

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Further Develop a Risk-Based Decision-Making Framework for Electric and Gas Utilities.	R.20-07-013 (Filed July 16, 2020)
<b>(Not Consolidated)</b>	
Application of San Diego Gas & Electric Company (U 902 M) to Submit Its 2021 Risk Assessment and Mitigation Phase Report.	A.21-05-011 (Filed May 17, 2021)
And Related Matter.	A.21-05-014 (Consolidated)
Application of Southern California Gas Company (U 904 G) for Authority, Among Other Things, to Update its Gas Revenue Requirement and Base Rates Effective on January 1, 2024.	A.22-05-015 (Filed May 16, 2022)
And Related Matter.	A.22-05-016 (Consolidated)

**2021 SAFETY PERFORMANCE METRICS REPORT OF  
SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)**

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July 29, 2022

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**2021 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) and D.21-11-009 Modifying Certain Metrics and Adopting New Metrics (Risk OIR Phase One Decision), San Diego Gas & Electric Company (SDG&E) timely submits its annual Safety Performance Metrics Report (2021 SPMR).<sup>1</sup> This 2021 SPMR reports on the applicable 32 safety performance

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<sup>1</sup> In compliance with D.21-11-009, the Risk OIR Phase One Decision, this 2021 SPMR is being filed in and served on Application (A.) 21-05-011/014 and A.22-05-015/016 (cons.), the “most recent or current Risk Assessment Mitigation Phase (RAMP) and GRC proceeding,” and on the successor S-MAP proceeding Rulemaking (R.) 20-07-013. SDG&E will also concurrently email the SPM report to RASA\_Email@cpuc.ca.gov. D.21-11-009 (issued November 9, 2021) at Ordering Paragraph 9, p. 145.

metrics to measure achieved safety improvements,<sup>2</sup> including how metrics are used to improve 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 2021 Safety Performance Metrics Report and Attachment “B” constitutes 10 years of monthly historical data, where available, for all applicable metrics.<sup>3</sup>

Respectfully submitted,

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July 29, 2022

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<sup>2</sup> Of the currently adopted safety performance metrics, 29 are applicable to SDG&E.

<sup>3</sup> 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 successor S-MAP proceeding R.20-07-013 and the most recent or current RAMP and GRC proceedings.



## **2021 Safety Performance Metrics Report**

**July 29, 2022**



TABLE OF CONTENTS

- I. INTRODUCTION/OVERVIEW .....1
  - A. Compliance with S-MAP Phase Two Decision and Risk OIR Phase One Decision Directives ..... 8
- II. METRICS OVERVIEW (D.19-04-020, ORDERING PARAGRAPH 6D AND D.21-11-009) .....10
  - A. Summary ..... 10
  - B. Examples of Improved Training and Corrective Actions ..... 16
  - C. Examples of How Safety Performance Metrics Data is Used to Support Risk-Based Decision-Making ..... 21
- III. EXECUTIVE COMPENSATION AND BIAS CONTROLS – OVERVIEW (D.19-04-020, ORDERING PARAGRAPH 6.A - C) .....24
  - A. Executive Incentive Compensation..... 24
  - B. Bias Controls..... 27
- IV. INTERIM RISK MITIGATION ACCOUNTABILITY REPORT (RMAR) REQUIREMENTS (D.19-04-020, ORDERING PARAGRAPHS 6E – 6F).....29
  - A. How Safety Metrics Reflect Progress Against SDG&E’s RAMP and GRC Safety Goals..... 29
  - B. High-level Summary of SDG&E’s Total Estimated Risk Mitigation Spending Level as Approved in the TY 2019 GRC..... 31
- V. Approved Safety Performance Metrics (D.19-04-020, Ordering Paragraph 2 and D.21-11-009) .....36
  - A. Metric No. 1: Transmission & Distribution (T&D) Overhead Wires Down Non-Major Event Days ..... 36
  - B. Metric No. 2: Transmission & Distribution (T&D) Overhead Wires Down - Major Event Days ..... 40
  - C. Metric No. 3: Electric Emergency Response Time..... 44
  - D. Metric No. 4: Fire Ignitions ..... 46
  - E. Metric No. 5: Gas Dig-In ..... 53
  - F. Metric No. 6: Gas In-Line Inspection ..... 56



G.	Metric No. 7: Gas In-Line Inspection Upgrade .....	59
H.	Metric No. 8: Gas Shut-In Time – Mains .....	62
I.	Metric No. 9: Gas Shut-In Time - Services .....	66
J.	Metric No. 10: Cross Bore Intrusions .....	71
K.	Metric No. 11: Gas Emergency Response Time.....	73
L.	Metric No. 13: Gas Pipelines That Can Be Internally Inspected .....	78
M.	Metric No. 14: Employee Days Away, Restricted and Transfer (DART) Rate.....	80
N.	Metric No. 15: Rate of Serious Injuries or Fatalities (SIF) Actual (Employee) .....	82
O.	Metric No. 16: Rate Of SIF Actual (Contractor) .....	96
P.	Metric No. 17: Rate of SIF Potential (Employee) .....	99
Q.	Metric No. 18: Rate of SIF Potential (Contractor).....	102
R.	Metric No. 19: Contractor Days Away, Restricted Transfer (DART).....	105
S.	Metric No. 20: Public Serious Injuries and Fatalities .....	108
T.	Metric No. 21: Helicopter/Flight Accident or Incident.....	113
U.	Metric No. 25: Wires-Down not resulting in Automatic De-energization.....	116
V.	Metric No. 26: Missed Inspections and Patrols for Electric Circuits.....	118
W.	Metric No. 27: Overhead Conductor Size in High Fire Threat District (Tiers 2 and 3, HFTD).....	119
X.	Metric No. 28: Gas Operation Corrective Actions Backlog .....	121
Y.	Metric No. 29: GO-95 Corrective Actions (Tiers 2 and 3, HFTD).....	123
Z.	Metric No. 30: Gas Overpressure Events .....	128
AA.	Metric No. 31: Gas In-Line Inspections Missed .....	131
BB.	Metric No. 32: Overhead Conductor Safety Index .....	132



## 2021 Safety Performance Metrics Report

July 29, 2022

### I. INTRODUCTION/OVERVIEW

SDG&E submits this annual Safety Performance Metrics Report in compliance with the California Public Utilities Commission’s (Commission or CPUC) directives in Decisions (D.) 19-04-020, *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)<sup>1</sup> and D.21-11-009, *Modifying Certain Metrics and Adopting New Metrics* (Risk OIR Phase One Decision). The S-MAP Phase Two Decision requires the California investor-owned utilities (IOUs), including San Diego Gas & Electric Company (SDG&E or Company), to annually report on safety performance metrics (SPM) to measure achieved safety improvements.

The S-MAP Phase Two Decision emphasizes that the initial metrics could be refined over time. The Decision directed Commission Staff to biennially convene the S-MAP Proceeding technical working group to discuss the SPMs and any needed changes, authorizes Staff to initiate Commission Resolutions to update the SPMs, and suggests that Staff and the technical working group should prepare and periodically update a high-level SPM work plan. The S-MAP Phase Two Decision further expressed the Commission’s intent that “[g]oing forward, the Commission should

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<sup>1</sup> In compliance with D.21-11-009, Ordering Paragraph 9 at 145, this 2021 Safety Performance Metrics Report is being filed in and served on Application (A.) 21-05-011/014 and A.22-05-015/016 (cons.), the “most recent or current Risk Assessment Mitigation Phase [(RAMP)] and General Rate Case [(GRC)] proceedings,” and on the successor S-MAP proceeding Rulemaking (R.) 20-07-013. SDG&E will also concurrently email the SPM report to RASA\_Email@cpuc.ca.gov.



develop additional safety metrics that correspond to the top safety risks and top risk drivers identified in IOU RAMPs.”<sup>2</sup>

On July 16, 2020, the Commission opened R.20-07-013 in an Order Instituting Rulemaking (OIR) to *Further Develop A Risk-Based Decision-Making Framework for Electric and Gas Utilities* (RDF Proceeding). Track 2 of the RDF Proceeding considered the need for new SPMs or revisions to existing SPMs adopted in the S-MAP Phase Two Decision. On November 4, 2021, the Commission issued D.21-11-009 (Risk OIR Phase One Decision),<sup>3</sup> which modified certain of the initial SPMs and adopted new metrics. The Risk OIR Phase One Decision directed the IOUs to adhere to the guidance on submittal of SPMs adopted in the S-MAP Phase Two Decision when making their annual SPM report submissions. This means the IOUs will report on the applicable original SPMs, as modified by the Risk OIR Phase One Decision (which modified certain existing SPMs, removed certain SPMs and added new SPMs).<sup>4</sup> In accordance with both D.19-04-020 and D.21-11-009, in this Report SDG&E now reports on the 29 applicable SPMs<sup>5</sup> using the designated definitions and units for the last ten years, January 1, 2012, through December 31, 2021, where such data exists, in the accompanying Excel file as Attachment B.<sup>6</sup>

On March 30, 2021, SDG&E submitted its second Safety Performance Metrics Report (the 2020 Report). The CPUC Safety Policy Division (SPD) provided its review, conclusion, and

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<sup>2</sup> See D.19-04-020.

<sup>3</sup> D.21-11-009, *Modifying Certain Metrics and Adopting New Metrics* (Risk OIR Phase One Decision).

<sup>4</sup> Not all metrics adopted in D.19-04-020 and D.21-11-009 are applicable to SDG&E.

<sup>5</sup> D.21-11-009 at Appendix B.

<sup>6</sup> 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 successor S-MAP proceeding R.20-07-013 and the most recent or current RAMP and GRC proceedings.





recommendations for SDG&E's 2020 Report on December 21, 2021. To the extent practicable, SDG&E has addressed SPD recommendations in this year's report.<sup>7</sup>

SDG&E has tracked safety-related metrics for years and uses such metric data as part of its risk-informed decision-making and continuous improvement processes. Tracking both leading and lagging indicators and comparing historical results provides a point of reference for safety processes and helps identify opportunities for continuous improvement. Common metrics (*e.g.*, employee injury, controllable motor vehicle incidents, and near-miss incidents) are tracked and analyzed, then 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 SDG&E's Executive Safety Council and led by SDG&E's Chief Safety Officer, SDG&E has various safety committees that 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 promote strong safety principles throughout the Company, and foster a culture of continuous safety

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<sup>7</sup> Between the time SDG&E submitted its 2020 Report and the date SPD provided its comments to that Report, the Commission revised or eliminated certain of the metrics adopted in the S-MAP Phase 2 Decision. D.21-11-009 modified a number of the metrics previously required by D.19-04-020 and also adopted new metrics. As a result, certain of the SPD comments and recommendations may no longer be applicable.



improvement, SDG&E continuously strives for a work environment where employees at all levels can raise concerns and offer suggestions for improvement on any safety-related topic including pipeline and electric infrastructure, customer safety, and employee safety. In order to identify and manage safety risks before incidents occur, SDG&E encourages two-way formal and informal communication between: (i) the company and the public, (ii) employees and management, and (iii) contractors and the company. 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 hosts annual Safety Congress events (both employee and contractor) to share safety best practices, lessons learned, education and awareness, and recognize safety leaders. SDG&E regularly holds safety meetings for field employees that provide safety training, solicit feedback, share best practices and promote leadership and employee engagement. If an employee or contractor 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.

In 2022, SDG&E adopted its first Safety Management Action Plan with data-driven goals, objectives, and measurable metrics for continuous safety improvement. Progress towards the Safety Management Action Plan goals are regularly communicated and reviewed by management. Key leading and lagging safety indicators, Near Miss Reports, safety observations, and Serious Injury and Fatality (SIF) potential assessments are continually reviewed to identify opportunities for



improvement and develop additional goals. SDG&E has a consolidated safety dashboard, accessible to all employees, to monitor progress towards the Company's safety goals.

While SDG&E's Safety Management Action Plan is new for 2022, SDG&E has been tracking many leading and lagging safety-related metrics for numerous years. It is important to note that there are some instances where the definition of the reportable Safety Performance Metric, as adopted by the S-MAP Phase Two Decision and Risk OIR Phase One Decision, differs from previous external reporting requirements, or data required by the new or modified 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.<sup>8</sup> Therefore, SDG&E notes that some of the data presented in this Safety Performance Metric Report related to the revised and additional metrics should be considered preliminary and subject to further analysis and review.

In 2020, SDG&E developed and began operating within a Company-wide Safety Management System (SMS) that encompasses both its gas and electric operations. The 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. SDG&E has strong safety performance, a robust safety culture, and many effective established safety programs and initiatives. The SMS framework ties together each of SDG&E's existing and future

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<sup>8</sup> 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.



safety initiatives, aligns its core operating units, integrates risk and safety, and allows for risk to be assessed across the entire organization for continuous improvement and enhanced safety performance. The SMS moves SDG&E forward in its journey towards “Target Zero.” At all levels, SDG&E, including its Board of Directors, is deeply committed to implementing an enterprise-wide SMS.

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; and
- Continual learning and improvement with greater reliance on data and analytics, increased use of leading indicators with strong review processes to continually measure effectiveness.

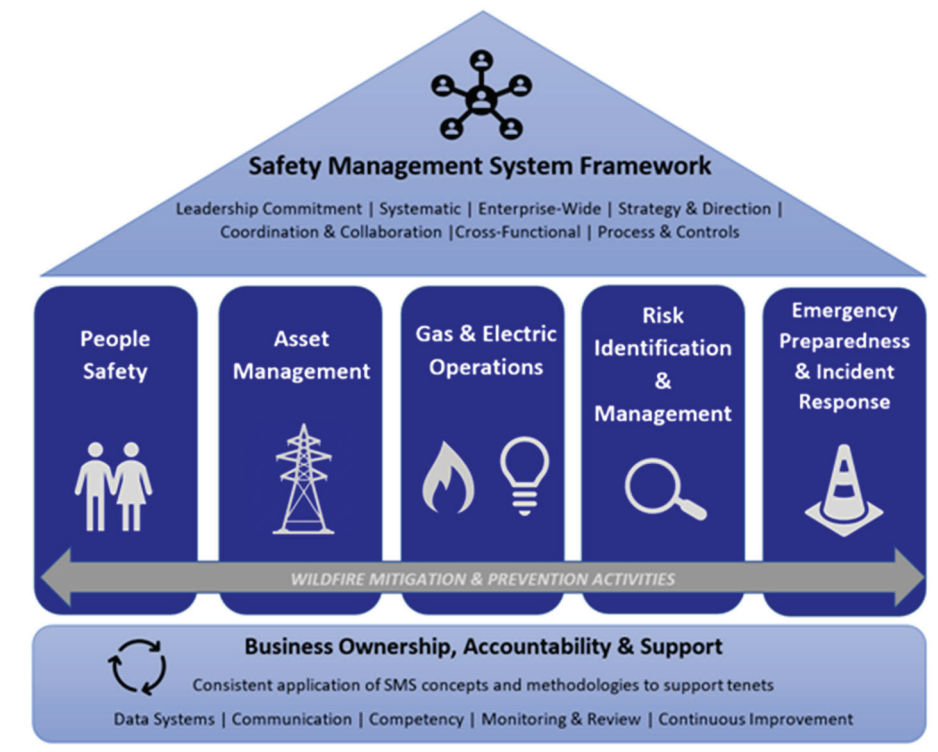
SDG&E’s SMS provides a standardized approach for managing risk and safety across all assets and operations by implementing standardized processes and risk assessment methodologies



that can be consistently applied Company-wide. The SMS framework creates an integrated approach and a Company-wide resource to guide actions, decisions, and behaviors to efficiently and effectively manage risk and continually improve upon all aspects of the Company’s 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.

**A. Compliance with S-MAP Phase Two Decision and Risk OIR Phase One Decision Directives**

The S-MAP Phase Two Decision approved 26 Safety Performance Metrics and requires the IOUs to annually file the metrics and accompanying narratives in any future S-MAP proceedings and in their respective GRC proceedings.<sup>9</sup> The S-MAP Phase Two Decision includes additional reporting requirements for the IOUs to: 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.

The S-MAP Phase Two Decision also directed the IOUs to work with SPD staff to develop a standardized Safety Performance Metrics Report format. SDG&E worked with SPD staff (via the S-

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<sup>9</sup> In accordance with D.21-11-009, SDG&E is required to report on 29 metrics.



MAP Technical Working Group) 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. 20, 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.<sup>10</sup> SDG&E complied with this requirement and provided SPD with a preview of its Pub-SIF data on January 28, 2022.<sup>11</sup> After submission and review of SDG&E's draft Pub-SIF data, SPD informed the IOUs on June 14, 2022, that there were no changes to the Pub-SIF subcategories for final reporting in this Safety Performance Metrics Report.

SDG&E acknowledges that S-MAP and metric data collection is an iterative process and SDG&E will continue to work with SPD, Commission staff, and stakeholders to revise and/or add metrics for future report submissions. To this end, on December 21, 2021, SPD provided its review, conclusion, and recommendations for SDG&E's 2020 Safety Performance Metric Report. SDG&E has carefully considered SPD's comments and has integrated additional information into this submission for the 2021 SPM Report where appropriate and to the extent data and information was available to include.<sup>12</sup>

As discussed above, the Risk OIR Phase One Decision modified certain metrics and adopted new metrics and instructed the IOUs to continue to follow the guidance provided in the S-MAP Phase Two Decision when making their annual SPM report submissions, with two modifications.

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<sup>10</sup> D.19-04-020 at 19.

<sup>11</sup> On December 14, 2021, SDG&E submitted a Request for Extension of Time to Comply with D.19-04-020 to CPUC Executive Director Rachel Peterson to extend the due date to submit the 2021 Safety Performance Metrics Report (SPMR) from March 2022 to July 29, 2022. The request was granted on January 21, 2022.

<sup>12</sup> *See supra* n.7.



First, the IOUs were directed to serve and file their annual SPM reports in R.20-07-013, their most recent or current Risk Assessment Mitigation Phase (RAMP) and their most recent or current GRC. Second, the IOUs were directed to send their SPM reports [RASA\\_Email@cpuc.ca.gov](mailto:RASA_Email@cpuc.ca.gov).<sup>13</sup> For a list of the final adopted modified SPMs are provided refer to Risk OIR Phase One Decision, Appendix B. A redlined version of the adopted modified SPMs showing the changes from the Staff Proposal is provided in Appendix F to that Decision.

## **II. METRICS OVERVIEW (D.19-04-020, ORDERING PARAGRAPH 6D AND D.21-11-009)**

### **A. Summary**

The currently-approved Safety Performance Metrics contain nine metrics in the “electric” category, twelve metrics in the “gas” category, eight metrics in the “injuries” category, and three metrics in the “vehicle” category. Of these 32 metrics, 29 are currently applicable to SDG&E and included within this Report. In addition to data for the 29 SPM, included as Attachment B, SDG&E provides a narrative below in accordance with the additional reporting requirements established in D.19-04-020.

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<sup>13</sup> D.21-11-009, Ordering Paragraph (OP) 9 at 145.





*Table 1- Summary of Applicable Metrics Adopted in D.19-04-020 and D.21-11-009<sup>14</sup>*

Category	Risk(s)	Metric Name	Units	2021
Electric	Wildfire; Transmission Overhead Conductor; Distribution Overhead Conductor Primary	1. Transmission & Distribution (T&D) Overhead Wires Down <sup>15</sup>	Number of wire down events	108
	Wildfire; Transmission Overhead Conductor; Distribution Overhead Conductor Primary	2. Transmission & Distribution (T&D) Overhead Wires Down - Major Event Days <sup>16</sup>	Number of wire down events	372
	Wildfire; Overhead Conductor; Public Safety; Worker Safety	3. Electric Emergency Response	Average time in minutes	49.71
			Median time in minutes	35.91
	Overhead Conductor; Wildfire Public Safety; Worker Safety; Catastrophic Event Preparedness	4. Fire Ignitions	Number of ignitions	25
Gas	Transmission Pipeline Failure - Rupture with Ignition; Distribution	5. Gas Dig-in	The number of 3rd party gas dig-ins per 1,000	1.54

<sup>14</sup> Category, Risks, Metric Names and Units as provided in D.19-04-020, Attachment 1 and D.21-11-009, Appendix B. Of the 32 reportable safety metrics adopted in D.19-04-020 and D.21-11-009, 29 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.

<sup>15</sup> 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).

<sup>16</sup> 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).



Category	Risk(s)	Metric Name	Units	2021
	Pipeline Rupture with Ignition (non-Cross Bore); Catastrophic Damage involving Gas Infrastructure (Dig-Ins)		USA tags/tickets	
	Catastrophic Damage Involving High-Pressure Pipeline Failure	6. Gas In-Line Inspection	Total number of miles of inspections performed and percentage inspected by ILI <sup>17</sup>	115 miles 20%
	Catastrophic Damage Involving High-Pressure Pipeline Failure	7. Gas In-Line Inspection Upgrade	Miles of gas transmission lines upgraded annually to permit inline inspections	0.03
	Distribution Pipeline Rupture with Ignition (non-Cross Bore)	8. Gas Shut-In Time – Mains	[Median]Time in minutes required to stop the flow for Distribution Mains	871.00
	Distribution Pipeline Rupture with Ignition (non-Cross Bore)	9. Gas Shut-In Time - Services	[Median]Time in minutes required to stop the flow for Distribution Services	127.00

<sup>17</sup> Transmission pipelines in High Consequence Areas (HCAs) are required to be assessed at an interval not to exceed seven years and those in areas outside of HCAs (non-HCAs) are required to be assessed at an interval not to exceed ten years. Therefore, intervals may vary year-to-year over the seven-year or ten-year inspection cycle and data should be viewed across years rather than on a year-by-year basis. Ten years of historical data is included in the accompanying Excel file, Attachment B.



Category	Risk(s)	Metric Name	Units	2021
	Catastrophic Damage Involving Medium Pressure Pipeline Failure	10. Cross Bore Intrusions <sup>18</sup>	Number of cross bore intrusions per 1,000 inspections	0
	Distribution Pipeline Rupture with Ignition	11. Gas Emergency Response Time	The time in minutes [Average and Median] that a Gas Service Representative or a qualified first responder takes to respond after receiving a call which results in an emergency order.	29.06 26.73
	Catastrophic Damage Involving High-Pressure Pipeline Failure	13. Gas Pipelines That Can Be Internally Inspected <sup>19</sup>	[Miles] Percentage	147 68%
Injuries	Employee Safety	14. Employee Days Away, Restricted and Transfer (DART) Rate	DART Cases times 200,000 divided by employee hours worked	1.25
	Employee Safety	15. Rate of Serious	Number of SIF-Actual	0.02

<sup>18</sup> 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.

<sup>19</sup> 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 as acceptable methods of inspection.



Category	Risk(s)	Metric Name	Units	2021
		Injuries or Fatalities (SIF) Actual (Employee)	cases among employees x 200,000/employee hours worked	
	Contractor Safety	16. Rate of SIF Actual (Contractor)	Number of SIF-Actual cases among contractors x 200,000/contractor hours worked	0.03
	Employee Safety	17. Rate of SIF Potential (Employee)	Number of SIF-Potential cases among employees x 200,000/employee hours worked	2.53
	Contractor Safety	18. Rate of SIF Potential (Contractor)	Number of SIF-Potential cases among contractors x 200,000/contractor hours worked	0.29
		19. Contractor Days Away, Restricted Transfer (DART)	OSHA DART Rate	0.56
	Public Safety	20. Public Serious Injuries and Fatalities	Number of Serious Injuries and Fatalities	2/0
Vehicle	Aviation Safety Helicopter Operations Public Safety Worker Safety Employee Safety	21. Helicopter/Flight Accident or Incident	Number of accidents or incidents (as defined in 49 CFR Section 830.5 "Immediate	0



Category	Risk(s)	Metric Name	Units	2021
			Notification ) per 100,000 flight hours	
Electric	Electric Overhead, wildfire	25. Wires- Down not resulting in Automatic De- energization	Percentage of wires down occurrences	N/A <sup>20</sup>
		26. Missed Inspections and Patrols for Electric Circuits	Percentage of structures that missed inspection relative to total required structures	0.00% 0.00% 0.00% 0.00%
		27. Overhead Conductor Size in High Fire Threat District (Tiers 2 and 3, HFTD)	Percentage relative to total circuit miles	N/A <sup>21</sup>
Gas	Gas safety	28. Gas Operation Corrective Actions Backlog	Percentage of work orders past due for completion in the past calendar year [Transmissi on/Distributi on]	0.00% 0.00%
Electric	Electric safety and Wildfire	29. GO-95 Corrective Actions (Tiers	Percentage of corrective	105.78% 99.97%

<sup>20</sup> Data for this metric has not been tracked in prior years and therefore, is not available for this reporting cycle. Tracking of data for this metric commenced in 2022 and will be reported in the next reporting cycle.

<sup>21</sup> Data for this metric has not been tracked in prior years and therefore, is not available for this reporting cycle. Tracking of data for this metric commenced in 2022 and will be reported in the next reporting cycle.



Category	Risk(s)	Metric Name	Units	2021
		2 and 3, HFTD)	actions completed [Transmission/Distribution]	
Gas	Gas Transmission and Distribution	30. Gas Overpressure Events	Number of occurrences [Transmission/Distribution]	0/0
	Gas Transmission	31. Gas In-Line Inspections Missed	Number of Missed Inspections	0
Electric	Wildfire Transmission Overhead Conductor Distribution Overhead Conductor Primary	32. Overhead Conductor Safety Index	Number of occurrences per circuit mile	N/A <sup>22</sup>

## 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.”<sup>23</sup> 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.

<sup>22</sup> Data at the level of granularity required for this metric is not available. For further information, see the narrative context discussion for Metric 32.

<sup>23</sup> D.19-04-020 at 28.



As noted above, SDG&E operates within a Company-wide SMS, which provides a systematic, enterprise-wide framework to collectively manage and reduce risk and promote continuous improvement in safety culture and safety performance through deliberate, routine, and intentional processes. The SMS framework connects each of SDG&E's existing and future safety initiatives, better aligns the core operating units, and allows SDG&E to assess risk across the entire enterprise for enhanced safety performance.

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 continually reviews results from a variety of safety leading and lagging key performance indicators and metrics, including injuries, motor vehicle accidents, near-miss incidents, safety observations, and is actively involved in 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,”<sup>24</sup> 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.’<sup>25</sup>

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.”<sup>26</sup> 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.<sup>27</sup> As such, SDG&E created an enterprise-wide SMS to drive continuous improvement in both its electric and gas operations. Below are four illustrations of recent improvements to training or corrective actions, as directed by the S-MAP Phase Two Decision:

**Example 1: SDG&E’s Serious Injury and Fatality (SIF) Prevention Program – Metric Nos. 15 & 17**

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<sup>24</sup> 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.

<sup>25</sup> 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).

<sup>26</sup> *Id.*

<sup>27</sup> *See, e.g.*, A.17-10-007/-008 (cons.), Application of San Diego Gas & Electric Company 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-02-R/SDGE-02-R Day Direct) at DD-28.





In 2021, SDG&E implemented its SIF Prevention Program. 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 SIF Prevention Program provides SDG&E with the tools necessary to identify and understand the Company's specific SIF precursors and to identify 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 are trained on the process and effective use of the tools. In 2021, SDG&E began performing SIF potential analysis on submitted Near Miss Reports. Near Misses that did not result in injury but are deemed to have the potential to have caused a Serious Injury or Fatality undergo review by the SIF SME teams. Findings are presented to a cross-functional team of operational managers, directors, and leaders during monthly Safety Incident Review Meetings with identified opportunities for safety improvements.

#### **Example 2: Safety in Motion® Program – Metric Nos. 14, 15 & 17**

In 2021, over half of SDG&E's Occupational Safety and Health Administration (OSHA) recordable safety incidents were soft tissue or "strain and sprain" related. Therefore, in order to improve performance and reduce the risk of future injuries, SDG&E deployed a program targeted at proactive and preventive stretching, ergonomic, and body positioning techniques. SDG&E field employees perform rigorous tasks on a daily basis and are exposed to a wide variety of causes and conditions capable of causing soft tissue injuries such as sprains and strains. These tasks include, but are not limited to lifting, pushing, pulling, climbing, digging, loading and unloading. The Safety in Motion® program takes a proactive approach to preventing and reducing these injuries by addressing risk factors using four cornerstones: Tools and Equipment, Physical Technique, Early



Warning Signs, and Re-energizers. Analyzing job demands and providing the best possible tool to reduce physical strain is the first step in our injury prevention program. Physical Technique recognizes the impossibility of eliminating all physical effort and provides four broad categories of training principles, each with several body specific techniques. Yearly refresher training in all four categories is a requirement for all field employees but Safety in Motion takes it one step further by leveraging other safety programs within SDG&E's SMS to develop short modules addressing specific issues captured from our Near Miss reports, early reports of discomfort and from observations from our Behavior Based Safety (BBS) teams. Both the yearly and short modules use Stressed-Better photo pairs and videos to demonstrate specific and safe ways to complete a task. The final Safety in Motion cornerstone are Re-energizers which are designed to balance muscle strength, increase range of motion and circulation, and encourage micro breaks and task rotation.

### **Example 3: Ignition Management Program – Metric Nos. 1, 2 & 4**

SDG&E's Ignition Management Program, which started in 2019, helps SDG&E identify potential causes of wildfire ignitions utilizing the most current technology, reduce the risk and occurrence of ignitions, and assist in guiding mitigations and policymaking. The program involves collecting data from Electric Trouble Shooters, the Electric Distribution Operations team, Electrical Engineering, Fire Coordination, and many other groups. The team then analyzes data collected from equipment failures, downed power lines, and any evidence of heat (sparking, charring, melted debris, etc.) discovered on or around our equipment after an outage. That data is then used to investigate the cause of the potential or actual ignition, and then teams work to better understand and prevent future ignitions. SDG&E's Ignition Management Program supports our core safety values by enabling early risk identification, which allows our operational controls to be refined and



reinforced. It also investigates near-miss events and equipment failures, as well as conducts ongoing reviews and assessments to measure goals.

#### **Example 4: Fleet Vehicle Telematics and Coaching – Metric Nos. 14, 15, 17 & 20**

In 2020, SDG&E 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 usage. This data provides SDG&E with a comprehensive view of the vehicle driver and fleet performance and enables SDG&E to provide coaching and specific driver training to employees to reinforce safe driving habits. Since coaching began in 2021, SDG&E has seen a decline in speeding amongst its fleet and best-ever Controlled Motor Vehicle Incident (CMVI) rates. These changed behaviors improves both employee safety and public 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.

#### **Example 1: Investment Portfolio Optimization (IPO) Tool Development**

SDG&E has commenced the development of an IPO software, Copperleaf Portfolio Tool, that it expects to place in service for electric transmission and distribution operating units by 2023. The first phase of the IPO project commenced in early 2020. The next phase will expand the implementation of the Copperleaf Portfolio as “Software as a Service” (SaaS) solution for Gas Transmission, Gas Distribution, IT, Generation and Facilities, while continuing the business process



development and adoption of this software solution with the Electric Transmission, Substation, System Protection, and Distribution groups.

The current investment prioritization tool lacks the capability to meet the more rigorous and complex regulatory reporting requirements mandated in S-MAP decisions. These requirements include forecasting, tracking, and reporting of units and costs associated with risk activities that drive SDG&E's risk-informed decision-making process. Replacing the current tool with Copperleaf Portfolio will provide data-driven, risk informed, transparent, and consistent value-based capital investment prioritization and support reporting requirements. The IPO software also supports the 2020-2022 Wildfire Mitigation Plan under Resource Allocation Methodology as part of the Wildfire Mitigation Programs. The software solution enables the simplification and standardization of project appraisals, based on risk reduction benefits and costs and, enhances the Company's ability to cross-prioritize across its portfolios, including wildfire-driven projects, and optimize capital spend for effective use of ratepayer funds.

#### **Example 2: Remote Inspections/Surveys (Metric Nos. 11)**

SDG&E continues to research, develop, and analyze technologies leveraging aircraft systems (manned and unmanned) to conduct various types of pipeline/facility inspections and surveys to improve safety in remote or difficult-to-access pipeline segments or as incremental activities. SDG&E introduced a proactive tiered strategy for methane emissions detection that continues to augment technologies leveraging aircraft systems with traditional routine leak survey practices. Utilizing the current strategy effectively detects ground-level and underground methane emissions to manage pipeline safety and mitigate leak threats. In 2022, SDG&E approved a more technologically advanced aerial methane sensor. The new sensor was shown in evaluations to detect and measure the same concentrations of gas from the air as ground detection equipment. The new



device also promises better stabilization and less weight for improved detection over hard-to-reach facilities. These continued implementations of advanced technology decrease overall risk exposure through more thorough and detailed detection.

**Example 3: Enterprise Asset Management Platform (Asset 360) (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 switches and capacitors, transmission overhead structures, conductor, and equipment. Additionally, asset health and risk indices were completed for distribution switches and capacitors 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 2021, 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 IPO program 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."<sup>28</sup> Benefits programs that promote employee health and welfare also contribute to SDG&E's safety performance and culture.

In her Test Year (TY) 2024 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 continues to emphasize 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.<sup>29</sup> Providing continued 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.

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.<sup>30</sup> In the narrative for each Safety Performance Metric reported herein, SDG&E indicates whether that specific metric is linked

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<sup>28</sup> D.16-06-054 at 153.

<sup>29</sup> A.22-05-015/016 (cons.), Ex. SCG-25-R/SDG&E-29-R Robinson Direct at DSR-11.

<sup>30</sup> D.19-04-020, Ordering Paragraph 6.A at 63.



to determining executive compensation levels and/or incentives (*See* Section V, below). For this 2021 Safety Performance Metrics Report, SDG&E references its 2021 Executive ICP and 2021 non-executive ICP and indicates whether each metric was tied to these ICPs in 2021. 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 2022 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 one of SDG&E's core values, 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 (Sempra) 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 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 maintained the weighting of safety measures in variable pay plans over the past years, such that safety-related measures comprise 59% of SDG&E's 2021 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.”<sup>31</sup> 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 2021 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 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,

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<sup>31</sup> 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.”





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 2021 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 Audit Services. Audit Services provides an independent internal audit function, with the Vice President of Audit Services functionally reporting to the Sempra Board of Directors through its Audit Committee, and administratively to Sempra'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 address identified deficiencies by Audit Services and develop 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.”<sup>32</sup> SDG&E’s 2021 Executive ICP and 2021 non-executive ICP each include nineteen separate safety-related performance measures.<sup>33</sup> 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

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<sup>32</sup> D.19-04-020, Ordering Paragraph 6.C. at 63.

<sup>33</sup> For the period of January 1, 2021 to December 31, 2021, SDG&E had in place a “2021 Executive Incentive Compensation Plan” and a “2021 Incentive Compensation Plan.” The S-MAP Phase Two Decision defines “executive” as “director or above.” SDG&E directors are covered by SDG&E’s 2021 Incentive Compensation Plan (*i.e.*, the 2021 non-executive Incentive Compensation Plan). Therefore, SDG&E refers to both the 2021 Executive Incentive Compensation Plan and the 2021 Incentive Compensation Plan” herein.



are discussed in each metric section below. However, SDG&E's inclusion of nineteen 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 investment management activities over future GRC cycles.<sup>34</sup> 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.

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<sup>34</sup> A.17-10-007/-008 (cons.), Ex. 03 (SCG-02-R/SDGE-02-R Day Direct) at DD-25 – DD-26, Figure DD-4.



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 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.<sup>35</sup>

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,<sup>36</sup> 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.”<sup>37</sup> A prudent SMS will further integrate risk, safety, and asset 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.

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<sup>35</sup> *Id.* at DD-23.

<sup>36</sup> A.17-10-007/-008 (cons.), Ex. 90 (SCG-250/SDG&E-252 Buczkowski and Geier Rebuttal) at DLB/DLG-5.

<sup>37</sup> 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.



**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.<sup>38</sup> D.19-04-020 found that it was “premature to approve specific RMAR requirements or to require separate, more general RMARs at this time,”<sup>39</sup> 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.”<sup>40</sup>

SDG&E filed its TY 2019 GRC Application on October 6, 2017.<sup>41</sup> 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).<sup>42</sup> SDG&E’s 2016 RAMP filing significantly informed the TY 2019 General Rate Case results.<sup>43</sup> 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.

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<sup>38</sup> D.14-12-025 at 3.

<sup>39</sup> D.19-04-020 at 32.

<sup>40</sup> *Id.*

<sup>41</sup> 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).

<sup>42</sup> I.16-10-015, Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company (November 30, 2016).

<sup>43</sup> Pursuant to D.20-01-002, Appendix B at B-1, SDG&E filed its RAMP application on May 17, 2021, informing its TY 2024 GRC, which was filed on May 16, 2022.



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.”<sup>44</sup> 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 operations and maintenance (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 2021 figures reflect a transitional time period in presenting the above-noted Commission directives.<sup>45</sup> 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.<sup>46</sup> 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 at reasonable rates.”<sup>47</sup> Further, while SDG&E endeavored to “isolate the RAMP activity, to allow the

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<sup>44</sup> D.19-09-051 at 22.

<sup>45</sup> A Decision in the TY 2024 GRC is anticipated by year-end 2023. Safety Performance Metrics Reports filed after the GRC Decision will reflect SDG&E’s total estimated risk mitigation spending as presented in the approved TY 2024 GRC and applicable RAMP filings.

<sup>46</sup> D.19-09-051.

<sup>47</sup> *Id.* at 3.



reader to see the dollar request in GRC workpapers,”<sup>48</sup> 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.”<sup>49</sup> 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.”<sup>50</sup> SDG&E includes this data in the tables below. Please refer to SDG&E’s 2021 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 (2021 Direct \$000)					
RAMP Chapter	RAMP Risk Description	2021 Actuals	2021 Imputed Authorized	\$ Variance	% Variance
SDG&E-01	Wildfires Caused by SDG&E Equipment (Including Third Party Pole Attachments)	67,809	41,999	25,810	61%
SDG&E-02	Catastrophic Damage Involving Third Party Dig-Ins	7,112	4,760	2,351	49%
SDG&E-03	Employee, Contractor, and Public Safety	66,675	53,452	13,223	25%
SDG&E-04	Distributed Energy Resources – Safety and Operational Concerns	48	84	(36)	-43%
SDG&E-06	Fail to Blackstart	16	46	(30)	-65%
SDG&E-07	Cyber Security	12,799	8,643	4,156	48%
SDG&E-08	Aviation Incident	456	463	(7)	-1%

<sup>48</sup> A.17-10-007/-008 (cons.), Ex. 03, (SCG-02-R/SDG&E-02-R, York Direct) at JKY-6.

<sup>49</sup> D.19-09-051 at 22.

<sup>50</sup> D.19-04-020 at 32.



**SDG&E O&M Details  
(2021 Direct \$000)**

<b>RAMP Chapter</b>	<b>RAMP Risk Description</b>	<b>2021 Actuals</b>	<b>2021 Imputed Authorized</b>	<b>\$ Variance</b>	<b>% Variance</b>
<b>SDG&amp;E-09</b>	Workplace Violence	4,389	5,369	(980)	-18%
<b>SDG&amp;E-10</b>	Catastrophic Damage Involving High-Pressure Gas Pipeline Failure	10,299	5,834	4,466	77%
<b>SDG&amp;E-11</b>	Unmanned Aircraft System Incident	177	183	(6)	-3%
<b>SDG&amp;E-12</b>	Electric Infrastructure Integrity	8,464	22,422	(13,958)	-62%
<b>SDG&amp;E-13</b>	Records Management	6,338	9,664	(3,327)	-34%
<b>SDG&amp;E-14</b>	Climate Change Adaptation	-	454	(454)	-100%
<b>SDG&amp;E-16</b>	Catastrophic Damage Involving Medium-Pressure Gas Pipeline Failure	12,073	16,829	(4,756)	-28%
<b>SDG&amp;E-17</b>	Workforce Planning	3,372	2,471	901	36%
<b>New</b>	Emergent RAMP <sup>51</sup>	82,330	-	82,330	100%
	<b>Total SDG&amp;E RAMP</b>	<b>282,357</b>	<b>172,674</b>	<b>109,683</b>	<b>64%</b>

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).<sup>52</sup> 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.”<sup>53</sup> Reprioritizing spending allows utilities to “[r]espond to immediate or short-term crises outside of the RAMP and GRC process,”<sup>54</sup> in

<sup>51</sup> Emergent RAMP includes RAMP mitigation activities that were not identified in the TY 2019 GRC but have been newly identified as RAMP in the TY 2024 GRC.

<sup>52</sup> 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.” Decision (D.) 21-05-003, *Decision Regarding San Diego Gas and Electric Company’s and Southern California Gas Company’s Post Test Year Mechanism For 2022 And 2023* was approved effective May 6, 2021.

<sup>53</sup> D.20-01-002 at 38.

<sup>54</sup> D.18-04-016 at 6 n.7 (citing D.16-08-018 at 152).





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.”<sup>55</sup> 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.

*Table 3 - SDG&E Interim RMAR Summary: Capital*

<b>SDG&amp;E Capital Details (2021 Direct \$000)</b>					
<b>RAMP Chapter</b>	<b>RAMP Risk Description</b>	<b>2021 Actuals</b>	<b>2021 Imputed Authorized</b>	<b>\$ Variance</b>	<b>% Variance</b>
<b>SDG&amp;E-01</b>	Wildfires Caused by SDG&E Equipment (Including Third Party Pole Attachments)	189,368	92,414	96,954	105%
<b>SDG&amp;E-02</b>	Catastrophic Damage Involving Third Party Dig-Ins	3	318	(315)	-99%
<b>SDG&amp;E-03</b>	Employee, Contractor, and Public Safety	15,101	13,245	1,856	14%
<b>SDG&amp;E-04</b>	Distributed Energy Resources – Safety and Operational Concerns	8	241	(233)	-97%
<b>SDG&amp;E-05</b>	Major Disturbance to Electrical Service (e.g., Blackout)	0	1,726	(1,726)	-100%
<b>SDG&amp;E-06</b>	Fail to Blackstart	34	2,051	(2,017)	-98%
<b>SDG&amp;E-07</b>	Cyber Security	10,976	3,229	7,747	240%
<b>SDG&amp;E-08</b>	Aviation Incident	0	1,980	(1,980)	-100%
<b>SDG&amp;E-09</b>	Workplace Violence	5,061	4,185	876	21%
<b>SDG&amp;E-10</b>	Catastrophic Damage Involving High-Pressure Gas Pipeline Failure	3,251	10,608	(7,358)	-69%
<b>SDG&amp;E-12</b>	Electric Infrastructure Integrity	116,670	108,545	8,125	7%
<b>SDG&amp;E-13</b>	Records Management	15,122	12,693	2,430	19%
<b>SDG&amp;E-16</b>	Catastrophic Damage Involving Medium-Pressure Gas Pipeline Failure	123,334	45,431	77,903	171%
<b>New</b>	Emergent RAMP <sup>56</sup>	218,856	32,282	186,574	578%
<b>Total SDG&amp;E RAMP</b>		<b>697,783</b>	<b>328,946</b>	<b>368,837</b>	<b>112%</b>

<sup>55</sup> D.16-08-018 at 152.

<sup>56</sup> See *supra*, n.51.



As stated above, please refer to SDG&E’s 2021 Risk Spending Accountability Report for additional detail on activities presented in SDG&E’s 2016 RAMP Report and TY 2019 GRC 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 AND D.21-11-009)**

Each of the currently applicable and reportable safety performance metrics, as defined and adopted in the S-MAP Phase Two Decision and the Risk OIR Phase One Decision, are individually discussed below.<sup>57</sup> 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 Non-Major Event Days**

**Metric Name and Description per D.21-11-009:**<sup>58</sup> “Transmission & Distribution (T&D) Overhead Wires Down - Non-Major Event Days. Number of instances where an electric transmission or primary distribution conductor is broken or remains intact and falls from its intended position to rest on the ground or a foreign object; excludes down secondary distribution wires and “Major Event Days’ (typically due to severe storm events) as defined by the [Institute of Electrical and Electronics Engineers] IEEE.”

<sup>57</sup> As discussed *supra* at p 2, SDG&E was directed in the Risk OIR Phase One Decision to adhere to the S-MAP Phase Two Decision to the extent the metrics promulgated by that Decision were not revised, superseded, or expanded by the directives contained in the Risk OIR Phase One Decision.

<sup>58</sup> The metric name and description, risks, category, and units for each metric comes directly from D.21-11-009, Appendix B.



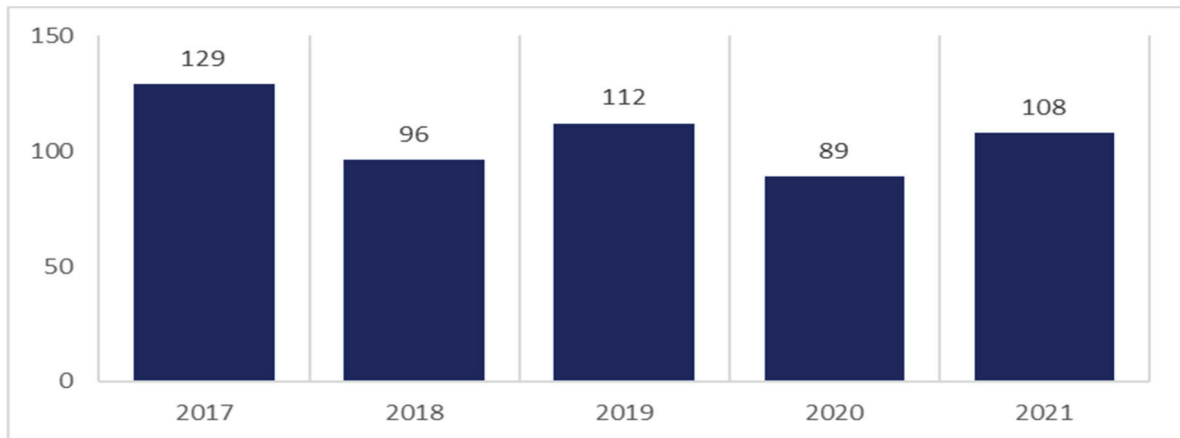
**Risks:** Wildfire; Transmission Overhead Conductor; Distribution Overhead Conductor Primary.

**Category:** Electric

**Units:** Number of wire down events.

**Summary:**

*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 Strategic Undergrounding, Overhead System Hardening, and Overhead Public Safety (OPS).

**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 secondary distribution wires and "Major Event Days" (typically due to severe storm events) as defined by the IEEE.<sup>59</sup> More wires down events generally occur in January and February than other months due to weather conditions. Also, as we improve our tracking processes and widen the scope of the definition of wire down events, there will be historical changes in previously reported years. Wire down data for 2019 and prior has been retroactively updated to reflect a change in our data collection efforts and include events that were not included previously. SDG&E effected those data collection changes in order to adhere to the highest quality standards for data reporting.

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<sup>59</sup> As defined by IEEE Standard 1366-2012, a Major Event Day is a day when the daily SAIDI exceeds a threshold value,  $T_{MED}$ , that is 2.5 standard deviations above the mean of the lognormal distribution based on daily SAIDI values for the previous five years (IEEE, Classification of Major Event Days, at 1-4, available as of August 12, 2021 at <https://cmt.ee.org/pes-drwg/wp-content/uploads/sites/61/2003-01-Major-Events-Classification-v3.pdf>.) D.21-11-009, Appendix B, n.1.



**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 2021 Executive and non-executive Incentive Compensation Plans include “System and Customer Safety” performance measures. SDG&E has the following systematic programs for mitigating wildfire risk through reducing wire down events, as included in the 2021 Executive and non-executive ICPs: Overhead System Hardening and Underground System Hardening. Additionally, 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

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

- Yes. As described above, SDG&E’s 2021 Executive Incentive Compensation and non-executive Incentive Compensation Plans include two System and Customer Safety metrics, Overhead System Hardening and Underground System Hardening. These metrics have a combined weighting of 6% of the 59% overall safety weighting for SDG&E’s 2021 Executive ICP and 3% of the 34% overall safety weighting for SDG&E’s 2021 non-executive ICP.



**Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph**

**6B.)– [Yes/No]**

- Yes. SDG&E’s Overhead System Hardening and Underground System Hardening metrics are linked to all SDG&E director level or higher positions covered by either the 2021 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’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 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.21-11-009:** “Transmission & Distribution (T&D) Overhead Wires Down - Major Event Days. Number of instances where an electric transmission or primary distribution conductor is broken or remains intact 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.”

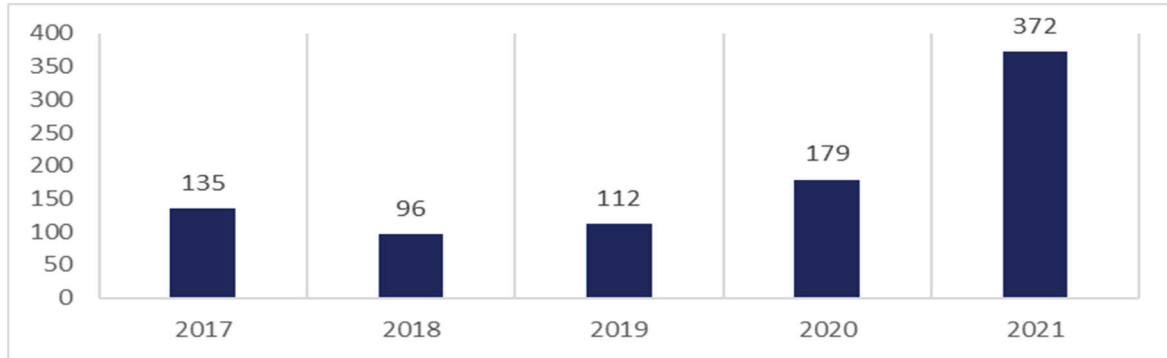
**Risks:** Wildfire; Transmission Overhead Conductor; Distribution Overhead Conductor Primary.

**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 2021 to previous years, there is a noticeable increase in wire down events. This is directly related to a full year inclusion of secondary wire down reporting. In 2021 secondary wire down accounted for 71% of the 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 2021 Executive and non-executive Incentive Compensation Plans include “System and Customer Safety” performance measures. SDG&E has the following systematic programs for mitigation wildfire risk through reducing wire down events, as included in the 2021 Executive and non-executive ICPs: Overhead System Hardening and Underground System Hardening. Additionally, 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.





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

- Yes. As described above, SDG&E’s 2021 Executive Incentive Compensation and non-executive Incentive Compensation Plans include two System and Customer Safety metrics, Overhead System Hardening and Underground System Hardening. These metrics have a combined weighting of 6% of the 59% safety weighting for SDG&E’s 2021 Executive ICP and 3% of the 34% safety weighting for SDG&E’s 2021 non-executive ICP.

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

- Yes. SDG&E’s Overhead System Hardening and Underground System Hardening metrics are linked to all SDG&E director level or higher positions covered by either the 2021 Executive ICP or 2021 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’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 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 Time

**Metric Name and Description per D.21-11-009:** Electric Emergency Response Time: “Average time and median time in minutes to respond on-site to an electric-related emergency notification from the time of notification to the time a representative (or qualified first responder) arrived onsite. Emergency notification includes all notifications originating from 911 calls and calls made directly to the utilities’ safety hotlines. The data used to determine the average time and median time shall be provided in increments as defined in GO 112-F 123.2 (c) as supplemental information, not as a metric.”

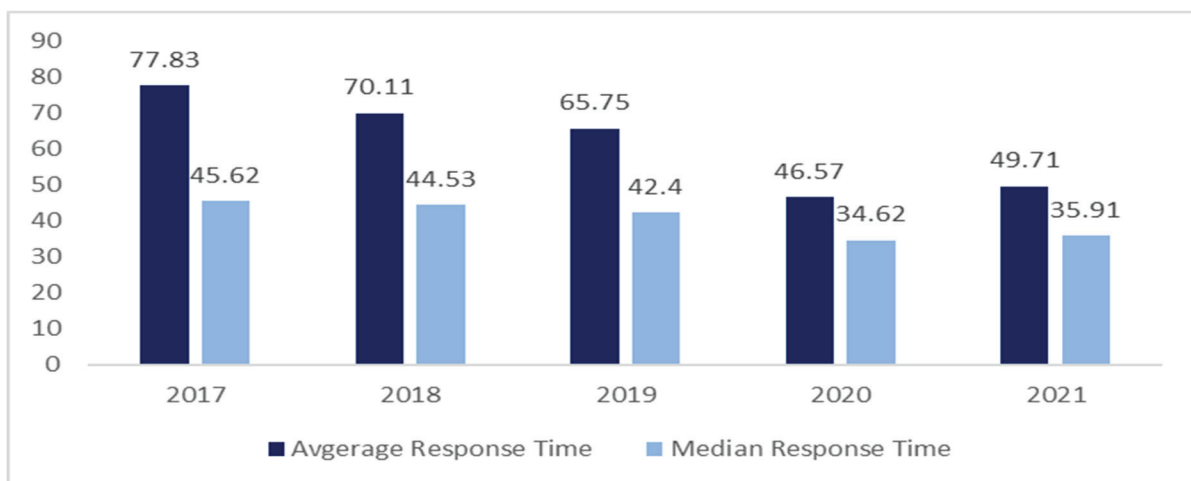
**Risks:** Wildfire; Overhead Conductor; Public Safety; Worker Safety.

**Category:** Electric

**Units:** The time in minutes that an electric crew person or a qualified first responder takes to respond after receiving a call which results in an emergency order.

**Summary:**

*Summary Chart of Electric Emergency Response Metric Data (Annual)*



**Narrative Context:**

D.21-11-009 modified the Electric Emergency Response Metric to align with Natural Gas Pipeline Safety General Order 112-F 123.2 (c), the Electric Emergency Response historic data was



updated and reviewed to compare differences from the previous metric. The monthly median response times between 2011 and 2021 were most commonly in the range between 30 and 50 minutes. In comparison, the monthly average response times were most commonly in the range between 45 minutes and 75 minutes. The difference between these value ranges demonstrates that SDG&E consistently reaches electric emergency response requests to meet the previous metric (under 60 minutes), however sees an increase in the average response times when delayed arrival times (due to geographic terrain or response requests outside normal working hours) are included in the overall metric.

The metric response trend, whether average or median, is consistent with improving response times across the historic data range. This has occurred with a strong increasing trend of the amount of electrical emergency response requests with 30% growth on an annual average basis between 2011-2021. SDG&E has consistently focused on 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 that started in late 2019.

**Historical Data:**

Ten years of monthly historical data is included in the accompanying Excel file (Attachment B). The data captures both the annual and monthly average and median times, in minutes, where qualified SDG&E personnel responded (are on-site) after receiving a 911 emergency request (electric-related) from a government agency (Fire, Police) or from the customer safety hotline. On-site arrival is defined as arriving at the premises to which the request relates. As noted in the previous SPMRs, SDG&E's review of historical data identified instances in delayed recording of actual on-scene arrival times. Since mid- 2019, SDG&E has performed manual reviews of arrival to



on-site response times to correct anomalies resulting from human error (e.g., the technician did not manually click ‘onsite’ upon arrival on scene) and system errors (e.g., application downtime or outage). These data corrections use vehicle telematics to confirm onsite arrival time to the requested address. 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.

**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.21-11-009:** “Fire Ignitions: The number of fire incidents annually reportable to the CPUC per Decision 14-02-015.”

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

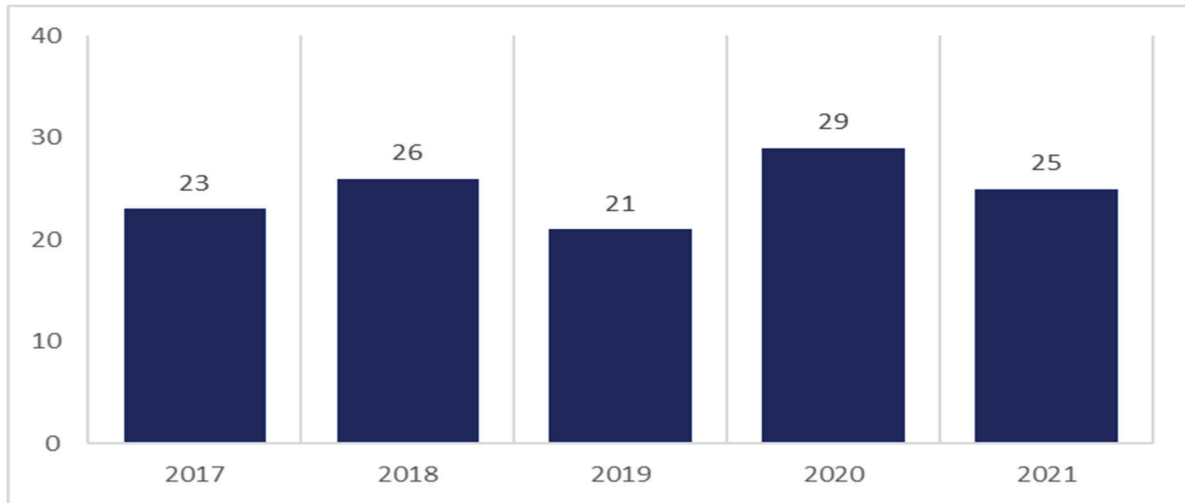
**Category:** Electric

**Units:** Number of ignitions.



**Summary:**

*Summary Chart of Fire Ignitions Metric Data (Annual)*



**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 2022 Wildfire Mitigation Plan (SDG&E WMP), attempt to address both the likelihood of an ignition and reduction of the consequences of an ignition should one occur. In 2021, California experienced one of its longest and most destructive fire seasons. Throughout the state there were 2,568,948 acres consumed with 3,629



structures destroyed. Over the next three years, SDG&E intends to use data gathered through its mitigation initiatives to identify increased areas of risk and inform mitigation activities.

Since the tracking of ignitions began, utilizing the definition adopted in D.14-02-015, the majority of ignitions have fallen within two primary groups of ignition drivers. These primary drivers are (1) contact from an outside force on utility infrastructure and (2) equipment failure. Outside forces leading to ignitions comprise items ranging from foil balloons to flying patio umbrellas. For example, since 2014 there have been twenty-four (24) CPUC-reportable fires caused by foil balloons within SDG&E's service territory. Equipment failure also presents a risk of ignition and there are many different types of equipment utilized across the electric system. 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 2021 the total combined acreage of all of SDG&E's reportable ignitions was 2.02 acres (25 fires). This 2-acre total is the lowest total acreage since the 2014 definition of a reportable fire was adopted. 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 ascertain any patterns or correlations. These events are documented and analyzed. Through 2021, the IMP has reviewed 564 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. The corresponding data is used to inform metrics, operational practices, and system hardening. SDG&E also monitors for new emerging ignition concerns using its IMP. As the data is analyzed, it helps to build foundational knowledge about potential ignition sources. This knowledge lead to more informed decisions in the areas of fire hardening, fire prevention, and overall risk. SDG&E



has also incorporated a process for completing 4-hour notifications, 12-hour notifications and 30-day reports to California Office of Energy Infrastructure Safety (OEIS) in compliance with California Code of Regulations, Title 14 Section 29300.

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 legacy programs such as FiRM (Fire Risk Mitigation), PRiME (Pole Risk Mitigation and Engineering), and WiSE (Wire Safety Enhancement), Cleveland National Forest Project (CNF), and current programs like Traditional Hardening, Covered Conductor Hardening, and Strategic Undergrounding. System hardening efforts have expanded to include the replacement of hotline clamps, expulsion fuses, and capacitors. In addition to these mitigation activities, SDG&E 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 also 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.<sup>60</sup> 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,

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<sup>60</sup> D.14-02-015, Ordering Paragraphs 8 and 9 at 99, and Appendix C.



- 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,<sup>61</sup> SDG&E has had only three reportable fires over 10 acres, including 2021 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 2021, containing the number of electric equipment-involved fire incidents annually reportable to the CPUC per D.14-02-015. As noted in the Metric Description, 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.<sup>62</sup>

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

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<sup>61</sup> *Id.*

<sup>62</sup> See SDG&E 2020 - 2022 Wildfire Mitigation Plan Update (February 11, 2022), available at <https://energysafety.ca.gov/what-we-do/electrical-infrastructure-safety/wildfire-mitigation-and-safety/wildfire-mitigation-plans/2022-wmp/>.





- Yes. SDG&E’s 2021 Executive and 2021 non-executive ICP plans include the following “Fire and Public Safety” performance measures aimed at reducing the risk of fire ignitions:
  - Overhead System Hardening - The goal of this program is to mitigate the risk of wildfire and minimize the impact of Public Safety Power Shutoff (PSPS) by hardening the distribution system to known local wind conditions, reducing the risk of equipment failure in high wind. Additionally, the FiRM program installs high tensile strength conductors that are less likely to fail than the aged small wire that exists today. This goal will be tracked by the project managers in the following programs and verified on the quarterly GIS reports: Fire Risk Mitigation (FiRM), Pole Risk Mitigation Engineering (PRiME); Cleveland National Forest Project (CNF); Corrective Maintenance Program (CMP).
  - Underground System Hardening - The objective of undergrounding distribution circuits in strategic locations allows SDG&E to dramatically reduce SDG&E equipment as an ignition source. Removing the possibility of the overhead conductors failing, poles from failing and vegetation contacting SDG&E equipment, reduces possibilities of ignition. This program has the added benefit of reducing the need for PSPS as a mitigation under extreme weather conditions, potentially eliminating PSPS impacts for some customers. This goal will be tracked by the project managers in the Cleveland National Forest (CNF) and underground hardening programs.
  - 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

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

- Yes. As described above, SDG&E’s 2021 Executive Incentive Compensation and 2021 non-executive Incentive Compensation Plans include safety metrics for “Overhead System Hardening (miles)”, “Underground System Hardening



(miles)” and “Wildfire Safety Communications.” These metrics are each weighted at 3% (Overhead System Hardening), 3% (Underground System Hardening), and 2% (Wildfire Safety Communications) for a combined total of 8% of the 59% safety weighting for SDG&E’s 2021 Executive ICP and 2% (Overhead System Hardening), 1% (Underground System Hardening), and 1% (Wildfire Safety Communications) for a combined total of 4% of the 34% safety weighting for SDG&E’s 2021 non-executive ICP.

**Is Metric Linked to Executive (Director Level or Higher) Positions? (Ordering Paragraph**

**6B.)– [Yes/No]**

- Yes. SDG&E’s Overhead System Hardening, Underground System Hardening, and Wildfire Safety Communications metrics are linked to all SDG&E director level or higher positions covered by either the 2021 Executive ICP or 2021 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’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 Audit Services department prior to SDG&E board approval. Additionally, the specific programs/projects noted above within the Fire Hardening ICP metrics 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. 21-11-009:** “Gas Dig-In: The number of 3rd party gas dig-ins per 1,000 Underground Service Alert (USA) tags/tickets for gas. 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. Excludes fiber and electric tickets. A third party dig-in is damage caused by someone other than the utility or a utility contractor.”

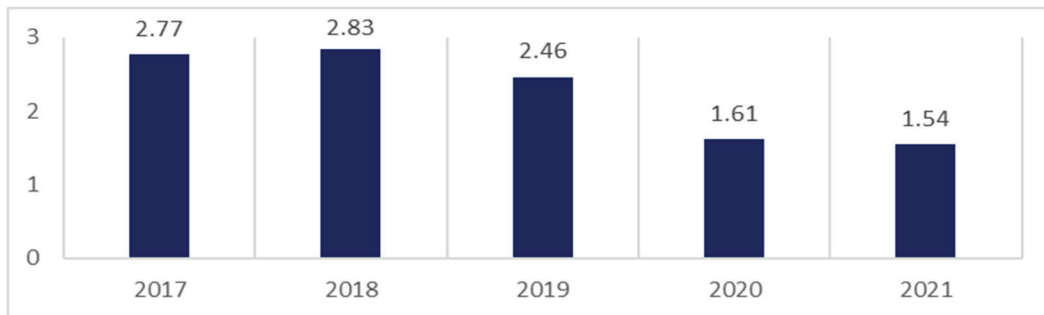
**Risks:** (1) Transmission Pipeline Failure - Rupture with Ignition, (2) Distribution Pipeline Rupture with Ignition (non-Cross Bore). (3) Catastrophic Damage involving Gas Infrastructure (Dig-Ins).

**Category:** Gas

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

**Summary:**

*Summary Chart of Gas Dig-In Metric Data (Annual)*



#### **Narrative Context:**

SDG&E began tracking this metric in 2014; however, regulations were not enacted requiring external reporting of this data until 2017.<sup>63</sup> Over the time period SDG&E has been tracking this metric, SDG&E has seen an increased volume in USA tickets. Third-party gas dig-ins is an identified RAMP risk for SDG&E. SDG&E managed over 160,000 811 USA tickets and reported

<sup>63</sup> 49 CFR §192, *et al.*; *id.* at §196; California Government Code §4216, General Order (GO) 112-F; and American Petroleum Institute Recommended Practice (API RP) 1162 (December 2003).



over 250 dig-in excavation damages in 2021. Analysis of reported damage incidents for 2021 shows that over 47% were due to a lack of notification to 811 USA for a locate and mark ticket. Another approximately 50% 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 Program<sup>64</sup> 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 Underground Safety Board established a protocol for investigations of incidents and began issuing violations and fines to third parties in July 2020 and continued issuing notices of probable violation in 2021.

**Historical Data:**

Monthly data is provided for years 2014 through 2021 in the accompanying Excel file (Attachment B) for the number of third-party gas dig-ins per 1,000 USA tickets. While SDG&E does not have ten 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 2021 Executive Incentive Compensation and 2021 non-executive Incentive Compensation Plans include a gas safety metric for

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<sup>64</sup> API RP 1162 (December 2003), available at <https://law.resource.org/pub/us/cfr/ibr/002/api.1162.2003.pdf>.



“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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

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

- Yes. As described above, SDG&E’s 2021 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 2021 Executive ICP and 2% of the 34% safety weighting for SDG&E’s 2021 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 2021 Executive ICP or 2021 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’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 Audit Services department prior to SDG&E board approval.

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

**Metric Name and Description per D.21-11-009:** “Gas In-Line Inspection: Total miles of transmission pipelines inspected annually by inline inspection (ILI) and percentage of transmission pipelines inspected annually by inline inspections.”

**Risks:** Catastrophic Damage Involving High-Pressure Pipeline Failure.

**Category:** Gas.

**Units:** Total number of miles of inspections performed and percentage inspected by ILI.

**Summary:**

*Summary Chart of Gas In-Line Inspection Metric Data (Annual)*



**Narrative Context:**

SDG&E’s Transmission Integrity Management Program (TIMP) is federally mandated to identify threats to transmission pipelines in High Consequence Areas (HCAs) or areas outside of HCAs (non-HCAs) as required by federal regulations,<sup>65</sup> 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. The SDG&E transmission and distribution system spans from the California-Mexico border to the Pacific Ocean and to the SoCalGas territory border. Approximately 180 miles out of 215 miles of SDG&E’s transmission pipelines are located in HCA areas. ILI is a primary assessment method used by SDG&E and other methods are employed as well. At a minimum of every seven years for HCAs and every ten years for non-HCAs, transmission pipelines within scope of the TIMP are assessed using In-Line Inspection (ILI), Direct Assessment, Pressure Test, or other appropriate methods identified in 49 CFR §§ 192.921 and 937 and remediated as needed.

The TIMP evaluates pipeline Likelihood of Failure (LOF) using the nine threat categories established by PHMSA (External Corrosion, Internal Corrosion, Stress Corrosion Cracking, Manufacturing, Construction, Equipment, Third-Party Damage, Incorrect Operations, and Weather-Related and Outside Force) and evaluates the Consequence of Failure (COF) by considering pipeline operational parameters and the area near the pipeline. The LOF multiplied by the COF

<sup>65</sup> 49 CFR § 192, Subpart O and § 192.710.



produces the pipeline's Relative Risk Score. Further information is collected about the physical condition of transmission pipelines through integrity assessments and action is taken to address applicable threats and integrity concerns to increase safety and preclude pipeline failures.

Based on data analysis and evaluation, detected anomalies are classified and addressed by severity (i.e., immediate, scheduled, monitored) in accordance with 49 CFR § 192.933 and ASME B31.8, with the most severe requiring immediate action. Possible anomalies may include areas where corrosion, weld or joint failure, or other forces are occurring or have occurred. Once areas of concern are identified, sites are prioritized for pipe surface evaluations to validate or re-rank the identified areas. Post-assessment pipeline repairs or reconditioning (e.g., welded steel sleeve repairs or grinding of a defect), when appropriate, and replacements are intended to increase public and employee safety by reducing or eliminating conditions that might lead to an incident.

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. SDG&E continues to manage and prioritize inspections consistent with federal mandates. HCA segments are required to be assessed at an interval not to exceed seven years and covered non-HCA segments are required to be assessed at an interval not to exceed ten years; therefore, assessments may vary year-to-year. TIMP reduces the risk of failure to the pipeline transmission system and on a continual basis, SDG&E evaluates and enhances the program.

#### **Historical Data:**

SDG&E provides annual data for years 2012 through 2021 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.<sup>66</sup> Pipeline miles

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<sup>66</sup> PHMSA, Gas Transmission and Gathering Annual Report F 7100.2-1, available at <https://www.phmsa.dot.gov/forms/gas-transmission-and-gathering-annual-report-form-f-71002-1>.





reported in the Annual Report F 7100.2-1 are based on individual ILI tool inspections so where there are multiple ILI tools used for inspection, miles are multiplied accordingly. However, the percentage of miles inspected each year is based on the number of distinct miles that have been inspected by ILI and do not include duplicate miles. Lastly, 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 not be compared on a year-by-year basis.

**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. 7: Gas In-Line Inspection Upgrade**

**Metric Name and Description per D.21-11-009:** “Gas In-Line Inspection Upgrade: Miles of gas transmission lines upgraded annually to permit inline inspections.”

**Risks:** Catastrophic Damage Involving High-Pressure Pipeline Failure.

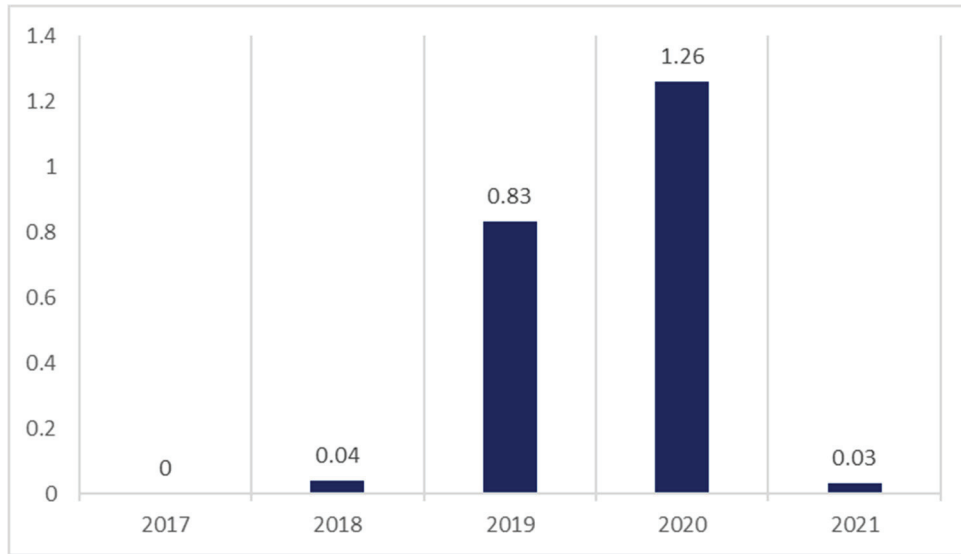
**Category:** Gas.



Units: Miles.

**Summary:**

*Summary Chart of Gas In-Line Inspection Upgrade Metric Data (Annual)*



**Narrative Context:**

As discussed under Metric No. 6, operators of gas transmission pipelines are required to identify the threats to their pipelines, analyze the risks posed by these threats, assess the physical condition of their pipelines, and take actions, where possible, to address potential threats and integrity concerns before pipeline incidents occur. With approximately 82% of transmission pipelines operated by SDG&E in HCAs, SDG&E has focused on the ability of assessing pipelines using ILI; approximately 68% of the entire transmission system is able to accommodate ILI tools as of the end of year 2021 (refer to Metric 13).

SDG&E may retrofit along pipeline routes to allow sufficient clearance for an ILI tool if the pipeline is not already ILI-capable, particularly when ILI is determined to be an appropriate method of assessment for identified threats. A typical retrofit may include replacing valves with less-restrictive valves that allow inspection devices to traverse internally, insertion of tees with bars, and the change-out of bends and other fittings that may impede the progress of the inspection tool.



Once the retrofit is completed, the inspection tool is run, followed by excavations to both validate the inspection findings and determine necessary repairs, if needed. As the TIMP evolves and new pipeline segments are included, SDG&E continues to identify opportunities for expanding ILI assessments.

**Historical Data:**

SDG&E is newly providing annual data for years 2012 through 2021 in the accompanying Excel file (Attachment B). The miles that can be inspected internally is an annual metric that is currently reported in Part R of the Pipeline and Hazardous Materials Safety Administration (PHMSA) Gas Transmission and Gathering Annual Report F 7100.2-1.<sup>67</sup>

**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

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<sup>67</sup> *Id.*



## H. Metric No. 8: Gas Shut-In Time – Mains

**Metric Name and Description per D.21-11-009:** “Gas Shut-In Time – Mains: Median time to shut-in gas when an uncontrolled or unplanned gas release occurs on a main. The data used to determine the median time shall be provided in increments as defined in GO 112-F 123.2 (c) as supplemental information, not as a metric.”

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

**Category:** Gas.

**Units:** Time in minutes required to stop the flow of gas for Distribution Mains.

**Summary:**

*Summary Chart of Gas Shut-In 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 GO 112-F went into effect. Monthly historical data for years 2017 through 2021 is included in the accompanying Excel file (Attachment B) reflecting the median 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. The increase in the 'shut-in' time for gas mains in 2021 is attributed to the higher number of projects requiring the replacement of large sections of gas mains. The larger isolation



area and multiple control points that are not always in close proximity need extra work activities to control leaks. Additional excavation and installation of a by-pass to lessen the impact on customers contributed to the increase in the ‘shut-in’ time.

**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 2021 Executive Incentive Compensation and 2021 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

**Is Metric Linked to the Determination of Individual or Group Performance Goals? (Ordering**

**Paragraph 6A.)– [Yes/No]**

- Yes. As described above, SDG&E’s 2021 Executive Incentive Compensation and 2021 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 2021 Executive ICP and 1% of the 34% safety weighting for SDG&E’s 2021 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 2021 Executive ICP or 2021 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’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 Audit Services department prior to SDG&E board approval.

**I. Metric No. 9: Gas Shut-In Time - Services**

**Metric Name and Description per D.21-11-009:** “Gas Shut-In Time – Services: Median time to shut-in gas when an uncontrolled or unplanned gas release occurs on a service. The data used to determine the median time shall be provided in increments as defined in GO 112-F 123.2 (c) as supplemental information, not as a metric.”

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

**Category:** Gas.

**Units:** Time in minutes required to stop the flow of gas for Distribution Services.

**Summary:**





Summary Chart of Gas Shut-In 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 that has been broken out to distinguish between Mains and Services. The accompanying Excel file (Attachment B) provides monthly historical data for 2017 through 2021 for the median 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. The increase in the 'shut-in' time for gas services in 2021 is attributed to the crew continuity measure established to avoid cross-contamination and to limit the spread of the coronavirus at the work site and among the employee population. If an appropriate number of Trouble Crew members could not be assembled within the assigned crew or district due to the coronavirus precautionary measures to avoid potential cross-contamination, a crew from another district in SDG&E's service territory or a contractor crew was utilized to support on-call response. Increased crew travel time contributed to the increase in the 'shut-in' time for gas services.



**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 2021 Executive Incentive Compensation and 2021 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

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

- Yes. As described above, SDG&E’s 2021 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 2021 Executive ICP and 1% of the 34% safety weighting for SDG&E’s 2021 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 2021 Executive ICP or 2021 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’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 Audit Services department prior to SDG&E board approval.

**J. Metric No. 10: Cross Bore Intrusions**

**Metric Name and Description per D.21-11-009:** “Cross Bore Intrusions: Cross bore intrusions found per 1,000 inspections.”

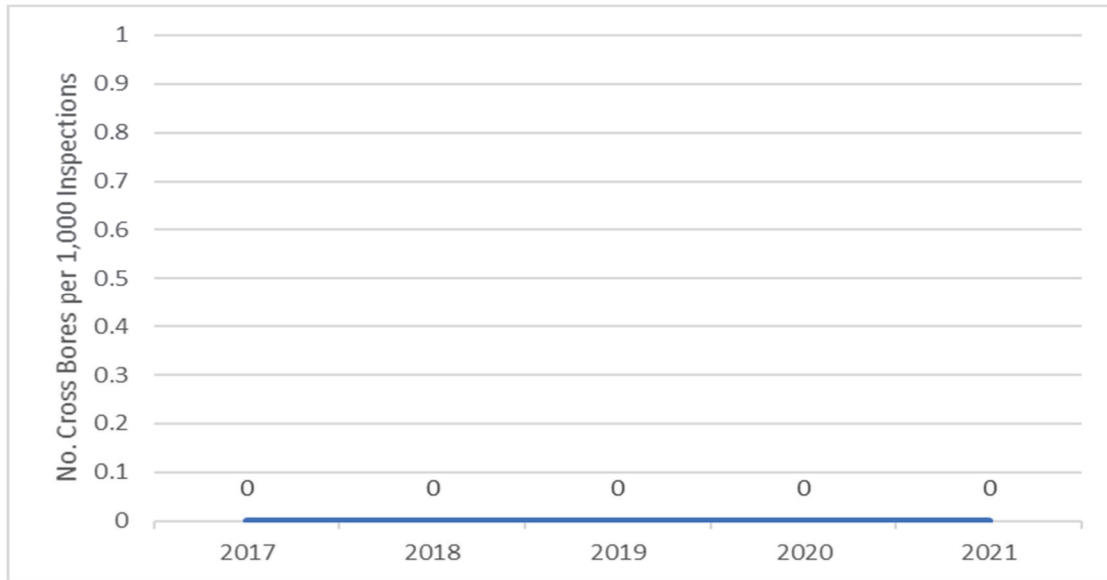
**Risks:** Catastrophic Damage Involving Medium Pressure Pipeline Failure.

**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 a risk mitigation activity developed and managed 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’s 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

**K. Metric No. 11: Gas Emergency Response Time**

**Metric Name and Description per D.21-11-009:** “Gas Emergency Response Time: Average time and median time in minutes to respond on-site to a gas-related emergency notification from the time of notification to the time a gas service representative (or qualified first responder) arrived onsite. Emergency notification includes all notifications originating from 911 calls and calls made directly to the utilities’ safety hotlines. The data used to determine the average time and median time shall be provided in increments as defined in GO 112-F 123.2 (c) as supplemental information, not as a metric.”



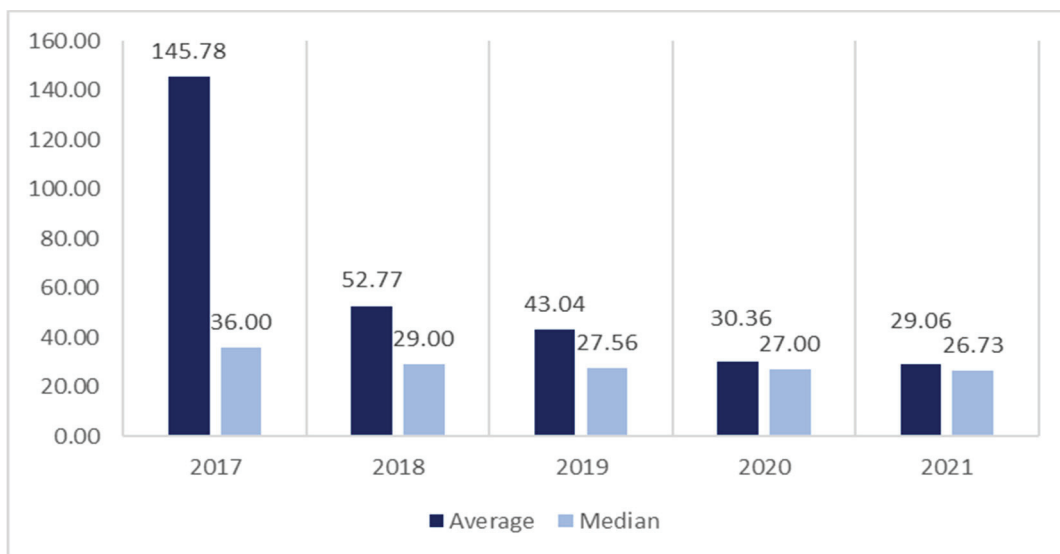
**Risks:** Distribution Pipeline Rupture with Ignition.

**Category:** Gas.

**Units:** The time in minutes that a Gas Service Representative or a qualified first responder takes to respond after receiving a call which results in an emergency order.<sup>68</sup>

**Summary:**

*Summary Chart of Gas Emergency Average and Median Response Times 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 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

<sup>68</sup> SDG&E reports response time in minutes.





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 improvements in response times in part to the addition of dedicated emergency response personnel and the addition of a dedicated overnight shift. SDG&E has implemented 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 2021, contained in the accompanying Excel file (Attachment B), provides the average and median 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 2021 Executive Incentive Compensation Plan and 2021 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.



**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 2021 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 2021 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 2021 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 2021 Executive ICP or 2021 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’s Audit Svices 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 Audit Services department prior to SDG&E board approval.



**L. Metric No. 13: Gas Pipelines That Can Be Internally Inspected**

**Metric Name and Description per D.21-11-009:** “Total miles and percent of system that can be internally inspected (“pigged”) relative to all transmission pipelines in the system.”

**Risks:** Catastrophic Damage Involving High-Pressure Pipeline Failure

**Category:** Gas.

**Units:** Percentage and Miles.

**Summary:**

*Summary Table of Miles and Percentage of the Gas System that can be Internally Inspected Metric Data (Annual)*

	2017	2018	2019	2020	2021
Miles	143	144	142	142	147
Percentage	61%	62%	64%	65%	68%

**Narrative Context:**

As described above for Metric No. 6, SDG&E’s TIMP is federally mandated to identify threats to transmission pipelines in High Consequence Areas (HCAs) or areas outside of HCAs (non-HCAs) as required by federal regulations,<sup>69</sup> 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 a pipeline failure. At a minimum of every seven years for HCAs and every ten years for non-HCAs, transmission pipelines within scope of the TIMP are assessed using ILI, Direct Assessment, Pressure Test, or other appropriate methods identified in 49 CFR §§ 192.710, 921 and 937 and remediated as needed.

<sup>69</sup> 49 CFR § 192, Subpart O and § 192.710.



As stated above for Metric No. 7, SDG&E has focused on the ability of assessing pipelines using ILI, with approximately 68% of the entire transmission system able to accommodate ILI tools as of the end of year 2021.

**Historical Data:**

This metric presents the number of miles and percentage of the gas system that can be internally inspected, otherwise known as ILI-capable or “piggable” miles. Annual data for 2012 through 2021 is included in the accompanying Excel file (Attachment B). 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.<sup>70</sup> These two annual metrics are utilized to calculate the percentage for this metric. This metric, in percentage and miles, has remained relatively constant since 2017 at 61%-68% and 143 – 147 miles because not all transmission pipelines can accommodate ILI tools. The remaining percentage that cannot accommodate ILI tools are assessed with other methods. Retrofitting may take place depending on the factors discussed under Metric No. 7 and would increase the percentage of piggable mileage.

**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

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<sup>70</sup> *Supra*, n.69.



**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

**M. Metric No. 14: Employee Days Away, Restricted and Transfer (DART) Rate**

**Metric Name and Description per D.21-11-009:** “Employee Days Away, Restricted and Transfer (DART) Rate: DART Rate is calculated based on number of Occupational Safety and Health Administration (OSHA) recordable injuries resulting in Days Away from work and/or Days on Restricted Duty or Job Transfer, and hours worked.”

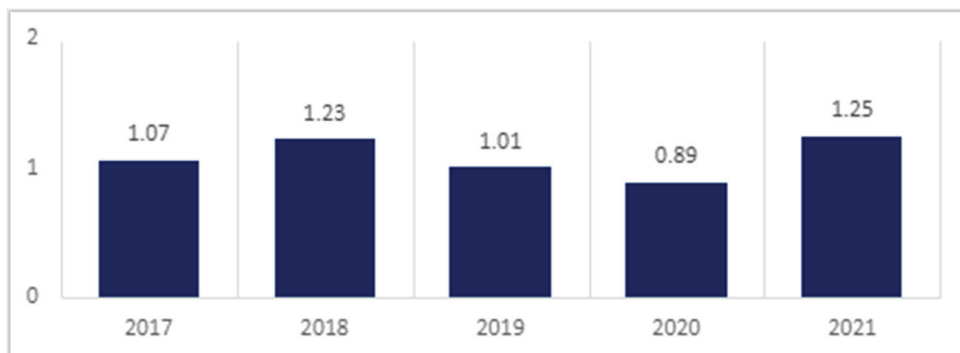
**Risks:** Employee Safety

**Category:** Injuries

**Units:** DART Cases times 200,000 divided by employee hours worked.

**Summary:**

*Summary Chart of Employee DART Rate Metric Data (Annual)*





### **Narrative Context:**

In 2021, SDG&E experienced an increase in its DART (Days Away/Restricted/Transfer) case rate from 2020, when it achieved its lowest DART case rate on record. This increase was consistent with upward trends for OSHA recordable case rates and DART case rates identified in both the American Gas Association’s *Survey of Natural Gas Utility and Transmission Industry Occupational Injury and Illness Statistics* and the Edison Electric Institute’s (EEI) *Occupational Safety and Health Committee Safety Survey* for year 2021. 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. Nevertheless, SDG&E’s DART rate in 2021 was 20% lower than the rate ten years ago in 2012 and while 2021 does show an uptick in the DART rate, SDG&E’s performance over the past 10 years has shown mostly continual improvement year over year.

### **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 2021 Executive Incentive Compensation Plan and 2021 non-executive Incentive Compensation Plan include the following metric:
- Lost Time Incident (LTI) Rate<sup>71</sup> – the LTI Rate is expressed as the number of OSHA Recordable Injuries or Illnesses resulting in Days Away from Work,

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<sup>71</sup> DART cases are OSHA Recordable Injuries or Illnesses resulting in Days Away from Work, or Days On Restricted Duty or Job Transfer.



per 100 full-time employees. This measure is calculated using the number of Lost-time 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

**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 2021 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 2021 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 2021 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 2021 Executive ICP or 2021 non-executive ICP.

**Bias Controls:** N/A

**N. Metric No. 15: Rate of Serious Injuries or Fatalities (SIF) Actual (Employee)**

**Metric Name and Description per D.21-11-009:** "Rate of Serious Injuries or Fatalities (SIF)

Actual (Employee): Rate of SIF Actual (Employee) is calculated using the formula: Number of SIF-





Actual cases among employees x 200,000 / employee hours worked, where SIF Actual is counted using the methodology developed by the Edison Electrical Institute’s (EEI) Occupational Health and Safety Committee (OHSC) Safety and Classification Learning Model. If a utility has implemented a replicable, substantially similar evaluation methodology for assessing SIF Actual, the utility may use that method for reporting this metric. If a utility opts to report the rate of SIF Actual using a method other than the EEI Safety Classification Model, it must explain how its methodology for counting SIF Actual differs and why it chose to use it. As a supplemental reporting requirement to the SIF Actual Rate for comparative purposes, *all utilities* shall also provide SIF Actual data based on OSHA reporting requirements under Section 6409.1 of the California Labor Code.”

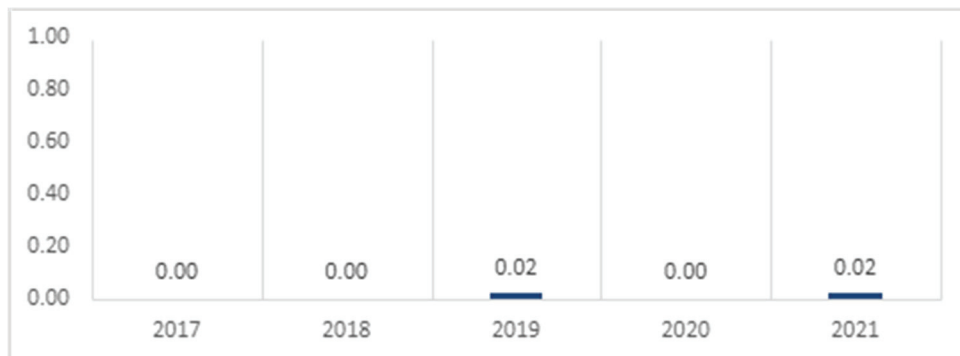
**Risks:** Employee Safety

**Category:** Injuries

**Units:** Number of SIF-Actual cases among employees x 200,000/employee hours worked.

**Summary:**

*Summary Chart of Rate of Serious Injuries or Fatalities (SIF) Actual (Employee) Metric Data (Year-end)*





## **Narrative Context:**

Employee 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).

SDG&E has in place a range of safety programs and initiatives within its Safety Management System (SMS) 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, International Organization for Standardization (ISO) 14001.<sup>72</sup> 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 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.

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<sup>72</sup> ISO 14000 family - "Environmental Management."



- 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.
- Office Safety Subcommittee: This committee was established in 2020 to drive office safety at SDG&E's headquarter location. The Office Director Safety Committee is designed to increase awareness, and share best practices and lessons learned around office safety. This committee meets regularly to review leading and lagging indicator data and discuss initiatives including development of office safety programs. This committee rolls up to the Executive Safety Council as the governing body.
- 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 enhanced Safety in Action (SIA) initiative. Designed for executives and field operations directors, the initiative provides 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 is a leading indicator program that 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. It provides the tools necessary to identify and understand the Company's specific SIF



precursors, and to design effective steps to mitigate SIF exposure. Tools include an SDG&E-specific SIF definition, SIF exposure decision trees, a precursor analysis procedure to assess SIF exposure potential, and leading and lagging SIF metrics. SMEs throughout the Company have been trained on the process and effective use of the tools. Goals and objectives for the SIA initiative demonstrate a forward-moving effort to improve safety. These goals and objectives will be defined and measured.

To determine the Rate of SIF Actual (Employee), SDG&E uses the Cal/OSHA definition of "serious injury" defined in CCR, Title 8, §330(h) and not the methodology espoused in the EEI Occupational Health and Safety Committee Safety and Classification Learning (SCL) Model. The Cal/OSHA definition is the one used by California employers for mandatory reporting of work-connected serious injuries to Cal/OSHA, and is more conservative when compared with the classification methodology espoused in the EEI criteria for "serious injury." SDG&E's use of the Cal/OSHA definition not only is consistent with the California reporting requirements, it also avoids the confusion that could occur were different criteria applied for different reporting objectives.

**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 rate. 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. The incidents related to this data currently are reported to Cal/OSHA at the time of occurrence. SDG&E notes that a new definition of "Serious Injury" went into effect in California on January 1, 2020, which may affect the number



of reportable incidents in 2020 and beyond.<sup>73</sup> 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. In 2021, SDG&E experienced one fatality resulting from a motor vehicle incident.

**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 2021 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 Lost-time 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 2021 that are completed by December 31, 2021.

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,

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<sup>73</sup> 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).



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.

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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

**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 2021 Executive and non-executive ICPs. These specific performance measures are each weighted 2% - 3% of the overall 59% public and employee safety operations measures in the 2021 Executive ICP which applies to all SDG&E executives covered by the plan and are weighted at 1% - 3% of the overall 34% of public and employee safety operations measures of the 2021 non-executive ICP which 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 2021 Executive ICP or 2021 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’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’s Audit Services department prior to SDG&E board approval.

**O. Metric No. 16: Rate Of SIF Actual (Contractor)**

**Metric Name and Description per D.21-11-009:** “Rate of SIF Actual (Contractor): Rate of SIF Actual (Contractor) is calculated using the formula: Number of SIF-Actual cases among contractors x 200,000 / contractor hours worked, where SIF Actual is counted using the methodology developed by the EEI OHSC Safety and Classification Learning Model. If a utility has implemented a replicable, substantially similar evaluation methodology for assessing incidents where a SIF occurred, the utility may use that method for reporting this metric. If a utility opts to report the rate of SIF Actual using a method other than the EEI Safety Classification Model, it must explain how its methodology for counting SIF Actual differs and why it chose to use it. As a supplemental reporting requirement to the SIF Actual Rate for comparative purposes, all utilities shall also report SIF Actual Rate data based on OSHA reporting requirements under Section 6409.1 of the California Labor Code.”

**Risks:** Contractor Safety

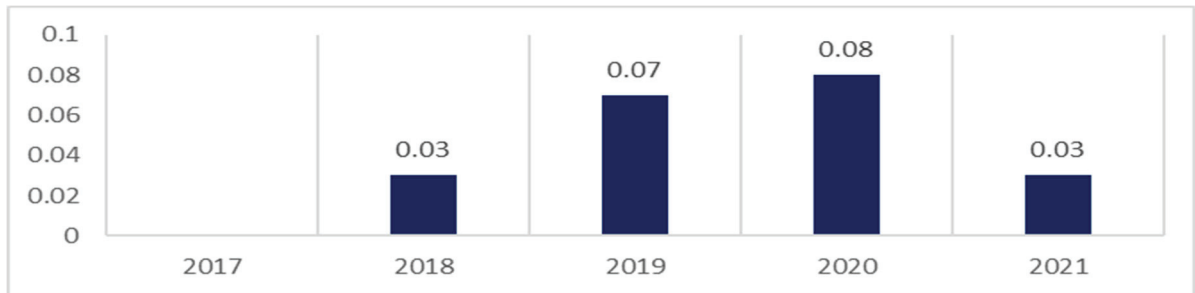
**Category:** Injuries

**Units:** Number of SIF-Actual cases among contractors x 200,000/contractor hours worked.

**Summary:**



*Summary Chart of Rate of SIF Actual (Contractor) Metric Data (Year-end)*



**Narrative Context:**

All Class 1 Contractors are included in this metric. In an effort to further reduce the risk of serious injuries and fatalities to its Class 1 contractors SDG&E has implemented programs such as “Stop the Job” and “Near Miss Reporting.” 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 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, they are reviewed for accuracy and closed out. Additionally, as contractors submit their monthly hours, the data is reviewed for accuracy by Contractor Safety Services and the SDG&E business unit engaging the contractor. In 2019, Contractor Safety Services expanded its oversight and reporting requirements to all Class 1 Contractors.



SDG&E updates the Class 1 Contractor Safety Manual annually or as needed with new requirements to conform to changed regulatory and other SDG&E requirements. SDG&E will be transitioning definitions and reporting requirements for all Class 1 Contractors in January 2023 to the EEI model for SIF Actual events. Class 2 Contractors do not fall within the enhanced SDG&E Contractor Safety Program. 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 information technology (IT) work. SDG&E has transitioned near miss and incident reporting into a Third Party Administration Tool. This new tool has made reporting easier for the contractors and simplifies the tracking and reporting process for the SDG&E team.

**Historical Data:**

SDG&E began tracking SIF Actual events in 2018. The accompanying Excel file (Attachment B) provides monthly data for 2018 through 2021 for SDG&E's Contractor Serious Injuries and Fatalities. According to the metric description, reportable incidents from 2018 through year end 2019 were "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. This new definition is "A Work-Connected 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 in which an employee suffers a loss of any member of the body or suffers any serious degree of permanent disfigurement". The reported on metric is based on the CAL OSHA definition of a SIF Actual event and Fatality for the 2018-2021 data. SDG&E has determined that the CAL OSHA definition and EEI models are very similar





for this metric with the CAL OSHA classification encompassing all incidents that would be tracked in the EEI model. 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.

- N/A

**P. Metric No. 17: Rate of SIF Potential (Employee)**

**Metric Name and Description per D.21-11-009:** “Rate of SIF Potential (Employee): Metric is calculated using the formula - Number of SIF Potential cases among employees x 200,000/employee hours worked, where a SIF incident, in this case would be events that could have led to a reportable SIF.”

**Risks:** Employee Safety.

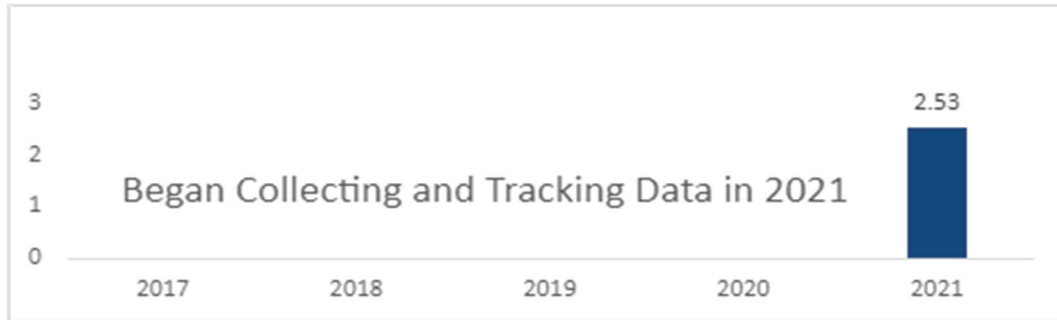
**Category:** Injuries.



**Units:** Number of SIF-Potential cases among employees x 200,000/employee hours worked.

**Summary:**

*Summary Chart of Rate of SIF Potential (Employee) Metric Data (Annual)*



**Narrative Context:**

The best defense against serious injury is the awareness and reduction of exposure. SDG&E's Serious Injury & Fatality (SIF) Prevention Initiative involves an ongoing process of assessing and evaluating injury, illness, motor vehicle and near miss cases for SIF potential. The objective of this initiative is to identify and remediate SIF precursors to help avoid future injuries, broaden awareness of high-risk situations in our daily work, and bring forward strong and effective corrective actions.

- “SIF potential” means the event outcome has a reasonable and realistic possibility to be an actual SIF, if the SIF precursors are allowed to continue.
- “SIF precursor” is a high-risk situation in which control measures are absent, ineffective or not complied with, and that could result in a serious or fatal injury if allowed to continue.

To determine the Rate of SIF Potential (Employee), SDG&E uses criteria developed in collaboration with the consultant Dekra in 2020 as part of its SIF Prevention Initiative, and not the methodology espoused in the EEI Occupational Health and Safety Committee Safety and Classification Learning (SCL) Model. SDG&E had already begun its collaboration with Dekra and



deployed the Dekra methodology prior to the CPUC's proposal to adopt the EEI SCL methodology. SDG&E recognizes that the EEI SCL methodology, due to its design and decision logic, likely results in substantially fewer cases being categorized as SIF Potential (pSIF) compared with the Dekra-based methodology. This difference will be reflected in a relatively higher pSIF Rate for SDG&E compared to utilities using the EEI SCL methodology.

A key lesson learned from the assessments to date is that the methodology provides a powerful tool for hazard recognition, revealing common high-risk factors within and across multiple organizations within the Company. Results from these insights can be shared and can lead to stronger and more effective corrective actions.

**Historical Data:**

Implemented in 2021, SDG&E's Serious Injury and Fatality Exposure Assessment Program provides SDG&E with the necessary tools to measure SIF exposure, understand the Company's specific SIF precursors, and design effective steps to mitigate SIF exposure.

Formal assessment of SDG&E injury, illness, motor vehicle and near miss cases began in March 2021. Data for the months of March 2021 through December 2021 are provided in the accompanying Excel file (Attachment B) for SDG&E's Employee SIF Potential rate.

**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. 18: Rate of SIF Potential (Contractor)**

**Metric Name and Description per D.21-11-009:** “Rate of SIF Potential (Contractor): Metric is calculated using the formula - Number of SIF Potential cases among contractors x

200,000/contractor hours worked, where a SIF incident, in this case would be events that could have led to a reportable SIF. Potential SIF incidents are identified using the EEI Safety Classification and Learning Model.”<sup>74</sup>

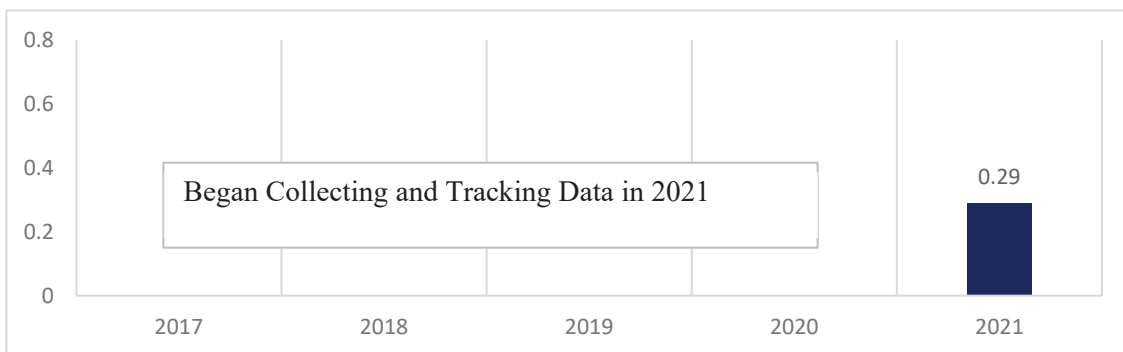
**Risks:** Contractor Safety.

**Category:** Injuries.

**Units:** Number of SIF-Potential cases among contractors x 200,000/contractor hours worked.

**Summary:**

*Summary Chart of Rate of SIF Potential (Contractor) Metric Data (Annual)*



<sup>74</sup> D.21-11-009, Appendix B at 8 (citing Edison Electric Institute Safety Classification and Learning Model developed by Dr. Matthew Hallowell available as of November 2, 2021 at: <https://esafetyline.net/eei/docs/eeiSCLmodel.pdf>).



## **Narrative Context:**

The Rate of SIF Potential applicable to Contractor activities metric was adopted by the Commission in D.21-11-009. Upon its adoption, SDG&E added SIF Potential events to the required reportable events Class 1 Contractors report. The current definition of a SIF Potential event for contractors is “A Work-Connected event where a flaw or weakness (in an action or tool) that if left uncorrected, could result in a serious injury or fatality”.<sup>75</sup> The definition SDG&E Contractor Safety uses was initiated in 2021 for all Class 1 Contractor prior to the decision by the CPUC to require reporting. SDG&E recognizes that the EEI SCL methodology, due to its design and decision logic, likely results in substantially fewer cases being categorized as pSIF compared with the current methodology SDG&E Contractor Safety uses for SIF Potential events. This difference will be reflected in a relatively higher pSIF Rate for SDG&E compared to utilities using the EEI SCL methodology.

A key lesson learned from the assessments to date is that the methodology provides a powerful tool for hazard recognition, revealing common high-risk factors within and across multiple organizations within the Company. Results from these insights can be shared and can lead to stronger and more effective corrective actions.

SDG&E’s Contractor Safety Program requires Contractors to investigate incidents in accordance with SDG&E’s Contractor Safety Manual. For Level 2 and 3 incidents, which include fatalities, life-impacting and serious injuries, SIF Potential events, among others, SDG&E will initiate its own formal internal incident investigation.

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<sup>75</sup> SDG&E Contractor Safety Manual, Class 1 Contractors (Version 2020.1) at 9, available at <https://www.sdge.com/contractor-safety-program-resources>.



When an incident occurs involving a contractor performing work on SDG&E’s projects or property, the business area that engaged the contractor (Business Unit) is responsible for determining the Incident Type . For Level 2 and 3 incidents, the Director of the Business Unit and the Director of Safety must designate the appropriate investigation team within two days of being notified of the incident. In addition, Contractor Safety Services will issue an incident alert companywide. At the conclusion of the investigation, findings are entered into ISNetworld<sup>76</sup> and distributed to all potentially affected contractors and employees. This information includes contributing factors, and mitigations to prevent recurrence, and is used in the field to support a proactive effort and help prevent a similar type of event.

**Historical Data:**

Implemented in 2021, SDG&E’s Serious Injury and Fatality Exposure Assessment Program provides SDG&E with the necessary tools to measure SIF exposure, understand the Company’s Class 1 Contractors specific SIF precursors, and design effective steps to mitigate SIF exposure.

Formal review of all Class 1 Contractor events is conducted by SDG&E Contractor Safety Services based on our current SIF Potential definition. When an event is determined to have SIF Potential the Company follows the process for a Level 2 event.

**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]**

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<sup>76</sup> SDG&E uses a third-party administrator, ISNetworld, to house and verify the established SDG&E pre-qualification requirements for Class 1 Contractors. ISNetworld also serves as a communication portal for contractors to receive communications.



- 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

**R. Metric No. 19: Contractor Days Away, Restricted Transfer (DART)**

**Metric Name and Description per D.21-11-009:** “Contractor Days Away, Restricted Transfer (DART) - DART Rate: Days Away, Restricted and Transfer (DART) Cases include OSHA-recordable Lost Work Day Cases and injuries that involve job transfer or restricted work activity. DART Rate is calculated as: DART Cases times 200,000 divided by contractor hours worked.

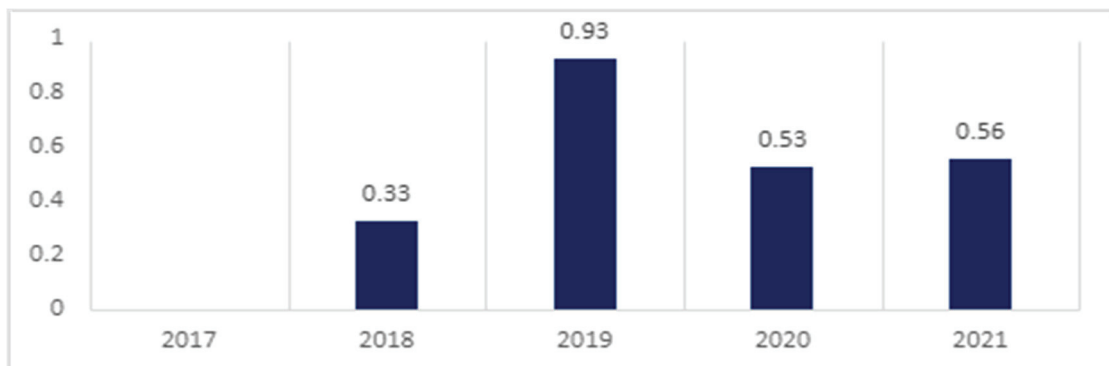
**Risks:** Contractor Safety.

**Category:** Injuries.

**Units:** OSHA DART Rate.

**Summary:**

*Summary Chart of Contractor Days Away, Restricted Transfer (DART) Metric Data (Annual)*





### **Narrative Context:**

All Class 1 Contractors are included in this metric. SDG&E uses a third-party administrator, ISNetwork, to house and verify the established SDG&E pre-qualification requirements for Class 1 Contractors. ISNetwork also serves as a communication portal for contractors to receive communications including:

- New rules, regulations, and requirements;
- Reports from contractors on SDG&E specific incidents and hours that allow 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.

ISNetwork 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 is used for selecting Class 1 Contractors.

In 2019, SDG&E's Contractor Safety Program increased the scope of contractors reporting into the ISNetwork 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





**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. As provided in the D.21-11-009 definition, this metric measures the number of DART cases incurred for contractors per 200,000 hours worked (for approximately every 100 contractors). A DART case is a current year OSHA Recordable incident that has resulted in days away from work, restricted activity, or job transfer. The formula is:  $\text{DART Case Rate} = \frac{\text{Number of DART Cases}}{\text{productive hours worked}} \times 200,000$ . 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 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



### S. Metric No. 20: Public Serious Injuries and Fatalities

**Metric Name and Description per D.21-11-009:** “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.”

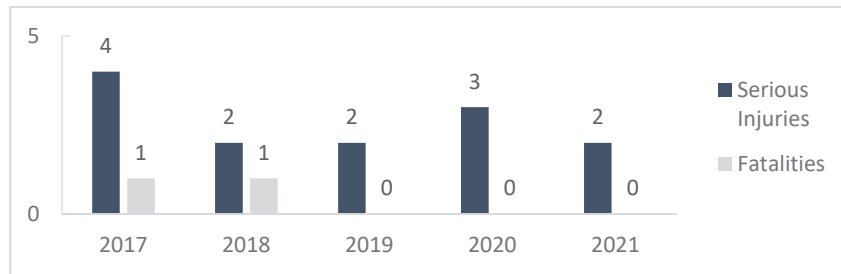
**Risks:** Public Safety

**Category:** Injuries

**Units:** Number of Serious Injuries and Fatalities.

**Summary:**

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



#### **Narrative Context:**

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 the Company’s 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, the dangers of metallic balloons, emergency preparedness 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, , postings to social media platforms, paid media tactics such as television, print and digital, social and out-of-home advertising, as well as proactive media outreach and warning signage near electrified facilities all serve to warn and communicate to the public about the care that needs to be taken around electrical equipment.

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 2021 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.

S-MAP Phase Two Decision states “For Metric 22,<sup>77</sup> 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.”<sup>78</sup> Pursuant to D.19-04-020, on January 28, 2022, SDG&E submitted a draft of its Public-SIF data to the Commission’s Staff. On June 14, 2022, SPD informed the IOUs<sup>79</sup> that there were no changes to the Pub-SIF subcategories for final reporting in this Safety Performance Metrics Report. Therefore, using the subcategories designated by SPD,<sup>80</sup> SDG&E’s 2021 Pub-SIF data can be categorized as follows, as further represented in the charts below:

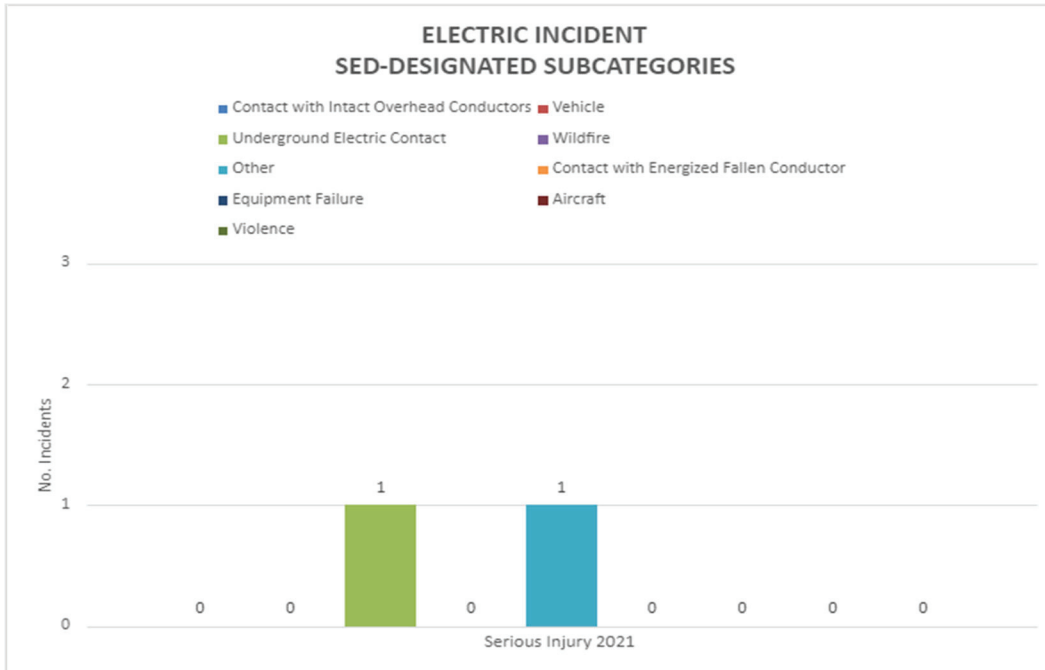
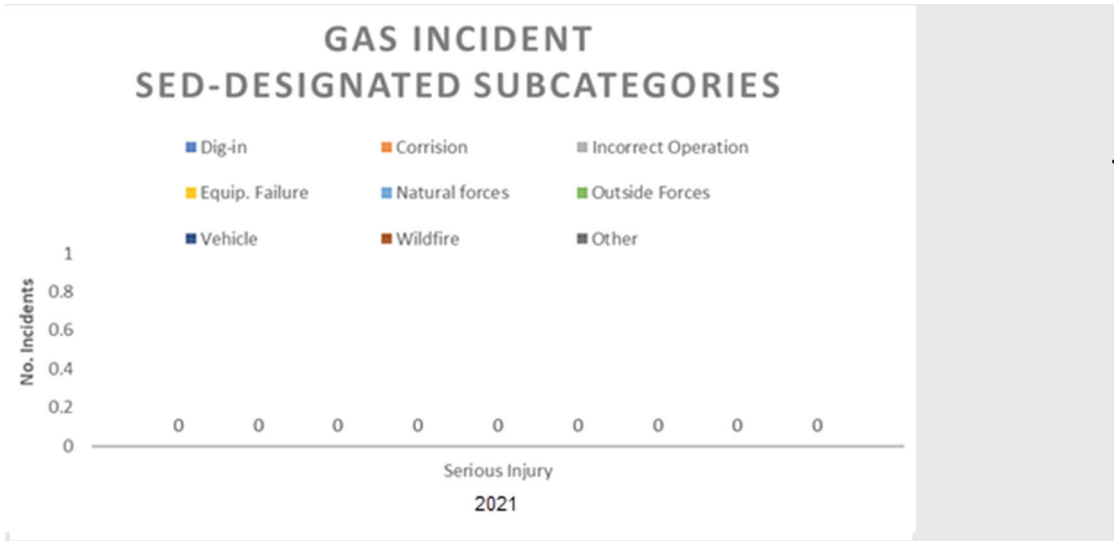
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<sup>77</sup> In D.19-04-020, the Public Serious Injuries and Fatalities metric was contained in Metric 22. The modifications contained in D.21-11-009 changed the number of this metric to Metric 20. *See* D.21-11-009, Appendix F at 15.

<sup>78</sup> D.19-04-020 at 26, n.49.

<sup>79</sup> June 14, 2022 e-mail from Steven Haine, SPD staff, to SDG&E representative.

<sup>80</sup> SPD designated nine gas incident-related subcategories and nine electric incident-related subcategories, as reflected in the charts accompanying this Metric above.



**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 2021 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



2021 Executive and non-executive ICPs include the following system and customer safety performance goals:

- Overhead System Hardening
- Underground System Hardening
- Wildfire Safety Communications
- Distribution System Integrity – Miles Vintage Replacement
- Damage Prevention (Damages per USA Ticket Rate)
- Mobile Home Park Retrofit Program (Spaces with To-the-Meter Installed)
- P1 Gas Response Time (Minutes)
- PSEP Line 1600 System Average Interruption Duration Index (SAIDI)

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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.

**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 2021 Executive Incentive Compensation Plan comprise 24 percent of the overall 59% public and employee safety operations weighting and 15% of the overall 34% weighting of SDG&E’s 2021 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 2021 Executive ICP or 2021 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’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 Audit Services department prior to SDG&E board approval.

**T. Metric No. 21: Helicopter/Flight Accident or Incident**

**Metric Name and Description per D.21-11-009:** “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.<sup>81</sup>

**Summary:**

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

Year	2017	2018	2019	2020	2021
Reportable Incidents	1	0	0	0	0

<sup>81</sup> 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.



## **Narrative Context:**

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, Human External Cargo (HEC), 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 (drones). 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, HEC, 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, line pulling, 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 manned operations and 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 project customers requiring the use of aviation assets on SDG&E property. ASD carefully reviews subcontracted aviation asset suppliers and verifies they meet SDG&E ASD safety requirements for safe and professional aviation operations. When work





in the SDG&E service territory commences, ASD ensures coordination and communication in planning and execution.

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 aviation specific training of aviation practices and safety, periodic review of safety policies and safety objectives to ensure they remain relevant and appropriate. Other important initiatives for ASD include onsite observations of helicopter/field personnel, briefings by all contracted operators to pilots and ground support crew, and continual hazard identification targeted to mitigate the risk created by increased numbers of drone and helicopter flights.

**Historical Data:**

SDG&E began tracking data on helicopter/flight accidents and incidents in 2013. From 2013 through 2021, SDG&E has flown a total of 19,476 hours, and since 2018 has flown 8,432 Unmanned Aerial System flights. Monthly historical data for years 2013 through 2021 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 Part 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 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

**U. Metric No. 25: Wires-Down not resulting in Automatic De-energization**

**Metric Name and Description per D.21-11-009:** “Wires-Down not resulting in Automatic De-energization: This metric is defined as the number of occurrences of wire down events in the past calendar year that did not result in automatic (i.e., not manually activated) de-energization by circuit protection devices such as fuses, circuit breakers, and reclosers, etc. on all portions of a downed conductor that rest on the ground. This metric does not consider possible energization due to induced voltages from magnetic coupling of parallel circuits. Metric excludes secondary conductors and service drops. The metric is reported as a percentage of all wires down events in the past calendar year. Separate metrics are provided for transmission and distribution systems.”

**Risks:** Electric Overhead and Wildfire.

**Category:** Electric.

**Units:** Percentage of wires down occurrences.



**Summary:**

*Summary Chart of Wires-Down not resulting in Automatic De-energization Metric Data (Annual)*

Data Not Yet Available

**Narrative Context:**

In D.21-11-009, the Commission adopted a new metric for “Wires Down not resulting in Automatic De-energization.” SDG&E’s interpretation and subsequent tracking of the new 2021 metric is where a wire comes down and the upstream equipment did not operate as intended by failing to auto- de-energize. Consistent with this Metric, SDG&E will not track back-feed or voltages from magnetic coupling of parallel circuits that may create on-going energization.

**Historical Data:**

SDG&E, historically, has not tracked this metric for wire-down events. A new outage auditing software and reporting system are necessary to capture the information required by this Metric, and are being implemented. SDG&E estimates both systems will be in place in Q3-2022, and tracking for this Metric will proceed.

**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

**V. Metric No. 26: Missed Inspections and Patrols for Electric Circuits**

**Metric Name and Description per D.21-11-009:** “Missed Inspections and Patrols for Electric Circuits: Metrics are calculated as annual number of overhead electric structures that did not comply with the inspection frequency requirements divided by total number of overhead electric structures with inspections due in the past calendar year. Separate metrics are provided for patrols, detailed inspections. Separate metrics are provided for primary distribution and transmission overhead circuits. ‘Minimum patrol frequency’ refers to the frequency of patrols as specified in GO 165. ‘Structures’ refers to electric assets such as transformers, switching protective devices, capacitors, lines, poles, etc.”

**Risks:** Electric Overhead and Wildfire.

**Category:** Electric.

**Units:** Percentage of structures that missed inspection relative to total required structures.

**Summary:**

*Summary Chart of Missed Inspections and Patrols for Electric Circuits Metric Data (Annual)*

	2017	2018	2019	2020	2021
Transmission Inspections	0.00%	0.00%	0.00%	0.00%	0.00%
Transmission Patrols	0.00%	0.00%	0.00%	0.00%	0.00%
Distribution Inspections	0.00%	0.07%	0.01%	0.00%	0.00%
Distribution Patrols	0.00%	0.00%	0.00%	0.00%	0.00%

**Narrative Context:**

SDG&E’s electric transmission maintenance program calls for annual visual patrols and detailed inspections on a 3-year cycle. No electric transmission patrols or inspections were missed.



SDG&E’s Distribution Corrective Maintenance Program calls for annual visual patrols and detailed inspection on a 5-year cycle on the overhead electric distribution system.

**Historical Data:**

No electric transmission patrols or inspections were missed.

In 2018 and 2019, a small number of electric distribution detailed inspections were missed that were primarily driven by a data gap within the tracking systems. Those detailed inspections were later issued and completed soon after the issue was identified.

**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

**W. Metric No. 27: Overhead Conductor Size in High Fire Threat District (Tiers 2 and 3, HFTD)**

**Metric Name and Description per D.21-11-009:** “Overhead Conductor Size in High Fire Threat District (Tiers 2 and 3, HFTD): Percentage of primary distribution overhead conductors in Tiers 2 and 3 HFTD that is #6 copper. Secondary conductors are excluded.”



**Risks:** Electric Overhead and Wildfire.

**Category:** Electric.

**Units:** Percentage relative to total circuit miles.

**Summary:**

*Summary Chart of Overhead Conductor Size in High Fire Threat District (Tiers 2 and 3, HFTD) Metric Data (Annual)*

Data Not Yet Available

**Narrative Context:**

Since this is a new metric, SDG&E currently does not have historical data for 2021 and prior years.

SDG&E’s Geographical Information System (GIS) system is a live “as-built” system and SDG&E does not have historical GIS information to query in order to provide historical data for this metric. This type of data has previously only been provided on an ad-hoc basis for system statistics at the time of the analytics and has not been tracked at a historical level.

**Historical Data:**

SDG&E currently does not have historical data for 2021 to support this metric. SDG&E utilizes its GIS system to provide the mileage of primary overhead conductor sizes in the High Fire Threat District, however, this information is live data and has not been stored and tracked on a historical basis. SDG&E has begun to capture this data and track this specific information on a monthly basis and will provide data on this metric for the 2022 Safety Performance Metrics Report that will be filed in 2023 and 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

**X. Metric No. 28: Gas Operation Corrective Actions Backlog**

**Metric Name and Description per D.21-11-009:** “Gas Operation Corrective Actions Backlog:

Total number of work orders generated to correct 49 CFR Part 192 non-compliances or Notices of Violation that exceeded the maximum allowable/allotted time frame to complete the work order in the past calendar year divided by the total number of closed or still-open non-compliance or Notices of Violation-related work orders in past calendar year, evaluated at the end of the year. Maximum allowable/allotted time is based on either applicable requirement in 49 CFR Part 192, or the utility’s internal standards. Separate metrics are provided for gas distribution and gas transmission.”

**Risks:** Gas Safety.

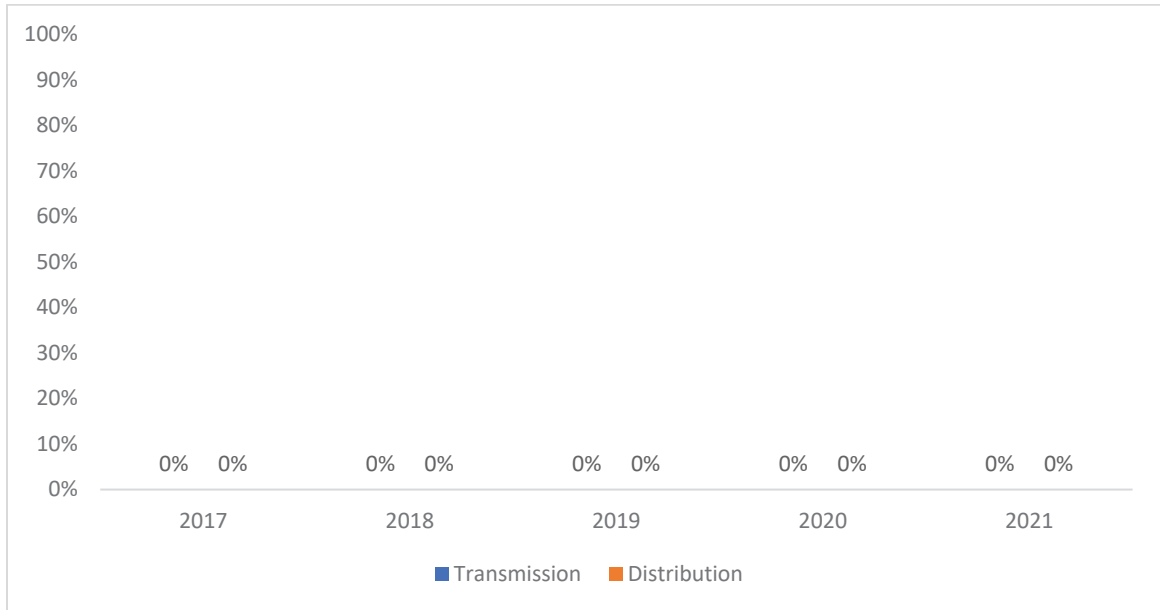
**Category:** Gas.

**Units:** Percentage of work orders past due for completion in the past calendar year.

**Summary:**



*Summary Chart of Gas Operation Corrective Actions Backlog Metric Data (Annual)*



**Narrative Context:**

When SDG&E becomes aware of being out of compliance with 49 CFR or the CPUC General Orders, it is imperative that the situation be investigated, rectified, and learned from, as expeditiously as possible. SDG&E takes safety and compliance very seriously; all non-compliances, either self-reported or identified by the CPUC, are brought back into compliance as quickly and safely as possible, by means of immediate field resolution, updates of internal gas standards, internal employee training, or the scheduling of corrective work orders. This metric measures overdue non-compliance corrective work orders (utilizing the timeframes outlined in 49 CFR Part 192 and SDG&E’s internal standards for measurement purposes) as a percentage of total non-compliance corrective work orders in a given calendar year. To calculate this Metric, SDG&E includes corrective actions resulting which includes CPUC Safety Enforcement Division (SED) Notice of Probable Violations (NOPVs), SDG&E Exception Self-Reports, and Gas Safety Citation Program SDG&E Self-Reports. The percentages are calculated using the corrective actions that did





not meet the suggested or required timeframes by the total NOPV and Self-Reported corrections. The monthly percentages are calculated using the months that NOPVs responses or Self Reports were communicated to the SED.

**Historical Data:**

Ten years of monthly historical data is included in the accompanying Excel file (Attachment B) for Gas Operation Corrective Actions Backlog. As noted in the Summary Chart provided above, there have been no backlogs as defined by this Metric for SDG&E.

**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

**Y. Metric No. 29: GO-95 Corrective Actions (Tiers 2 and 3, HFTD)**

**Metric Name and Description per D.21-11-009:** “GO-95 Corrective Actions (Tiers 2 and 3, HFTD): The number of Priority Level 2 notifications that were completed on time divided by the total number of Priority Level 2 notifications that were due in the calendar year in Tiers 2 and 3, HFTD. Consistent with GO 95 Rule 18 provisions, the proposed metric should exclude notifications



that qualify for extensions under reasonable circumstances. Separate metrics are provided for distribution and transmission systems.”

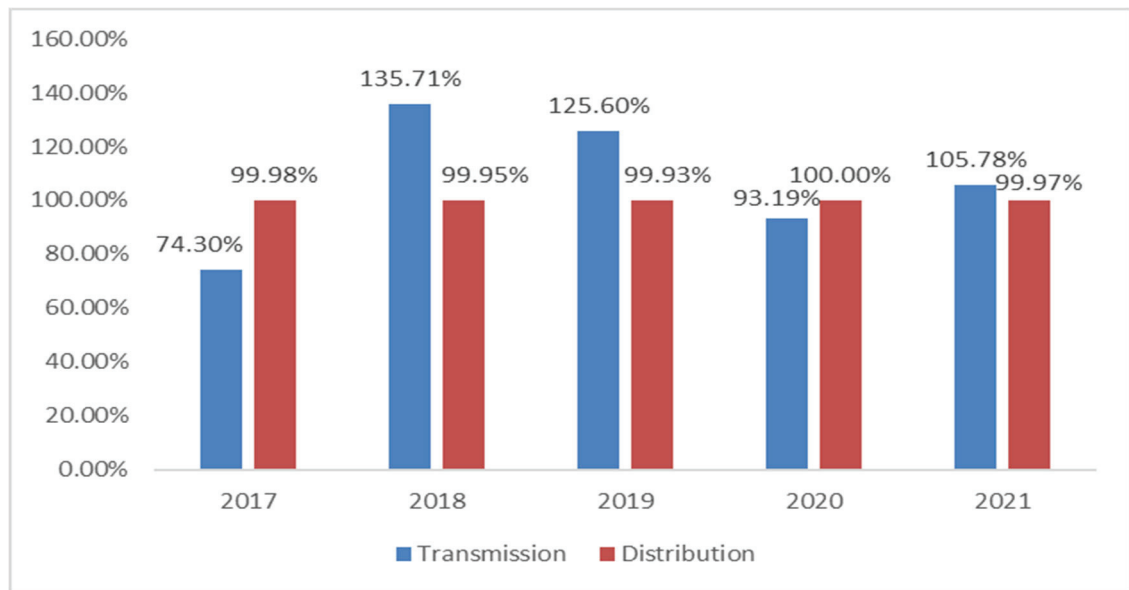
**Risks:** Electric Safety and Wildfire.

**Category:** Electric.

**Units:** Percentage of corrective actions completed.

**Summary:**

*Summary Chart of GO-95 Corrective Actions (Tiers 2 and 3, HFTD) Metric Data (Annual)*



**Narrative Context:**

SDG&E’s Transmission System Maintenance program provides for preventive and corrective maintenance of transmission system structures, conductors, rights of way and their components. Maintenance is performed to correct infractions and to ensure public safety and transmission system reliability. SDG&E intends to complete all corrective maintenance by the date specified, default 12 month. However, a component/condition may be reassessed for changes in condition and correction action may be deferred if deemed safe to do so.



SDG&E's Electric Distribution Corrective Maintenance Program has been established to repair any infraction that violates GO 95, GO 128, or SDG&E Standards within 12 months from the month the infraction was identified. If the infraction is in the HFTD Tier 3 and is related to fire safety, GO 95 Rule 18 establishes a 6 month repair completion timeframe.

SDG&E administers its own, strict deferral process for the electric distribution system, as allowed per GO 95 Rule 18. Each deferral request is subject to due diligence and is reviewed for reasonableness. Not all requests for deferral are granted. For purposes of calculating this Metric, infractions that have exceeded their compliance timeline and a deferral was not granted are included in the metric table.

**Historical Data:**

For SDG&E's transmission system, SDG&E's Transmission System Maintenance program requires completion of corrective action activities for Priority Level 2 notifications within the time period established in GO 95 Rule 18 unless reasonable circumstances exist that qualify for an extension of that time period. Reasonable circumstances or conditions that qualify for a "hold" of corrective action activities may occur when work is located in sensitive areas with environmental or cultural issues; requires coordination with third parties; is located in areas that require permits or Land Services to resolve legal issues to allow work to proceed are managed until issues are resolved and construction complete. In these instances, the annual percentage of corrective actions completed may be less than 100%, however, the shortfall is made up for in the following year resulting in corrective actions completed to be greater than 100%. Additionally, while SDG&E maintains complete maintenance and inspection records, priority level 1, 2, and 3, coding did not begin until 2016. As such, historical data for this metric is only available going back to 2016 and is included the accompanying Excel file (Attachment B).



For SDG&E’s distribution system, there are instances when the construction team is delayed for a reason allowed under GO 95 (e.g., permitting, environmental, access); however, a deferral was not requested in time. One example of when this oversight has occurred is when a job was mislabeled within our notification tracking system (SAP). Another example is when a job was incorrectly cancelled. Cancellations can occur when a repair is being driven by the results of a pole loading calculation and there is no visual issue identified for repair. In those instances, a construction supervisor may overlook the pole loading data when fielding the job and seeing no visible issue needing repair. SDG&E has a quality control process to identify when an erroneous cancellation has occurred, but such identification may sometimes occur after the completion date established under GO 95.

**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 2021 Executive Incentive Compensation Plan and 2021 non-executive Incentive Compensation Plan each include a metric for “Average Days for Tier 3 Level 1 Corrections”. This metric is defined as follows: “Level 1 infractions are issues on power lines found during inspections and have the potential to be an imminent hazard to public safety or fire risk that requires immediate action to either correct or make safe. Measures the average time between the recognition of a Level 1 risk and a corrective action being completed to mitigate immediate issue.”
- 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 2021 report submission, SDG&E references the incentive compensation plans in place as of 2021.



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

- Yes. As described above, performance related to Average Days for Tier 3 and Level 1 Corrections are included in SDG&E’s 2021 Executive and non-executive ICPs. This performance measure is weighted 2% of the overall 59% public and employee safety operations measures in the 2021 Executive ICP and applies to all SDG&E executives covered by the plan and are weighted at 1% of the overall 34% of public and employee safety operations measures of the 2021 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 Average Days for Tier 3 Level 1 Corrections performance measure is linked to all SDG&E director or above positions covered by either the 2021 Executive ICP or 2021 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’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 Audit Services department prior to SDG&E board approval.



## Z. Metric No. 30: Gas Overpressure Events

**Metric Name and Description per D.21-11-009:** “Gas Overpressure Events: CPUC-reportable overpressure events are those that met the conditions specified in GO112-F, 122.2(d)(5), but reported on same frequency as the other SPMs. Separate metrics are provided for distribution and transmission systems. The metric measures both gas operational performance and the integrity of gas pipelines.”

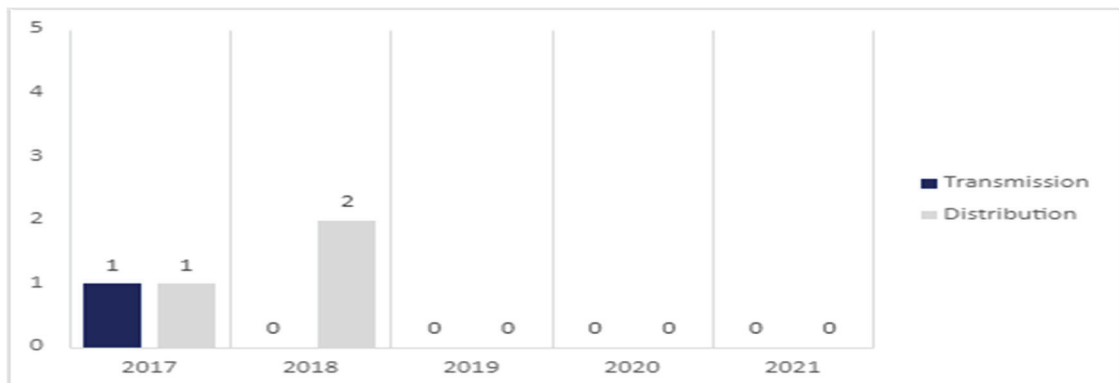
**Risks:** Gas Transmission and Distribution.

**Category:** Gas.

**Units:** Number of occurrences.

**Summary:**

*Summary Chart of Gas Overpressure Events Metric Data (Annual)*



### **Narrative Context:**

A key safety component for all pipelines is the determination of a pipeline’s Maximum Allowable Operating Pressure (MAOP). MAOP is the highest pressure at which a piping system, or segment of a piping system, is qualified to operate safely, based on design and pressure testing, or design and operating history. The MAOP of a pipe segment cannot be greater than its Design Level. The MAOP of a piping system is equal to the lowest MAOP of any segment of that system. It is vitally important not to exceed MAOP as this can lead to equipment damage, leaks, and dangerous incidents. Each piping component and segment of the gas transmission and distribution system is



designed and operated based on this concept. The maximum pressure for a component is determined by its design and characteristics, and it is verified by testing. The component with the lowest MAOP determines the maximum pressure for an entire section of the gas system. Control systems are required to maintain pressure at or below MAOP, and that secondary pressure relief or pressure limiting devices be installed to restrict the operating pressure in case of a failure in the primary control system. These pressure control devices must be inspected and tested annually.

A CPUC-reportable overpressure event is any event where the failure of a pressure relieving and limiting station, or any other unplanned event, results in pipeline system pressure exceeding its established MAOP plus the allowable build up set forth in 49 CFR §192.201.

<b>If the system's MAOP is:</b>	<b>Then gas emergency incident is reportable when system pressure is greater than:</b>
60 psig or more	MAOP plus 10 percent, or a pressure that produces a hoop stress of 75 percent of SMYS, whichever is lower
12 psig or more, but less than 60	MAOP plus 6 psig
less than 12 psig	MAOP plus 50 percent

Quarterly Reporting: Incidents where the failure of a pressure relieving and limiting stations, or any other unplanned event, results in pipeline system pressure exceeding its established MAOP plus the allowable build up set forth in 49 CFR § 192.201.

Annual Reporting: The number of events in which pressure in any pipeline facility exceeded the MAOP by 50% or more of the buildup allowed for by 49 CFR § 192.201. For any transmission pipeline facility where the Operator applies the provisions of 49 CFR § 192.917 (e)(3) or (e)(4), any increases above the maximum operating pressure must be reported. Also, for low-pressure systems (i.e., inches of water column pressure), all pressure increases above MAOP must



be reported. Increases in pressure above MAOP resulting from planned, designed, testing, or other intentional operations performed per procedures or process established by the Operator are exempted from this requirement. For purposes of reporting, “events” includes each occurrence of over pressurization that develops between over pressurization being noted and maintenance being performed.

**Historical Data:**

The overpressure reporting criteria established by GO112-F became effective in 2015. However, regulations requiring external reporting of this data were not enacted until 2017. SDG&E began tracking this data in 2017 in compliance the new reporting requirements.

**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.

- NA





**AA. Metric No. 31: Gas In-Line Inspections Missed**

**Metric Name and Description per D.21-11-009:** “Gas In-Line Inspections Missed: The number of gas pipeline in-line inspections that missed the required reassessment interval, according to the relevant intervals established pursuant to 49 CFR, Part 192.”

**Risks:** Catastrophic Damage Involving High-Pressure Pipeline Failure.

**Category:** Gas.

**Units:** Total number of missed inspections.

**Summary:**

<b>Year</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Missed Inspections</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Narrative Context:**

As discussed for Metric No. 6, gas transmission operators are required to assess pipelines in HCAs at a minimum of every seven years and certain pipelines in non-HCAs at a minimum of every ten years.<sup>82</sup> Transmission pipelines within scope of the TIMP are assessed using In-Line Inspection (ILI), Direct Assessment, Pressure Test, or other appropriate methods identified in 49 CFR §§ 192.710, 921 and 937 and remediated as needed. Since the TIMP was initiated, SDG&E has remained in compliance with federal regulations.

**Historical Data:**

The number of gas pipeline in-line inspections that missed a reassessment interval is a metric that is managed under the TIMP. SDG&E provides annual data for years 2012 through 2021 in the accompanying Excel file (Attachment B).

<sup>82</sup> 49 CFR §§ 192.710 and 192.939.



**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

**BB. Metric No. 32: Overhead Conductor Safety Index**

**Metric Name and Description per D.21-11-009:** “Overhead Conductor Safety Index: Overhead Conductor Safety Index is the sum of all annual occurrences on overhead transmission or primary voltage distribution conductors satisfying one or more of the following conditions divided by total circuit miles in the system x 1,000: 1) A conductor or splice becomes physically broken; 2) A conductor is dislodged from its intended design position due to either malfunction of its attachment points and/or supporting structures or contact with foreign objects (including vegetation); 3) A conductor falls from its intended position to rest on the ground or a foreign object; 4) A conductor comes into contact with communication circuits, guy wires, or conductors of a lower voltage; or 5) A power pole carrying normally energized conductors leans by more than 45 degrees in any direction relative to the vertical reference when measured at ground level. Separate metrics are



reported for transmission and primary voltage distribution conductors. Secondary voltage conductors and service drops are not included in this metric.”

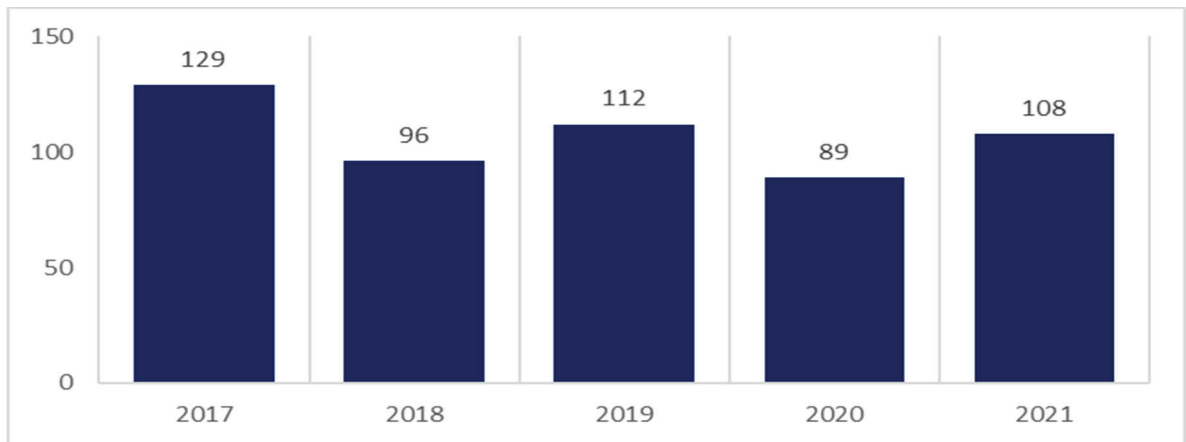
**Risks:** Wildfire, Transmission Overhead Conductor, and Distribution Overhead Conductor Primary.

**Category:** Electric.

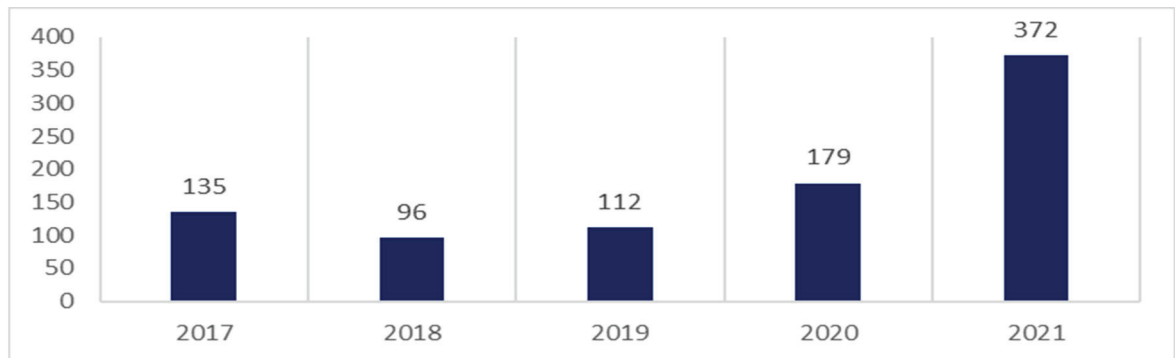
**Units:** Number of occurrences per circuit mile.

**Summary:**

*Summary Chart of T&D Overhead Wires Down excluding secondary distribution wires and “Major Event Days” Metric Data (Annual)*



*Summary Chart of T&D Overhead Wires Down including secondary distribution wires and “Major Event Days” Metric Data (Annual)*





**Narrative Context:**

The Overhead Conductor Safety Index Metric was adopted by the Commission in D.21-11-009. While SDG&E keeps thorough records of inspections and maintenance performed on the electric transmission and distribution systems, those records are not coded and tracked at the level of granularity required for this metric. Additionally, as noted in Metric #27, Overhead Conductor Size in High Fire Threat District (Tiers 2 and 3, HFTD), SDG&E has not retained historical circuit mileage data, from its GIS system that may be used to produce certain of the measurements sought to be captured by the Metric. Furthermore, as indicated in SDG&E’s written comments in R.20-07-013, the metric definition as it pertains to wires down conflicts with the OEIS (criteria 1-3) and contains elements (criteria 4 and 5) that may not be readily measurable. The essence of this metric aligns with the wires down definition, as contained in Metrics #1 and #2.

**Historical Data:**

As discussed above, the data sought by the recently adopted Overhead Conductor Safety Index Metric was not historically tracked by SDG&E at the level of granularity for this Metric. Metrics #1 and #2 in this Report provide historical data for certain overlapping elements sought to be captured by this Metric, and may be referred to for that purpose.

**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 of 10 years of monthly historical data, where available, for all applicable metrics served to parties of R.20-07-013, A.21-05-011 and A.21-05-014 (cons.), A.22-05-015 and A.22-05-016 (cons.) and made available upon request]









The below is presented as supplemental information as noted in the matrix description for Metric #1: Electric Emergency Response Time. Average time and median time is provided in increments as defined in the matrix description for Metric #1: Electric Emergency Response Time. Average time and median time is provided in increments as defined in the matrix description for Metric #1: Electric Emergency Response Time. Average time and median time is provided in increments as defined in the matrix description for Metric #1: Electric Emergency Response Time.

Year / Month	Count of < 05 Min	Count of ≥ 05 Min < 15 Min	Count of ≥ 15 Min < 30 Min	Count of ≥ 30 Min < 45 Min	Count of ≥ 45 Min < 60 Min	Count of ≥ 60 Min < 90 Min	Count of ≥ 90 Min < 120 Min	Count of ≥ 120 Min < 180 Min	Count of ≥ 180 Min < 240 Min	Year / Month	Count of < 05 Min	Count of ≥ 05 Min < 15 Min	Count of ≥ 15 Min < 30 Min	Count of ≥ 30 Min < 45 Min	Count of ≥ 45 Min < 60 Min	Count of ≥ 60 Min < 90 Min	Count of ≥ 90 Min < 120 Min	Count of ≥ 120 Min < 180 Min	Count of ≥ 180 Min < 240 Min	Year / Month	Count of < 05 Min	Count of ≥ 05 Min < 15 Min	Count of ≥ 15 Min < 30 Min	Count of ≥ 30 Min < 45 Min	Count of ≥ 45 Min < 60 Min	Count of ≥ 60 Min < 90 Min	Count of ≥ 90 Min < 120 Min	Count of ≥ 120 Min < 180 Min	Count of ≥ 180 Min < 240 Min						
2012	12	28	98	141	147	115	110	115	12	87	85	64	64	64	64	64	64	64	64	2013	25	25	90	117	147	174	174	128	104	102	97	76	51	169	
2014	21	44	94	103	154	111	148	120	76	93	63	57	57	57	57	57	57	57	57	2015	21	44	94	103	154	111	148	120	76	93	63	57	57	57	57

The below is presented as supplemental information as noted in the matrix description for Matrix #1: Electric Emergency Response Time. Average time and median time is provided in increments as an electric related emergency notification from the time of notification to the time a representative (or qualified (or+) responder) arrived onsite. Emergency notification includes all notifications originating from 911 calls and calls made directly by the customer's utility facilities. The data used to determine the average time and median time shall be provided in increments as defined in ISO 1124-123.2 (c) as supplemental information, not as a metric.

Year / Month	Count of < 15 Min	Count of ≥ 15 Min < 30 Min	Count of ≥ 30 Min < 45 Min	Count of ≥ 45 Min < 60 Min	Count of ≥ 60 Min < 75 Min	Count of ≥ 75 Min < 90 Min	Count of ≥ 90 Min < 105 Min	Count of ≥ 105 Min < 120 Min	Count of ≥ 120 Min < 135 Min	Count of ≥ 135 Min < 150 Min	Count of ≥ 150 Min < 165 Min	Count of ≥ 165 Min < 180 Min	Count of ≥ 180 Min < 195 Min	Count of ≥ 195 Min < 210 Min	Count of ≥ 210 Min < 225 Min	Count of ≥ 225 Min < 240 Min	Count of ≥ 240 Min < 255 Min	Count of ≥ 255 Min < 270 Min	Count of ≥ 270 Min < 285 Min	Count of ≥ 285 Min < 300 Min	Count of ≥ 300 Min < 315 Min	Count of ≥ 315 Min < 330 Min	Count of ≥ 330 Min < 345 Min	Count of ≥ 345 Min < 360 Min	Count of ≥ 360 Min < 375 Min	Count of ≥ 375 Min < 390 Min	Count of ≥ 390 Min < 405 Min	Count of ≥ 405 Min < 420 Min	Count of ≥ 420 Min < 435 Min	Count of ≥ 435 Min < 450 Min	Count of ≥ 450 Min < 465 Min	Count of ≥ 465 Min < 480 Min	Count of ≥ 480 Min < 495 Min	Count of ≥ 495 Min < 510 Min	Count of ≥ 510 Min < 525 Min	Count of ≥ 525 Min < 540 Min	Count of ≥ 540 Min < 555 Min	Count of ≥ 555 Min < 570 Min	Count of ≥ 570 Min < 585 Min	Count of ≥ 585 Min < 600 Min																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
2015	28	28	64	110	147	151	130	150	56	72	22	47	60	2016	19	38	103	141	141	145	158	117	100	100	80	78	81	2017	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2018	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2019	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2020	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2021	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2022	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2023	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2024	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2025	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2026	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2027	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2028	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2029	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2030	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2031	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2032	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2033	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2034	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2035	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2036	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2037	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2038	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2039	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2040	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2041	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2042	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2043	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2044	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2045	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2046	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2047	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2048	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2049	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2050	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2051	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2052	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2053	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2054	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2055	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2056	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2057	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2058	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2059	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2060	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2061	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2062	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2063	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2064	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2065	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2066	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2067	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2068	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2069	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2070	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2071	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2072	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2073	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2074	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2075	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2076	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2077	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2078	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2079	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2080	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2081	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2082	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2083	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2084	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2085	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2086	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2087	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2088	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2089	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2090	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2091	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2092	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2093	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2094	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2095	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2096	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2097	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2098	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2099	22	13	41	141	170	151	176	145	125	115	115	87	65	87	2100	22	13	41	141	170	151	176	145	125	115	115	87	65	87



The below is presented as supplemental information as noted in the metric description for Metric #1: 'Electric Emergency Response Time'. Average time and median time is provided in response to an electric related emergency notification from the time of notification to the time a representative (or qualified (or+) responder) arrived onsite. Emergency notification includes all notifications originating from 221 calls and calls made directly by the 'customer' using hotlines. The data used to determine the average time and median time shall be provided in increments as defined in ISO 1124 123.2 (c) as supplemental information, not as a metric.

Year / Month	Count of < 05 Min	Count of ≥ 05 Min < 10 Min	Count of ≥ 10 Min < 15 Min	Count of ≥ 15 Min < 20 Min	Count of ≥ 20 Min < 25 Min	Count of ≥ 25 Min < 30 Min	Count of ≥ 30 Min < 35 Min	Count of ≥ 35 Min < 40 Min	Count of ≥ 40 Min < 45 Min	Count of ≥ 45 Min < 50 Min	Count of ≥ 50 Min < 55 Min	Count of ≥ 55 Min < 60 Min
2021	67	68	173	222	261	281	210	173	127	144	120	62
1	10	22	44	57	65	65	46	36	24	33	15	7
2	4	11	18	26	27	20	17	12	12	15	9	4
3	6	10	24	27	34	32	20	10	10	6	4	14
4	1	10	17	28	31	30	10	10	5	4	5	17
5	4	7	22	28	20	15	7	14	17	18	5	50
6	6	10	26	31	31	14	10	10	6	10	10	20
7	4	4	8	14	20	22	17	25	9	18	10	12
8	0	0	0	0	0	0	0	0	0	0	0	0
9	2	11	17	16	10	12	15	11	12	9	8	14
10	1	12	14	19	20	20	22	11	14	8	6	14
11	1	2	8	12	18	10	10	4	11	6	2	11
12	1	4	11	14	15	14	11	14	7	11	12	14

The below is presented as supplemental information as noted in the metric description for Metric #8 and #9: "Median time to shut-in gas when an uncontrolled or unplanned gas release occurs on a main. The data used to determine the median time shall be provided in increments as defined in GO 112-F 123.2 (c) as supplemental information, not as a metric."

		Response time 5 minutes or less	Response time more than 5, but less than 10 minutes	Response time more than 10, but less than 15 minutes	Response time more than 15, but less than 20 minutes	Response time more than 20, but less than 25 minutes	Response time more than 25, but less than 30 minutes	Response time more than 30, but less than 35 minutes	Response time more than 35, but less than 40 minutes	Response time more than 40, but less than 45 minutes	Response time more than 45, but not more than 60 minutes	Response time more than 60 minutes
2021	Main	0	0	0	0	0	0	0	1	0	3	145
	Services	0	1	1	3	6	7	8	14	7	41	315
2020	Main	0	0	0	0	1	0	1	4	5	10	187
	Services	0	2	4	6	12	20	23	27	27	82	434
2019	Main	0	0	0	1	0	0	2	0	2	12	232
	Services	1	1	3	8	15	18	34	30	35	108	604
2018	Main	1	0	0	0	0	0	3	1	1	8	252
	Services	0	3	2	10	17	26	27	42	31	103	773
2017	Main	0	0	0	1	1	1	2	2	0	7	216
	Services	0	0	3	6	16	22	26	28	25	62	817

The below is presented as supplemental information as noted in the metric description for Metric #11 - "...The data used to determine the average time and median time shall be provided in increments as defined in GO 112-F 123.2 (c) as supplemental information, not as a metric."

2021														
Operating Periods and Units	Number of reports of natural gas leaks or damages to which a field response was initiated on a non-emergency basis due to an Operator's qualified representative determining, based on the Operator's procedures and information provided by the reporting party, the reported condition as being non-hazardous and not requiring of an immediate response	Hazardous Leak Response Count	Response time 5 minutes or less	Response time more than 5, but less than 10 minutes	Response time more than 10, but less than 15 minutes	Response time more than 15, but less than 20 minutes	Response time more than 20, but less than 25 minutes	Response time more than 25, but less than 30 minutes	Response time more than 30, but less than 35 minutes	Response time more than 35, but less than 40 minutes	Response time more than 40, but less than 45 minutes	Response time more than 45, but not more than 60 minutes	Response time more than 60 minutes	
<b>17,278</b>														
<b>Business Hours (M-F 0800-1700)</b>														
San Diego	SAN DIEGO 1st Operator's Responder On Scene	4578	121	151	344	690	816	754	556	407	276	304	99	
	Leak/Damage Rendered Non-Hazardous		5	12	7	16	41	62	132	179	203	907	3014	
	SDG&E 1st Operator's Responder On Scene	17	0	3	1	3	1	1	2	2	1	0	1	
	Leak/Damage Rendered Non-Hazardous		0	0	0	1	0	1	1	0	0	2	12	
<b>After Business Hours (M-F 1701-0759)</b>														
San Diego	SAN DIEGO 1st Operator's Responder On Scene	1750	47	43	120	225	291	311	210	178	124	163	38	
	Leak/Damage Rendered Non-Hazardous		5	12	5	6	10	34	69	85	108	419	997	
	SDG&E 1st Operator's Responder On Scene	7	0	0	0	3	3	0	0	0	0	1	0	
	Leak/Damage Rendered Non-Hazardous		0	0	0	0	1	0	0	0	0	3	9	
<b>Weekends/Holidays</b>														
San Diego	SAN DIEGO 1st Operator's Responder On Scene	1626	30	32	104	201	258	225	221	146	117	200	92	
	Leak/Damage Rendered Non-Hazardous		3	9	5	8	20	40	55	72	91	349	974	
	SDG&E 1st Operator's Responder On Scene	9	1	1	1	1	2	2	0	0	0	1	0	
	Leak/Damage Rendered Non-Hazardous		0	0	0	0	0	0	1	0	1	1	6	

2020														
Operating Periods and Units	Number of reports of natural gas leaks or damages to which a field response was initiated on a non-emergency basis due to an Operator's qualified representative determining, based on the Operator's procedures and information provided by the reporting party, the reported condition as being non-hazardous and not requiring of an immediate response	Hazardous Leak Response Count	Response time 5 minutes or less	Response time more than 5, but less than 10 minutes	Response time more than 10, but less than 15 minutes	Response time more than 15, but less than 20 minutes	Response time more than 20, but less than 25 minutes	Response time more than 25, but less than 30 minutes	Response time more than 30, but less than 35 minutes	Response time more than 35, but less than 40 minutes	Response time more than 40, but less than 45 minutes	Response time more than 45, but not more than 60 minutes	Response time more than 60 minutes	
<b>20,352</b>														
<b>Business Hours (M-F 0800-1700)</b>														
San Diego	SAN DIEGO 1st Operator's Responder On Scene	5557	124	151	467	828	932	872	715	489	352	525	102	
	Leak/Damage Rendered Non-Hazardous		2	4	9	18	39	78	119	191	263	1124	3710	
	SDG&E 1st Operator's Responder On Scene	32	2	1	5	6	6	3	2	2	3	2	0	
	Leak/Damage Rendered Non-Hazardous		1	2	0	0	1	1	2	2	2	3	16	
<b>After Business Hours (M-F 1701-0759)</b>														
San Diego	SAN DIEGO 1st Operator's Responder On Scene	2117	47	41	142	238	361	300	311	193	160	244	80	
	Leak/Damage Rendered Non-Hazardous		4	5	10	8	21	31	51	94	120	458	1317	
	SDG&E 1st Operator's Responder On Scene	11	0	0	0	1	3	1	3	0	2	1	0	
	Leak/Damage Rendered Non-Hazardous		0	0	0	0	0	0	0	0	2	1	8	
<b>Weekends/Holidays</b>														
San Diego	SAN DIEGO 1st Operator's Responder On Scene	1968	49	36	104	230	315	309	224	207	146	215	133	
	Leak/Damage Rendered Non-Hazardous		5	4	4	7	11	27	60	89	107	417	1237	
	SDG&E 1st Operator's Responder On Scene	7	0	0	1	1	2	1	1	0	0	0	1	
	Leak/Damage Rendered Non-Hazardous		0	0	0	0	0	0	0	0	1	1	5	















