized amounts for some RAMP mitigation activities. Similarly, SDG&E does not necessarily track costs by RAMP mitigation activity or risk. Rather, SDG&E records costs to O&M cost centers and to various capital budget codes, aligned with their GRC presentations. Since SDG&E's 2016 RAMP and TY 2019 GRC applications were filed, a more quantitative risk methodology and framework for RAMP and GRC filings was approved by the Commission in D.18-12-014. Based on the foregoing, these 2020 figures reflect a transitional time period in presenting the above-noted Commission directives. SDG&E will continue to work with Commission staff and the S-MAP technical working group (as needed) regarding additional details for future reports.

The TY 2019 GRC Decision was approved by the Commission on September 26, 2019.³⁶ The TY 2019 GRC Decision states "[t]he adopted revenue requirement and PTY increases for SDG&E will provide the necessary funds to allow it to operate its electric and natural gas transmission and distribution system safely and reliably and to fulfill customer service functions

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Pursuant to D.20-01-002, Appendix B at B-1, SDG&E's next RAMP filing will be May 15, 2021, informing its TY 2024 GRC to be filed on May 15, 2022.

³⁵ D.19-09-051 at 22.

³⁶ D.19-09-051.



at reasonable rates."³⁷ Further, while SDG&E endeavored to "isolate the RAMP activity, to allow the reader to see the dollar request in GRC workpapers,"³⁸ the TY 2019 GRC Decision stated that the "RAMP portion in Applicants' requests is not presented as separate and distinct from the non-RAMP portions" and "in many instances our decision is not based on risk mitigation but rather on standard GRC methods."³⁹ Based on this approach, the TY 2019 GRC Decision does not necessarily authorize RAMP activities by line item details.

D.19-04-020 directs the IOUs to include an explanation of how the reported safety metric data reflects progress against the safety goals in the utility's RAMP and approved GRC application and a high-level summary of their total estimated risk mitigation spending level as approved in their most recent GRC. SDG&E includes this data in the tables below. Please refer to SDG&E's 2020 Risk Spending Accountability Report for additional detail on spending activities presented in SDG&E's 2016 RAMP Report and TY 2019 GRC proceeding.

Table 2 - SDG&E Interim RMAR Summary: O&M

SDG&E O&M Details (2020 Direct \$000)							
RAMP Chapter	RAMP Risk Description	2020 Actuals	2020 Imputed Authorized	\$ Variance	% Variance		
SDG&E-01	Wildfires Caused by SDG&E Equipment	88,159	40,986	47,172	115%		
	Catastrophic Damage Involving Third Party						
SDG&E-02	Dig-Ins	7,922	4,115	3,807	93%		
SDG&E-03	Employee, Contractor, and Public Safety	62,176	51,720	10,457	20%		
	Distributed Energy Resources – Safety and						
SDG&E-04	Operational Concerns	75	82	(7)	-8%		
SDG&E-06	Fail to Blackstart	18	45	(27)	-60%		
SDG&E-07	Cyber Security	11,557	8,434	3,122	37%		
SDG&E-08	Aviation Incident	509	452	58	13%		

³⁷ *Id* at 3

Ex. SCG-02-R/SDG&E-02-R, Chapter 3 (York) at JKY-6.

³⁹ D.19-09-051 at 22.



SDG&E-09	Workplace Violence	4,748	5,240	(492)	-9%
	Catastrophic Damage Involving High-				
SDG&E-10	Pressure Gas Pipeline Failure	9,030	5,693	3,337	59%
SDG&E-11	Unmanned Aircraft System Incident	290	179	111	62%
SDG&E-12	Electric Infrastructure Integrity	8,697	21,881	(13,184)	-60%
SDG&E-13	Records Management	6,809	9,431	(2,622)	-28%
SDG&E-14	Climate Change Adaptation	1,095	443	652	147%
	Catastrophic Damage Involving Medium-				
SDG&E-16	Pressure Gas Pipeline Failure	11,769	15,543	(3,774)	-24%
SDG&E-17	Workforce Planning	3,493	2,411	1,081	45%
Total SDG&E RAMP		216,347	166,655	49,692	30%

SDG&E's 2016 RAMP Report forecasted RAMP activities for years 2017 through 2019. SDG&E's TY 2019 GRC presented capital forecasts for the GRC cycle (*i.e.*, 2019-2021). SDG&E manages its capital projects over the cycle, rather than on a year-by-year basis. Further, as the Rate Case Plan Decision states: "The Commission has always acknowledged that utilities may need to reprioritize spending between GRCs. Now, given the evolving reality [of moving to a four-year GRC cycle], that necessity may even be growing." Reprioritizing spending allows utilities to "[r]espond to immediate or short-term crises outside of the RAMP and GRC process," in accordance with Commission directive. As the Commission has stated: "RAMP and GRCs... are not designed to addresses immediate needs; the utilities have responsibility for addressing safety regardless of the GRC cycle." With the September 2019 TY 2019 GRC Decision, SDG&E began executing on new and/or incremental programs presented during the TY 2019 GRC proceeding.

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D.20-01-002 at 52, extended the GRC cycle for each large California IOU from three to four years. To facilitate the transition from a three to four-year GRC cycle, the Rate Case Plan Decision "direct[s]... SDG&E to request two additional attrition years (2022 and 2023) in their petition for modification of D.19-09-051." A Proposed Decision was issued March 19, 2021.

⁴¹ D.20-01-002 at 38.

⁴² D.18-04-016 at 6 n.7 (citing D.16-08-018 at 152).

⁴³ D.16-08-018 at 152.



Table 3 - SDG&E Interim RMAR Summary: Capital

SDG&E Capital Details (2020 Direct \$000)							
RAMP Chapter	RAMP Risk Description	2020 Actuals	2020 Imputed Authorized	\$ Variance	% Variance		
SDG&E-01	Wildfires Caused by SDG&E Equipment	279,701	87,502	192,200	220%		
SDG&E-02	Catastrophic Damage Involving Third Party Dig-Ins	4	313	(309)	-99%		
SDG&E-03	Employee, Contractor, and Public Safety	23,835	9,252	14,583	158%		
SDG&E-04	Distributed Energy Resources – Safety and Operational Concerns	46	233	(187)	-80%		
SDG&E-05	Major Disturbance to Electrical Service (e.g., Blackout)	0	1,673	(1,673)	-100%		
SDG&E-06	Fail to Blackstart	1,408	1,990	(582)	-29%		
SDG&E-07	Cyber Security	9,675	3,144	6,530	208%		
SDG&E-08	Aviation Incident	1	1,929	(1,928)	-100%		
SDG&E-09	Workplace Violence	4,246	4,069	178	4%		
SDG&E-10	Catastrophic Damage Involving High- Pressure Gas Pipeline Failure	5,529	10,443	(4,914)	-47%		
SDG&E-12	Electric Infrastructure Integrity	95,314	107,703	(12,389)	-12%		
SDG&E-13	Records Management	7,501	12,361	(4,860)	-39%		
SDG&E-16	Catastrophic Damage Involving Medium- Pressure Gas Pipeline Failure	73,146	43,239	29,907	69%		
	Total SDG&E RAMP	500,406	283,849	216,557	76%		

As stated above, please refer to SDG&E's 2020 Risk Spending Accountability Report for additional detail on activities presented in SDG&E's 2016 RAMP Report and TY 2019 GRC

SEMPTA Energy utility

proceeding, including variance explanations for those activities/programs that meet the CPUC's variance criteria threshold.

V. Approved Safety Performance Metrics (D.19-04-020, Ordering Paragraph 2)

Each of the currently applicable and reportable safety performance metrics, as defined and adopted in the S-MAP Phase Two Decision, are individually discussed below. Each section provides a brief narrative to provide context to the data and a high-level summary. Ten years of monthly historical data, where available, is separately provided in Excel format in Attachment B. If the full ten years of monthly historical data is not included for any given metric, SDG&E provides an explanation and is collecting such data on a prospective basis for inclusion in future Safety Performance Metrics Reports.

A. Metric No. 1: Transmission & Distribution (T&D) Overhead Wires Down

Metric Name and Description per D.19-04-020:⁴⁴ "Transmission & Distribution (T&D) Overhead Wires Down. Number of instances where an electric transmission or primary distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object; excludes down distribution secondary wires and "Major Event Days" (typically due to severe storm events) as defined by the [Institute of Electrical and Electronics Engineers] IEEE."

Risks: Wildfire; Transmission Overhead Conductor; Distribution Overhead Conductor Primary.

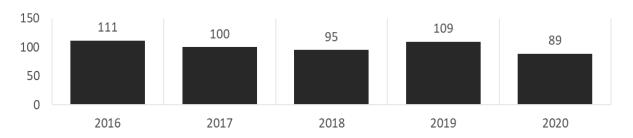
Category: Electric

Units: Number of wire down events.

The metric name and description, risks, category, and units for each metric comes directly from D.19-04-020, Attachment 1.



Summary Chart of T&D Overhead Wires Down Metric Data (Annual)



Narrative Context:

As provided in the metric description, a downed conductor, or "wire down," occurs when a conductor drops or breaks from its designed location on a pole and cross arm and falls from its intended position, possibly in an energized mode. A wire down event is one of SDG&E's primary concerns with respect to its overhead equipment. Accordingly, SDG&E continues to take proactive measures to determine the cause of any such wire down event and has a dedicated team reviewing all wire down events to determine the root cause and identify any trends to potentially trigger the development of a new program. The identification of wire-down events key drivers is captured through a collaboration of data analysis and engineering. These drivers include environmental factors such as high winds or coastal corrosion, third-party contact, weather-caused foreign object contact, human or animal-caused foreign object contact, and degradation due to aging infrastructure.

SDG&E has implemented programs targeting the wire most prone to potential wire down events to decrease this risk. SDG&E utilizes risk modeling to determine segments of circuits that have the greatest risk for energized wire downs and then mitigates through installing larger conductor, covered conductor, reconfiguring the system, and/or deploying advanced protection schemes. The mitigations are included in the capital rebuild and wildfire mitigation programs



such as SDG&E's Fire Risk Mitigation (FiRM), Overhead Public Safety (OPS), and Wire Safety Enhancement (WiSE).

Historical Data:

Ten years of monthly historical data is included in the accompanying Excel file (Attachment B) for the number of instances where an electric transmission or primary distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object. As noted in the metric definition, this data excludes down distribution secondary wires and "Major Event Days" (typically due to severe storm events) as defined by the IEEE. 45 More wires down events generally occur in January and February than other months due to weather conditions.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. SDG&E's 2020 Executive and non-executive Incentive Compensation Plans include "System and Customer Safety" performance measures. One of these measures is "Fire Hardening: Wood-to-Steel Pole Replacements." While SDG&E's wood to steel pole replacements is aimed at mitigating fire risk, these programs also help mitigate the risk of wire down events. SDG&E has the following systematic programs for changing out wood to steel poles, as included in the 2020 Executive and non-executive ICPs: FiRM, Pole Risk Mitigation Engineering (PRiME); Cleveland National Forest Project (CNF); Corrective Maintenance Program (CMP). When wood poles in the High Fire Threat District (HFTD) need to be replaced, they will be replaced with steel. This goal will be tracked by the project managers of the above-listed programs and verified on the quarterly geographic information system (GIS) reports.

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this

The Institute of Electrical and Electronics Engineers defines a Major Event Day as "[a] day in which the daily system SAIDI exceeds a threshold value, TMED. For the purposes of calculating daily system SAIDI, any interruption that spans multiple calendar days is accrued to the day on which the interruption began. Statistically, days having a daily system SAIDI greater than TMED are days on which the energy delivery system experienced stresses beyond that normally expected (such as severe weather). Activities that occur on major event days should be separately analyzed and reported." IEEE Guide for Electric Power Distribution Reliability Indices, in IEEE Std 1366-2003 (Revision of IEEE Std 1366-1998), vol., no., pp.1-50, 14 May 2004.



2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

Yes. As described above, SDG&E's 2020 Executive Incentive Compensation and non-executive Incentive Compensation Plans include a System and Customer Safety metric for "Fire Hardening: Wood-to-Steel Pole Replacements." This metric is weighted at 3% of the 59% overall safety weighting for SDG&E's 2020 Executive ICP and 2% of the 34% overall safety weighting for SDG&E's 2020 non-executive ICP.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)– [Yes/No]

 Yes. SDG&E's Fire Hardening: Wood-to-Steel Pole Replacement metric is linked to all SDG&E director level or higher positions covered by either the 2020 Executive ICP or 2020 non-Executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval. Additionally, the specific programs/projects noted above within the Fire Hardening ICP metric description are tracked by the project managers and verified on the quarterly GIS reports.
 - B. Metric No. 2: Transmission & Distribution (T&D) Overhead Wires Down Major Event Days

Metric Name and Description per D.19-04-020: "Transmission & Distribution (T&D) Overhead Wires Down - Major Event Days. Number of instances where an electric transmission or primary distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object; includes down secondary distribution wires. Includes "Major Event Days" (typically due to severe storm events) as defined by the IEEE."

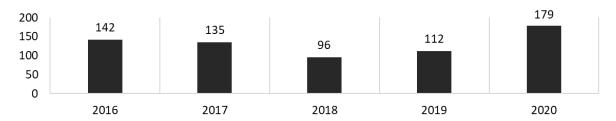
Risks: Wildfire; Transmission Overhead Conductor; Distribution Overhead Conductor Primary.

Category: Electric

Units: Number of wire down events.



Summary Chart of T&D Overhead Wires Down Metric Data (Annual)



Narrative Context:

As discussed in the previous metric narrative, a downed conductor, or "wire down," occurs when a conductor drops or breaks from its designed location on a pole and cross arm falls from its intended position, possibly in an energized mode. This metric takes into account both secondary wires and Major Event Days. Major Event Days are typically due to severe storm events. SDG&E tracks the number of instances where a primary distribution conductor experiences a wire down in a major event. Before 2020, SDG&E tracked instances of secondary wire downs; however, SDG&E did not track if the secondary wire down was caused by a Major Event. Based on the directive in D.19-04-020 to report on this metric, beginning in 2020, SDG&E tracks and reports all secondary wire downs and identifies those caused by a Major Event.

Historical Data:

Ten years of monthly historical data is included in the accompanying Excel file (
Attachment B) for the number of instances where an electric transmission or primary distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object.

This metric definition includes down secondary distribution wires and Major Event Days as defined by the IEEE. However, as stated above, SDG&E did not track downed secondary distribution wires prior to 2020. Therefore, the data provided includes instances of downed



primary distribution conductor, including Major Event Days (Metric No. 1 includes instances of downed primary conductor but excludes Major Event Days) for ten years and instances of down secondary wire beginning in 2020. In comparing 2020 to previous years, there is a noticeable increase in wire down events. This is directly related to the inclusion of secondary wire down reporting, beginning in August of 2020, which added an additional 82 events to the 2020 total. More wires down events generally occur in January and February than other months due to weather conditions.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. SDG&E's 2020 Executive and non-executive Incentive Compensation Plans include "System and Customer Safety" performance measures. One of these measures is "Fire Hardening: Wood-to-Steel Pole Replacements." While SDG&E's wood to steel pole replacements is aimed at mitigating fire risk, these programs also help mitigate the risk of wire down events. SDG&E has the following systematic programs for changing out wood to steel poles, as included in the 2020 Executive and non-executive ICPs: FiRM, Pole Risk Mitigation Engineering (PRiME); Cleveland National Forest Project (CNF): Corrective Maintenance Program (CMP). When wood poles in the High Fire Threat District (HFTD) need to be replaced, they will be replaced with steel. This goal will be tracked by the project managers of the above-listed programs and verified on the quarterly GIS reports.

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)– [Yes/No]

• Yes. As described above, SDG&E's 2020 Executive Incentive Compensation and non-executive Incentive Compensation Plans include System and Customer Safety metrics for "Fire Hardening: Wood-to-Steel Pole Replacements." This metric is weighted at 3% of the 59% safety weighting for SDG&E's 2020 Executive ICP and 2% of the 34% safety weighting for SDG&E's 2020 non-executive ICP.



Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

• Yes. SDG&E's Fire Hardening: Wood-to-Steel Pole Replacement metric is linked to all SDG&E director level or higher positions covered by either the 2020 Executive ICP or 2020 non-executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

• Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval. Additionally, the specific programs/projects noted above within the Fire Hardening ICP metric description are tracked by the project managers and verified on the quarterly GIS reports.

C. Metric No. 3: Electric Emergency Response

Metric Name and Description per D.19-04-020: "Electric Emergency Response. The percent of time utility personnel respond (are on-site) within one hour after receiving a 911 (electric related) call, with on-site defined as arriving at the premises to which the 911 call relates."

Risks: Wildfire; Overhead Conductor; Public Safety; Worker Safety.

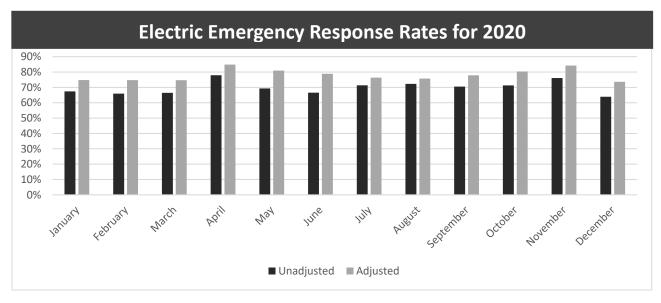
Category: Electric

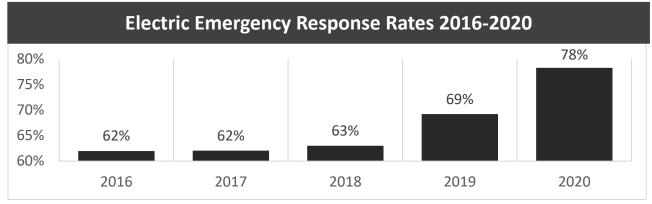
Units: Percentage of time response is within 60 mins.

Summary:



Summary Chart of Electric Emergency Response Metric Data (Annual)





2020 is the first year tracking adjusted data and YTD rates. Years 2016-2019 show unadjusted monthly average for the year.

Narrative Context:

The efforts to improve data collection for the electric emergency response metric continued in 2020 and benefitted from a process to audit data utilizing vehicle telematics to increase the accuracy of reported departure and on-site arrival times for the electric troubleshooters. The unadjusted rate from raw data, used to report the metric in prior years, found that 2020 was nearly equivalent to 2019, with an electric emergency response rate of 69%. The adjusted rate from audited data for 2020 increased the emergency response percentage to



78% after correcting for delayed data input on enroute and arrival times, often due to the priority of responding to the emergency at-hand or other anomalous timekeeping data errors. The difference between the raw and audited data seen in 2020 showed monthly ranges between 4-12%, with no apparent seasonal or quarterly trend. The difference between adjusted and unadjusted rates when compared to the total number of monthly orders are also fairly constant.

SDG&E received over 1,600 electric emergency calls requested by police, fire, or other government agencies in 2020, with approximately 2,400 electric emergency orders responded to in total. The monthly adjusted response rates for 2020 range from 74-85%, with the highest response rates in the 2nd and 4th quarters of the year, averaging around 80%. The response rates for the 1st and 3rd quarters of 2020 averaged around 75%.

The total number of emergency orders varied slightly in the first quarter of 2020.

Between the months of January and April, the average number of emergency orders was 165 orders per month. The remaining three quarters of the year, from May to December, saw an increase in the total number of orders averaging 217 per month. This variation in the seasonal number of emergency orders has no current identifiable explanation or apparent influence on the monthly emergency response percentages.

SDG&E has consistently improved electric emergency response times over recent years and is evaluating multiple initiatives and strategies to (1) further improve response times and (2) improve data collection and reporting efforts. For example, SDG&E plans to continue deployments for advanced vehicle telematics to better determine troubleshooters' time of departure and on-site arrivals in support of the audit process utilized in 2020.



Historical Data:

Ten years of monthly historical data is included in the accompanying Excel file (
Attachment B). The data captures the percent of time SDG&E personnel respond (are on-site)
within one hour after receiving a 911 (electric-related) call, with on-site defined as arriving at the
premises to which the 911 call relates. As noted before, SDG&E's review of historical data
identified instances in delayed reporting of actual on-scene arrival times and, in late 2019,
SDG&E commenced manual reviews of this data. SDG&E conducted a manual review of
electricity emergency response data for the entire year of 2020. This data for 2020, as reflected in
the accompanying Excel file (Attachment B), has been adjusted to correct anomalies resulting
from human error (e.g., the technician did not manually click 'onsite' upon arrival on scene),
system errors (e.g., application downtime or outage) and/or duplicate orders. Given the manual
nature of this review, SDG&E did not review (or adjust) data prior to June 2019. Further, the
underlying 911 source data remains unchanged. SDG&E is currently evaluating processes to
improve data collection efforts for this metric going forward.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

• No

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

• N/A



D. Metric No. 4: Fire Ignitions

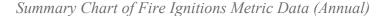
Metric Name and Description per D.19-04-020: "Fire Ignitions. The number of annually reportable fire incidents meeting the parameters of CPUC Decision 14-02-015. A reportable fire incident includes all of the following: 1) Ignition is associated with a utility's powerlines and 2) something other than the utility's facilities burned and 3) the resulting fire traveled more than one meter from the ignition point."

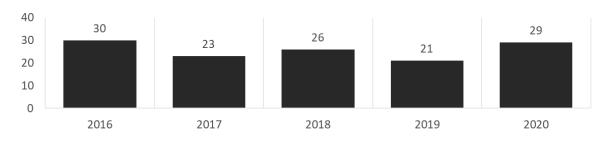
Risks: Overhead Conductor; Wildfire; Public Safety; Worker Safety; Catastrophic Event Preparedness.

Category: Electric

Units: Number of ignitions.

Summary:





Narrative Context:

SDG&E operates its system with safety as a core value. When operating conditions reach elevated or extreme levels, SDG&E implements operating protocols that reduce the risk of ignitions on the system. This can be in the form of disabling automatic reclosers, enabling enhanced protection settings, work restrictions, and in the most extreme cases, shutting off the power to the specific areas that experience the extreme risk. Additionally, SDG&E field employees are required to take an annual training course that focuses on fire prevention and mitigations.



The latest climate projections trend towards the continuation of warmer and dryer conditions, which results in a macro trend of fuels being more receptive to ignition and fire growth. If not mitigated, this trend is likely to lead to an increase in ignition from all sources. SDG&E's wildfire mitigation initiatives, as outlined in SDG&E's 2020 Wildfire Mitigation Plan (SDG&E WMP),⁴⁶ attempt to address both the likelihood of an ignition and reduction of the consequences of an ignition should one occur. In 2020, California experienced one of its longest and most destructive fire seasons. The fire conditions remained in SDG&E's service territory into January 2021 with a Red Flag Warning (RFW) being issued through January 19, 2021 (in the past, state agencies begin to release their seasonal fire crews around mid-November). Over the next three years, SDG&E intends to use data gathered through its mitigation initiatives to identify increased areas of risk and educate mitigation activities.

Over the past five years in SDG&E's service territory, the two primary groups of ignition drivers that impact the ignition probability and the consequence of ignition are contact from an outside force on utility infrastructure and equipment failure. Outside forces leading to ignitions comprise items ranging from foil balloons to flying patio umbrellas. For instance, since 2014 there have been twenty-four (24) CPUC-reportable fires caused by foil balloons within SDG&E's service territory. Electric equipment also has a wide range of ignition sources. Both the ignition probability and the consequence of a fire are impacted by the fuel loading near the ignition point. Even with these factors, in 2020 the total combined acreage of all of SDG&E's reportable ignitions was 12.57 acres (29 fires).

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SDG&E's 2020 Wildfire Mitigation Plan (February 7, 2020), available at https://www.sdge.com/2020-wildfire-mitigation-plan.



In 2019, SDG&E established a pilot Ignition Management Program (IMP). The purpose of this program is to track ignitions and potential ignitions in order to perform an analysis on ignitions or potential ignitions to detect patterns or correlations. These events are documented and analyzed. In 2020, the IMP followed up on 210 evidence of heat reports. This information is then tracked in a database and analyzed by internal subject matter experts. When patterns or correlations are identified, the outcomes are communicated and assigned to mitigation owners from the business unit most logically positioned to eliminate or reduce future events of a similar nature. This data will be used to inform metrics, operational practices, and system hardening in the future.

To reduce the probability of equipment failure leading to an ignition, SDG&E has, over the past decade, focused on hardening its electric system with programs like FiRM and Cleveland National Forest Project (CNF). Recently, these system hardening efforts expanded to include the replacement of hotline clamps, expulsion fuses, and capacitors. SDG&E monitors for new emerging ignition concerns using its IMP. In addition to these mitigation activities, SDG&E has developed, maintained, and continues to expand its extensive Vegetation Management Program, which inspects and maintains clearances between electric facilities and vegetation. SDG&E also partners with fire agencies, community groups, and landowners to implement fuels management projects in areas that will reduce the likelihood of an ignition becoming a wildfire.

In D.14-02-015, the CPUC adopted a Fire Incident Data Collection Plan that requires investor-owned electric utilities to collect and annually report certain information that would be useful in identifying operational and/or environmental trends relevant to fire-related events. The purpose of this reporting is to improve regulations and internal utility standards to reduce the



likelihood of fires. Reporting requirements are limited to reportable fire events that meet the following criteria:

- A self-propagating fire of material other than electrical and/or communication facilities,
- The resulting fire traveled greater than one linear meter from the ignition point, and
- The utility has knowledge that the fire occurred.

Since external reporting of this metric began in 2014,⁴⁷ SDG&E has had only three reportable fires over 10 acres, including 2020 fires incidents. All other CPUC-reportable fires have been less than 10 acres. As stated above, external factors such as vehicles contacting electric equipment, foil balloons, and human activity are shown to have a large impact on the yearly number of reportable fires.

Historical Data:

Monthly historical data is provided in the accompanying Excel file (Attachment B) for years 2014 through 2020, containing the number of electric equipment-involved fire incidents annually reportable to the CPUC per D.14-02-015. As noted in the metric definition, a reportable fire incident includes all of the following: "1) Ignition is associated with a utility's powerlines [electric equipment] and 2) something other than the utility's facilities burned and 3) the resulting fire [was self-propagating and] traveled more than one meter from the ignition point." SDG&E will continue to track this metric for inclusion in future Safety Performance Metrics Reports, until a full ten years of historical data is provided. This data is also submitted to the CPUC annually as part of SDG&E's Wildfire Mitigation Plan reportable metrics. ⁴⁸ 2020 Fire Ignitions were higher than 2019 because the 2020 fire season was longer, and the conditions in 2020 were more conducive to fires than in years past.

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⁴⁷ D.14-02-015.

⁴⁸ See SDG&E WMP.



Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

- Yes. SDG&E's 2020 Executive and 2020 non-executive ICP plans include the following "Fire and Public Safety" performance measures aimed at reducing the risk of fire ignitions:
 - Fire Hardening: Wood-to-Steel Pole Replacements The goal of this program is to replace wood poles with steel poles to reduce fire risk. SDG&E has the following systematic programs for changing out wood to steel poles:
 - Fire Risk Mitigation (FiRM); Wood to Steel Transmission Pole Change Outs; Pole Risk Mitigation Engineering (PRiME); Cleveland National Forest Project (CNF): Corrective Maintenance Program (CMP) When wood poles in the High Fire Threat District (HFTD) need to be replaced, they will be replaced with steel. This goal will be tracked by the project managers in the above programs and verified on the quarterly GIS reports.
 - Wildfire Safety Communications Measures the percentage of fire safety messages confirmed as received by customers that are sent prior to an imminent Public Safety Power Shut-Off event. The delivery of this message notifying customers of an imminent loss of power generally occurs 1-2 days before a circuit or portion of a circuit is deenergized.

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. As described above, SDG&E's 2020 Executive Incentive Compensation and 2020 non-executive Incentive Compensation Plans include safety metrics for "Fire Hardening: Wood-to-Steel Pole Replacements" and "Wildfire Safety Communications." These metrics are each weighted at 3% of the 59% safety weighting for SDG&E's 2020 Executive ICP and 2% (Fire Hardening) and 1% (Wildfire Safety Communications) of the 34% safety weighting for SDG&E's 2020 non-executive ICP.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

 Yes. SDG&E's Fire Hardening: Wood-to-Steel Pole Replacements and Wildfire Safety Communications metrics are linked to all SDG&E director level or higher positions covered by either the 2020 Executive ICP or 2020 non-executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.



• Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval. Additionally, the specific programs/projects noted above within the Fire Hardening ICP metric description are tracked by the project managers and verified on the quarterly GIS reports.

E. Metric No. 5: Gas Dig-In

Metric Name and Description per D.19-04-020: "Gas Dig-in: The number of 3rd party gas dig-ins per 1,000 Underground Service Alert (USA) tags/tickets for gas. Excludes fiber and Electric tickets. A gas dig-in refers to any damage (impact or exposure) that results in a repair or replacement of underground gas facility as a result of an excavation. A third-party dig-in is damage caused by someone other than the utility or a utility contractor."

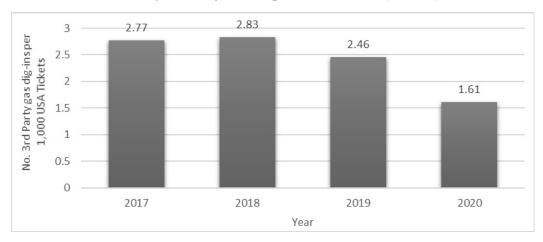
Risks: (1) Transmission Pipeline Failure - Rupture with Ignition, (2) Distribution Pipeline Rupture with Ignition (non-Cross Bore). (3) Catastrophic Damage involving Gas Infrastructure (Dig-Ins).

Category: Gas

Units: The number of 3rd party gas dig-ins per 1,000 USA tags/tickets.

Summary:







Narrative Context:

SDG&E began tracking this metric in 2014; however, regulations were not enacted requiring external reporting of this data until 2017.⁴⁹ Over the time period SDG&E has been tracking this metric, SDG&E has seen an increased volume in USA tickets. Third-party gas digins is an identified RAMP risk for SDG&E. SDG&E managed over 180,000 811 USA tickets and reported over 290 dig-in excavation damages in 2020. Analysis of reported damage incidents for 2020 shows that over 58% were due to a lack of notification to 811 USA for a locate and mark ticket. Another approximately 31% were due to insufficient excavation practices even after the excavator called 811 USA and underground facilities were marked.

In addition to direct involvement with excavators and 811 USA, SDG&E engages in promoting safe digging practices through its Public Awareness Program⁵⁰ and corporate safety messaging through stakeholder outreach. The message is presented by way of multi-formatted educational materials through mail, email, social media, television, radio, events, and association sponsorships. The California Dig Board established a protocol for investigations of incidents and began issuing violations and fines to third parties in July 2020.

Historical Data:

Monthly data is provided for years 2014 through 2020 in the accompanying Excel file (Attachment B) for the number of third-party gas dig-ins per 1,000 USA tickets. The data included herein is a subset of the data submitted annually to PHMSA. The data submitted annually to PHMSA reports the number of instances of all dig-ins, whereas the data included here reports only third-party dig-ins per 1,000 USA tickets. While SDG&E does not have ten

⁵⁰ API RP 1162.

⁴⁹ 49 CFR §192, *et al.*; *id.* at §196; California Government Code §4216, General Order (GO) 112-F; American Petroleum Institute Recommended Practice (API RP) 1162 (December 2003).



years of historical data, SDG&E will continue tracking this metric and will build upon the historical data in each future submission until a full ten years of monthly, historical data is provided.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. SDG&E's 2020 Executive Incentive Compensation and 2020 non-executive Incentive Compensation Plans include a gas safety metric for "Damage Prevention (Damages per USA Ticket Rate)." For ICP purposes, the Damage Prevention (Damages per USA Ticket Rate) consists of the number of damages that cause a gas leak to SDG&E's below ground facilities and the total number of received USA Ticket transmittals. This is a standard industry metric for measuring operator performance for damage prevention. To calculate this metric, the number of damages is normalized by the number of USA tickets and multiplied by 1,000 to obtain the number of damages per 1,000 tickets. Normalizing by ticket count factors in the year-to-year variation in construction and excavation activities that have a direct influence on damages. This allows for measurable year-to-year performance, allowing this metric to be used as an indicator for success of risk reduction activities.

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. As described above, SDG&E's 2020 Executive Incentive Compensation and non-executive Incentive Compensation Plans include a gas safety metric for "Damage Prevention (Damages per USA Ticket Rate)." This metric is weighted at 3% of the 59% safety weighting for SDG&E's 2020 Executive ICP and 2% of the 34% safety weighting for SDG&E's 2020 non-executive ICP.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)–[Yes/No]

• Yes. SDG&E's Damage Prevention (Damages per USA Ticket Rate)" metric is linked to all SDG&E director level or higher positions covered by either the 2020 Executive ICP or 2020 non-executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.



• Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval.

F. Metric No. 6: Gas In-Line Inspection

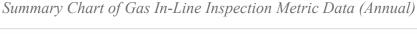
Metric Name and Description per D.19-04-020: "Gas In-Line Inspection: Total miles of transmission pipe inspected by in-line inspection."

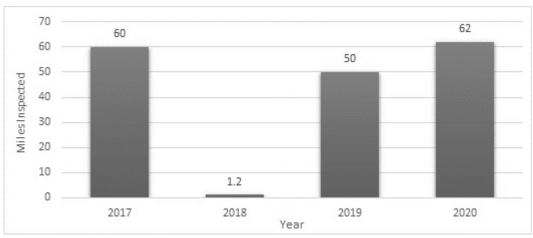
Risks: Catastrophic Damage Involving High-Pressure Pipeline Failure.

Category: Gas.

Units: (1) Miles Inspected, (2) Total number of inspections scheduled/total number of targeted. Inspections.

Summary:





Narrative Context:

The SDG&E transmission and distribution system spans from the California-Mexico border to the Pacific Ocean and to the SoCalGas territory border. SDG&E's Transmission Integrity Management Program (TIMP) is federally mandated to identify threats to transmission pipelines in High Consequence Areas (HCAs), determine the risk posed by these threats, schedule prescribed assessments to evaluate these threats, collect information about the condition



of the pipelines, take actions to minimize applicable threat and integrity concerns to reduce the risk of a pipeline failure. Approximately 185 miles out of 220 miles of SDG&E's transmission pipelines are located in HCA areas. At a minimum of every seven years transmission pipelines located within HCAs are assessed using In-Line-Inspection (ILI), Direct Assessment, Pressure Test, or other appropriate methods identified in 49 CFR §§ 192.921 & 937 and remediated as needed.

Detected anomalies are classified and addressed based on severity. Remediations reduce risk by addressing areas where corrosion, weld or joint failure, or other forces are occurring or have occurred. Post-assessment pipeline repairs, when appropriate, and replacements are intended to increase public and employee safety by reducing or eliminating conditions that might lead to an incident. ILI is the primary assessment method used to identify potential pipeline integrity threats. When a condition that presents a potential threat is evaluated and requires remediation, SDG&E acts in accordance with 49 CFR § 192.933 to reduce risk. These actions involve removing a pipeline from service or reducing operating pressure. In cases where the assessment involves a pressure test, immediate remediation is also required as the pressure test cannot be completed until the pipeline is repaired.

TIMP reduces the risk of failure to the pipeline transmission system and on a continual basis evaluates the effectiveness of the program and scheduled assessments. TIMP Risk Assessment evaluates the Likelihood of Failure (LOF) using the nine threat categories (1. External Corrosion; 2. Internal Corrosion; 3. Stress Corrosion Cracking; 4. Manufacturing; 5. Construction; 6. Equipment; 7. Third-Party Damage; 8. Incorrect Operations; and 9. Weather Related and Outside Force) for transmission pipelines located within an HCA. Pipeline operational parameters and the area near the pipeline are considered to evaluate Consequence of



Failure (COF). The LOF multiplied by the COF produces the pipelines Relative Risk Score. Further information is collected about the physical condition of transmission pipelines through integrity assessments. Action is taken to address applicable threats and integrity concerns to increase the safety and preclude pipeline failures.

The numbers and types of TIMP activities vary from year to year and are primarily based on the timing and interval of baseline assessments and reassessments. Covered segments are required to be assessed at an interval not to exceed seven years. Therefore, assessments may vary year-to-year and data should be viewed across an entire seven-year cycle.

In addition to TIMP, and pursuant to 49 CFR § 192.710, SDG&E also assesses transmission pipeline segments in non-HCA Class 3 and Class 4 locations, as well as ILI-capable transmission pipeline segments in Moderate Consequence Areas (MCAs). SDG&E assesses these outside-of-HCA segments using ILI, Direct Assessment, Pressure Test, or other appropriate methods identified in 49 CFR §192.710, and remediates adverse conditions as required. Intervals of assessments are not to exceed ten years and as with TIMP, assessments may vary year-to-year, further supporting the earlier statement that data should be viewed across an entire cycle.

Historical Data:

SDG&E began tracking the total miles of transmission pipe inspected by ILI in 2010 and provides annual data for years 2011 through 2020 in the accompanying Excel file (Attachment B). The miles inspected by ILI is an annual metric that is currently reported in Part F of the PHMSA Gas Transmission and Gathering Annual Report F 7100.2-1; therefore, monthly values have not historically been tracked or provided. Additionally, as stated previously, the number of assessments and mitigation activities planned under TIMP and to address 49 CFR § 192.710 varies from year to year; therefore, data should be viewed across the entire cycle.



Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)– [Yes/No]

No

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

No

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

N/A

G. Metric No. 8: Shut In The Gas Average Time – Mains

Metric Name and Description per D.19-04-020: "Shut In The Gas Average Time – Mains: The average time (in minutes) required for the utility to stop the flow of gas during incidents involving mains when responding to any unplanned/uncontrolled release of gas. The timing for the response starts when the utility first receives the report and ends when an utility's qualified representative determines, per the utility's emergency standards, that the reported leak is not hazardous or the utility's representative completes actions to mitigate a hazardous leak and render it as being non-hazardous (*i.e.*, by shutting-off gas supply, eliminating subsurface leak migration, repair, etc.) per the utility's standards."

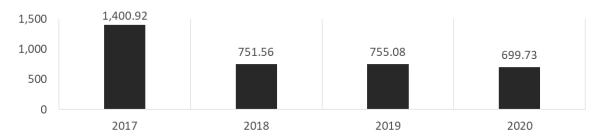
Risks: Distribution Pipeline Rupture with Ignition (non-Cross Bore).

Category: Gas.

Units: Average (median) time in minutes required to stop the flow of gas.

Summary:

Summary Chart of Shut In The Gas Average Time - Mains Metric Data (Annual)





Narrative Context:

The metric includes shut-in time for incidents where a gas dig-in occurred and for uncontrolled gas releases found during routine gas surveys. SDG&E responds to emergency calls 24 hours per day, 365 days per year from a myriad of sources, including first responders (e.g., local law enforcement and fire departments) as well as residential, commercial, industrial and agriculture customers. SDG&E's Customer Service Field (CSF) technicians or Gas Emergency Department crews will respond to all calls of gas leaks and perform a gas leak investigation. A leak will be remediated immediately if there is a hazardous condition. If the leak does not create a hazardous situation, SDG&E will monitor the leak until it is remediated. SDG&E has a pipeline safety campaign, which is mandated by federal pipeline safety regulation (49 CFR, §192). SDG&E's campaign includes bill inserts, mailings to residential and business customers, mailings to excavators, businesses, land developers and farmers, and communications to schools and universities, public officials and emergency officials. Pipeline safety efforts provide customers with information about natural gas pipeline locations; what to do if you sense a leak/smell gas; and messaging to direct the public to call 811 (i.e., DigAlert); and other recommended actions related to natural gas safety.

SDG&E conducts pipeline monitoring and inspection activities to proactively target risk factors before operation and safety issues arise. These monitoring activities include pipeline patrols, leak surveys, bridge and span inspections, and unstable earth inspections. SDG&E proactively surveys its gas distribution system for leakage at frequencies determined based on the pipe material involved, the operating pressure, whether the pipe is under cathodic protection, and the proximity of the pipe to various population densities as prescribed within 49 CFR § 192.723. Quarterly and bi-annual surveys are conducted for DOT-defined transmission pipes.



Annual surveys are scheduled for all steel and plastic mains and services located in business districts, near public service establishments, such as schools, churches, hospitals and for DuPont Aldyl-A (PE) pipe installed before 1986 and cathodically unprotected steel pipes located outside of business districts. Three-year survey cycles are typically used for plastic and cathodically protected steel mains and services installed outside of the business districts and in residential areas. The results of leak surveys feed into risk models for pipeline replacement.

If a leak is found during a survey of the gas distribution system, SDG&E takes steps to either remediate or monitor the situation depending on the type of leak classification. As mentioned previously, a leak will be remediated immediately if there is a hazardous condition. If the leak does not create a hazardous situation, SDG&E will monitor the leak until it is remediated. SDG&E has shortened the prescribed timeframe for which leaks will be monitored and scheduled for remediation. The leak survey program has accelerated due to the increased footage for leak surveys, which requires more leak survey activities. SB 1371 requires the adoption of rules and procedures to minimize natural gas leakage from Commission-regulated natural gas pipeline facilities consistent with Public Utilities Code section 961(d) and 49 CFR § 192.703(c). SDG&E has been an active participant in the rulemaking and has provided comments as well as met the reporting requirements set forth under SB 1371. SDG&E's first Leak Abatement Compliance Plan and accompanying Advice Letter were approved in 2018 and the Plan is being implemented by the Emissions Strategy Project Management Organization to implement 26 Mandatory Best Practices. This will result in collateral safety benefits.

Historical Data:

SDG&E began tracking this data in 2017 when CPUC GGO 112-F went into effect.

However, the 2019 Safety Performance Metrics Report constitutes the first-time that information



has been broken out to distinguish between Mains and Services. Monthly historical data for years 2017 through 2020 is included in the accompanying Excel file (Attachment B) reflecting the average time (in minutes) required for the utility to stop the flow of gas during incidents involving mains when responding to any unplanned/uncontrolled release of gas.

Unplanned/uncontrolled releases discovered during leak surveys are included in the historical data. The time calculated for the response starts when SDG&E first receives notice of a potential gas leak and ends when a qualified representative determines, per SDG&E's emergency standards, that the reported leak is not hazardous or the SDG&E representative completes actions to mitigate a hazardous leak and render it non-hazardous (*i.e.*, by shutting-off gas supply, eliminating subsurface leak migration, repair, etc.) per SDG&E's standards. SDG&E will continue to track this metric for inclusion in future Safety Performance Metrics Reports until a full ten years of monthly historical data is provided.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

Yes. SDG&E's 2020 Executive Incentive Compensation and 2020 non-executive Incentive Compensation Plans include a gas safety metric for "P1 Gas Response Time (Minutes)." For ICP purposes, the P1 Gas Response Time performance measure is the average time it takes either Customer Service Field or Gas Operations to response to a Priority 1 gas emergency. Targets are based on a three-year average of response times adjusted for anomalies including area odor/mass odor calls.

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

Yes. As described above, SDG&E's 2020 Executive Incentive Compensation and 2020 non-executive Incentive Compensation Plans include a gas safety metric for "P1 Gas Response Time (Minutes)." This metric is weighted at 2% of the 59% safety weighting



for SDG&E's 2020 Executive ICP and 1% of the 34% safety weighting for SDG&E's 2020 non-executive ICP.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

 Yes. SDG&E's "P1 Gas Response Time (Minutes)" metric is linked to all SDG&E director level or higher positions covered by either the 2020 Executive ICP or 2020 nonexecutive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval.
 - H. Metric No. 9: Shut In The Gas Average Time Services

Metric Name and Description per D.19-04-020: "Shut In The Gas Average Time – Services: The average time (minutes) that a Gas Service Representative (GSR) or qualified first responder (Gas Crew, Leak Surveyor, etc.) takes to respond and stop gas flow during incidents involving services. The timing for the response starts when the utility first receives the report and ends when the utility's qualified representative determines, per the utility's emergency standards, that the reported leak is not hazardous or the utility's representative completes actions to mitigate a hazardous leak and render it as being non-hazardous (*i.e.*, by shutting-off gas supply, eliminating subsurface leak migration, repair, etc.) per the utility's standards."

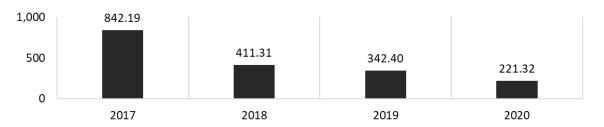
Risks: Distribution Pipeline Rupture with Ignition (non-Cross Bore).

Category: Gas.

Units: Average (median) time in minutes required to stop the flow of gas.

Summary:

Summary Chart of Shut In the Gas Average Time – Services Metric Data (Annual)





Narrative Context:

As stated above for the previous metric, Shut In The Gas Average Time – Mains, the metric includes shut-in time for incidents where a gas dig-in occurred and for uncontrolled gas releases found during routine gas surveys. SDG&E responds to emergency calls 24 hours per day, 365 days per year from a myriad of sources including first responders (e.g., local law enforcement and fire departments) as well as residential, commercial, industrial and agriculture customers. SDG&E's CSF technicians or Gas Emergency Department crews will respond to all calls of gas leaks and perform a gas leak investigation. A leak will be remediated immediately if there is a hazardous condition. If the leak does not create a hazardous situation, SDG&E will monitor the leak until it is remediated. SDG&E has a pipeline safety campaign, which is mandated by federal pipeline safety regulation (49 CFR §192). SDG&E's campaign includes bill inserts, mailings to residential and business customers, mailings to excavators, businesses, land developers, and farmers, and communications to schools and universities, public officials, and emergency officials. Pipeline safety efforts provide customers with information about natural gas pipeline locations; what to do if you sense a leak/smell gas; and messaging to direct the public to call 811 (i.e., DigAlert) and other actions to take related to natural gas safety.

SDG&E conducts pipeline monitoring and inspection activities to proactively target risk factors before operation and safety issues arise. These monitoring activities include pipeline patrols, leak surveys, bridge and span inspections, and unstable earth inspections. SDG&E proactively surveys its gas distribution system for leakage at frequencies determined based on the pipe material involved, the operating pressure, whether the pipe is under cathodic protection, and the proximity of the pipe to various population densities as prescribed within 49 CFR § 192.723. Annual surveys are scheduled for all steel and plastic services located in business



districts, near public service establishments, such as schools, churches, hospitals and for DuPont Aldyl-A (PE) pipe installed before 1986 and cathodically unprotected steel pipes located outside of business districts. Three-year survey cycles are typically used for plastic and cathodically protected steel services installed outside of the business districts and in residential areas. The results of leak surveys feed into risk models for pipeline replacement.

If a leak is found during a survey of the gas distribution system, SDG&E takes steps to either remediate or monitor the situation depending on the type of leak classification. As mentioned previously, a leak will be remediated immediately if there is a hazardous condition. If the leak does not create a hazardous situation, SDG&E will monitor the leak until it is remediated. SDG&E has shortened the prescribed timeframe for which leaks will be monitored and scheduled for remediation. The leak survey program has accelerated due to the increased footage for leak surveys, which requires more leak survey activities. SB 1371 requires the adoption of rules and procedures to minimize natural gas leakage from Commission-regulated natural gas pipeline facilities consistent with Public Utilities Code section 961(d) and 49 CFR § 192.703(c). SDG&E has been an active participant in the rulemaking and has provided comments as well as met the reporting requirements set forth under SB 1371. SDG&E's first Leak Abatement Compliance Plan and accompanying Advice Letter were approved in 2018, and the Plan is being implemented across by the Emissions Strategy Project Management Organization to implement 26 Mandatory Best Practices. This will result in collateral safety benefits.

Historical Data:

SDG&E began tracking this metric in 2017. This data is also reported externally per CPUC GO 112-F. However, the 2019 Safety Performance Metrics Report constitutes the first-



time information has been broken out to distinguish between Mains and Services. The accompanying Excel file (Attachment B) provides monthly historical data for 2017 through 2020 for the average time (minutes) that a Gas Service Representative (GSR) or qualified first responder (e.g., Gas Crew, Leak Surveyor, etc.) takes to respond and stop gas flow during incidents involving services. Incidents discovered during leak surveys are included in the historical data. The time calculated for the response starts when SDG&E first receives notice of a potential gas leak and ends when a qualified representative determines, per SDG&E's emergency standards, that the reported leak is not hazardous or SDG&E's representative completes actions to mitigate a hazardous leak and render it non-hazardous (i.e., by shutting-off gas supply, eliminating subsurface leak migration, repair, etc.) per SDG&E's standards. SDG&E will continue to track this metric for inclusion in future annual reports until a full ten years of historical data is provided.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

Yes. SDG&E's 2020 Executive Incentive Compensation and 2020 non-executive Incentive Compensation Plans include a gas safety metric for "P1 Gas Response Time (Minutes)." For ICP purposes, the P1 Gas Response Time performance measure is the average time it takes either Customer Service Field or Gas Operations to respond to a Priority 1 gas emergency. Targets are based on a three-year average of response times adjusted for anomalies including area odor/mass odor calls.

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. As described above, SDG&E's 2020 Executive Incentive Compensation and non-executive Incentive Compensation Plans include a gas safety metric for "P1 Gas Response Time (Minutes)." This metric is weighted at 2% of the 59% safety weighting



for SDG&E's 2020 Executive ICP and 1% of the 34% safety weighting for SDG&E's 2020 non-executive ICP.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

 Yes. SDG&E's "P1 Gas Response Time (Minutes)" metric is linked to all SDG&E director level or higher positions covered by either the 2020 Executive ICP or 2020 nonexecutive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval.
 - I. Metric No. 10: Cross Bore Intrusions

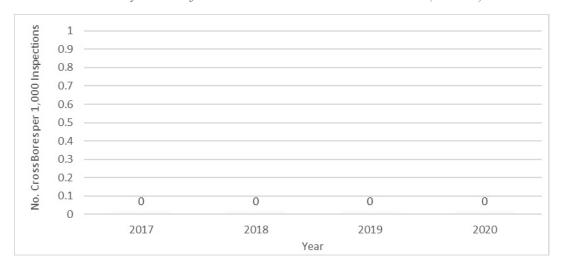
Metric Name and Description per D.19-04-020: "Cross Bore Intrusions: Cross bore intrusions found per 1,000 inspections."

Risks: Catastrophic Damage Involving Medium Pressure Pipeline Failure.

Category: Gas.

Units: Number of cross bore intrusions per 1,000 inspections.

Summary Chart of Cross Bore Intrusions Metric Data (Annual)





Narrative Context:

SDG&E's Sewer Lateral Inspection Project (SLIP) was an initiative conducted as part of SDG&E's Distribution Integrity Management Program (DIMP). SLIP addressed the concerns PHMSA expressed under the DIMP regulations that require operators to address identified threats of low frequency, but potentially high consequence events concerning pipeline damage within sewer laterals. Threats to pipeline integrity can occur if the trenchless installation inadvertently crosses a sewer line (or "lateral") and penetrates, or bores, through the sewer line, creating what is referred to as a "cross bore."

SDG&E completed all sewer lateral inspections by 2012; only one cross bore intrusion was found and repaired. SDG&E's inspection program of known sewer laterals is complete. Additional rounds of inspections are not required after the initial inspection. Going forward, should a cross bore intrusion be discovered as part of normal operations, it will be remediated, which mitigates the potential of an incident.

Historical Data:

As stated above, SDG&E sewer lateral inspections were completed in 2012. A single cross bore intrusion was found and repaired at that time. SDG&E includes monthly data for 2012 in the accompanying Excel file (Attachment B).

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)–[Yes/No]

No



Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- N/A
 - J. Metric No. 11: Gas Emergency Response

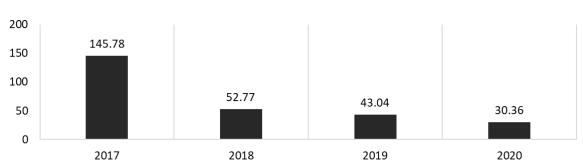
Metric Name and Description per D.19-04-020: "Gas Emergency Response: The average time that a Gas Service Representative or a qualified first responder takes to respond after receiving a call which results in an emergency order."

Risks: Distribution Pipeline Rupture with Ignition.

Category: Gas.

Units: Average response time in minutes, additionally: response times in five-minute intervals, segregated first by business hours (0800 - 1700 hours), after business hours and weekends/legal state holidays. The intervals start with 0-5 minutes, all the way to 40-45 minutes, an interval of 45-60 minutes and then all response times greater than 60 minutes.⁵¹

Summary:



Summary Chart of Gas Emergency Response Metric Data (Annual)

Narrative Context:

SDG&E responds to emergency calls 24 hours per day, 365 days per year from a myriad of sources, including first responders (*e.g.*, local law enforcement and fire departments) as well as residential, commercial, industrial and agriculture customers. SDG&E's CSF technicians will respond to all calls of gas leaks or gas odors and perform a gas leak investigation. SDG&E has a

⁵¹ SDG&E reports response time in minutes.



pipeline safety campaign, which is mandated by federal pipeline safety regulation (49 CFR §192). SDG&E's campaign includes bill inserts, mailings to residential and business customers, mailings to excavators, businesses, land developers, and farmers, and communications to schools and universities, public officials, and emergency officials. Pipeline safety efforts provide customers with information about natural gas pipeline locations; what to do if you sense a leak/smell gas; and messaging to direct the public to call 811 (*i.e.*, DigAlert) and other actions to take related to natural gas safety.

SDG&E's Emergency Management organization provides planning and guidance for responding in anticipation of, response to, or following an incident. Emergency Management effectively and efficiently supports the Company's ability to prepare for, respond to, and recover from incidents regardless of cause, size, or complexity. The overall purpose of emergency preparedness, including planning, is to safeguard the public, employees, contractors, stakeholders, reputation, and the continuation of essential business functions.

SDG&E's Customer Service's primary goal is providing safe, reliable and efficient gas and electric service to customers, while complying with applicable federal, state and local regulations. To reduce the risk of a customer or public incident, SDG&E Field employees are trained to rectify safety hazards on customer premises. SDG&E attributes improvement in response times in part to the addition of dedicated emergency response personnel and the addition of a dedicated overnight shift. SDG&E is currently implementing other initiatives to improve gas emergency crew locational capabilities, such as vehicle telematics. Additionally, SDG&E is evaluating initiatives to improve operational efficiency, the accuracy of data collection and resolving technology issues to enhance reporting accuracy. Since reporting began



in 2017, the reporting processes continue to be refined to ensure accurate data is captured for this metric. These refinements have resulted in more consistent month-to-month response times.

Historical Data:

The monthly historical data for October 2017 through December 2020, contained in the accompanying Excel file (Attachment B), provides the average time that a Company CSF or Gas Operations representative takes to respond after receiving a call that results in an emergency order. SDG&E began tracking this data in October 2017, when the CPUC's GO 112-F reporting requirements became effective. For purposes of GO 112-F reporting, SDG&E currently reports gas emergency response times and "made safe" times in five- to ten-minute increments. The metric data provided herein differs from that included in the GO 112-F report. GO 112-F reporting is based on completion code; the data for this Safety Performance Metrics Report includes data for all Priority 1 (P1) gas emergency response times. In other words, GO 112-F filters P1 codes by specific completion code, whereas all P1s are included in the metric data included in Attachment B. SDG&E will continue to track this metric, as defined by the S-MAP Phase Two Decision, monthly for inclusion in future Safety Performance Metrics Reports until a full ten years of historical data exists.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. SDG&E's 2020 Executive Incentive Compensation Plan and 2020 non-executive Incentive Compensation Plan each include a metric for "P1 Gas Response Time." This metric is defined as follows: "the Priority 1 gas emergency response time is the average time it takes either Customer Service Field or Gas Operations to respond to a Priority 1 gas emergency. Targets are based on a three-year average of response times adjusted for anomalies including area odors."

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.



Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. As described above, performance related to SDG&E's P1 Gas Response Time is included as a goal in SDG&E's 2020 Executive and non-executive ICPs. This specific performance measure is weighted at 2% of the overall 59% public and employee safety operations measures of the 2020 Executive ICP and applies to all SDG&E executives covered by the plan and is weighted at 1% of the overall 34% public and employee safety operations measures of the 2020 non-executive ICP and applies to all SDG&E employees covered by the plan.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)– [Yes/No]

Yes. SDG&E's P1 Gas Response Time performance measure is linked to all SDG&E director or above positions covered by either the 2020 Executive ICP or 2020 non-executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval.
 - K. Metric No. 13: Percentage of the Gas System that can be Internally Inspected

Metric Name and Description per D.19-04-020: "Percentage of the Gas System that can be Internally Inspected: The ratio of transmission pipe miles that can be inspected internally to all transmission pipe miles." ⁵²

Risks: Catastrophic Damage Involving High-Pressure Pipeline Failure

Category: Gas.

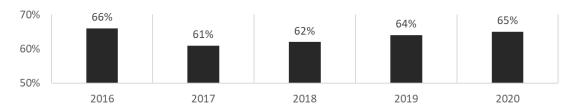
Units: Percentage.

This metric represents the percentage of the gas system that can be internally inspected, otherwise known as in-line inspection or "piggable." All of SDG&E's transmission pipeline is inspected in accordance with 49 CFR §192 Subpart O, which identifies in-line inspection, pressure test, and direct assessment.



Summary:

Summary Chart of Percentage of the Gas System that can be Internally Inspected Metric Data (Annual)



Note: 2012 -2019 data was updated See footnote 53, infra.

Narrative Context:

The SDG&E transmission and distribution system spans from the California-Mexico border to the Pacific Ocean and to the SoCalGas territory border. Approximately 185 miles out of 220 miles of SDG&E's transmission pipelines are located in High Consequence Areas (HCAs). SDG&E's Transmission Integrity Management Program (TIMP) is federally mandated to identify threats to transmission pipelines in HCAs, determine the risk posed by these threats, schedule prescribed assessments to evaluate these threats, collect information about the condition of the pipelines, and take actions to minimize applicable threat and integrity concerns to reduce the risk of pipeline failure. At a minimum of every seven years, transmission pipelines located within HCAs are assessed using In-Line-Inspection (ILI), Direct Assessment, Pressure Test, or other appropriate methods identified in 49 CFR §§ 192.921 & 937, and remediated as needed.

Detected anomalies are classified and addressed based on severity. Remediations reduce risk by addressing areas where corrosion, weld or joint failure, or other forces are occurring or have occurred. Post-assessment pipeline repairs, when appropriate, and replacements are intended to increase public and employee safety by reducing or eliminating conditions that might lead to an incident. ILI is the primary assessment method used to identify potential pipeline integrity threats. When a condition that presents a potential threat is evaluated and requires



remediation, SDG&E acts in accordance with 49 CFR § 192.933 to reduce risk. These actions involve removing a pipeline from service or reducing operating pressure. In cases where the assessment involves a pressure test, immediate remediation is also required as the pressure test cannot be completed until the pipeline is repaired.

TIMP reduces the risk of failure to the pipeline transmission system and on a continual basis evaluates the effectiveness of the program and scheduled assessments. TIMP Risk Assessment evaluates the Likelihood of Failure (LOF) using the nine threat categories (1. External Corrosion; 2. Internal Corrosion; 3. Stress Corrosion Cracking; 4. Manufacturing; 5. Construction; 6. Equipment; 7. Third Party Damage; 8. Incorrect Operations; and 9. Weather Related and Outside Force) for transmission pipelines located within an HCA. Pipeline operational parameters and the area near the pipeline are considered to evaluate Consequence of Failure (COF). The LOF multiplied by the COF produces the pipelines Relative Risk Score. Further information is collected about the physical condition of transmission pipelines through integrity assessments. Action is taken to address applicable threats and integrity concerns to increase safety and preclude pipeline failures.

The numbers and types of TIMP activities vary from year to year and are primarily based on the timing and interval of baseline assessments and reassessments. Covered segments are required to be assessed at an interval not to exceed seven years. Therefore, assessments may vary year-to-year and data should be viewed across an entire seven-year cycle.

In addition to TIMP and pursuant to 49 CFR § 192.710, SDG&E also assesses transmission pipeline segments in non-HCA Class 3 and Class 4 locations, as well as ILI-capable transmission pipeline segments in Moderate Consequence Areas (MCAs). SDG&E assesses these outside-of-HCA segments using ILI, Direct Assessment, Pressure Test, or other appropriate



methods identified in 49 CFR §192.710 and remediates adverse conditions as required. Intervals of assessments are not to exceed ten years and as with TIMP, assessments may vary year-to-year, further supporting the earlier statement that data should be viewed across an entire cycle.

Historical Data:

This metric represents the percentage of the gas system that can be internally inspected, otherwise known as ILI-capable or "piggable." SDG&E's transmission pipelines are inspected in accordance with 49 CFR §192 Subpart O or 49 CFR §192.710, which identify various methods of assessment including ILI. As described above for Metric No. 6, Gas In-Line Inspection, the numbers of assessment and mitigation activities vary from year to year based on the timing and intervals of prior assessments. Transmission pipelines are required to be assessed at an interval not to exceed seven years.

Annual data for 2012 through 2020 is included in the accompanying Excel file (Attachment B) for the percentage of SDG&E's system that can be internally inspected.⁵³ This metric represents a ratio of two metrics that are tracked and separately reported to PHMSA: 1) transmission pipe miles that can be inspected internally, and 2) the number of transmission pipe miles. The miles of transmission pipeline that can be internally inspected and the total miles of transmission pipeline are annual metrics that are currently reported in Part R of the PHMSA Gas Transmission and Gathering Annual Report F 7100.2-1. These two annual metrics are utilized to calculate the percentage for this metric. This metric has remained relatively constant since 2017 at 61%-65% because not all transmission pipelines can accommodate ILI tools. The remaining

Based upon its review for this 2020 Safety Performance Metrics Report, data provided for 2012 through 2019 in SDG&E's 2019 Safety Performance Metrics Report was reviewed and updated.



percentage that cannot accommodate an ILI tools is assessed with other methods. Retrofitting is required to increase the percentage.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)– [Yes/No]

No

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

No

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

N/A

L. Metric No. 14: Employee Serious Injuries and Fatalities

Metric Name and Description per D.19-04-020: "Employee Serious Injuries and Fatalities: A work-related injury or illness that results in a fatality, inpatient hospitalization for more than 24 hours (other than for observation purposes), a loss of any member of the body, or any serious degree of permanent disfigurement."

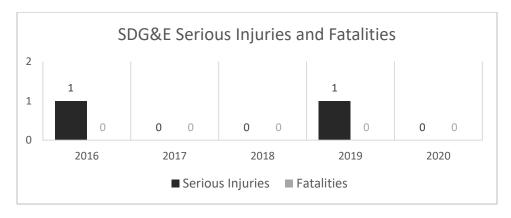
Risks: Employee Safety

Category: Injuries

Units: Number of Serious Injuries and Fatalities.



Summary Chart of Employee Serious Injuries and Fatalities Metric Data (Annual)⁵⁴



Narrative Context:

Employees safety is a core value at SDG&E. SDG&E's safety-first culture focuses on its employees, customers, and the public, and is embedded in every aspect of the Company's work. Employees should be able to go home to their families and loved ones after work each day and be able to return to work safely the next day. Safety is not compromised for production, customer satisfaction, or other goals, and no activity is so important that it should jeopardize employee, customer, or public safety. SDG&E's Employee Safety risk mitigation programs are founded on proven employee-based programs, safety training, workforce education, site inspections, and SDG&E's Injury and Illness Prevention Program (IIPP).

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Effective January 1, 2020, Cal/OSHA revised its injury reporting obligations to be more aligned with the injury reporting obligations under federal OSHA. The 24-hour minimum time requirement for hospitalizations was removed. Accordingly, any hospitalization will be reportable, excluding those for medical observation or diagnostic testing. The full text of the new "serious injury or illness" definition, as of Jan. 1, 2020, is: "Any injury or illness occurring in a place of employment or in connection with any employment that requires inpatient hospitalization, for other than medical observation or diagnostic testing, or in which an employee suffers an amputation, the loss of an eye, or any serious degree of permanent disfigurement, but does not include any injury or illness or death caused by an accident on a public street or highway, unless the accident occurred in a construction zone." Assembly Bill (AB) 1805, amended Labor Code, § 6302(h). The data represented for 2020 reflects the revised definition for serious injury or illness reporting.



SDG&E has in place a range of safety programs and initiatives designed to identify, address, communicate, and mitigate and/or eliminate workplace hazards, and to contribute proactively to overall workplace safety and employee awareness of safety issues and concerns. These programs include:

- Injury and Illness Prevention Program (IIPP): Every California employer must have an effective written IIPP plan for preventing injury and illness. The IIPP pertains to a range of required elements and associated procedures, such as: management commitment/assignment of responsibilities; safety communications system with employees; assuring employee compliance with safe work practices; scheduled inspections and evaluation system; accident investigation; procedures for correcting unsafe or unhealthy conditions; safety and health training and instruction; and recordkeeping and documentation.
- Safety Training: Training is a crucial element of a successful and sustainable safety and health program. SDG&E is committed to ensuring that its employees perform their job duties safely and in compliance with all applicable safety laws, rules, regulations, permit requirements, and company standards. SDG&E's extensive range of safety training courses provides employees the means to perform their job tasks safely.
- Inspections: Safety inspections are a principal means of identifying potential hazards and help to determine what safeguarding is necessary to prevent incidents, injuries, and occupational illnesses. The inspection program addresses procedures for conducting safety inspections and self-assessments, describes the process of documenting corrective actions and their implementation, and defines roles and responsibilities.



- Industrial Hygiene Programs: SDG&E has robust Industrial Hygiene programs in compliance with Cal/OSHA regulations. Industrial Hygienists are responsible for monitoring changes in employee safety and health regulations, developing internal safety policies and procedures to confirm compliance with the applicable regulations, and managing Company-wide implementation of key industrial hygiene programs, on such topics as Hazard Communications, Hearing Conservation, Respiratory Protection, Mold, Asbestos, and Lead Exposure Management, Arc Flash and Confined Space.
- Environmental and Safety Compliance Management Program (ESCMP): ESCMP is a management system that monitors the effectiveness of environmental, health and safety activities, similar to the internationally accepted standard, ISO 14001.⁵⁵ It establishes procedures and defines roles and responsibilities necessary to ensure conformance to the IIPP and other requirements applicable to safety aspects of SDG&E operations.
- OSHA and Cal/OSHA Voluntary Protection Programs (VPP): The Federal and California VPP are labor-management-government cooperative programs designed to recognize workplaces that manage outstanding health and safety systems for protection of workers and exceed minimal compliance with the Federal and Cal/OSHA Title 8 California Code of Regulations. OSHA's VPP recognize employers who have implemented effective safety and health management systems and maintain injury and illness rates below national Bureau of Labor statistics averages for their respective industries. In VPP, management, labor, and OSHA work cooperatively and proactively to prevent fatalities, injuries, and illnesses through a system focused on hazard prevention and control; worksite analysis; training; and management commitment and worker

⁵⁵ International Organization for Standardization (ISO) 14000 family - "Environmental management."



involvement. To participate, employers must submit an application to OSHA (or Cal/OSHA) and undergo a rigorous onsite evaluation by a team of safety and health professionals. VPP participants are re-evaluated every three to five years to remain in the programs. SDG&E currently has two VPP-certified sites and is in the process of assessing sites for Cal/OSHA VPP certification.

- Personal Protective Equipment (PPE): SDG&E's PPE program establishes a comprehensive approach toward controlling potential employee injuries and eliminating or mitigating exposure to specified hazards when and where needed. PPE includes uniforms and equipment designed to protect employees while performing their job (*e.g.*, fire retardant uniforms, gloves, protective eyewear). All employees who are required to use PPE are trained on when PPE is necessary, what PPE is necessary, how to properly don/remove/adjust/wear PPE, limitations of PPE and the proper care, maintenance, life and disposal of PPE.
- Drug and Alcohol Testing Program: SDG&E has an employee drug and alcohol testing program managed in accordance with state and federal regulations. SDG&E's substance abuse prevention policy, which all employees are responsible for knowing and complying with, prohibits the use or possession of alcohol during working hours or reporting to work with alcohol or prohibited drugs in their system. Violations of this policy are cause for disciplinary action, up to and including employment termination. In addition to the substance abuse prevention policy, SDG&E deploys Substance Abuse Prevention Training as a proactive measure.
- Behavior Based Safety (BBS) Program: BBS is a proactive approach to safety and health management, focusing on principles that recognize at-risk behaviors, which can be a



frequent cause of both minor and serious injuries. BBS is intended to reduce the occurrence of at-risk behaviors by modifying an individual's actions and/or behaviors through observation, feedback, and positive interventions aimed at developing safe work habits. SDG&E has five BBS processes in the gas, electric and customer service field organizations.

- Facilities Maintenance Program: Facilities Capital projects are designed to make
 workspaces safer. Facilities maintenance programs are preventative, provide predictive
 and corrective maintenance, and are used to address deficiencies. Examples include
 structural changes and asbestos inspection and abatement.
- Traffic Control for employee, contractor and public safety at worksites: When performing work on, or adjacent to, a roadway, SDG&E is responsible for installing and maintaining such devices, which are necessary to provide safe passage for the traveling public through the work area and for the safety of the workers on the site. SDG&E uses both internal and external resources to fulfill this responsibility.
- Work Methods and Standards: SDG&E's electric engineering departments develop and
 maintain construction standards, standard practices, and system design for electric
 service, primary and secondary systems, and seek continuous improvement of the electric
 systems through innovation and incorporation of new technologies.
- Stop Work Authority (*i.e.*, Stop the Job/Stop the Task): SDG&E employees, regardless of rank or title, are given the authority to "stop a job" at any time if they identify a safety hazard and are encouraged to raise a red flag whenever they feel it is needed.
- Close Call/Near-Miss Program: SDG&E recognizes the importance of learning from close calls and near-misses to reduce the potential for a serious incident or injury in the



future. The National Safety Council describes a close call or near-miss as an unplanned event that did not result in injury, illness, or damage, but had the potential to do so. SDG&E encourages employees to report close calls in safety meetings and through an online process. SDG&E's online process allows employees to report anonymously through an electronic form. The information is submitted to Safety Services for review and may be shared with other employees, so they understand and benefit from the lessons learned.

- Job Observations: SDG&E field-based organizations perform documented observations of front-line operational employees. Observations provide the opportunity to identify if workers can safely perform the task, determine why a precaution was or was not taken, and provide feedback on the positive things a person is doing for his/her own safety.
- Incident Investigation: As part of improving its safety culture, SDG&E has established a team to create a more comprehensive and robust incident investigation standard and reporting process. Applying this process uniformly across the Company will result in more consistent investigations and will allow lessons learned to be shared broadly. In addition, regular training is provided for those conducting incident investigations to confirm consistency and more thorough investigations.
- Safe Driving Program: SDG&E utilizes the Smith System® Defensive Driving System as part of safe driving training for employees. The Smith System® concepts help drivers see, think and act their way through various driving environments, challenges, and changes that may exist regardless of where a driver travels or the type of vehicles he or she operates.



- Executive Safety Council (ESC) Team Meeting Dialogs: The ESC is the governing body for all safety committees. Led by SDG&E's Chief Operations Officer and Director of Safety, the ESC advances the Company safety culture and addresses enterprise-wide safety strategy. The meeting dialogs are held at Company locations and integrate employee and supervisor dialog sessions so that employees have an opportunity to share safety experiences with Company leadership.
- Field and Office Safety Committees: These site-specific committees are actively engaged in safety awareness through education, promoting a healthy lifestyle, encouraging work-life balance, and always maintaining a safe work environment. To keep the committees connected, quarterly meetings are held with committee chairpersons and co-chairpersons. During these meetings, safety updates are shared, training is provided, and action planning steps are identified. Like all other safety committees, site committees report to the ESC as the governing body.
- Electric Safety Subcommittee (ESS): The ESS brings management and electric front-line personnel together to discuss safety concerns from the perspective of those closest to the risks. The objectives are to make a lasting difference in reducing unnecessary risk, resolve division-wide safety issues/concerns, and facilitate two-way communication between frontline employees and their respective management.
- Gas Safety Subcommittee (GSS): Since 2015, the GSS has engaged employee representatives from each district and management on a monthly basis to discuss concerns and address potential gas operations safety hazards. The objective is to reduce unnecessary risk, resolve gas safety issues/concerns, and facilitate two-way communication between frontline employees and their respective management.



- Safety Tailgates: Safety tailgate talks are short informational meetings held with
 employees to discuss work-site-related safety. The purpose of a tailgate is to inform
 employees of specific hazards associated with a task and the safe way to do a job.
 Tailgate talks also serve as a reminder to employees of what they already know while
 establishing the supervisor's credibility and conscientiousness about his oversight role.
- Safety Meetings: The main objectives of a safety meeting are to remind employees of safe practices they have already learned and to introduce and build awareness of new techniques, new equipment, or new regulations that must be observed.
- Safety Stand-downs: These are voluntary events for employers to talk directly to
 employees about safety. They provide an opportunity to discuss hazards, protective
 methods, and the Company's safety policies, goals, and expectations.
- Safety Congress and Leadership Awards: Since 2002, this event has been held annually. It provides a forum for safety committee members, safety leaders, and others to share and exchange information and ideas through networking and workshops. At this event, individuals and teams are recognized for living by the Company's safety vision, turning that vision into action, embracing the SDG&E safety culture, and demonstrating safety leadership.

SDG&E continually evaluates initiatives to further reduce the risk of serious employee injury. For instance, SDG&E has undertaken an initiative to implement an enhanced Safety in Action (SIA) Program. Designed for executives and field operations directors, the enhanced SIA initiative will provide SDG&E with the necessary tools to measure SIF exposures, understand the Company's specific SIF exposure precursors, and design effective steps to eliminate or mitigate SIF exposure. This leading indicator program goes beyond traditional classification and



recording of incidents to evaluate both the exposures that resulted in an actual SIF and those that have reasonable potential to result in a SIF. The process will provide the tools necessary to identify and understand the Company's specific SIF precursors, and to design effective steps to mitigate SIF exposure. Tools include a SIF definition for SDG&E, SIF exposure decision trees, a precursor analysis procedure to assess SIF exposure potential, and leading and lagging SIF metrics. Subject matter experts (SMEs) throughout the Company will be trained on the process and effective use of the tools. Goals and objectives for the SIA program will consist of clear, concise wording that demonstrates a forward-moving effort to improve safety. These goals and objectives will be defined and measured.

Historical Data:

Ten years of monthly historical data are provided in the accompanying Excel file (Attachment B) for SDG&E's Employee Serious Injury and Fatality data. This data captures any work-related injury or illness that results in a fatality, inpatient hospitalization for more than 24 hours (other than for observation purposes), a loss of any member of the body, or any serious degree of permanent disfigurement, as provided in the metric definition. This data is currently reported to Cal/OSHA. SDG&E notes that a new definition of "Serious Injury" went into effect in California on January 1, 2020, which may impact the number of reportable incidents in 2020



and beyond.⁵⁶ No serious injuries or fatalities to SDG&E employees occurred during 2017 or

2018. In 2019, SDG&E recorded one serious employee injury resulting from a slip and fall. In 2020 no serious injuries or fatalities occurred.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

- Yes. SDG&E's 2020 Executive and non-executive Incentive Compensation Plans include the following employee safety-related metrics:
 - Zero Employee Electric Contacts No employee makes a direct electrical contact with any part of their body that results in a disfigurement, dismemberment, or extended hospitalization requiring substantial medical treatment.
 - Lost Time Incident (LTI) Rate the LTI Rate is expressed as the number of OSHA Recordable Injuries or Illnesses resulting in Days Away from Work, per 100 full-time employees. This measure is calculated using the number of Losttime Incidents x 200,000 divided by the Total Hours Worked.
 - Controllable Motor Vehicle Incidents (CMVI) Minimum performance, 53;
 maximum performance, 33 or fewer. Motor vehicle incident records in the
 electronic Safety Information Management System will document controllability.
 - ESCMP Findings Mediated [Environmental Safety Compliance Management Program] Corrective Action – Percent of Corrective Actions documented in the Safety Information Management System and scheduled for completion in calendar year 2020 that are completed by December 31, 2020.
 - o Field Observations The Company has developed a leading indicator safety metric which counts the number of documented observations to front-line operational employees. An observation is defined as a visit to an employee or crew work site in which work is observed and documented, with at minimum the date of observation and notes on the observation. Note: [Behavior Based Safety] BBS processes includes observations from front-line employees who may also work in an office environment.

Effective January 1, 2020, Cal/OSHA revised its injury reporting obligations to be more aligned with the injury reporting obligations under federal OSHA. The 24-hour minimum time requirement for hospitalizations was removed. Accordingly, any hospitalization will be reportable, excluding those for medical observation or diagnostic testing. The full text of the new "serious injury or illness" definition, as of Jan. 1, 2020, is: "Any injury or illness occurring in a place of employment or in connection with any employment that requires inpatient hospitalization, for other than medical observation or diagnostic testing, or in which an employee suffers an amputation, the loss of an eye, or any serious degree of permanent disfigurement, but does not include any injury or illness or death caused by an accident on a public street or highway, unless the accident occurred in a construction zone." Assembly Bill (AB) 1805, amended Labor Code, § 6302(h).



As stated in Section III, above, SDG&E's Executive and Non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)– [Yes/No]

• Yes. As described above, performance related to (1) Zero Employee Electric Contacts, (2) LTI Rate, (3) CMVI, (4) ESCMP Findings Mediated, and (5) Field Observations are included in SDG&E's 2020 Executive and non-executive ICPs. These specific performance measures are each weighted 3% - 4% of the overall 59% public and employee safety operations measures in the 2020 Executive ICP and applies to all SDG&E executives covered by the plan and are weighted at 1% - 4% of the overall 34% of public and employee safety operations measures of the 2020 non-executive ICP and applies to all SDG&E employees covered by the plan.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

• Yes. SDG&E's (1) Zero Employee Electric Contacts, (2) LTI Rate, (3) CMVI, (4) ESCMP Findings Mediated, and (5) Field Observations performance measures are linked to all SDG&E director or above positions covered by either the 2020 Executive ICP or 2020 non-executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval.
 - M. Metric No. 15: Employee Days Away, Restricted and Transfer (DART) Rate

Metric Name and Description per D.19-04-020: "Employee Days Away, Restricted and Transfer (DART) Rate: DART Rate is calculated based on the number of OSHA-recordable injuries resulting in Days Away from work and/or Days on Restricted Duty or Job Transfer, and hours worked."

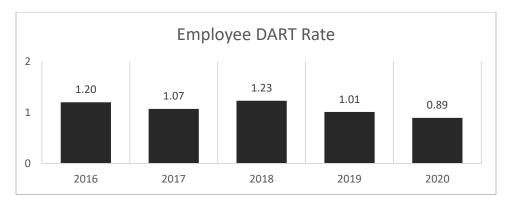
Risks: Employee Safety

Category: Injuries

Units: Number of DART Cases times 200,000 divided by total employee hours worked



Summary Chart of Employee DART Rate Metric Data (Year-end)



Narrative Context:

In 2020, SDG&E achieved its lowest year-end DART (Days Away/Restricted/Transfer) case rate on record. The DART case rate is a lagging metric of injury severity, reflecting how many employees are kept away from their regular duties due to an injury or illness. SDG&E's DART rate has fallen by nearly 60% in the last ten years. SDG&E attributes this downward trend to its strong injury case management and continual evaluation of initiatives to eliminate or mitigate exposure to workplace hazards. Please refer to the initiatives listed above in SDG&E's Employee Serious Injuries and Fatalities metric.

Historical Data:

Ten years of monthly historical data are provided in the accompanying Excel file (Attachment B) for SDG&E's Employee DART Rate. A DART Rate is calculated based on the number of OSHA-recordable injuries resulting in Days Away from work and/or Days on Restricted Duty or Job Transfer, and hours worked.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. SDG&E's 2020 Executive Incentive Compensation Plan and 2020 non-executive Incentive Compensation Plan include the following metric:



o Lost Time Incident (LTI) Rate⁵⁷ – the LTI Rate is expressed as the number of OSHA Recordable Injuries or Illnesses resulting in Days Away from Work, per 100 full-time employees. This measure is calculated using the number of Losttime Incidents x 200,000 divided by the Total Hours Worked.

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

 Yes. As described above, performance related to SDG&E's LTI Rate is included in SDG&E's 2020 Executive and non-executive ICPs. This specific performance measure is weighted at 4% of the overall 59% public and employee safety operations measures in the 2020 Executive ICP and applies to all SDG&E executives covered by the plan and is weighted at 4% of the overall 34% public and employee safety operations measures in the 2020 non-executive ICP and applies to all SDG&E employees covered by the plan.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph **6B.**)– [Yes/No]

 Yes. SDG&E's LTI Rate performance measure is linked to all SDG&E director or above positions covered by either the 2020 Executive ICP or 2020 non-executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval.
 - N. Metric No. 18: Contractor OSHA Recordables Rate

Metric Name and Description per D.19-04-020: "Contractor OSHA Recordables Rate: An OSHA recordable incident is an occupational (job-related) injury or illness that requires medical treatment beyond first aid, or results in work restrictions, death or loss of consciousness. OSHA recordable rate is calculated as OSHA recordable times 200,000 divided by contractor hours worked."

Risks: Contractor Safety

⁵⁷ DART includes LTI plus Days On Restricted Duty or Job Transfer.

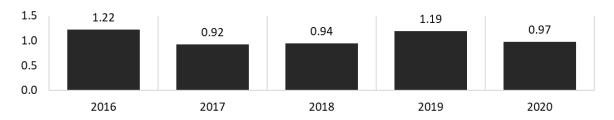


Category: Injuries

Units: OSHA recordable times 200,000 divided by contractor hours worked associated with work for the reporting utility.

Summary:

Summary Chart of Contractor OSHA Recordables Metric Data (Year-end)



Narrative Context:

All Class 1 Contractors are included in this metric. A Class 1 Contractor is a contractor engaged to perform work that can reasonably be anticipated to expose the Contractor's employees, Subcontractors, SDG&E employees, or the general public to one or more hazards that have the potential to result in Serious Safety Incident. Examples of a Class 1 Contractor include contractors performing work involving energized equipment or hazardous chemicals. SDG&E standardized its approach to contractor safety by implementing a Contractor Safety Oversight Program. SDG&E uses both the Contractor Safety Program Standard G8308, the internal standard for SDG&E, and the Class 1 Contractor Safety Manual for contractors in order to hold all business unit employees and Class 1 Contractors to the same requirements and/or standards. Contractor Safety Services provides oversight through field safety observations of Class 1 Contractors to verify program requirements are being followed in the field. This oversight includes instituting safeguards for all contracted work to be performed in accordance with SDG&E standards, OSHA regulations, applicable laws, Commission Orders (such as GO 95, Rules for Overhead Electric Line Construction), and GO 128 (Rules for Construction of



Underground Electric Supply and Communications Systems). These safeguards include administrative activities associated with construction services-managed construction work and pre-qualification of all Class 1 Contractors in accordance with the Program.

SDG&E currently uses certain third-party administration tools to verify that contractors comply with SDG&E's established safety requirements according to the Class 1 Contractor Safety Manual and the contractual requirements. In 2019, the Contractor Safety Oversight Program increased the scope of contractors reporting into the ISN data management system (ISNetworld is the third-party administrator of the SDG&E contractor safety program). This resulted in many contractor businesses reporting for the first time, with increased oversight and scrutiny by SDG&E of their safety performance and quality of safety reporting. ISNetworld monitors new and changing OSHA requirements and verifies that SDG&E's Class 1 Contractors meet minimum OSHA requirements for written safety programs for the work performed and grades Class 1 Contractors according to the pre-qualification criteria SDG&E establishes.

Contractor recordable rates increased in 2019 due to this expanded oversight and reporting.

SDG&E believes that consistent safety oversight of Class 1 Contractors will lead to consistent and accurate reporting of incidents. Additionally, SDG&E is currently evaluating initiatives to update the Class 1 Contractor Safety Manual and hold contractor quarterly and monthly meetings to educate and expand open lines of communication.

Historical Data:

SDG&E began tracking this metric in 2014. The accompanying Excel file (Attachment B) provides monthly data for 2014 through 2020 for SDG&E's Contractor OSHA Recordables Rate. The OSHA recordable rate is calculated as the number of OSHA recordables times 200,000 divided by contractor hours worked. SDG&E utilizes a third-party administration tool to collect



SDG&E-specific hours and incidents to calculate the rates reported to OSHA and included in

Attachment B. SDG&E will continue collecting this data for inclusion in future annual Safety

Performance Metrics Reports until a full ten years of monthly historical data exists.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)–[Yes/No]

No

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- N/A
 - O. Metric No. 20: Contractor Serious Injuries and Fatalities

Metric Name and Description per D.19-04-020: "Contractor Serious Injuries and Fatalities: A work-related injury or illness that results in a fatality, inpatient hospitalization for more than 24 hours (other than for observation purposes), a loss of any member of the body, or any serious degree of permanent disfigurement."

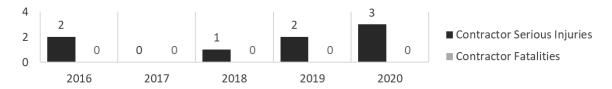
Risks: Contractor Safety

Category: Injuries

Units: Number of work-related injuries or illnesses associated with work for the reporting utility.



Summary Chart of Contractor Serious Injuries Fatalities Metric Data (Annual)⁵⁸



Narrative Context:

All Class 1 Contractors are included in this metric. In addition to the programs and initiatives discussion above for SDG&E's Contractor OSHA Reportable Rate metric, SDG&E has implemented programs such as "Stop the Job" and "Near Miss Reporting" in an effort to further reduce the risk of serious injuries and fatalities to its Class 1 contractors. The Stop the Job (STJ) Process is a protocol SDG&E has established for all contractors. It gives authority to everyone onsite to stop a job or task if an unsafe work condition or activity is identified. All work must immediately cease in the area of concern once the STJ is declared until site supervision and the involved contractor(s) have conducted an investigation, the identified situation is abated, controlled, or otherwise determined to be safe, and the situation and outcome are explained to affected personnel. SDG&E requires its Class 1 contractors to report all incidents per the Class 1 Contractor Safety Manual including near miss/close call incidents

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Effective January 1, 2020, Cal/OSHA revised its injury reporting obligations to be more aligned with the injury reporting obligations under federal OSHA. The 24-hour minimum time requirement for hospitalizations was removed. Accordingly, any hospitalization will be reportable, excluding those for medical observation or diagnostic testing. The full text of the new "serious injury or illness" definition, as of Jan. 1, 2020, is: "Any injury or illness occurring in a place of employment or in connection with any employment that requires inpatient hospitalization, for other than medical observation or diagnostic testing, or in which an employee suffers an amputation, the loss of an eye, or any serious degree of permanent disfigurement, but does not include any injury or illness or death caused by an accident on a public street or highway, unless the accident occurred in a construction zone." Assembly Bill (AB) 1805, amended Labor Code, § 6302(h). The data represented for 2020 reflects the revised definition for serious injury or illness reporting.



immediately, then monthly in a report. This information is then tracked and used during SDG&E's Class 1 Contractor safety observations and communicated out to contractors, if applicable. As SDG&E receives incident reports from contractors, we review for accuracy and close out all incident reports with support from the Business Unit the contractor is working for. Additionally, as contractors submit their monthly hours, the data is reviewed for accuracy by Contractor Safety Services and the Business Units. In 2019 Contractor Safety Services expanded oversight and reporting to all Class 1 Contractors.

SDG&E plans to update the Class 1 Contractor Safety Manual annually or as needed with new requirements and/or updating regulatory and SDG&E requirements. SDG&E also plans to develop a manual for Class 2 contractors that are not currently covered under the enhanced contractor safety program or Class 1 Contractor Safety Manual. Class 2 Contractors are defined as: a contractor engaged to perform any other work (than work defined as Class 1). Examples of Class 2 Contractors include contractors engaged to perform administrative tasks or IT work. SDG&E also plans to create a portal and/or app where Class 1 Contractors can submit near miss/close call incidents. Near miss/close call incidents are already required to be reported to SDG&E but are collected on an incident report form. A new reporting mechanism could promote the submittal of near-miss/close call incidents, a leading indicator that reflects a proactive safety program and culture.

Historical Data:

SDG&E began tracking this metric in 2012. The accompanying Excel file (Attachment B) provides monthly data for 2012 through 2020 for SDG&E's Contractor Serious Injuries and Fatalities. According to the metric description, reportable incidents are "a work-related injury or illness that results in a fatality, inpatient hospitalization for more than 24 hours (other than for



observation purposes), a loss of any member of the body, or any serious degree of permanent disfigurement." A new definition of "Serious Injury" went into effect in California on January 1, 2020, which may impact the number of reportable incidents in 2020 and beyond. SDG&E utilizes a third-party administration tool to collect SDG&E-specific incidents for the data reported to OSHA and included in Attachment B. SDG&E will continue collecting this data for inclusion in future annual Safety Performance Metrics Reports until a full ten years of monthly historical data exists.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)– [Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)– [Yes/No]

No

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)– [Yes/No]

No

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

P. Metric No. 21: Contractor Lost Workday Case Rate

Metric Name and Description per D.19-04-020: "Contractor Lost Workday Case Rate: This measures the number of Lost Workday (LWD) cases incurred for contractors per 200,000 hours worked (for approximately every 100 contractors). A Lost Workday Case is a current year OSHA Recordable incident that has resulted in at least one lost workday. An OSHA Recordable incident is an occupational (job related) injury or illness that requires medical treatment beyond first aid, or results in work restrictions, death or loss of consciousness. The formula is: LWD Case Rate = Number of LWD Cases / productive hours worked x 200,000."

Risks: Contractor Safety

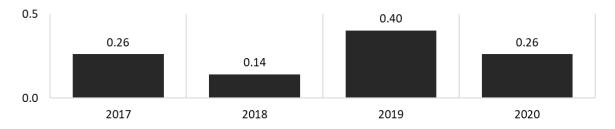
Category: Injuries

Units: Number of Lost Workday (LWD) cases incurred for contractors per 200,000 hours worked associated with work for the reporting utility.



Summary:





Narrative Context:

All Class 1 Contractors are included in this metric. As stated above, SDG&E uses a third-party administrator, ISNetworld, to house and verify the established SDG&E prequalification requirements for our Class 1 Contractors. ISNetworld also gives SDG&E a place to communicate with our contractors, including:

- Communication of new rules, regulations, and requirements;
- Reports from contractors on SDG&E specific incidents and hours in order for SDG&E to track and trend performance;
- A bulletin board that houses documents communicated to all connected contractors; and
- An action item tool for targeted communication to specific contractors.

ISNetworld monitors new and changing OSHA requirements and verifies SDG&E's Class 1 Contractors meet minimum OSHA requirements for written safety programs for the work performed, and grades Class 1 Contractors according to the pre-qualification criteria SDG&E establishes. The nationwide-level data captured by the third-party administration program is



reviewed by SDG&E to standardize the pre-qualification process and used for selecting Class 1 Contractors.

In 2019, SDG&E's Contractor Safety Program increased the scope of contractors reporting into the ISN data management system. This resulted in many contractor businesses reporting for the first time, with increased oversight and scrutiny by SDG&E of their safety performance and quality of safety reporting. SDG&E saw an increase in contractor recordable rates in 2019 due to this expanded oversight and reporting. SDG&E is currently evaluating initiatives such as updating the Class 1 Contractor Safety Manual and holding Contractor Quarterly and Monthly meetings to educate and expand open communication, to further reduce this risk.

Historical Data:

SDG&E began tracking this metric in 2017. This metric is one of the graded components used by SDG&E in its Class 1 Contractor pre-qualification criteria. Consistent Safety oversight of Class 1 Contractors will lead to consistent and accurate reporting of incidents. Historically, May – September is the time SDG&E typically sees an increase in contractor lost workday cases. Monthly data for years 2017 through 2020 is included in the accompanying Excel file (Attachment B) for SDG&E's Contractor LWD case rate. As provided in the S-MAP Phase Two Decision definition, this metric measures the number of LWD cases incurred for contractors per 200,000 hours worked (for approximately every 100 contractors). A LWD case is a current year OSHA Recordable incident that has resulted in at least one lost workday. The formula is: LWD Case Rate = Number of LWD Cases / productive hours worked x 200,000. SDG&E utilizes a third-party administration tool to collect SDG&E-specific incidents for the data reported to OSHA and included here in Attachment B. SDG&E will continue tracking this metric for



inclusion in future Safety Performance Metric Report submissions until a full ten years of monthly historical data is provided.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)—[Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)– [Yes/No]

No

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)–[Yes/No]

No

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

N/A

Q. Metric No. 22: Public Serious Injuries and Fatalities

Metric Name and Description per D.19-04-020: "Public Serious Injuries and Fatalities: A fatality or personal injury requiring in-patient hospitalization involving utility facilities or equipment. Equipment includes utility vehicles used during the course of business."

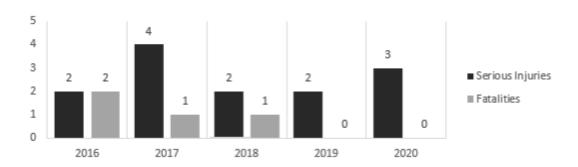
Risks: Public Safety

Category: Injuries

Units: Number of Serious Injuries and Fatalities.

Summary:

Summary Chart of Public Serious Injuries and Fatalities Metric Data (Annual)





Public safety is a core value at SDG&E. SDG&E's safety-first culture focuses on its employees, customers, and the public and is embedded in every aspect of our work. SDG&E conducts public awareness efforts to enhance the safety of its customers and the general public. These efforts are designed to engage with the Company's customers and the public to inform them about our shared safety responsibilities. Communication with the public promotes safety through a wide array of topics including, but not limited to, safety around Company facilities, messaging related to the Public Safety Power Shut Off (PSPS) program, information about gas line locations and downed power lines, and working or being near electrified equipment or facilities.

SDG&E strives to continually educate the public about the dangers and risks associated with working and being around electricity. Bill inserts, public service announcements, postings to social media platforms, paid media tactics such as television, print and digital advertising, and warning signage near electrified facilities all serve to warn and communicate to the public about the care that needs to be taken.

Without adequate communication and education programs, the public may not know how to safely dig on their property or how to keep themselves safe around company facilities that may be damaged during an event. Communication with the public also allows customers to be able to detect possible safety issues with their homes. Without adequate communications and education programs, a customer or member of the general public may not know how to identify a hazardous situation or how to prevent one.

As stated in the metric description, this metric also includes utility vehicles used during business. To mitigate this risk, SDG&E utilizes the Smith System® Defensive Driving System



as part of safe driving training for employees. The Smith System® was founded on the principle that most vehicle crashes are preventable if the correct driving habits are learned, practiced, and applied consistently. The Smith System® utilizes a series of interlocking techniques to prevent crashes. The concepts help drivers see, think and act their way through various driving environments, challenges and changes that may exist regardless of where a driver travels or the type of vehicles he or she operates. Adhering to Smith System® Driving principles enables our employees to be better drivers and therefore aims to reduce SDG&E's employee and public safety risk.

Historical Data:

SDG&E's internal database captures historical data beginning in 2015. The accompanying Excel file (Attachment B) includes monthly data for years 2015 through 2020 for Public Serious Injuries and Fatalities. This metric includes data on a fatality or personal injury requiring in-patient hospitalization involving utility facilities or equipment. Equipment includes utility vehicles used during the course of business. However, the data provided herein does not include vehicle contact with stationary facilities or equipment (e.g., car pole contact or car transformer contact). Contact with stationary facilities or equipment has not previously been reported and therefore is not captured in the accompanying data.

D.19-04-020, Footnote 49 states "For Metric 22, Public Serious Injuries and Fatalities, we do not require the IOUs to report ten-year historical data using the subcategories for IOU reporting on public serious injuries and fatalities discussed in this decision. The requirement to report subcategories for this metric applies prospectively and should be reported for the current and future years."59 Pursuant to D.19-04-020, on January 29, 2021, SDG&E submitted a draft of

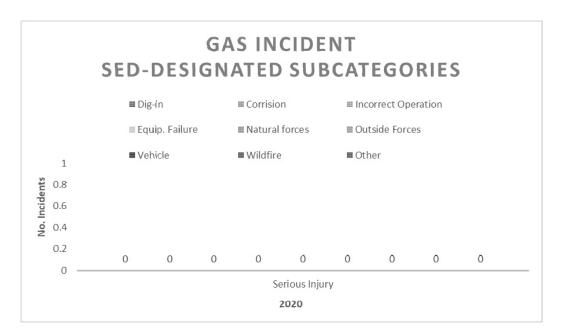
Page 92

D.19-04-020 at 26.



its Public-SIF data to the Commission's Staff. On March 11, 2021, SPD provided the IOUs⁶⁰ with the designated subcategories for the Public Serious Injuries and Fatalities metric. Therefore, using the subcategories designated by SPD,⁶¹ SDG&E's 2020 Pub-SIF data can be categorized as follows, as further represented in the charts below:

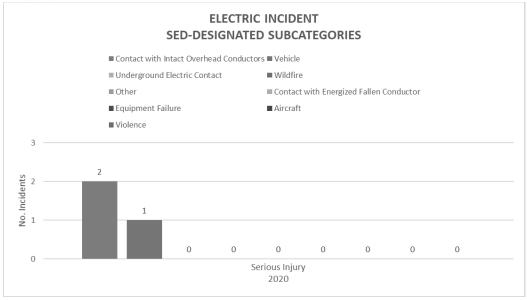
- June 22, 2020 Serious injury: Electric Incident Vehicle
- September 9, 2020 Serious injury: Electric Incident Contact with intact overhead conductors
- December 7, 2020 Serious injury: Electric Incident Contact with intact overhead conductors



March 11, 2021 e-mail from Ayat Osman, SPD staff, to PG&E representative.

SPD designated nine gas incident-related subcategories and nine electric incident-related subcategories, as reflected in the below charts.





Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)– [Yes/No]

- Yes. 59% of SDG&E's 2020 Executive Incentive Compensation Plan and 34% of SDG&E's non-executive Incentive Compensation Plan is comprised of "public and employee safety operations" performance goals. SDG&E's 2020 Executive and nonexecutive ICPs include the following system and customer safety performance goals:
 - o Fire Hardening: Wood-to-Steel Pole Replacements
 - Overhead System Hardening
 - Underground System Hardening
 - Wildfire Safety Communications
 - o Distribution System Integrity Miles Vintage Replacement
 - Damage Prevention (Damages per USA Ticket Rate)
 - o Mobile Home Park Retrofit Program (Spaces with To-the-Meter Installed)
 - o P1 Gas Response Time (Minutes)
 - o PSES Line 1600 Projected Advanced to Late State Design
 - System Average Interruption Duration Index (SAD)
 - Substation Breaker Replacement (units)
 - Tee Replacement Program (locations)

As stated in Section III, above, SDG&E's Executive and non-executive Incentive Compensation Plans are reviewed and updated on an annual basis. For purposes of this 2020 report submission, SDG&E references the incentive compensation plans in place as of 2020.



Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

• Yes. As described above, performance goals in the "system and customer safety" category of SDG&E's 2020 Executive Incentive Compensation Plan comprise 32 percent of the overall 59% public and employee safety operations weighting and 20% of the overall 34% weighting of SDG&E's 2020 non-executive Incentive Compensation Plan.

Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)—[Yes/No]

• Yes. SDG&E's system and customer safety performance measures are linked to all SDG&E director or above positions covered by either the 2020 Executive ICP or 2020 non-executive ICP.

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

- Sempra Energy's Audit Services department reviews SDG&E's annual Executive ICP and non-executive ICP results and calculations. Each safety-related performance metric is well defined in the approved annual ICP plan. The annual ICP plan further specifies how each metric is tracked. SDG&E's ICP performance results are reviewed by the Sempra Energy Audit Services department prior to SDG&E board approval.
 - R. Metric No. 23: Helicopter/Flight Accident or Incident

Metric Name and Description per D.19-04-020: "Helicopter/Flight Accident or Incident. Defined by Federal Aviation Regulations (FARs), reportable to FAA per 49-CFR-830."

Risks: Aviation Safety; Helicopter Operations; Public Safety; Worker Safety; Employee Safety.

Category: Vehicle

Units: Number of accidents or incidents (as defined in 49 CFR Section 830.5 "Immediate Notification") per 100,000 flight hours. 62

Summary:

Summary Chart of Helicopter/Flight Incident Metric Data (Annual)

Year	2013	2014	2015	2016	2017	2018	2019	2020
Reportable Incidents	1	0	0	0	1	0	0	0

Given the low number of flight hours – well below the 100,000 hours per the metric description – SDG&E includes data based on the total number of incidents.



SDG&E's Aviation Services Department (ASD) is committed to upholding the highest safety practices and procedures for each mission type as assigned. ASD services include passenger movements, powerline patrols, pole setting, and other construction-related activities. SDG&E's safety-first attitude is integral in every operation and flight. ASD supports electric transmission, electric distribution, and gas operations with manned and unmanned aircraft. Manned operations are primarily flown with rotary-wing aircraft and include scheduled powerline patrols, fault patrols, infrared camera patrols, vegetation management surveys, external load work, Light Detection and Ranging (LiDAR) data collections, and aerial assessments. In addition, SDG&E's ASD provides an air-rescue capability to structures and areas that are accessible by helicopter only, and in close proximity to powerlines. Unmanned operations include pole-top and structure integrity assessments, environmental and sensitive area surveys, LiDAR data collection, and post storm or fire damage assessments.

SDG&E's Aviation Operations Manual was developed to create a standard approach and language for SDG&E flight personnel and all contractors who may conduct operations on behalf of SDG&E. It contains information and instructions such as how flight operations are to be conducted and the priorities and approaches to those operations. SDG&E ASD is fully committed to continuing the same level of highly professional services characteristic of our manned operations in our unmanned flight operations, and as such, has identified safety as our number one priority. SDG&E's mission for both its manned and unmanned flight operations is to coordinate safe and effective aviation services to internal and external customers requiring aviation assets on SDG&E property. Coordination with internal and external customers will facilitate proper customer safety and training for working with the aviation assets. ASD carefully



reviews subcontracted aviation asset suppliers and verifies they meet SDG&E ASD safety requirements for safe and professional aviation operations.

In addition, SDG&E's ASD is committed to a process of continual improvement in the safety and quality of our ground, maintenance, flight, and support activities. This includes periodic review of both safety policies and safety objectives to ensure our policies remain relevant and appropriate. Other important initiatives for this area include onsite observations of helicopter/field personnel, briefings by all contracted operators to pilots and ground support crew on any incident, and programs targeted to mitigate the risk created by increased numbers of drone and helicopter contractor flights.

Historical Data:

SDG&E began tracking data on helicopter/flight accidents and incidents in 2013. From 2013 through 2020, SDG&E has flown a total of 17,321 hours. Monthly historical data for years 2013 through 2020 is provided in the accompanying Excel file (Attachment B) for Helicopter/Flight Accident or Incident as defined by Federal Aviation Regulations, reportable to FAA per 49-CFR-830. Given the low number of flight hours – well below the 100,000 hours per the metric unit description – SDG&E includes data based on the total number of incidents. SDG&E will continue collecting this data for inclusion in future Safety Performance Metrics Reports until a full ten years of historical data exist.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives? (Ordering Paragraph 6A.)– [Yes/No]

No

Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering Paragraph 6A.)—[Yes/No]

No



Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph 6B.)— [Yes/No]

• No

Bias Controls: If any of the above are answered "yes," provide a description of bias controls in place for this specific metric.

• N/A



Attachment B

Native/Excel file reflecting 10 years of monthly historical data, where available, for all applicable metrics served upon parties to A.15-05-002, R.20-07-013, and A.17-10-007, and made available upon request.

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