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

Application of Pacific Gas and Electric
Company for Authority, Among Other Things,
to Increase Rates and Charges for Electric and
Gas Service Effective on January 1, 2020.

(U39M)

Application No. 18-12-009
(Filed December 13, 2018)

**PACIFIC GAS AND ELECTRIC COMPANY'S (U39M) 2019 SAFETY
PERFORMANCE METRICS REPORT IN COMPLIANCE WITH CALIFORNIA
PUBLIC UTILITIES COMMISSION DECISION 19-04-020**

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Dated: April 1, 2020

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

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Pacific Gas and Electric Company (PG&E) submits its 2019 Safety Performance Metrics Report in Compliance with the *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*, Decision (D.) 19-04-020 (Decision).

The Decision approves 26 Safety Performance Metrics and requires the large investor owned utilities to annually file metrics data and accompanying narratives in a Safety Performance Metrics Report on March 31 of the following year.¹ PG&E is required to report on 25 of the 26 approved metrics.²

The Decision also requires the Safety Performance Metrics Report to include:

- Identification of the metrics linked to or used for purposes of determining executive compensation levels for positions director-level and above;
- Descriptions of bias controls that the utility has in place for reporting of the metrics;
- Examples of how the metrics have informed training and supported risk-informed decision-making;
- Explanations of how the metrics reflect progress against safety goals included in

¹ D.19-04-020, p. 26. Because March 31, 2020 is a state holiday, PG&E is filing this report timely on April 1, 2020.

² D.19-04-020, Attachment 1.

the utility's General Rate Case; and

- A high-level summary of the total estimated and recorded risk-related spend.³

PG&E's 2019 Safety Performance Metrics Report is provided as Attachment 1.

Respectfully Submitted,

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Dated: April 1, 2020

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³ D.19-04-020, p. 63, Ordering Paragraph 6.

2019 Safety Performance Metrics Report

Application: 15-05-003
(U 39 M)
Exhibit No.: _____
Date: April 1, 2020
Witness(es): Various

PACIFIC GAS AND ELECTRIC COMPANY

**2019 SAFETY PERFORMANCE METRICS REPORT IN COMPLIANCE
WITH CALIFORNIA PUBLIC UTILITIES COMMISSION
DECISION 19-04-020**



PACIFIC GAS AND ELECTRIC COMPANY
2019 SAFETY PERFORMANCE METRICS REPORT

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PACIFIC GAS AND ELECTRIC COMPANY
2019 SAFETY PERFORMANCE METRICS REPORT
SECTION 1
INTRODUCTION

PACIFIC GAS AND ELECTRIC COMPANY

2019 SAFETY PERFORMANCE METRICS REPORT

I. Introduction

Pacific Gas and Electric Company (PG&E, the Company, or the Utility) submits its 2019 Safety Performance Metrics Report (SPMR) in compliance with the Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities (IOU) and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities, Decision (D.) 19-04-020.

This report provides an overview of 25 Safety Metrics and their performance over the last 10 years. As directed in the Safety Model Assessment Proceeding Phase 1 Scoping memo, PG&E actively participated in the Technical Working Group convened by Safety and Enforcement Division (SED) on September 28, 2016, with representatives from the Coalition of California Utility Employees, Energy Division, Public Advocates Office at the California Public Utilities Commission, Office of the Safety Advocate, The Utility Reform Network, Southern California Gas Company, and the other IOUs to refine the list of safety metrics for the IOUs' reports. PG&E is providing metric data for:

- 1) Transmission and Distribution (T&D) Overhead Wires Down
- 2) T&D Overhead Wires Down – Major Event Days (MED)
- 3) Electric Emergency Response
- 4) Fire Ignitions
- 5) Gas Dig-In
- 6) Gas In-Line Inspection (ILI)
- 7) Gas In-Line Upgrade
- 8) Shut In The Gas Average Time – Mains
- 9) Shut In The Gas Average Time – Services
- 10) Cross Bore Intrusions
- 11) Gas Emergency Response
- 12) Natural Gas Storage Baseline Inspections Performed

- 13) Not Applicable to PG&E¹
- 14) Employee Serious Injuries and Fatalities (SIF)
- 15) Employee Days Away, Restricted, or Transferred (DART) Rate
- 16) Employee Lost Workday (LWD) Case Rate
- 17) Employee Occupational Safety and Health Administration (OSHA) Recordables Rate
- 18) Contractor OSHA Recordables Rate
- 19) Contractor DART
- 20) Contractor SIF
- 21) Contractor LWD Case Rate
- 22) Public SIF
- 23) Helicopter/Flight Accident or Incident
- 24) Percentage of Serious Injury and Fatality Corrective Actions Completed on Time
- 25) Hard Brake Rate
- 26) Driver's Check Rate

Safety is PG&E's most important responsibility. Our customers and communities deserve the assurance that we will deliver their electricity and natural gas safely and reliably. That is the fundamental role of any utility company, and one that PG&E does not take lightly.

PG&E is committed to continuing to improve the safety of our workforce and the public. Benchmarking and safety metrics are measured and analyzed to drive the right behavior as we continue to strengthen our safety efforts. PG&E monitors our progress with a focus on leading indicators as well as lagging metrics to show our progress over time. This helps PG&E identify and address the underlying causes of safety incidents to prevent them from reoccurring.

The information in this "2019 Safety Performance Metrics Report" confirms areas where PG&E has shown significant safety progress over the past decade. At the same time, as shown in other data points, we have more to do to get better when it comes to the safety of our system and the safety of our customers, employees and contractors.

¹ Metric 13, Percentage of the Gas System That Can Be Internally Inspected, is not applicable to PG&E. See D.19-04-020, Attachment 1, p. 5.

1 We look forward to demonstrating, through our actions, that we are working
2 every day toward improved outcomes. We know that restoring trust can only
3 come through sustained performance and accountability. The people who rely
4 on us need to see that we are continuing to reduce risks in every corner of our
5 system.

PACIFIC GAS AND ELECTRIC COMPANY
2019 SAFETY PERFORMANCE METRICS REPORT
SECTION 2
METRIC OVERVIEW

1 II. Metrics Overview

2 Prior to the SPMR, PG&E tracked many of these metrics because they
3 provide valuable insight on our safety performance. Below PG&E provides a
4 number of examples of how PG&E uses these metric data to improve staff
5 and/or contractor training, take corrective actions aimed at minimizing top risks
6 or risk drivers, and to support risk-based decision-making as required by
7 D.19-04-020.

8 a) Fire ignitions metric data improved PG&E's training: The 2019 Wildfire
9 Mitigation Plan (WMP) was focused on the enhanced, accelerated, and new
10 programs that PG&E implemented to reduce the risk of wildfires in 2019 and
11 beyond. The Reportable Fire Ignitions metric directly informed many of
12 PG&E's Community Wildfire Safety Program (CWSP) initiatives targeted at
13 further reducing the number of wildfires associated with utility distribution
14 equipment.

15 As part of the commitments in the 2019 WMP, PG&E revised the Utility
16 Standard: TD-1464S, Preventing and Mitigating Fires While Performing
17 PG&E work. The standard establishes requirements for PG&E personnel to
18 follow when traveling to, performing work, or operating outdoors in any
19 forest, brush, or grass-covered land. This standard targets all PG&E
20 employees and contractors working on or near facilities located in any
21 forest, brush, or grass-covered lands, using equipment, tools, and/or
22 vehicles whose use could result in the ignition of a fire.

23 To train relevant operational employees on this standard, PG&E
24 developed a training course (SAFE-1503WBT). An annual refresher training
25 was completed by 8,579 relevant operational employees in 2019.

26 b) The 911 Emergency Response metric data: Informed several programs that
27 were developed and implemented to improve our response to 911
28 Emergency Calls and reduce the time it takes PG&E personnel to arrive at
29 the premises where the 911 agency personnel are waiting. One of these
30 programs utilized Global Positioning System (GPS) to identify the
31 Troubleman closest to 911 location during storm and non-storm events and
32 integrated GPS data with PG&E's Outage Information System (OIS) to
33 further improve response time and resource effectiveness. Another program
34 focused on filtering 911 calls to exclude non-electric calls, monitoring and

1 validating OIS data to better track response. These programs, and the
2 improvements in the examples above, helped PG&E achieve and maintain
3 industry-leading performance on 911 Emergency Response.

- 4 c) Contractor SIF metric data has informed future risk mitigations: PG&E's
5 Corporate Safety Organization monitors the implementation of the
6 Contractor Safety Program requirements by conducting compliance
7 assessments on lines of business (LOB) adherence to the enterprise
8 Contractor Safety Standard, SAFE-3001S and their established contractor
9 oversight procedures. All assessment findings are provided to the LOBs to
10 correct any non-conformance or opportunity for improvement findings.
11 Assessments with non-conformances are entered into the Corrective Action
12 Program (CAP) system and assigned to the LOBs to address. The
13 assessment data is captured in the Contractor Safety Dashboard and
14 updated monthly. These metrics, including the Contractor SIF metric, are
15 used to evaluate LOB compliance, evaluate findings and develop action
16 plans to address any trending issues.

17 PG&E will include two mitigations in its next Risk Assessment and
18 Mitigation Phase (RAMP) report in June 2020 that will assist in ensuring the
19 safety observations are performed by PG&E and contractors:

20 (1) Implementing a GPS tracking platform to track contractor crew locations;
21 and (2) Requiring contractors to assign safety representatives to specific
22 PG&E work to ensure qualified safety oversight.

23 The Contractor Safety Program compliance assessments continue to
24 strengthen PG&E's implementation of the program requirements.

- 25 d) PG&E California Occupational Safety and Health Administration recordable
26 injuries data and DART case data: Included in this SPMR, and also used in
27 the 2020 RAMP model analysis to determine the amount of risk reduced
28 with the implementation of the Employee Safety Incident risk program
29 mitigations.

30 The PG&E On-site Clinics Strategy includes the establishment of a set
31 number of on-site clinics made available to PG&E employees and expected
32 to be completed in 2024. Once in place, on-site clinics will be readily
33 accessible to approximately 50 percent of the PG&E employee workforce.

1 In addition, Mobile Medic services in locations not able to provide brick
2 and mortar clinic space are being deployed. The on-site clinic and care
3 services network provide employees with access to health care services,
4 leading to a healthier workforce and reducing the severity of workplace
5 injuries. Combining and expanding occupational and non-occupational
6 models is necessary to achieve our safety and health goals. In 2017, the
7 PG&E Health Center was established in San Francisco. This San Francisco
8 General Office clinic has improved health of employees who utilized the
9 clinic. Occupational clinics in San Carlos and Fresno were opened in 2017.
10 In the first year, these occupational clinics reduced DART cases an
11 additional 26 percent and OSHA recordable cases an additional 11 percent
12 over the comparison non-clinic population. This decrease is attributed to an
13 increased focus on case management and ease of access to medical
14 services.

15 The metrics discussed in the above examples are reviewed on a
16 monthly basis by PG&E (Safety, Health, Enterprise CAP, and Department of
17 Transportation (DOT) and Regulatory Compliance (SHED) and LOB)
18 leadership and are incorporated into business planning processes.

- 19 e) Gas Dig-In metric: PG&E designed the Gold Shovel Standard to enhance
20 public and employee safety by reducing dig-ins. The program, which was
21 fully implemented in 2016, requires contractors excavating on behalf of
22 PG&E to obtain the Gold Shovel certification. Beyond certification, the
23 Program utilizes standardized metrics to drive continuous performance
24 improvement for all stakeholders and increase public and workforce safety.

25 The Gold Shovel Standard Program is now run by a third-party and
26 available to utilities across the nation. The program sets safety criteria
27 contractors must meet to be eligible to do work on behalf of the Utility. The
28 Gold Shovel Standard became an internationally recognized program, with
29 companies in Canada adopting and implementing its certification
30 requirements. Through the Gold Shovel Standard Program, PG&E is both
31 making its own communities safer and also bringing best safety practices to
32 the industry. Both monthly and annual metrics from the Gold Shovel
33 Program are reviewed by Damage Prevention, Sourcing and Safety
34 committees and the Gas Leadership team.

- 1 f) Helicopter Metric data improved PG&E's training: On Tuesday, July 11,
2 2017, four PG&E employees and one Federal Energy Regulatory
3 Commission employee were utilizing a contract helicopter for transportation
4 to inspect multiple dams located in Northern California. During landing, the
5 helicopter's main rotor struck a tree, severely damaging the helicopter and
6 resulting in minor injuries to several passengers. The National
7 Transportation Safety Board (NTSB) investigation had no recommendations
8 for corrective actions. PG&E's investigation resulted in the following actions
9 to improve PG&E processes and systems. The learnings also informed
10 training and guidance documents including:
- 11 – An action plan was created to support the implementation of a Safety
12 Management System that meets the intentions and framework of
13 Federal Aviation Administration (FAA) Advisory Circular 120-92A for
14 Utility Helicopter operations.
 - 15 – PG&E amended contracts with all helicopter vendors requiring the use
16 of a Flight Risk Assessment Tool (FRAT) prior to each flight. In addition,
17 PG&E's process for dispatching helicopters requires the pilot's
18 verification that the FRAT was completed and, if a high risk was
19 identified, it must be mitigated until a lower FRAT score is achieved.
20 (Guidance Document Reference AVI-3001M-JA05).
 - 21 – An assessment of all helicopter landing zones (LZ) was completed.
22 Each received a rating and those not meeting requirements were
23 shutdown until repairs were made and another assessment conducted.
24 An LZ Maintenance Review Checklist was also created to support
25 ongoing reviews every two years. (Guidance Document Reference AVI-
26 3001M, AVI-3001M-JA04 and AVI-3001M-F03).
 - 27 – PG&E created a LZ standard that details the responsibilities and
28 requirements for the design of the LZs used by vendors for PG&E while
29 working on assignment for PG&E. (Guidance Document: Helicopter
30 Landing Zone Standard AVI-1003S).
 - 31 – Helicopter flight approval procedures were created by LOBs to provide a
32 process that ensures the appropriate request timeframe, approval levels
33 and required documentation meets the requirements of the Helicopter

- 1 Operations Manuals. (Guidance Document references: TD-1244P-01
2 and PG-2021S).
- 3 – Helicopter Operations created a standard lead time for requesting a
4 helicopter that supports routine and emergency requests. Creation of
5 this standard supports planning, mission evaluation and risk
6 identification. (Guidance Document Reference: AVI-1004S).

PACIFIC GAS AND ELECTRIC COMPANY
2019 SAFETY PERFORMANCE METRICS REPORT
SECTION 3
BIAS CONTROLS AND METHODOLOGY

1 III. Bias Controls and Methodology

2 PG&E utilizes multiple bias controls and systems to ensure reporting of the
3 metric data cannot be manipulated or skewed. PG&E incorporates internal and
4 external auditing, third-party data collection and resources, and state mandated
5 reporting to safety regulators such as the OSHA. PG&E uses database systems
6 such as the Energy Management (EM) tool and SAP for accurate data input and
7 automatically generates a change log for every notification down to the field by
8 field basis to ensure system controls and retention of record history. The data is
9 reviewed by the process team to ensure accuracy. Many of the metrics included
10 in this report are reviewed by Governance, Control, and Metric teams and
11 leadership at meetings to discuss performance and take action.

12 PG&E's Internal Audit Department also regularly reviews many of the
13 metrics identified in this report.

14 For a description of the bias controls applicable to each metric, see the bias
15 control section within the metric discussion.

16 Individual or Group Performance Tied to Metrics

17 PG&E sets goals annually for employees in our system that cascade
18 throughout each LOB. For a given year:

- 19 1) Senior Leaders identify the most significant areas of focus;
- 20 2) Senior Leaders set high level goals (e.g., Short-Term Incentive Plan (STIP)
21 metrics) and provide direction on other areas of focus;
- 22 3) Goal setting is disaggregated and managed within the LOBs;
- 23 4) Downstream leaders set operational goals to meet objectives; and
- 24 5) Goal setting is managed locally.

25 For this report, to determine if a metric is tied to a specific goal PG&E
26 reviewed all available 2019 goals and metrics for Officers and Directors for the
27 Enterprise. PG&E met this requirement by searching all LOB goals for
28 each SPMR metric name and identified the officers and Directors with
29 performance goals that are tied to each SPMR metric.

PACIFIC GAS AND ELECTRIC COMPANY
2019 SAFETY PERFORMANCE METRICS REPORT
SECTION 4
2019 IMPUTED ADOPTED VALUES FOR SAFETY-RELATED
RISK MITIGATION ACTIVITIES

1 **IV. 2019 Imputed Adopted Values for Safety-Related Risk Mitigation Activities**

2 The total estimated risk mitigation spending level as adopted in the 2017
3 General Rate Case (GRC) for 2019 and the recorded spend is provided in
4 Table 4-1 below.

**TABLE 4-1
2019 TOTAL SAFETY-RELATED RISK MITIGATION IMPUTED ADOPTED VALUES AND
RECORDED COSTS**

	Expense	Capital
2019 Imputed Regulatory Values	\$865,351.06	\$1,631,229.16
2019 Recorded	\$1,403,021.43	\$2,215,701.28
<hr/> Note This table is comprised of all Major Work Categories or Maintenance Activity Types that are related to safety-related risk mitigation activities.		

PACIFIC GAS AND ELECTRIC COMPANY
2019 SAFETY PERFORMANCE METRICS REPORT
SECTION 5
SAFETY PERFORMANCE METRICS

1 **V. Safety Performance Metrics**

2 **Metric 1: T&D Overhead Wires Down**

3 **Metric Name and Description:** T&D Overhead Wires Down – Number of
4 instances where an electric transmission or primary distribution conductor is
5 broken and falls from its intended position to rest on the ground or a foreign
6 object; excludes down secondary distribution wires and MEDs (typically due to
7 severe storm events) as defined by the Institute of Electrical and Electronics
8 Engineers (IEEE).

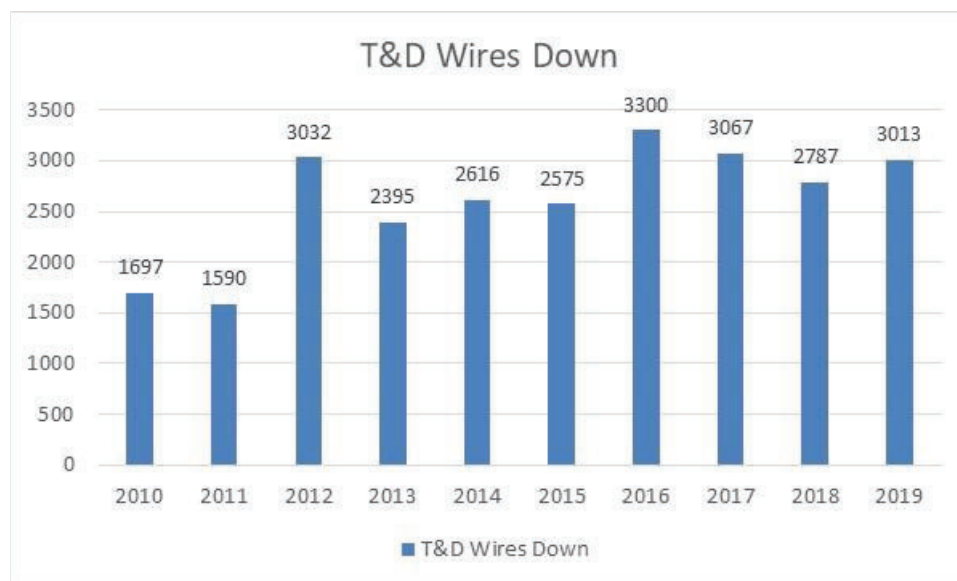
9 **Risks:** Wildfire, Transmission Overhead Conductor, and DOCP²

10 **Category:** Electric

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

12 **Summary:**

FIGURE 5-1
T&D OVERHEAD WIRES DOWN METRIC DATA EXCLUDING MEDS (ANNUAL)



13 **Narrative Context:** In 2012, PG&E initiated the Wires Down Program
14 (including introduction of the wires down metric) to address the Company's

2 The 2019 Enterprise Risk Register now has the following risks: (1) Wildfire, (2) Failure of Transmission Overhead Assets; and (3) Failure of Electric Distribution Overhead Assets. Transmission Overhead Conductor and Distribution Overhead Conductor – Primary (DOCP) no longer exist as separate risks.

1 increased focus on public safety by reducing the number of conductors that fail
2 and result in a contact with the ground, a vehicle, or other object. Before 2012,
3 wires down data was collected in the OUTAGE and ESLIC databases but not
4 tracked or used as a metric. PG&E's 2011 data is comparable to the current
5 metric definition, but data prior to 2011 is not a valid comparison to current
6 performance. The increase in wire down events starting in 2012 is due, at least
7 in part, to more accurate measurement. As part of the Wires Down Program, in
8 an effort to identify and mitigate the root cause of wires down incidents, Electric
9 Operations implemented a program to visit wires down locations to gather
10 essential data, understand the cause, and develop work plans to mitigate future
11 wires down incidents.

12 Significant work has been performed to reduce wires down, including
13 replacing overhead conductors, vegetation clearing, hardening of distribution
14 circuits, infrared inspections of overhead lines to identify and repair hot spots,
15 and investigating wire down incidents and implementing learnings/corrective
16 actions.

17 PG&E's Vegetation Management team conducts site visits of vegetation-
18 caused wires-down events as part of its standard tree-caused service
19 interruption investigation process. The data obtained from site visits supports
20 efforts to reduce future vegetation-caused wires-down events. The data
21 collected from these investigations also helps identify failure patterns by tree
22 species that are associated with wires-down events.

23 Improvements have been made to the wires down forecast model to include
24 weather day and non-weather day information to better understand events not
25 related to weather. This provided better insights to blue sky day conductor
26 performance and improved forecasting performance.

27 **Is Metric Used for the Purposes of Determining Executive (Director Level**
28 **or Higher) Compensation Levels and/or Incentives?**

29 From 2012-2016, the metric was used as a STIP metric supporting the
30 Public Safety goal. Public contact with live wires, particularly in emergency
31 events, is one of the most significant public safety risks associated with the
32 electric system.

1 **Is Metric Linked to the Determination of Individual or Group Performance**
2 **Goals?**

3 Yes, the T&D Metric is linked to one or more Director level or higher
4 individual performance goals for 2019.

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

6 In 2019, the following position(s) include individual goals that are linked to
7 this metric:

- 8 – Director Electric Operations (3)
- 9 – Senior Director Electric Operations (2)
- 10 – Vice President (VP) Electric Operations (2)

11 **Bias Controls:** The T&D Wires Down metric is a strong proxy of the overall
12 goal of reducing the potential contacts with wires down and improving the
13 reliability of the electric system, so achieving this outcome-based metric
14 performance goal is tied to achieving the overall Public Safety goals. From the
15 metric data, performance and target-setting perspective, there are several
16 controls put in place that have been verified by Internal Audit.

- 17 – The wires down events are reported by field and control center personnel
18 per uniform reporting guidelines as the events occur.
- 19 – Engineers conduct post wire down event reviews (typically for the non-MED
20 events) and will initiate corrections to the data via the outage quality team to
21 ensure the reporting guidelines were followed and the records align with
22 information reported by repair crews.
- 23 – The outage quality team processes all valid change requests received and
24 also initiates corrections based on their reviews and findings of the collected
25 outage information.

26 **Rate Case Safety Goal Progress:** The T&D Wires Down metric (excluding
27 downed secondary distribution wires and MEDs) has been one of the key
28 indicators that PG&E is using to track Public Safety Performance.

29 The performance targets in the 2017 GRC (Exhibit (PG&E-2), Table 2A-1)
30 for years 2015 and 2016 were challenging to achieve due to unfavorable
31 weather and tree failures due in part to the impact of the extended drought.
32 PG&E's target for 2015 was 2,540 events; the target for 2016 was 2,480 events.

1 Despite missing these targets, significant work was performed to reduce wires
2 down, including replacing overhead conductor, vegetation clearing, hardening of
3 distribution circuits, infrared inspections of overhead lines to identify and repair
4 hot spots, investigating wires down incidents, and implementing
5 learnings/corrective actions.

6 At the time the 2017 GRC was filed, PG&E expected to maintain first
7 quartile performance in wires down. Due to the adjustment of its methodology to
8 calculate total distribution circuit miles, year-over-year changes in industry
9 performance, and the recent metric performance, PG&E is currently in the
10 2nd quartile.

11 **Monthly Data:** See Attachment A at the end of this report.

Metric 2: T&D Overhead Wires Down – MEDs

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

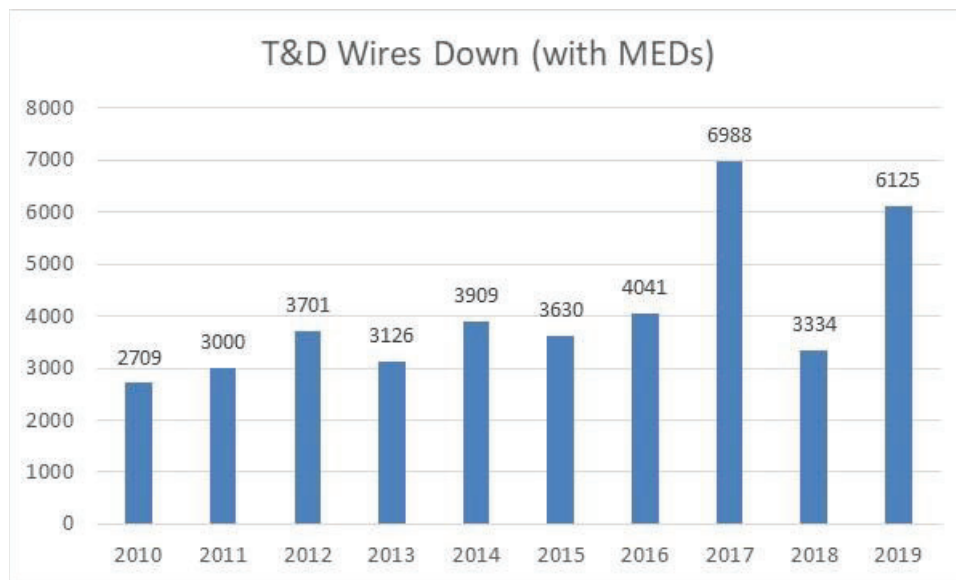
Risks: Wildfire, Transmission Overhead Conductor, DOCP³

Category: Electric

Units: Number of wire down events

Summary:

FIGURE 5-2
T&D OVERHEAD WIRES DOWN METRIC DATA INCLUDING MEDS AND SECONDARY DISTRIBUTION WIRES (ANNUAL)



Narrative Context: The metric, inclusive of MEDs and secondary distribution wires down, is not being used for internal reporting purposes. PG&E focuses on transmission and primary distribution conductor wire down events, excluding MEDs. As can be seen in the data above, particularly in 2017 and 2019, the

³ The 2019 Enterprise Risk Register now has the following risks: (1) Wildfire; (2) Failure of Transmission Overhead Assets; and (3) Failure of Electric Distribution Overhead Assets. Transmission Overhead Conductor and DOCP no longer exist as separate risks.

1 results for this metric fluctuate heavily based on the number of severe weather
2 event days in a particular year. The IEEE established the MED criteria to
3 exclude those days from industry benchmarked reliability data to avoid having
4 metric results driven primarily by weather patterns. Given the fluctuations driven
5 in this metric from weather patterns, PG&E does not view it as an appropriate
6 metric to properly assess system performance or improvement.

7 **Is Metric Used for the Purposes of Determining Executive (Director Level**
8 **or Higher) Compensation Levels and/or Incentives?**

9 As noted above, PG&E does not focus on this metric; therefore, it is not
10 used for the purpose of determining executive compensation or incentives.

11 **Is Metric Linked to the Determination of Individual or Group Performance**
12 **Goals?**

13 PG&E does not focus on this metric; therefore, it is not used to determine
14 individual or group performance goals.

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

16 PG&E does not focus on this metric, therefore it is not linked to executive
17 positions.

18 **Bias Controls:** PG&E does not focus on this metric; therefore, it does not have
19 any bias controls in place for this specific metric.

20 **Rate Case Safety Goal Progress:** PG&E does not focus on this metric,
21 therefore it is not used to track safety performance. The T&D Wires Down
22 metric excluding MEDs and secondary wires is used to track Public Safety
23 Performance.

24 **Monthly Data:** See Attachment A at the end of this report.

Metric 3: Electric Emergency Response

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

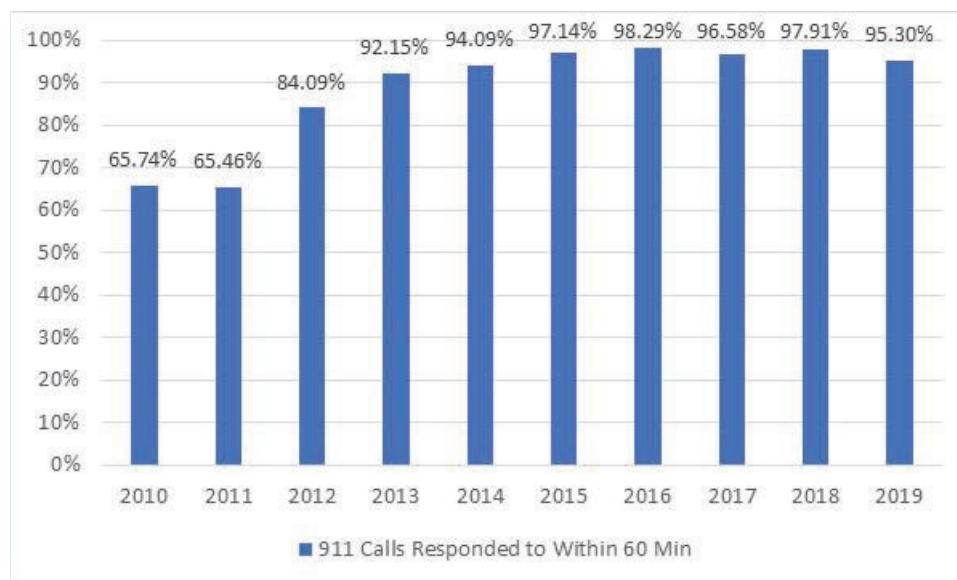
Risks: Wildfire, Overhead Conductor, Public Safety, Worker Safety⁴

Category: Electric

Units: Percentage of time response is within 60 minutes

Summary:

**FIGURE 5-3
911 RESPONSE PERFORMANCE (ANNUAL)**



Narrative Context: A primary performance metric used to evaluate PG&E's commitment to public safety is PG&E's response to 911 calls and the amount of time it takes field resources to respond to those calls. There is a direct linkage between public safety and a utility's response to emergency situations, which is

⁴ The 2019 Enterprise Risk Register now has the following risks: (1) Wildfire, (2) Failure of Electric Distribution Overhead Assets, (3) Third Party Incident (4) Employee Safety Incident; and (5) Contractor Safety Incident. Overhead Conductor no longer exists as a separate risk.

1 why PG&E selected emergency response time for this element of the
2 performance metric.

3 The keys to performing well on this metric are accurately predicting when
4 large volumes of calls will come in (based on weather forecasts) and ensuring
5 there are enough resources on hand to respond to all of those calls. This
6 requires coordinating across departments (like Electric and Gas Operations) to
7 share resources to respond when high volumes of 911 calls are anticipated.
8 These tactics are especially important during stormy weather; high call volume
9 during bad weather days may vary from year-to-year.

10 Metric performance has been driven by proactive scheduling of resources
11 for 911 response, coordination across multiple LOBs on training and availability
12 of resources for weather days and improved understanding of shifts in storm
13 fronts and impacts on the system. Additional actions include faster resource
14 notification, utilization of GPS to integrate vehicle and the 911 standby tag
15 locations and use of supplemental (non-traditional) resources.

16 PG&E's response to 911 electric-related emergencies improved by roughly
17 50 percent from 2010-2019. By 2019, the number of electric-related 911
18 emergencies responded by PG&E personnel within 60 minutes of receiving a
19 911 electric-related call was over 95 percent. The recent 2019 performance was
20 the lowest of the past 5 years, driven by a higher volume of requests
21 (115 percent of the 5-year average).

22 PG&E began benchmarking its response to 911 calls with other utilities in
23 2012. While only 8-10 companies are able to provide data on this metric each
24 year, PG&E has been making steady progress towards first quartile. PG&E's
25 2011 performance was 3rd quartile, improving to 2nd quartile in 2012-2014, and
26 reaching 1st quartile in 2015. Since 2015, PG&E's historical performance has
27 been within the first quartile and best-in-class in some years.

28 **Is Metric Used for the Purposes of Determining Executive (Director Level**
29 **or Higher) Compensation Levels and/or Incentives?**

30 The metric was used as a STIP metric in years 2012-2017.

1 **Is Metric Linked to the Determination of Individual or Group Performance**
2 **Goals?**

3 Yes, the Electric Emergency Response metric is linked to the 2019
4 individual performance goals for one or more Director-level position or higher.

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

6 In 2019, the following position(s) include individual goals that are linked to
7 this metric:

- 8 – Director, Electric Operations (19)
- 9 – Senior Director, Electric Operations (5)
- 10 – Director, Strategy and Policy (1)

11 **Bias Controls:** Several controls, verified by Internal Audit, are in place for this
12 metric. The metric performance data is captured and stored in the OIS
13 database. Each 911 call has a time stamp. The start time of a 911 call involves
14 receipt by utility personnel and entry into the OIS database (creation of a tag).
15 The tag is created in the OIS database when the PG&E personnel is on the
16 phone with the 911 dispatch agency (there is a direct 911 stand-by line into Gas
17 dispatch, where all 911 stand-by calls are routed). This process removes the
18 delay between the time the call is received and entered into the system.

19 **Rate Case Safety Goal Progress:** PG&E has been continuously improving its
20 performance in responding to 911 calls and in the past achieved a best in class
21 performance in comparison to its peers. The 2016 target (Exhibit (PG&E-2),
22 Table 2A-1,) in the 2017 GRC was to respond to 96 percent of all 911
23 Emergency calls within one hour. Additionally, the Public Safety goals outlined
24 in the 2017 GRC set the expectations of maintaining a first quartile performance
25 for this metric. The actual performance in 2016 was 98.3 percent, and through
26 2019, PG&E has maintained first quartile performance in 911 response time.

27 PG&E remains committed to directing a safe response to outage and 911
28 emergency calls, while minimizing response time and outage duration.

29 **Monthly Data:** See Attachment A at the end of this report.

Metric 4: Fire Ignitions

Metric Name and Description: Fire Ignitions – The number of

powerline-involved fire incidents annually reportable to the California Public Utilities Commission (CPUC) per D.14-02-015. A reportable event is any event where utility facilities are associated with the following conditions:

- A self-propagating fire of material other than electrical and/or communication facilities, and
- The resulting fire traveled greater than one linear meter from the ignition point,⁵ and
- The utility has knowledge that the fire occurred.⁶

Risks: Overhead Conductor, Wildfire, Public Safety, Worker Safety, Catastrophic Event Preparedness⁷

Category: Electric

Units: Count of number of fire ignition incidents

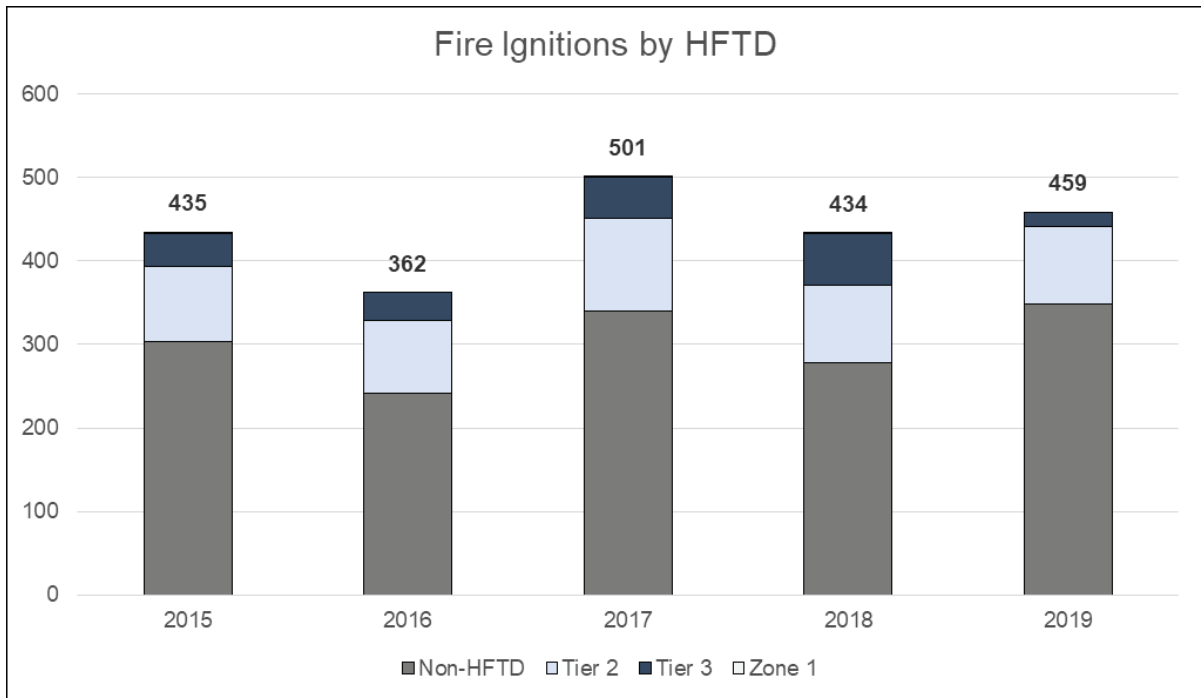
⁵ Per D.14-02-015, Appendix C at p. C-3.: Ignition Point is the location, excluding utilities facilities, where a rapid, exothermic reaction was initiated that propagated and caused the material involved to undergo change, producing temperatures greatly in excess of ambient temperature.

⁶ D.14-02-015, Appendix C at p. C-3.

⁷ The 2019 Enterprise Risk Register now has the following risks: (1) Wildfire, (2) Failure of Electric Distribution Overhead Assets, (3) Third Party Incident, (4) Employee Safety Incident, (5) Contractor Safety Incident, and (6) Emergency Preparedness and Response to Catastrophic Events. Overhead Conductor no longer exists as a separate risk.

1 **Summary:**

**FIGURE 5-4
FIRE IGNITION METRIC DATA (ANNUAL)**



Fire Ignitions by HFTD

HFTD	2015	2016	2017	2018	2019
non-HFTD	303	242	340	278	349
Tier 2	90	87	112	93	92
Tier 3	40	33	48	62	18
Zone 1	2		1	1	
Total	435	362	501	434	459

2 **Narrative Context:** A primary metric used to evaluate PG&E’s commitment to
 3 public safety is Reportable Fire Ignitions. This metric tracks the number of
 4 electrically involved fire ignitions with the conditions that meet the CPUC
 5 definition in D.14-02-015 within PG&E’s service territory. The data is collected
 6 from multiple sources:

- 7 • The Field Applications System provides ignition information from Distribution
 8 Troublemakers as they respond to Field Orders. When a Troublemaker arrives
 9 at an incident location and identifies signs that an ignition occurred, the
 10 Troublemaker selects “Yes” in the “Fire Incident” field of their data entry
 11 device. This then opens an “Ignitions” tab where the Troublemaker enters

1 information related to the ignition, including the fire location, suppressing
2 agency information, whether media is on site, if the fire was extinguished,
3 equipment ID numbers, weather, facility impacted, estimated wind, event
4 element, fire size, type of construction, and evidence collected. The
5 Troubleman has an option to attach pictures and other documents to the
6 Field Order. This information is received by the Electric Incident
7 Investigations (EII) team who quality check (QC) and further investigate the
8 ignitions.

- 9 • The Transmission Outage Tracking and Logging system provides
10 information about any planned or unplanned outages on Transmission and
11 Substation assets. This system indicates if an ignition resulted from an
12 unplanned transmission system outage or interruption. The information is
13 logged by the Grid Control Operators. The interruptions resulting in an
14 ignition are sent to EII who QC and further investigate the ignitions.
- 15 • The ILIS/OIS systems contain information related to outages and switching
16 to restore customers that were de-energized due to an equipment failure or
17 electric incident. This information applies only to ignitions that result in an
18 outage and contains information about the fault, potential causes of the fault,
19 location and circuit information, customers affected by the outage, and steps
20 and times to restore power to affected customers.
- 21 • The information received from these systems goes through a thorough
22 review process. This process will ensure that all required information for an
23 event is received shortly after the event has occurred, and also ensures the
24 ignition data is complete and accurate. The information is received by the
25 EII Metrics team and entered into the Fire Ignition Tracker. Once the
26 information is input, an initial quality control check is performed by EII
27 Metrics to verify the fire location, High Fire Threat District (HFTD), event
28 element, suspected initiating cause and other fields. Ignitions that require
29 more scrutiny are investigated by the EII and Data Gathering teams. The
30 incident investigations include a QC of data sources, communications with
31 Troublemens and responding fire agency incident leads, requests for failure
32 analyses, acquiring all relevant reports, and creating executive summaries
33 to communicate findings. The reviewed information is then sent back to the
34 EII Metrics team where the Fire Ignitions Tracker is updated with the QC'd

information. The data is also sent to the appropriate Asset Family Owners to help those teams identify and address failure trends and align mitigation strategies with areas of risk. This data is also utilized to inform the wildfire risk model.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives?

No, the Fire Ignitions metric was not used to determine incentives for the years 2010-2019.

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

Yes, the Fire Ignitions metric for ignitions within PG&E's HFTD areas is linked to the 2019 individual performance goals for one or more director level position or higher.

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

In 2019, the following positions include individual goals that are linked to this metric for ignitions within PG&E's HFTD areas:

- Director Electric Operations (1)
- VP Electric Operations (1)

Bias Controls: The EII team has an ignition review process to ensure that all required information for an event is received shortly after the event occurred, is complete, and is accurate. The EII Metrics team updates the Fire Ignitions Tracker by doing the following:

- Inputs data from the various data sources into tracker;
- Performs initial QC to verify the fire Lat/Long, HFTD, Event Element, and Suspected Initiating Cause;
- Identifies any ignitions that require further investigation;
- Once the information is added to the tracker and the initial review is complete, the EII team performs an in-depth QC and an investigation when necessary by doing the following:
 - Reviews information received from data sources for accuracy;
 - Confirms or revises the initial assessment made by the EII Metrics team;

- 1 – Reaches out to Troublemakers and/or responding fire agencies as
- 2 necessary;
- 3 – Creates an executive summary for each reportable ignition that is
- 4 determined to be attributable to PG&E; and
- 5 • This information is then sent to the EII Metrics team to update the master
- 6 Fire Ignitions Tracker.

7 **Rate Case Safety Goal Progress:** While this metric was not a stated safety
8 goal in the 2017 GRC, PG&E tracks the number of fires (ignitions) as one of its
9 key performance measures. PG&E's 2017 GRC testimony discussed planned
10 work to mitigate the risk of wildfires, and indicated that the controls for this risk
11 will likely require strengthening in the future due to the increasing severity of
12 drought conditions, the size of PG&E's electric system, and the quantity and
13 diversity of trees in the Company's service territory.

14 **Monthly Data:** See Attachment A at the end of his report.

1 **Metric 5: Gas Dig-In**

2 **Metric Name and Description:** Gas Dig-In – The number of third-party gas
3 dig-ins per 1,000 Underground Service Alert (USA) tags/tickets received for gas.
4 The ticket count excludes fiber and electric tickets. A gas dig-in refers to any
5 damage (impact or exposure) that results in a repair or replacement of
6 underground gas facilities as a result of an excavation. A third-party dig-in is
7 damage caused by someone other than the utility or a utility contractor.

8 The Company participates in a one-call “811” public service program
9 administered by USA. USA provides the Company notification of activities that
10 could be damaging to the Company’s gas pipelines. These notifications are
11 referred to as USA tickets. A ticket is the receipt of information by the Company
12 from USA regarding onsite meetings, project designs, or a planned excavation.
13 The ticket component of this metric includes PG&E gas tickets received from all
14 parties (i.e., first-, second-, and third-parties).

15 **Risks:** Transmission Pipeline Failure – Rupture with Ignition and Distribution
16 Pipeline Rupture with Ignition (non-Cross Bore)⁸

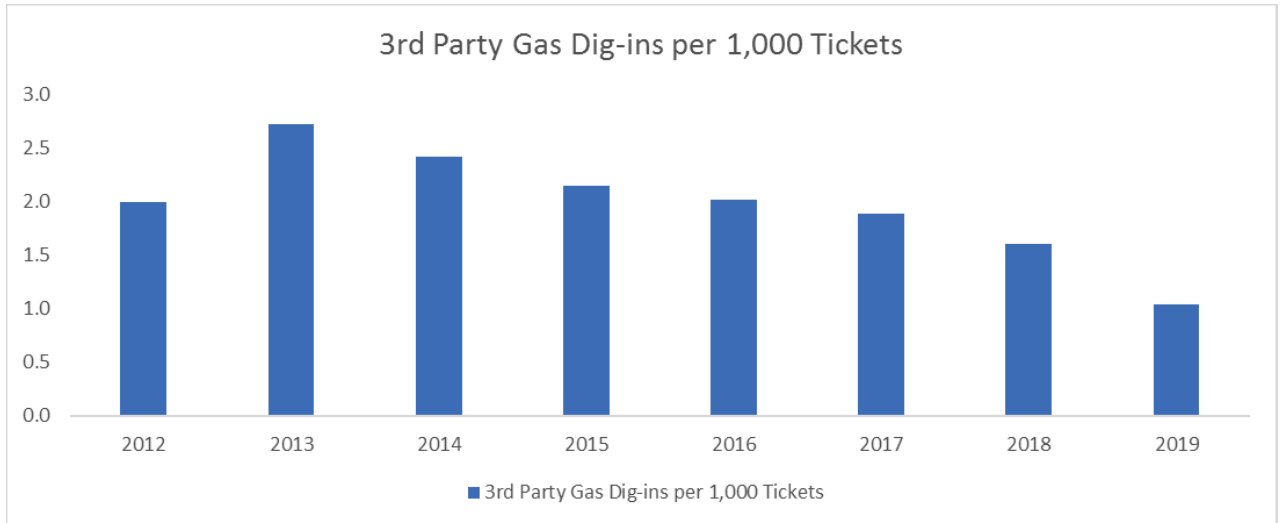
17 **Category:** Gas

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

8 In the 2019 Enterprise Risk Register, these risks are now called (1) Loss of Containment on Gas Transmission Pipeline and (2) Loss of Containment on Gas Distribution Main or Service.

1 **Summary:**

**FIGURE 5-5
THIRD-PARTY DIG-INS PER 1,000 TICKETS (ANNUAL)**



2 **Narrative Context:** There has been a downward trend in the number of dig-ins
3 per 1,000 USA tickets since 2014. At the same time, the number of USA tickets
4 has increased. From 2014-2019, PG&E experienced a 131 percent increase in
5 USA tickets. With the increase in USA tickets received between 2014-2017 the
6 dig-in count climbed, peaking in 2017, with 1,780 dig-ins and then began a
7 steady decline to 1,619 dig-ins in 2019. PG&E attributes the reduction in the
8 number of dig-ins per 1,000 USA tickets to PG&E's increase in Damage
9 Prevention activities.

10 To continuously focus on improving performance, metric results are reported
11 monthly and reviewed at leadership meetings and weekly huddles to discuss
12 results and take action as needed.

13 **Is Metric Used for the Purposes of Determining Executive (Director Level
14 or Higher) Compensation Levels and/or Incentives?**

15 The metric was used as a STIP metric for the years 2014-2018.

16 **Is Metric Linked to the Determination of Individual or Group Performance
17 Goals?**

18 Yes, the gas dig-in metric is linked to 2019 individual performance goals for
19 one or more Director level-position or higher.

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

2 In 2019, the following position(s) include individual goals that are linked to
3 this metric:

- 4 – Director Gas Operations (1)
- 5 – VP Gas Operations (1)

6 **Bias Controls:** All dig-ins are reviewed by the Damage Prevention team to
7 determine appropriate delineation of first-party, second-party or third-party
8 dig-in. Total USA tickets are determined by the California one-call system,
9 independent to PG&E.

10 The metric definition for this metric including targets, target setting
11 methodology, and exclusions, is documented and approved by Gas Leadership.
12 Metric results are reported monthly by the Gas Ops Governance, Controls and
13 Metrics team and reviewed at leadership meetings and huddles to discuss
14 performance and take action as needed. In the event that there is a resulting
15 need for additional budget or other resources, approval must be obtained from
16 the Gas Senior Leadership team at the Work, Finance and Resource Committee
17 meeting.

18 During the years that this metric was a STIP metric, on a quarterly basis a
19 supporting documentation package was prepared by the Damage Prevention
20 team, reviewed by the Governance, Controls and Metrics team, and then routed
21 for Gas Senior Leadership approval. The quarterly support packages were also
22 reviewed quarterly by Compensation and Internal Audit.

23 **Rate Case Safety Goal Progress:** This metric supports and reflects progress
24 in PG&E's safety goal of dig-in prevention for the safety of both PG&E
25 contractors and the public at large by reduced dig-ins per 1,000 tickets.⁹
26 Specific Locate and Mark Program¹⁰ dig-in prevention initiatives included in the
27 2017 GRC were: (1) providing certification to the contracting community on
28 dig-in prevention (the Gold Shovel Program), (2) improving the time it takes for
29 Locate and Mark activities from the receipt of the USA ticket to the completion of

9 See 2017 GRC (1) Exhibit (PG&E-2), Chapter 2, p. 2-11 and p. 2-AtchA-1;
and (2) Exhibit (PG&E-3), Chapter 6A, pp. 6A-8 through 6A-10.

10 PG&E's Locate and Mark Program prevents excavations from causing damage to
PG&E's underground gas transmission and distribution facilities.

1 the required Locate and Mark activities, and (3) improving public awareness by
2 sending bill inserts in the mail, making education links available on e-mail bill
3 pay, sending separate mailers, running ads in newspapers and the radio, and
4 conducting companywide campaigns for Call 811 Before You Dig.

5 PG&E's transmission-related Locate and Mark activities are discussed in
6 the 2019 Gas Transmission and Storage (GT&S) Rate Case.¹¹ Additionally,
7 PG&E describes its goal to maintain a "Line of Sight" for all pipeline markers in
8 the GT&S Rate Case.¹² Pipeline markers are effective for preventing dig-ins or
9 accidental damage of PG&E assets.

10 **Monthly Data:** See Attachment A at the end of this report.

¹¹ See 2019 GT&S Rate Case Prepared Testimony, Volume 1, Chapter 9, pp. 9-12 through 9-15.

¹² See 2019 GT&S Rate Case Prepared Testimony, Volume 1, Chapter 9, p. 9-29.

1 **Metric 6: Gas ILI**

2 **Metric Name and Description:** Gas ILI – Total miles of transmission pipe
3 inspected by ILI. This metric measures PG&E’s completed planned Traditional
4 ILI, including activities that exceed current code requirements. After the pipeline
5 is upgraded to accommodate a traditional ILI tool, cleaning and inspections are
6 conducted to collect data about the pipe. This data is analyzed for pipeline
7 anomalies that must be remediated through the Direct Examination and Repair
8 process where the anomaly is exposed, examined and repaired as necessary.
9 The information from Direct Examination and Repair is used to generate
10 additional prevention/mitigation activities to improve the long-term safety and
11 reliability of the pipeline.

12 **Risks:** Catastrophic Damage Involving High-Pressure Pipeline Failure¹³

13 **Category:** Gas

14 **Units:** Metric is reported in two ways: (1) miles of pipeline inspected, and
15 (2) total number of inspections scheduled/total number of targeted inspections.

16 **Summary:**

**FIGURE 5-6
MILES OF PIPELINE INSPECTED (ANNUAL)**



¹³ In the 2019 Enterprise Risk Register, these risks are now called Loss of Containment on Gas Transmission Pipeline.

Narrative Context: Total miles of pipeline in-line inspected with traditional ILI tools vary by year and are correlated with miles of pipeline upgraded and required re-inspection miles. D.11-06-017, as codified by Public Utilities Code (Pub. Util. Code) Section 958, requires natural gas transmission pipelines in California to be capable of ILIs, where warranted. In addition, both Title 49 of the Code of Federal Regulations – Transportation (49 CFR) Part 192, Subpart O, and PG&E’s traditional ILI Program procedures requires reassessments, which drive the required ILI re-inspection miles in a given year. Further, ILI is the most reliable pipeline integrity assessment tool currently available to natural gas pipeline operators to assess the internal and external condition of transmission line pipe. Accordingly, PG&E plans to perform traditional ILIs on approximately 65 percent of its transmission pipeline system by the end of 2027.

To continuously focus on improving performance, metric results are reported monthly and reviewed at leadership meetings and weekly huddles to discuss results and take action as needed.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives?

The metric or a subset of this metric was used as a STIP metric for the years 2015-2019.

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

First Time ILIs (a subset of the ILI metric) was included in the 2019 STIP metrics for all eligible employees.

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

First Time ILIs (a subset of the ILI metric) was included in the 2019 STIP metrics for all eligible employees.

Bias Controls: Metric results are reported monthly by the Gas Ops Governance Controls and Metrics team and reviewed at leadership meetings and huddles to discuss performance and take action. In the event that there is a resulting need for additional budget or resources, approval must be obtained

1 from the Gas Senior Leadership team at the Work, Finance and Resource
2 Committee meeting.

3 During the years that this was a STIP metric, on a quarterly basis the Gas
4 Ops Governance, Controls and Metrics team worked to confirm ILI projects and
5 mileage with various stakeholders. Mileage and unit capture dates from the
6 P6 scheduling database were verified by the Gas Ops Governance, Controls
7 and Metrics team to ensure consistency with the Assessment Completion
8 Notification form, which is signed by the ILI engineering Supervisor or Manager.
9 A supporting documentation package for metric results was prepared quarterly
10 by the Governance, Controls and Metrics team, then routed for Gas Senior
11 Leadership approval. The support packages were also reviewed each quarter
12 by Compensation and Internal Audit.

13 **Rate Case Safety Goal Progress:** This safety metric does not support a 2017
14 GRC safety goal given this metric is a gas transmission, not distribution, related
15 metric. Although the 2019 GT&S Rate Case testimony did not provide a specific
16 ILI inspection metric, the testimony supports this metric.¹⁴ PG&E's ILI Program
17 is intended to bring the total first time ILI miles to approximately 3,109 miles by
18 the end of 2021, approximately 47 percent of PG&E's system in addition to
19 performing re-inspections on approximately 1,000 miles over the 2019-2021
20 period.

21 **Monthly Data:** See Attachment A at the end of this report.

¹⁴ See 2019 GT&S Prepared Testimony, Chapter 5, pp. 5-20 through 5-31.

1 **Metric 7: Gas in-Line Upgrade**

2 **Metric Name and Description:** Gas in-line Upgrade – Miles upgraded. This
3 metric measures the number of miles of complete planned Traditional ILI
4 Upgrade projects, including activities that exceed current code requirements.
5 Prior to running a Traditional ILI tool in a pipeline, a pipeline must be modified
6 with portals called “launchers” and “receivers,” and pipeline features that would
7 obstruct the passage of the tool to make the pipeline piggable must be replaced.

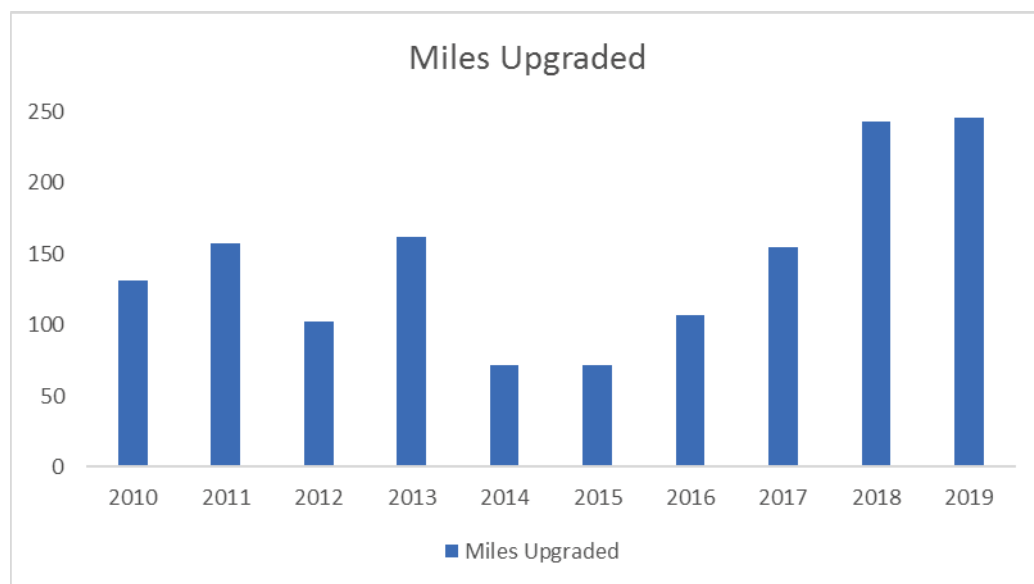
8 **Risks:** Failure – Loss of containment¹⁵

9 **Category:** Gas

10 **Units:** Miles

11 **Summary:**

FIGURE 5-7
MILES OF PIPELINE UPGRADED (ANNUAL)



12 **Narrative Context:** Annual Traditional ILI upgrade mileage totals have
13 increased in the last few years. D.11-06-017, as codified by Pub. Util.
14 Section 958, requires natural gas transmission pipelines in California be capable
15 of ILIs, where warranted. ILI is the most reliable pipeline integrity assessment

¹⁵ In the 2019 Enterprise Risk Register, this risk is now called Loss of Containment on Transmission Pipeline.

1 tool currently available to natural gas pipeline operators to assess the internal
2 and external condition of transmission line pipe.

3 There are three major phases to an ILI Program. This metric is to track
4 progress on the first phase, which involves modifying or upgrading the existing
5 pipeline system to accommodate a traditional ILI tool. PG&E refers to this as
6 “Traditional ILI Upgrades,” which involve capital improvements to make the
7 pipelines piggable. It includes installing pig launchers and receivers in
8 appropriate locations to introduce and remove the cleaning and ILI tools from the
9 inside of the pipeline. It also includes replacing certain segments of pipe,
10 valves, fittings or other appurtenances that, if left in the system, would obstruct
11 the movement of the tool through the pipeline.¹⁶ As part of the upgrade, there is
12 also a geometry tool run to verify that all obstructions have been fully removed
13 from the pipe.

14 While the metric for this program is “miles upgraded,” the miles targeted for
15 a given year may vary greatly. The amount of work associated with Traditional
16 ILI Upgrades is based on projects and is not directly related to miles. This is the
17 reason that PG&E’s 2019 GT&S Rate Case forecast for the Traditional ILI
18 Upgrade Program was based on a cost per project basis and did not use the
19 length of projects as a forecasting basis. A Traditional ILI upgrade project
20 includes installing pig launchers and receivers in appropriate locations to
21 introduce and remove the cleaning and ILI tools from the inside of the pipeline.
22 It also includes replacing certain segments of pipe, valves, fittings or other
23 appurtenances that, if left in the system, would obstruct the movement of the tool
24 through the pipeline. This means that similar amounts of work could be required
25 whether a section of pipe to be made piggable is 10 miles or 100 miles. It is
26 reasonable, however, to track miles upgraded as a way to track progress toward
27 reaching the Traditional ILI upgrade goal.

28 To continuously focus on improving performance, metric results are reported
29 monthly and reviewed at leadership meetings and weekly huddles to discuss
30 results and take action as needed.

¹⁶ For instance, it involves replacing reduced port valves and other obstructions, such as drip tubes, miter bends, short-radius elbows, and unbarred tees from the pipeline.

1 **Is Metric Used for the Purposes of Determining Executive (Director Level**
2 **or Higher) Compensation Levels and/or Incentives?**

3 The metric was used as a STIP metric for the years 2015-2018.

4 **Is Metric Linked to the Determination of Individual or Group Performance**
5 **Goals?**

6 Yes, the Gas In-Line Upgrade metric is linked to 2019 individual
7 performance goals for one or more Director-level position or higher.

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

9 In 2019, the following position(s) include individual goals that are linked to
10 the Gas In Line metric:

- 11 – Director Gas Operations (2)

12 **Bias Controls:** Monitoring controls exist for this metric. Metric results are
13 reported monthly by the Gas Ops Governance Controls and Metrics team and
14 reviewed at leadership meetings and huddles to discuss performance and take
15 action. In the event that there is a resulting need for additional dollars or
16 resources, approval must be obtained from the Gas Senior Leadership team at
17 the Work, Finance and Resource Committee meeting.

18 During the years that this metric was a STIP metric, on a quarterly basis the
19 Gas Ops Governance, Controls and Metrics team worked to confirm ILI projects
20 and mileage with various stakeholders. Mileage and unit capture dates from the
21 P6 scheduling database were verified by the Gas Ops Governance, Controls
22 and Metrics to ensure consistency with SAP and Engineering records. A
23 supporting documentation package for metric results was prepared quarterly by
24 the Governance, Controls and Metrics team, then routed to Gas Senior
25 Leadership approval. The support packages were also reviewed quarterly by
26 Compensation and Internal Audit.

27 **Rate Case Safety Goal Progress:** This safety metric does not support a 2017
28 GRC safety goal given this metric is a gas transmission, not distribution, related
29 metric. PG&E's ILI Upgrade Program was included in PG&E's 2019 GT&S Rate
30 Case testimony. PG&E plans to upgrade its transmission pipeline to
31 accommodate Traditional ILI tools on approximately 65 percent of its
32 transmission pipeline system by the end of 2026.

1 **Monthly Data:** See Attachment A at the end of this report.

Metric 8: Shut In The Gas Average Time – Mains

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

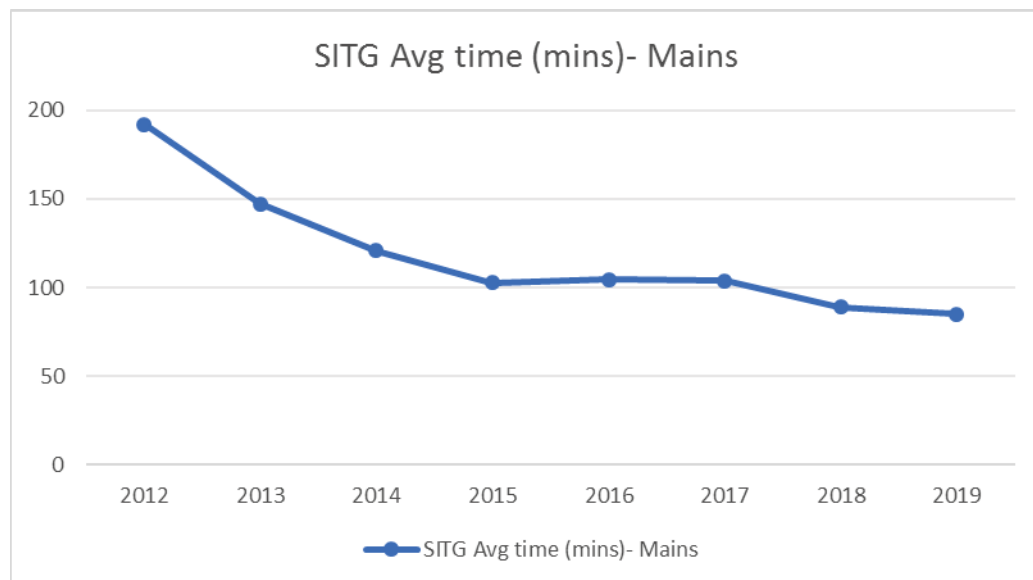
Risks: Distribution Pipeline Rupture with Ignition (non-Cross Bore)¹⁷

Category: Gas

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

Summary:

FIGURE 5-8
SHUT IN THE GAS AVG TIME METRIC DATA (ANNUAL)



¹⁷ In the 2019 Enterprise Risk Register, this risk is now called Loss of containment on Gas Distribution Main or Service.

Narrative Context: This metric measures the number of minutes required for a qualified PG&E responder to arrive onsite and stop the flow of gas as result of damages impacting gas mains from PG&E's distribution network.

In 2012, PG&E began to measure the time required for resources to respond to and make safe instances of blowing gas on distribution mains. Specifically measured are distribution events relating to dig-ins, vehicle impacts, explosions, material failures and pipe ruptures. In 2012, on average it required 192 minutes to respond to and make safe events involving distribution mains. From 2012-2019, that time has been reduced by 56 percent from 192 minutes to 85.13 minutes.

Metric results have improved and have been achieved through the following process improvements implemented during the past 8 years:

- Enhanced plastic squeeze capability from approximately 50 percent to all Gas Service Representatives (GSR) < 1.5" plastic pipe
- Provide yearly plastic squeeze training for all Field Service employees
- Purchased and implemented emergency trailers in every division, allowing for emergency equipment to be accessed quickly and easily
- Purchased additional steel squeezers for 2-8" steel pipe (housed on emergency trailers)
- Implemented Emergency Management tool to alert maintenance and construction (M&C) of SITG events when notified by third-party emergency organizations
- Established concurrent response protocol (dispatch M&C and Field Service resources) when notified by emergency agencies
- Implemented 30-60-90-120+ minute communication protocols between Gas Distribution Control Center (GDCC) and Incident Commander (IC) to ensure consistent communication and issue escalation during events
- Tier 3 incident review meetings monthly to share best practices and review long duration events

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives?

No, the Shut in the Gas Average time metric was not used to determine incentives for the years 2010-2019.

1 **Is Metric Linked to the Determination of Individual or Group Performance**
2 **Goals?**

3 No, the Shut in the Gas Average Time – mains metric is not linked to
4 Individual performance goals in 2019.

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

6 No, the Shut in the Gas Average Time – mains metric was not linked to
7 individual performance goals in 2019.

8 **Bias Controls:** Dispatch incidents are logged and tracked in the EM tool
9 database. The most current system (administered through Dynamic 365, which
10 was implemented in 2018) automatically generates a change log for every
11 notification down to the field by field basis to ensure system controls and
12 retention of record history. The data is reviewed by the process team to ensure
13 accuracy.

14 The metric definition for this metric including targets, target setting
15 methodology, and exclusions, are documented and approved by Gas
16 Leadership. Metric results are reported monthly by the Gas Ops Governance
17 Controls and Metrics team and reviewed at leadership meetings and huddles to
18 discuss performance and take action. In the event that there is a resulting need
19 for additional dollars or resources, approval must be obtained from the Gas
20 Senior Leadership team at the Work, Finance and Resource Committee
21 meeting.

22 **Rate Case Safety Goal Progress:** Yes, this metric (improving the average time
23 required for PG&E to stop the flow of gas during incidents) supports the 2017
24 GRC safety goal of reducing the response time to gas odor calls.¹⁸ The metric
25 also supports PG&E's goal to reach the top quartile with response time and
26 achieving the 2014 average response time of 21 minutes to all odor-related calls
27 through the hiring of additional GSRs.¹⁹

28 **Monthly Data:** See Attachment A at the end of this report.

¹⁸ See 2017 GRC Exhibit (PG&E-3), pp. 7-1, 7-8 through 7-10, and 7-24.

¹⁹ See 2017 GRC Exhibit (PG&E-3), p. 1-16 and p. 6A-18.

Metric 9: Shut In The Gas Average Time – Services

Metric Name and Description: Shut In The Gas Average Time – Services –

The average time (measured in minutes) that a GSR or qualified first responder (Gas Crew, Leak Surveyor, etc.) takes to respond and stop gas flow during incidents involving services. The timing for the response starts when the utility first receives the report and ends when the utility's qualified representative determines, per the utility's emergency standards, that the reported leak is not hazardous or the utility's representative completes actions to mitigate a hazardous leak and render it as being non-hazardous (i.e., by shutting-off gas supply, eliminating subsurface leak migration, repair, etc.) per the utility's standards.

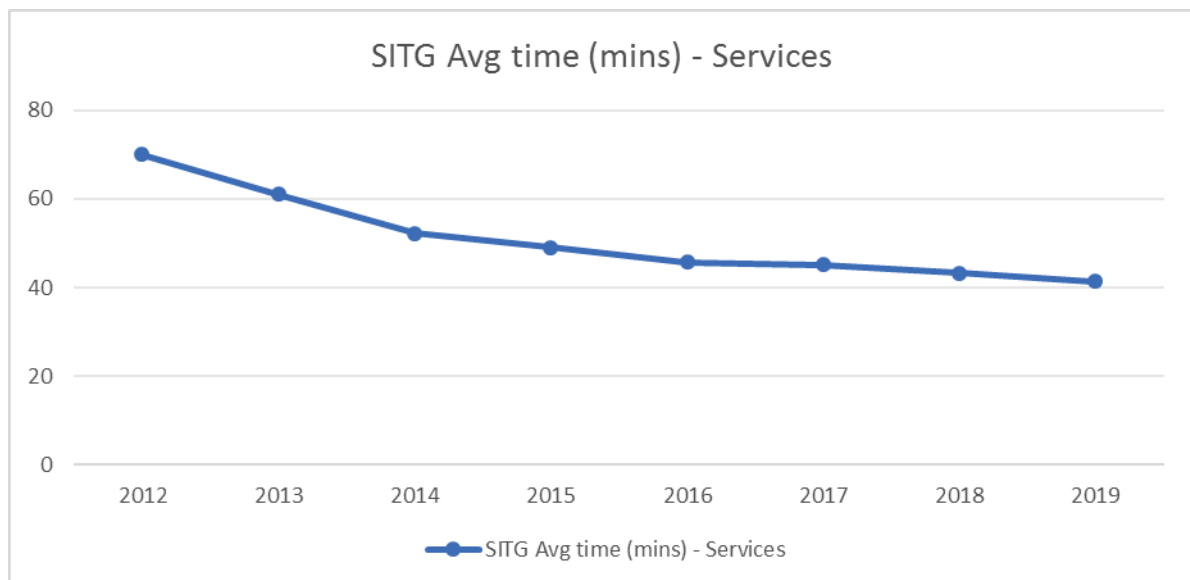
Risks: Distribution Pipeline Rupture with Ignition (non-Cross Bore)²⁰

Category: Gas

Units: Average (median) response time in minutes

Summary:

FIGURE 5-9
SITG AVG TIME METRIC DATA (ANNUAL)



²⁰ In the 2019 Enterprise Risk Register, this risk is now called Loss of Containment Distribution Main or Service.

Narrative Context: In 2012, PG&E began to measure the time required to respond to and make safe instances of blowing gas on distribution services. Specifically measured are distribution events relating to dig-ins, vehicle impacts, explosions, material failures and pipe ruptures. In 2012, on average it required 70 minutes to respond to and make safe events involving distribution services. From 2012-2019, that required time has been reduced by 41 percent from 70 minutes down to 41.4 minutes in 2019. Metric results have improved and have been achieved through the following process improvements implemented during the past 8 years:

- Enhanced plastic squeeze capability from ~50 percent to all GSRs < 1.5" plastic pipe
- Provide yearly plastic squeeze training for all Field Service employees
- Purchased and implemented emergency trailers in every division, allowing for emergency equipment to be accessed quickly and easily
- Purchased additional steel squeezers for 2-8" steel pipe (housed on emergency trailers)
- Implemented Emergency Management tool to alert M&C of SITG events when notified by third-party emergency organizations
- Established concurrent response protocol (dispatch M&C and Field Service resources) when notified by emergency agencies
- Implemented 30-60-90-120+ minute communication protocols between GDCC and IC to ensure consistent communication and issue escalation during events
- Tier 3 incident review meetings monthly to share best practices and review long duration events

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives?

No the Shut in the Gas Average time metric was not used to determine compensation levels or incentives for the years 2010-2019.

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

No, the Shut in the Gas Average Time metric was not linked to individual performance goals in 2019.

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

2 No, the Shut in the Gas Average Time metric was not linked to individual
3 performance goals in 2019.

4 **Bias Controls:** Dispatch incidents are logged and tracked in the EM tool
5 database. The most current system (administered through Dynamic 365 which
6 was implemented in 2018) automatically generates a change log for every
7 notification down to the field by field basis to ensure system controls and
8 retention of record history. The data is reviewed by the process team to ensure
9 accuracy.

- 10 • Monitoring controls also exist for this metric. The metric definition for this
11 metric including targets, target setting methodology, and exclusions, are
12 documented and approved by Gas Leadership. Metric results are reported
13 monthly by the Gas Ops Governance Controls and Metrics team and
14 reviewed at leadership meetings and huddles to discuss performance and
15 take action. In the event that there is a resulting need for additional budget
16 or resources, approval must be obtained from the Gas Senior Leadership
17 team at the Work, Finance and Resource Committee meeting.

18 **Rate Case Safety Goal Progress:** Yes, this metric (improving the average time
19 required for PG&E to stop the flow of gas during incidents) supports the 2017
20 GRC safety goal of reducing the response time to gas odor calls.²¹ The metric
21 also supports PG&E's goal to reach the top quartile with response time and
22 achieving the 2014 average response time of 21 minutes to all odor-related calls
23 through the hiring of additional GSRs.²²

24 **Monthly Data:** See Attachment A at the end of this report.

²¹ See 2017 GRC Exhibit (PG&E-3), pp. 7-1, 7-8 through 7-10, and 7-24.

²² See 2017 GRC Exhibit (PG&E-3), p. 1-16 and p. 6A-18.

1 **Metric 10: Cross Bore Intrusions**

2 **Metric Name and Description:** Cross Bore Intrusions – Cross bore intrusions
3 found per 1,000 inspections

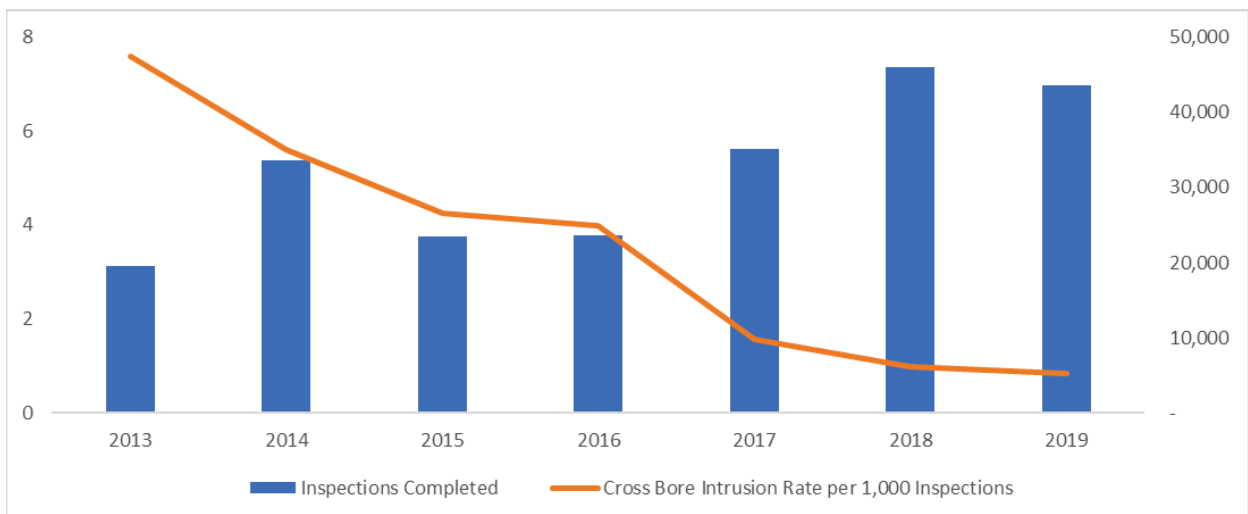
4 **Risks:** Catastrophic Damage Involving Pipeline Failure²³
5 Loss of Containment on Gas Distribution Main or Service

6 **Category:** Gas

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

8 **Summary:**

FIGURE 5-10
CROSS BORE INTRUSIONS PER 1,000 INSPECTIONS (ANNUAL)



9 **Narrative Context:** The Cross Bore Intrusion metric measures the number of
10 cross bores found per 1,000 inspections. A cross bore refers to a gas main or
11 service that has been installed unintentionally, using trenchless technology,
12 through a wastewater or storm drain system. Inspections refer to inspection of
13 potential conflict locations and repair occurrences of cross bore discoveries in
14 any location within PG&E territory. Cross bores pose a risk as they can result in
15 a gas leak into the sewer system if damaged during mechanical sewer cleaning
16 operations which may result in loss of containment and potential migration and

²³ In the 2019 Enterprise Risk Register, this risk is now called Loss of Containment on Gas Distribution Main or Service.

1 ignition of gas. The risk is mitigated by repairing the cross bore after finding it by
2 inspection.

3 To continuously focus on improving performance, the number of cross bore
4 inspections are measured. Corresponding metric results are reported monthly
5 and reviewed at leadership meetings and weekly huddles to discuss results and
6 take action as needed.

7 **Is Metric Used for the Purposes of Determining Executive (Director Level**
8 **or Higher) Compensation Levels and/or Incentives?**

9 No the Cross Bore Intrusion metric was not used to determine incentives for
10 the years 2010-2019.

11 **Is Metric Linked to the Determination of Individual or Group Performance**
12 **Goals?**

13 No, the Cross Bore Intrusion metric was not linked to individual performance
14 goals in 2019

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

16 No, the Cross Bore Intrusion metric was not linked to individual performance
17 goals in 2019

18 **Bias Controls:** Cross bore inspections are logged and tracked within SAP as
19 work is complete based on clerical updates from the field. A validation is
20 conducted by the Distribution Operations team to ensure units and work type are
21 correctly coded (inspection vs. repair) within the database. Cross bores found
22 are logged by the field and tracked by the Cross Bore Program management
23 team. When a potential cross bore intrusion is located, field personnel will
24 contact the Cross Bore Program management team and will also call PGE-5000.
25 This triggers a response for a GSR and Locate and Mark operator to help
26 validate the intrusion.

27 **Rate Case Safety Goal Progress:** This safety metric does support the
28 importance and progress of the 2017 GRC goal to increase the number of
29 inspections to identify and resolve cross bores in sewers.²⁴

²⁴ See 2017 GRC Exhibit (PG&E-3), pp. 1-6, 3-17, 4-5, 4-15 through 4-16, and 4-28.

1 **Monthly Data:** See Attachment A at the end of this report.

Metric 11: Gas Emergency Response

Metric Name and Description: Gas Emergency Response – The average time that a GSR or a qualified first responder takes to respond after receiving a call which results in an emergency order.

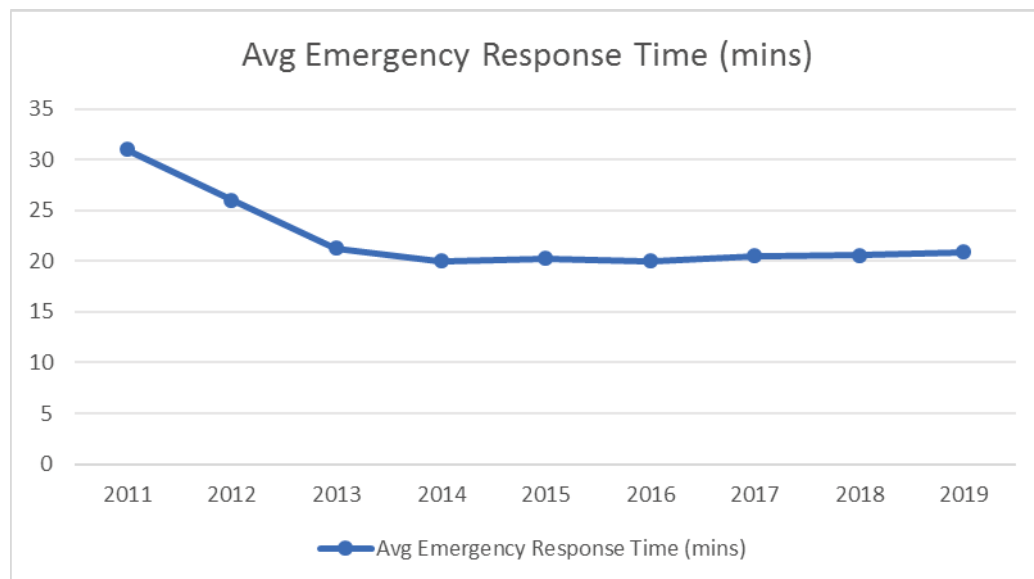
Risks: Distribution Pipeline Rupture with Ignition²⁵

Category: Gas

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

Summary:

**FIGURE 5-11
AVERAGE EMERGENCY RESPONSE TIME (ANNUAL)**



Narrative Context: The average response time is measured from the time PG&E is notified of the gas emergency order/immediate response (IR) until a GSR or a qualified first responder arrives onsite to the emergency location

²⁵ In the 2019 Enterprise Risk Register, this risk is now called Loss of Containment on Gas Distribution Main or Service.

(Including Business Hours and After Hours). The total response time divided by total gas emergency orders.

PG&E has maintained steady performance for the last several years. To continuously focus on improving performance, metric results are reported monthly and reviewed at leadership meetings and weekly huddles to discuss results and take action as needed.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives?

Yes, the metric was used as a STIP metric for the years 2011-2017.

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

Yes, the Gas Emergency response metric was linked to 2019 individual performance goals for one or more Director-level position or higher.

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

In 2019, the following position(s) include individual goals that are linked to this metric:

- Senior Director Gas Operations (1)
- VP Gas Operations (1)

Bias Controls: All response times to emergency calls are reviewed by the IR team to determine appropriate exclusions, and the average response time is calculated. Response times are captured electronically using PG&E's Field Automation System and are verified on a sample basis.

Monitoring controls also exist for this metric. The metric definition for this metric including targets, target setting methodology, and exclusions, are documented and approved by Gas Leadership. Metric results are reported monthly by the Gas Ops Governance Controls and Metrics team and reviewed at leadership meetings and huddles to discuss performance and take action. In the event that there is a resulting need for additional dollars or resources, approval must be obtained from the Gas Senior Leadership team at the Work, Finance and Resource Committee meeting.

On a quarterly basis, a report package is prepared by the IR team, reviewed by the Governance, Controls and Metrics team, then routed for Gas Senior

1 Leadership approval. The report package is also reviewed quarterly by
2 Compensation and Internal Audit.

3 **Rate Case Safety Goal Progress:** In the 2017 GRC, this metric (improving the
4 average time that a GSR or a qualified first responder takes to respond after
5 receiving a call which results in an emergency order) supports 2017 GRC safety
6 goals of reducing the response time to gas odor calls and improving response
7 capabilities with the increase in new valve installations.²⁶ The metric also
8 supports PG&E's goal to reach the top quartile with response time and achieving
9 the 2014 average response time of 21 minutes to all odor-related calls through
10 the hiring of additional GSRs.²⁷

11 **Monthly Data:** See Attachment A at the end of this report.

²⁶ See 2017 GRC Exhibit (PG&E-3), p. 4-7 and p. 4-38.

²⁷ See 2017 GRC Exhibit (PG&E-3), p. 1-16 and p. 6A-18.

1 **Metric 12: Natural Gas Storage Baseline Inspections Performed**

2 **Metric Name and Description:** Natural Gas Storage Baseline Inspections
3 Performed – Tracks the progress of completing baseline and reassessment
4 inspections that were expected to be completed within a given year.

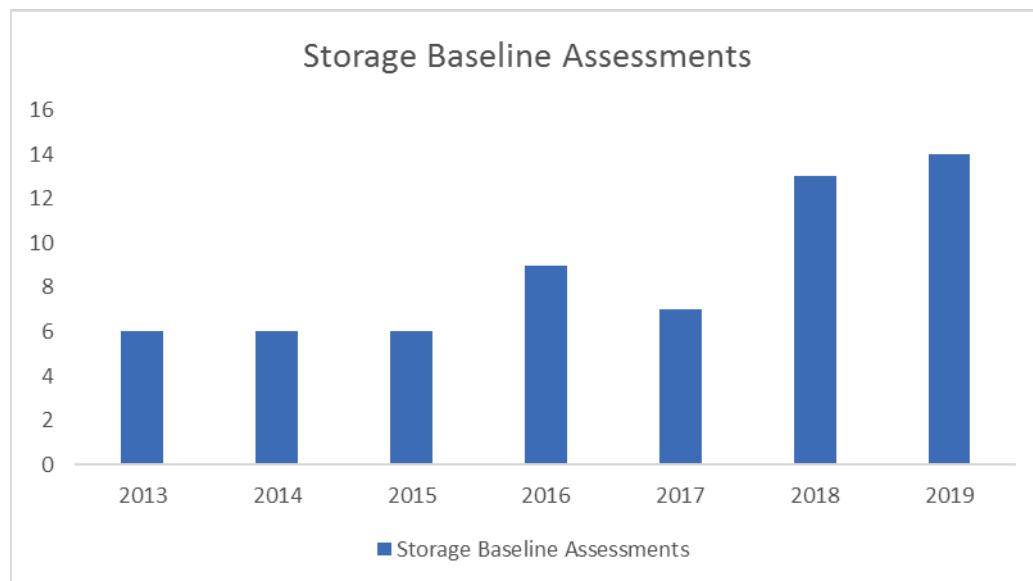
5 **Risks:** Gas Storage²⁸

6 **Category:** Gas

7 **Units:** Number of Inspections

8 **Summary:**

FIGURE 5-12
STORAGE BASELINE WELL ASSESSMENTS (ANNUAL)



9 **Narrative Context:** The Natural Gas Storage Baseline Inspections metric
10 measures the number of baseline well assessments performed since 2013.
11 Based on the PG&E Gas Storage Asset Management Plan, PG&E’s goal is to
12 complete baseline well production casing assessments on 111 wells by 2025
13 and to have 40 percent of these assessments complete by 2023. The program
14 has completed approximately 53 percent of the assessments and is on track in
15 meeting its goals as PG&E plans to continue ramping up in the years ahead.

²⁸ In the 2019 Enterprise Risk Register, this risk is now called Loss of Containment at Natural Gas Storage Well or Reservoir.

1 **Is Metric Used for the Purposes of Determining Executive (Director Level**
2 **or Higher) Compensation Levels and/or Incentives?**

3 No, the Natural Gas Storage Baseline Inspections Performed metric was not
4 used to determine Director Level or Higher incentives for the years 2010-2019.

5 **Is Metric Linked to the Determination of Individual or Group Performance**
6 **Goals?**

7 Yes, the Natural Gas Storage Baseline Inspections Performed metric is
8 linked to the 2019 individual performance goals for one or more Director-level
9 position or higher.

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

11 In 2019, the following position(s) include individual goals that are linked to
12 this metric:

- 13 – Director Gas Operations (1)

14 **Bias Controls:** Data Integrity – Project completion (assessment complete) is
15 tracked in the P6 scheduling tool and database and the Reservoir Engineering
16 team is responsible for validating that the assessment is a first time inspection
17 and not a reinspection of the same well. California Geologic Energy
18 Management (CalGEM) (previously the California Division of Oil, Gas and
19 Geothermal Resources (DOGGR)) is also responsible for validating work
20 completion as annular well monitoring logs must be submitted to them as part of
21 regulation.

22 **Rate Case Safety Goal Progress:** This safety metric does not support a 2017
23 GRC safety goal given this metric is a gas storage, not distribution, related
24 metric. PG&E's 2019 GT&S Rate Case forecast was based on the final draft
25 CalGEM (previously DOGGR) regulations available at the time of the filing.
26 PG&E's plan reflected annual compliance surveys on all wells during the rate
27 case period and 44 barrier inspection surveys in 2019. As the final draft
28 regulations required that barrier inspection surveys be performed every other
29 year starting in 2019, PG&E forecast to perform them on half of the storage
30 wells in each year. In addition, as a result of PG&E's Natural Gas Storage
31 Strategy, PG&E did not forecast to conduct integrity inspection and surveys at
32 the Los Medanos or Pleasant Creek storage wells during the rate case period.

1 **Monthly Data:** See Attachment A at the end of this report.

1 **Metric 14: Employee SIF**

2 **Metric Name and Description:** Employee SIF – A work-related injury or illness
3 that results in a fatality, inpatient hospitalization for more than 24 hours (other
4 than for observation purposes), a loss of any member of the body, or any
5 serious degree of permanent disfigurement.

6 **Risks:** Employee Safety

7 **Category:** Injuries

8 **Units:** Number of SIF

9 **Summary:**

**FIGURE 5-14
EMPLOYEE SIF METRIC DATA (ANNUAL)**



10 **Narrative Context:** Employee SIF events are generally trending down over the
11 2013-2019 time period with an increase in 2017 and 2019. Two of the events in
12 2017 were a result of an active shooter event. In 2017, PG&E implemented new
13 procedures for classifying and performing causal evaluations on serious events.

14 **Is Metric Used for the Purposes of Determining Executive (Director Level
15 or Higher) Compensation Levels and/or Incentives?**

16 No, the Employee SIF metric was not used to determine incentives for the
17 years 2010-2019.

1 **Is Metric Linked to the Determination of Individual or Group**
2 **Performance Goals?**

3 Yes, the Employee SIF metric was linked to 2019 individual performance
4 goals for one or more Director-level position or above.

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

6 In 2019, the following position(s) include individual goals that are linked to
7 this metric:

- 8 – Director Customer Care (4)
- 9 – Director Electric Operations (35)
- 10 – Senior Director Electric Operations (9)
- 11 – VP Electric Operations (1)
- 12 – Director Finance and Risk (3)
- 13 – Senior Director Finance and Risk (1)
- 14 – Director Gas Operations (9)
- 15 – Senior Director Gas Operations (1)
- 16 – VP Gas Operations (1)
- 17 – Director Generation (1)
- 18 – Director Human Resources (HR) (1)
- 19 – Senior Director HR (1)
- 20 – Director Information Technology (IT) (8)
- 21 – Senior Director IT (5)
- 22 – Senior Vice President (SVP) IT (1)
- 23 – Director Office of the President & Chief Executive Officer (CEO)
- 24 – Director Power Generation (1)
- 25 – Director Safety, Health, Enterprise Corrective Action Program (ECAP) &
26 DOT (2)
- 27 – Director Shared Services (6)
- 28 – Senior Director (1)
- 29 – Director Strategy and Policy (9)
- 30 – Senior Director Strategy and Policy (2)
- 31 – Director Supply Chain/Materials (2)

32 **Bias Controls:** Data is compiled by the Law Department and Employee SIF
33 events are also reviewed monthly by the Corporate Safety team.

1 **Rate Case Safety Goal Progress:** The SIF metric was proposed as a safety
2 goal for the Employee Safety risk in the RAMP 2017 Employee Safety risk
3 chapter,²⁹ and was discussed in PG&E's 2017 GRC Chapter 2, Safety of the
4 Public and Employees.³⁰ The SIF metric reinforces the importance of
5 investigating an incident to understand the cause and developing corrective
6 actions to reduce the likelihood of serious injury and fatality recurrence.
7 Investigation results are communicated across the enterprise. All corrective
8 actions are tracked to closure. Although PG&E did not specify a metric
9 reduction goal in the 2017 GRC or 2017 RAMP, the metric results over the
10 period 2010 through 2019 demonstrates progress in reducing employee SIF.

11 **Monthly Data:** See Attachment A at the end of this report.

²⁹ PG&E 2017 RAMP, Chapter 15, Employee Safety, p. 15-15.

³⁰ PG&E GRC, Exhibit (PG&E-2), Chapter 2, Safety of the Public and Employees, p. 2-2.

1 **Metric 15: Employee DART Rate**

2 **Metric Name and Description:** Employee DART Rate – DART Rate is
3 calculated based on number of OSHA-recordable injuries resulting in Days Away
4 from work and/or Days on Restricted Duty or Job Transfer, and hours worked.

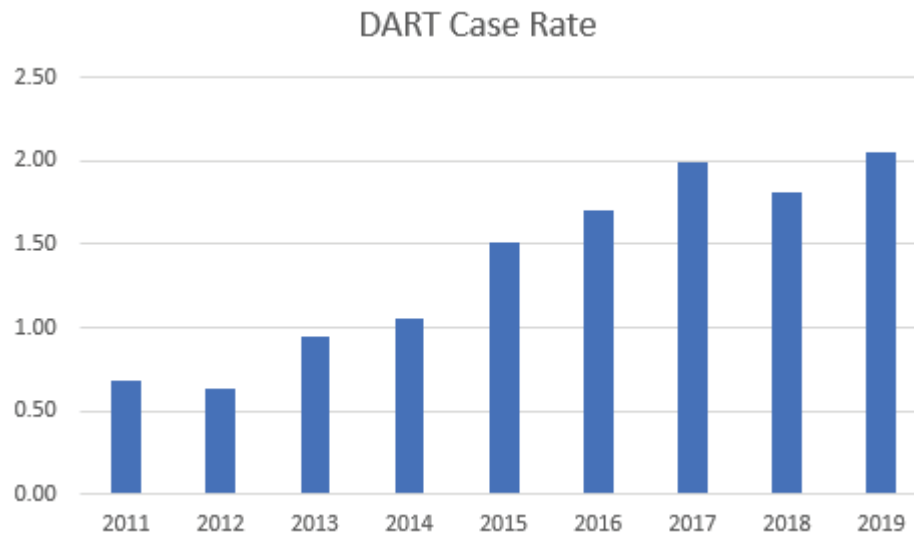
5 **Risks:** Employee Safety

6 **Category:** Injuries

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

8 **Summary:**

FIGURE 5-15
DART CASE RATE METRIC DATA (ANNUAL)



9 **Narrative Context:** PG&E began tracking the DART Case Rate in 2011. This
10 metric showed an incline from 2012 until 2017 driven primarily by restricted duty
11 cases related to sprains and strains. In 2018 the trend was reversed. The
12 biggest decline was in LWDs cases in part due to the implementation of a task
13 bank which offered alternative work for employees during their recovery period.
14 In 2019, there was an increase from the previous year in both LWD cases and
15 Restricted Duty cases. In response, we are opening additional on-site clinics,
16 initiating a mobile medic program and increasing the Industrial Athlete
17 Specialists hours and their time on the job sites. These efforts are intended to
18 provide injury prevention and early intervention care for employees.

1 **Is Metric Used for the Purposes of Determining Executive (Director Level**
2 **or Higher) Compensation Levels and/or Incentives?**

3 No, the Employee DART metric was not used to determine incentives for the
4 years 2010-2019.

5 **Is Metric Linked to the Determination of Individual or Group**
6 **Performance Goals?**

7 Yes, the Employee DART metric was linked to the 2019 individual
8 performance goals for one or more Director-level position or higher.

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

10 In 2019, the following position(s) include individual goals that are linked to
11 this metric:

- 12 – Director Customer Care (1)
- 13 – Senior Director Customer Care (1)
- 14 – Director Electric Operations (7)
- 15 – Senior Director Electric Operations (2)
- 16 – VP Electric Operations (1)
- 17 – VP Finance and Risk (1)
- 18 – Director Generation (2)
- 19 – Senior Director Generation (1)
- 20 – Director Office of the President & CEO (1)
- 21 – Director Power Generation (2)
- 22 – Director Shared Services (4)
- 23 – Director Supply Chain (1)

24 **Bias Controls:** Yes. OSHA regulates the definition of a DART case and we
25 rely on the physician determination of work relatedness and need for time off or
26 restricted duty. Internal Audit completed an audit of the DART classifications in
27 2019 to verify that bias controls are in place and effective.

28 **Rate Case Safety Goal Progress:** This metric was included as a Key Safety
29 Metric in Table 1-1 of the PG&E's 2017 GRC Safety and Health chapter
30 (Chapter 1).³¹ The stated goal for the DART case rate is 0.45 by year 2022.

31 PG&E GRC Exhibit (PG&E-7), Chapter 1, Safety and Health, p. 1-19.

- 1 The 2020 RAMP Report for the Employee Safety Incident risk will include
- 2 additional mitigations to support this effort as described in the Narrative Context.
- 3 **Monthly Data:** See Attachment A at the end of this report.

1 **Metric 16: Employee LWD Case Rate**

2 **Metric Name and Description:** Employee LWD Case Rate – This measures
3 the number of LWD cases incurred for employees and staff augmentation
4 (excluding contractors) per 200,000 hours worked, or for approximately every
5 100 employees. A LWD Case is a current year OSHA Recordable incident that
6 has resulted in at least one LWD. An OSHA Recordable incident is an
7 occupational (job related) injury or illness that requires medical treatment
8 beyond first aid, or results in work restrictions, death or loss of consciousness.
9 The formula is: LWD Case Rate = Number of LWD Cases/productive hours
10 worked x 200,000.

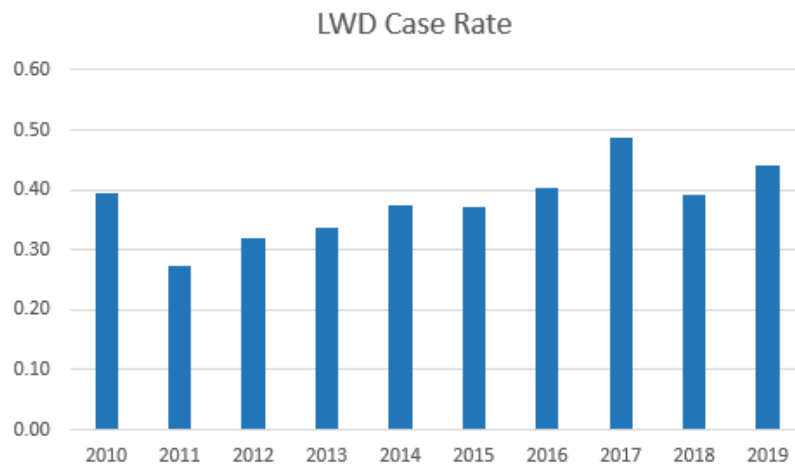
11 **Risks:** Employee Safety

12 **Category:** Injuries

13 **Units:** Number of LWD Cases/productive hours worked x 200,000.

14 **Summary:**

FIGURE 5-16
LWD CASE RATE METRIC DATA (ANNUAL)



15 **Narrative Context:** This metric showed a steady incline from 2011 until 2017
16 driven primarily by injuries related to falls,, lifting, repetitive motion and motor
17 vehicle incidents. In response, we are opening additional on-site clinics,
18 initiating a mobile medic program and increasing the Industrial Athlete
19 Specialists hours and their time on the job sites to help reduce the number of

LWD cases. These efforts are intended to provide injury prevention and early intervention care for employees.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives?

The metric was used as a STIP metric for the years 2012-2016.

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

Yes, the Employee LWD Case Rate metric is linked to 2019 individual performance goals for one or more Director-level position or higher.

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

In 2019, the following position(s) include individual goals that are linked to this metric:

- Director Customer Care (1)
- Director Electric Operations (9)
- Senior Director Electric Operations (2)
- VP Electric Operations
- Director Finance and Risk (2)
- Senior Director Gas Operations (1)
- Director Generation (2)
- Senior Director Generation (2)
- Director Human Resource (1)
- VP IT (1)
- Director Office of the President & CEO (1)
- Director Power Generation (2)
- Director Safety, Health, ECAP & DOT (1)
- Director Shared Services (3)
- Director Supply Chain/Materials (1)

Bias Controls: Yes. OSHA regulates the definition of a LWD case, and we rely on a physician determination that the injury is work related and the need for time off. If we were able to place the employee in an alternative role during recovery, the case could get classified as Restricted Duty and not Lost Time. Internal Audit completed an audit of the DART classifications in 2019.

1 **Rate Case Safety Goal Progress:** This metric was included as a Key Safety
2 Metric in Table 1-1 of PG&E's 2017 GRC Safety and Health chapter.³² The
3 stated goal for the LWD case rate is 0.239 by year 2022. The LWD case rate
4 through February of 2020 is 0.353. See the Narrative Context explanation
5 above for explanation of steps PG&E is taking to reduce the LWD case rate.
6 The 2020 RAMP Report for the Employee Safety Incident risk will include the
7 mitigations described in the Narrative Context section above; they include
8 additional on-site clinics, initiation of a mobile medics program and an increase
9 in the Industrial Athlete Specialists hours and their time on the job sites. The
10 Office, Industrial, and Vehicle Ergonomics programs are also being
11 strengthened and will be included in the 2020 RAMP Report for the risk.

12 **Monthly Data:** See Attachment A at the end of this report.

³² PG&E GRC Exhibit (PG&E-7), Chapter 1, Safety and Health, p. 1-19.

Metric 17: Employee OSHA Recordables Rate

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

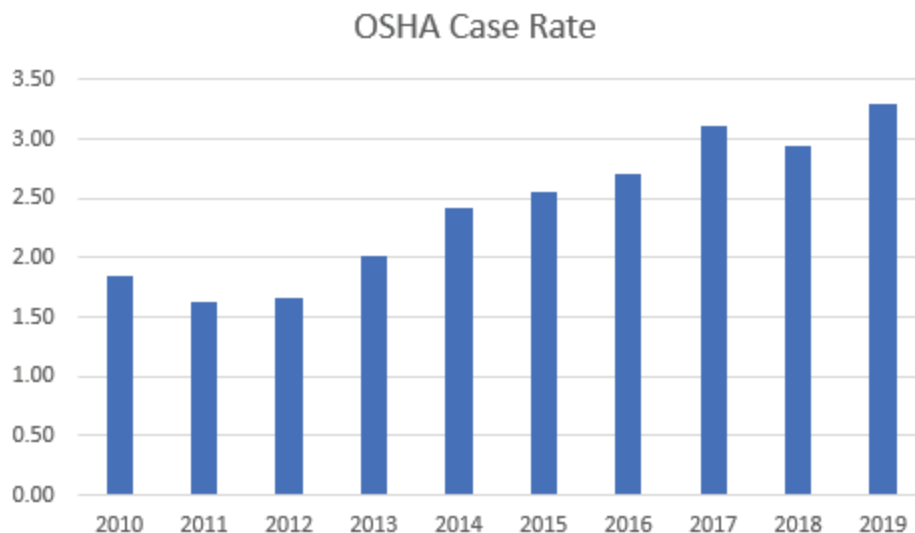
Risks: Employee Safety

Category: Injuries

Units: Rate; OSHA recordables times 200,000 divided by employee hours worked.

Summary:

FIGURE 5-17
OSHA CASE RATE METRIC DATA (ANNUAL)



Narrative Context: This metric showed an incline from 2011 through 2019. This is primarily attributable to an increase in injuries related to strains, falls and repetitive motion.

Over the course of 2019, LWD cases, Restricted Duty cases and Medical Only cases increased. In response, PG&E is opening additional on-site clinics, initiating a mobile medic program and increasing the Industrial Athlete Specialists hours and their time on the job sites to reduce the OSHA recordable

1 rate. These efforts are intended to provide injury prevention and early
2 intervention care for employees.

3 **Is Metric Used for the Purposes of Determining Executive (Director Level**
4 **or Higher) Compensation Levels and/or Incentives?**

5 The metric was used as a STIP metric for the years 2010-2011.

6 **Is Metric Linked to the Determination of Individual or Group**
7 **Performance Goals?**

8 Yes, the OSHA recordable metric was linked to the 2019 individual
9 performance goals for one or more Director-level position or higher.

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

11 In 2019, the following position(s) include individual goals that are linked to
12 this metric:

- 13 – Director Electric Operations (7)
- 14 – Senior Director Electric Operations (4)
- 15 – VP Electric Operations (2)
- 16 – Director Office of President & CEO (1)
- 17 – Director Shared Services (1)

18 **Bias Controls:** OSHA regulates the definition of an OSHA case and we rely on
19 a physician determination that the injury is work related and treatment rendered
20 in making the classification.

21 **Rate Case Safety Goal Progress:** This metric was included as a Key Safety
22 Metric in PG&E's 2017 GRC testimony on Safety of the Public and
23 Employees.³³ There is no specific stated goal for OSHA recordables, however
24 the metric is indirectly supported by the LWD case and DART case rate goals.
25 The 2020 RAMP Report for the Employee Safety Incident risk will include the
26 mitigations described in the Narrative Context section above; they include
27 additional on-site clinics, initiation of a mobile medics program and an increase
28 of work hours for Industrial Athlete Specialists. The Office, Industrial, and

³³ PG&E GRC Exhibit (PG&E-2), Chapter 2, Safety of the Public and Employees, p. 2-2.

- 1 Vehicle Ergonomics programs are also being strengthened and will be included
- 2 in the 2020 RAMP Report for the risk.
- 3 **Monthly Data:** See Attachment A at the end of this report.

Metric 18: Contractor OSHA Recordables Rate

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

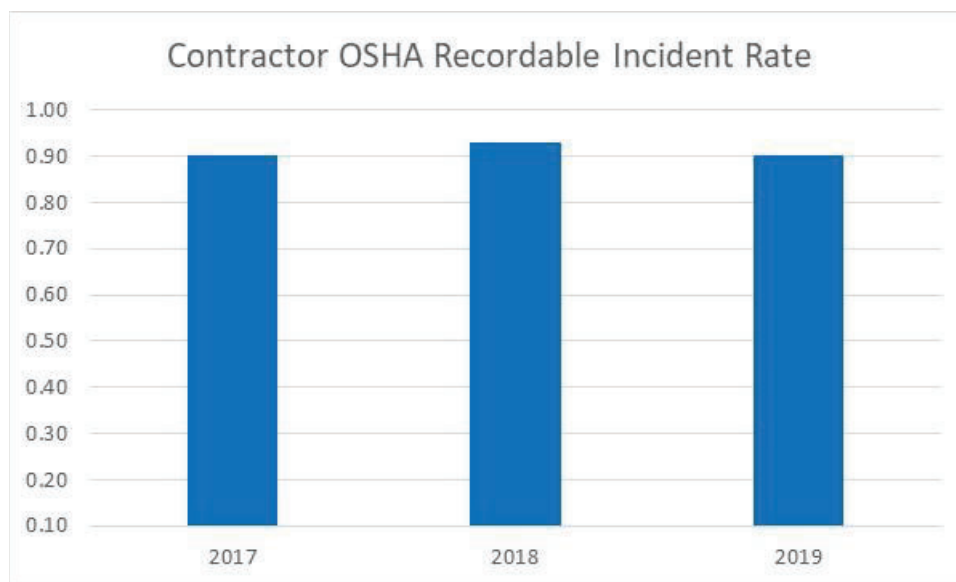
Risks: Contractor Safety

Category: Injuries

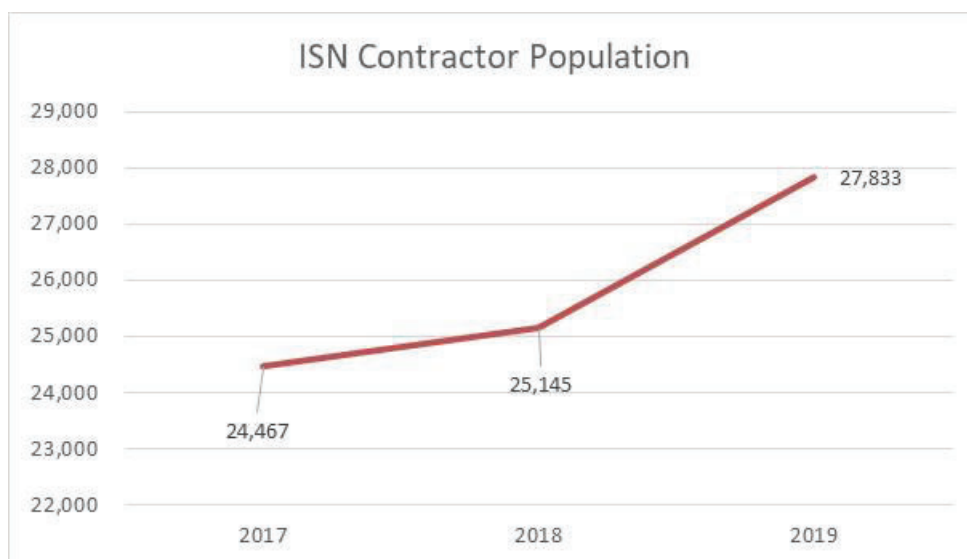
Units: OSHA recordable times 200,000 divided by contractor hours worked associated with work for the reporting utility.

Summary:

FIGURE 5-18
CONTRACTOR OSHA RECORDABLE INCIDENT RATE METRIC DATA (ANNUAL)



Narrative Context: Contractor OSHA recordable data became available with the implementation of the Contractor Safety Program which was fully in place at the beginning of 2017. PG&E did not track this metric prior to 2017. For 2017 through 2019 data show that the OSHA recordable rate for PG&E contractors remains relatively flat while there was an increase in the contractor workforce from 2017-2019 as indicated in the chart below.



1 Additional improvements to the Contractor Safety Program are being
 2 evaluated as part of the 2020 RAMP Report and include Contractor Safety
 3 Performance Audits and a Contractor work management system for tracking
 4 crew status.

5 **Is Metric Used for the Purposes of Determining Executive (Director Level**
 6 **or Higher) Compensation Levels and/or Incentives?**

7 No, the Contractor OSHA Recordables Rate metric was not used to
 8 determine incentives for the years 2010-2019.

9 **Is Metric Linked to the Determination of Individual or Group Performance**
 10 **Goals?**

11 Yes, the Contractor OSHA Recordables Rate metric was linked to 2019
 12 individual performance goals for one or more Director-level position or higher.

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

14 In 2019, the following position(s) and include individual goals that linked to
 15 this metric:

- 16 – Director Electric Operations (7)
- 17 – Senior Director Electric Operations (4)
- 18 – VP Electric Operations (2)
- 19 – Director Office of President & CEO (1)
- 20 – Director Shared Services (1)

1 **Bias Controls:** OSHA regulates the definition of an OSHA case. The PG&E
2 specific information is self-reported by the contractors. The contractor company
3 OSHA logs are verified annually by an external third party.

4 **Rate Case Safety Goal Progress:** This metric was included as a stated safety
5 metric in the 2017 GRC testimony on Safety of the Public and Employees.³⁴
6 There is currently no goal (target) for this metric. See the Narrative Context
7 explanation above for explanation of steps PG&E is taking to reduce the
8 Contractor OSHA recordables rate.

9 **Monthly Data:** See Attachment A at the end of this report.

³⁴ PG&E GRC Exhibit (PG&E-2), Chapter 2, Safety of the Public and Employees,
p. 2-AtchA-5.

Metric 19: Contractor DART

Metric Name and Description: Contractor DART – DART Rate: DART Cases include OSHA-recordable LWD 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.

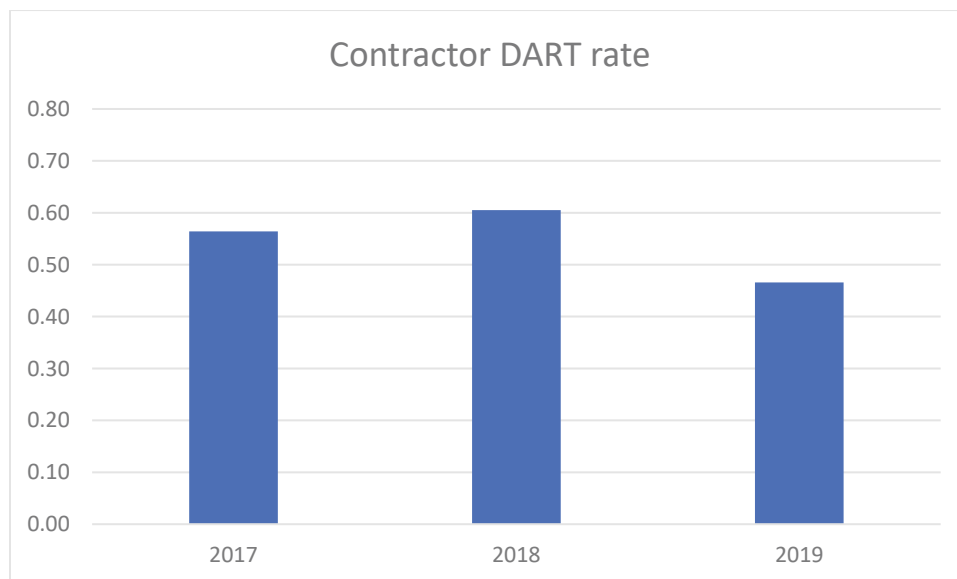
Risks: Contractor Safety

Category: Injuries

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

Summary:

**FIGURE 5-19
CONTRACTOR DART RATE METRIC DATA (ANNUAL)**



Narrative Context: Contractor DART case rate data became available with the implementation of the Contractor Safety Program which was fully in place at the beginning of 2017. PG&E did not track this metric prior to 2017. Data show that DART case rates for PG&E contractors decreased from 2018-2019 with the increase in the PG&E contractor workforce. Additional improvements to the Contractor Safety Program are being evaluated as part of the 2020 RAMP Report and include Contractor Safety Performance Audits and a Contractor work management system for tracking crew status.

1 **Is Metric Used for the Purposes of Determining Executive (Director Level**
2 **or Higher) Compensation Levels and/or Incentives?**

3 No, the Contractor DART metric was not used to determine incentives for
4 the years 2010-2019.

5 **Is Metric Linked to the Determination of Individual or Group Performance**
6 **Goals?**

7 Yes, the Contractor DART metric was linked to the 2019 individual
8 performance goals for one or more Director-level position or higher.

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

10 In 2019, the following position(s) include individual goals that are linked to
11 this metric:

- 12 – Director Customer Care (1)
- 13 – Senior Director Customer Care (1)
- 14 – Director Electric Operations (7)
- 15 – Senior Director Electric Operations (2)
- 16 – VP Electric Operations (1)
- 17 – VP Finance and Risk (1)
- 18 – Director Generation (2)
- 19 – Senior Director Generation (1)
- 20 – Director Office of the President & CEO (1)
- 21 – Director Power Generation (2)
- 22 – Director Shared Services (4)
- 23 – Director Supply Chain (1)

24 **Bias Controls:** OSHA regulates the definition of a DART case. The PG&E
25 specific information is self-reported by the contractors. The contractor company
26 OSHA logs are verified annually by an external third party.

27 **Rate Case Safety Goal Progress:** This metric was included as a stated safety
28 goal in the 2017 GRC testimony in Safety of the Public and Employees,
29 Chapter 2.³⁵ There is currently no goal (target) for this metric. See the

³⁵ PG&E GRC Exhibit (PG&E-2), Chapter 2, Safety of the Public and Employees, p. 2-AtchA-5.

- 1 Narrative Context explanation above for explanation of steps PG&E is taking to
- 2 reduce the Contractor DART Rate.
- 3 **Monthly Data:** See Attachment A at the end of this report.

1 **Metric 20: Contractor SIF**

2 **Metric Name and Description:** Contractor SIF – A work-related injury or illness
3 that results in a fatality, inpatient hospitalization for more than 24 hours (other
4 than for observation purposes), a loss of any member of the body, or any
5 serious degree of permanent disfigurement

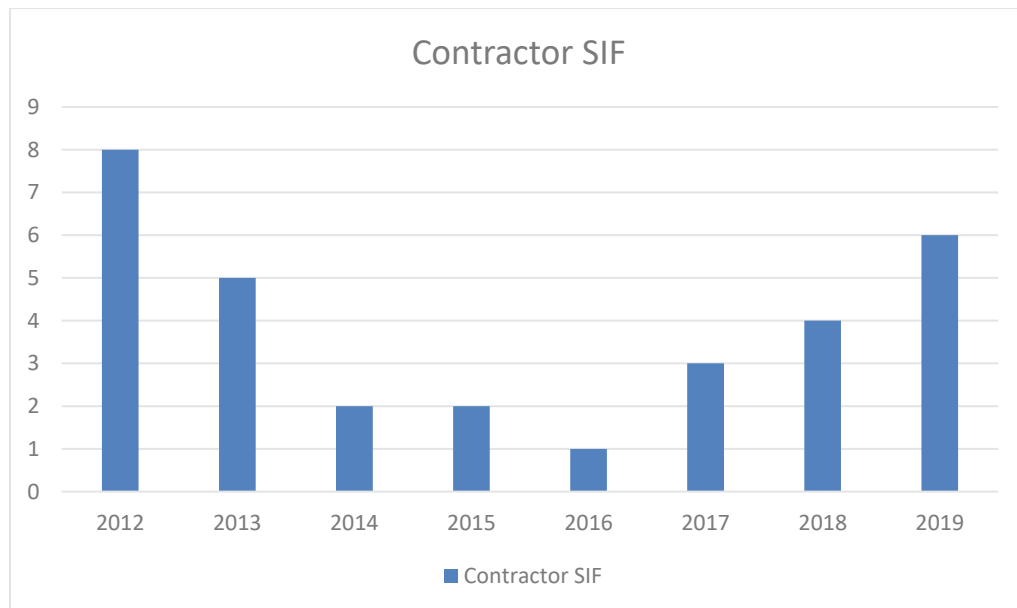
6 **Risks:** Contractor Safety

7 **Category:** Injuries

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

10 **Summary:**

**FIGURE 5-20
CONTRACTOR SIF EVENTS METRIC DATA (ANNUAL)**



11 **Narrative Context:** Contractor serious injuries have been trending upwards due
12 to the increase in work considered high risk, including vegetation management
13 associated with the wildfire mitigation response. To mitigate the risk of future
14 Contractor SIF occurrences, PG&E performs an investigation of all Contractor
15 SIF incidents. Investigation results are communicated across the enterprise. All
16 corrective actions are tracked to closure.

17 Also in an effort to reduce Contractor SIF, PG&E implemented the
18 Contractor Safety LOB assessment process in 2017. The Contractor Safety

1 LOB Assessments assure that high and medium risk contactors are performing
2 work safety in compliance with the Contractor Safety Program.

3 **Is Metric Used for the Purposes of Determining Executive (Director Level**
4 **or Higher) Compensation Levels and/or Incentives?**

5 No, the Contractor Serious Injuries and Fatalities metric was not used to
6 determine incentives for the years 2010-2019.

7 **Is Metric Linked to the Determination of Individual or Group Performance**
8 **Goals?**

9 Yes, the Contractor Serious Injuries and Fatalities metric was linked to 2019
10 individual performance goals for one or more director level position or above.

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

12 In 2019, the following position(s) include individual goals that are linked to
13 this metric:

- 14 – Director Customer Care (4)
- 15 – Director Electric Operations (35)
- 16 – Senior Director Electric Operations (9)
- 17 – VP Electric Operations (1)
- 18 – Director Finance and Risk (3)
- 19 – Senior Director Finance and Risk (1)
- 20 – Director Gas Operations (9)
- 21 – Senior Director Gas Operations (1)
- 22 – VP Gas Operations (1)
- 23 – Director Generation (1)
- 24 – Director Human Resources (1)
- 25 – Senior Director Human Resources (1)
- 26 – Director Information Technology (8)
- 27 – Senior Director Information Technology (5)
- 28 – SVP Information Technology (1)
- 29 – Director Office of the President & CEO
- 30 – Director Power Generation (1)
- 31 – Director Safety, Health, ECAP & DOT (2)
- 32 – Director Shared Services (6)

- 1 – Senior Director (1)
- 2 – Director Strategy and Policy (9)
- 3 – Senior Director Strategy and Policy (2)

4 **Bias Controls:** Data is compiled by the Law Department and all Contractor SIF
5 events are reviewed by Corporate Safety. Internal Audits and/or external
6 Third-Party reviews are utilized to verify that bias controls are in place and
7 effective.

8 **Rate Case Safety Goal Progress:** The SIF metric was proposed as a safety
9 goal for the Contractor Safety risk in the 2017 RAMP Contractor Safety risk
10 chapter.³⁶ This metric does not have a stated goal (target). See the Narrative
11 Context above for an explanation of steps PG&E is taking to reduce the
12 Contractor SIF rate.

13 **Monthly Data:** See Attachment A at the end of this report.

³⁶ PG&E 2017 RAMP, Chapter 14, Contractor Safety, p. 14-19.

1 **Metric 21: Contractor LWD Case Rate**

2 **Metric Name and Description:** Contractor LWD Case Rate – This measures
3 the number of LWD cases incurred for contractors per 200,000 hours worked
4 (for approximately every 100 contractors). A LWD Case is a current year OSHA
5 Recordable incident that has resulted in at least one LWD. An OSHA
6 Recordable incident is an occupational (job related) injury or illness that requires
7 medical treatment beyond first aid, or results in work restrictions, death or loss of
8 consciousness. The formula is: $\text{LWD Case Rate} = \frac{\text{Number of LWD Cases}}{\text{productive hours worked}} \times 200,000$.

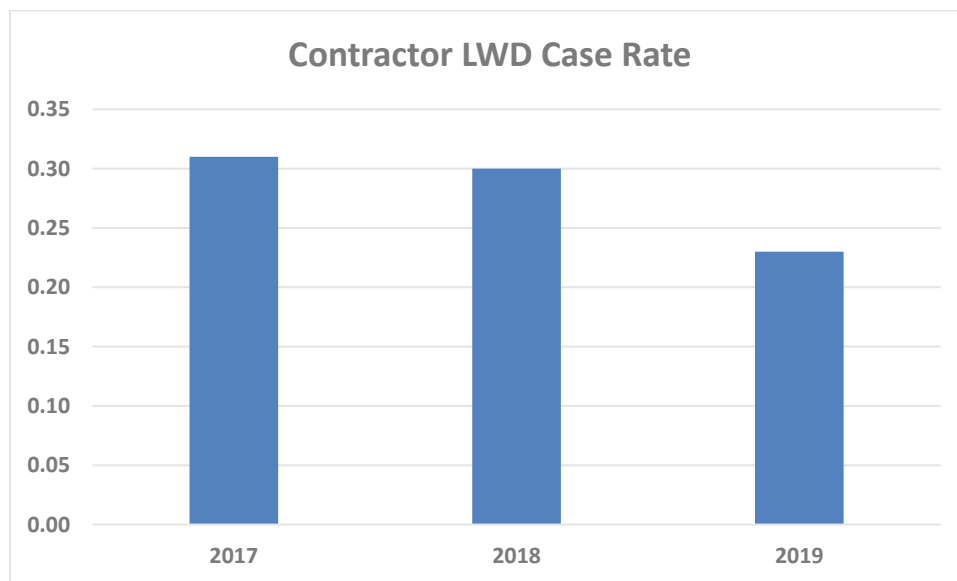
9
10 **Risks:** Contractor Safety

11 **Category:** Injuries

12 **Units:** Number of LWD cases incurred for contractors per 200,000 hours
13 worked associated with work for the reporting utility.

14 **Summary:**

FIGURE 5-21
CONTRACTOR LWD CASE RATE METRIC DATA (ANNUAL)



15 **Narrative Context Narrative Context:** Contractor LWD data became available
16 with the implementation of the Contractor Safety Program, which was fully in
17 place at the beginning of 2017. PG&E did not track this metric prior to 2017.
18 Data show that LWD cases for PG&E contractors decreased from 2017-2019

1 with the increase in the PG&E contractor workforce. Additional improvements to
2 the Contractor Safety Program are being evaluated as part of the 2020 RAMP
3 filing and include Contractor Safety Performance Audits and a Contractor work
4 management system for tracking crew status/work location to support field
5 reviews and audits and reduce injuries.

6 **Is Metric Used for the Purposes of Determining Executive (Director Level**
7 **or Higher) Compensation Levels and/or Incentives?**

8 No, the Contractor LWD Case Rate metric was not used to determine
9 incentives for the years 2010-2019.

10 **Is Metric Linked to the Determination of Individual or Group Performance**
11 **Goals?**

12 Yes, the Contractor LWD Case Rate metric is linked to 2019 individual
13 performance goals for one or more Director-level position or higher.

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

15 In 2019, the following position(s) include individual goals that are linked to
16 this metric:

- 17 – Director Customer Care (1)
- 18 – Director Electric Operations (9)
- 19 – Senior Director Electric Operations (1)
- 20 – VP Electric Operations (1)
- 21 – Director Finance and Risk (2)
- 22 – Director Generation (2)
- 23 – Senior Director Generation (2)
- 24 – Director HR (1)
- 25 – SVP IT (1)
- 26 – Director Office of President &CEO (1)
- 27 – Director Power Generation (2)
- 28 – Director Safety, Health, ECAP & DOT (1)
- 29 – Director Shared Services (3)
- 30 – Director Supply/Materials (1)

1 **Bias Controls:** OSHA regulates the definition of a LWD case. The PG&E
2 specific information is self-reported by contractors. The contractor company
3 safety OSHA logs are verified annually by an external third party.

4 **Rate Case Safety Goal Progress:** This metric was included as a stated safety
5 goal in the 2017 GRC testimony on Safety of the Public and Employees.³⁷
6 There is currently no goal (target) for this metric. See the Narrative Context
7 explanation above for explanation of steps PG&E is taking to reduce the
8 Contractor LWD rate.

9 **Monthly Data:** See Attachment A at the end of this report.

³⁷ PG&E GRC Exhibit (PG&E-2), Chapter 2, Safety of the Public and Employees,
p. 2-AtchA-5.

1 **Metric 22: Public SIF**

2 **Metric Name and Description:** Public SIF – A fatality or personal injury
3 requiring in-patient hospitalization involving utility facilities or equipment.
4 Equipment includes utility vehicles used during the course of business.

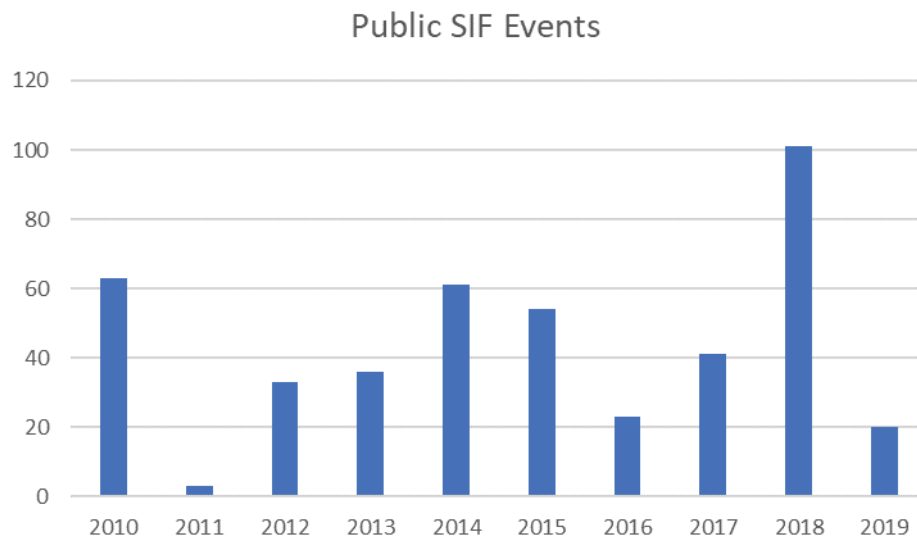
5 **Risks:** Public Safety

6 **Category:** Injuries

7 **Units:** Number of SIF

8 **Summary:**

FIGURE 5-22
PUBLIC SIF METRIC DATA (ANNUAL)



9 **Narrative Context:** Public SIF event counts have varied across years with a
10 significant uptick in 2018 due to the wildfires. Excluding wildfire SIF incidents,
11 the primary drivers for these incidents include electrical contact and motor
12 vehicles incidents with PG&E assets. For wildfire ignition metric information see
13 Metric 4. For electrical contact information see Metrics 1 and 2. Public SIF are
14 included in the risk analysis for asset-based event risks. A new risk has been
15 added to the PG&E risk register to place increased emphasis on public SIF that
16 are unrelated to a PG&E asset failure or incorrect operations. The risk reduction
17 plan will leverage LOB controls and mitigations specific to public safety.

On January 31, 2020, in compliance with the SMAP decision,³⁸ PG&E provided the SED with its Public SIF metric data for the last 10 years. On March 11, 2020 SED responded to the California IOUs asking for the following Public SIF subcategories to be provided in this report which are provided as Attachment B.

Is Metric Used for the Purposes of Determining Executive (Director Level or Higher) Compensation Levels and/or Incentives?

No, the Public SIF metric was not used to determine incentives for the years 2010-2019.

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

Yes, Public SIF metric is linked to one or more Director-level position or above.

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

In 2019, the following position(s) include individual goals that are linked to this metric:

- Director Customer Care (4)
- Director Electric Operations (35)
- Senior Director Electric Operations (9)
- VP Electric Operations (1)
- Director Finance and Risk (3)
- Senior Director Finance and Risk (1)
- Director Gas Operations (9)
- Senior Director Gas Operations (1)
- VP Gas Operations (1)
- Director Generation (1)
- Director HR (1)
- Senior Director HR (1)
- Director IT (8)
- Senior Director IT (5)

³⁸ D.19-04-020, p. 19.

- 1 – SVP IT (1)
- 2 – Director Office of the President & CEO
- 3 – Director Power Generation (1)
- 4 – Director Safety, Health, ECAP & DOT (2)
- 5 – Director Shared Services (6)
- 6 – Senior Director (1)
- 7 – Director Strategy and Policy (9)
- 8 – Senior Director Strategy and Policy (2)
- 9 – Director Supply Chain/Materials (2)

10 **Bias Controls:** Data is compiled by the Law Dept.

11 **Rate Case Safety Goal Progress:** This metric and was discussed as a safety
12 goal in the 2017 GRC testimony on Safety of the Public and Employees.³⁹
13 There is no target goal associated with this metric. See the Narrative Context
14 explanation above for explanation of steps PG&E is taking to reduce the Public
15 SIF rate down.

16 **Monthly Data:** See Attachment A at the end of this report.

³⁹ PG&E GRC Exhibit (PG&E-2), Chapter 2, Safety of the Public and Employees, p. 2-10.

1 **Metric 23: Helicopter/Flight Accident or Incident**

2 **Metric Name and Description:** Helicopter/Flight Accident or Incident – Defined
3 by Federal Aviation Regulations, reportable to the FAA per 49-CFR-830.

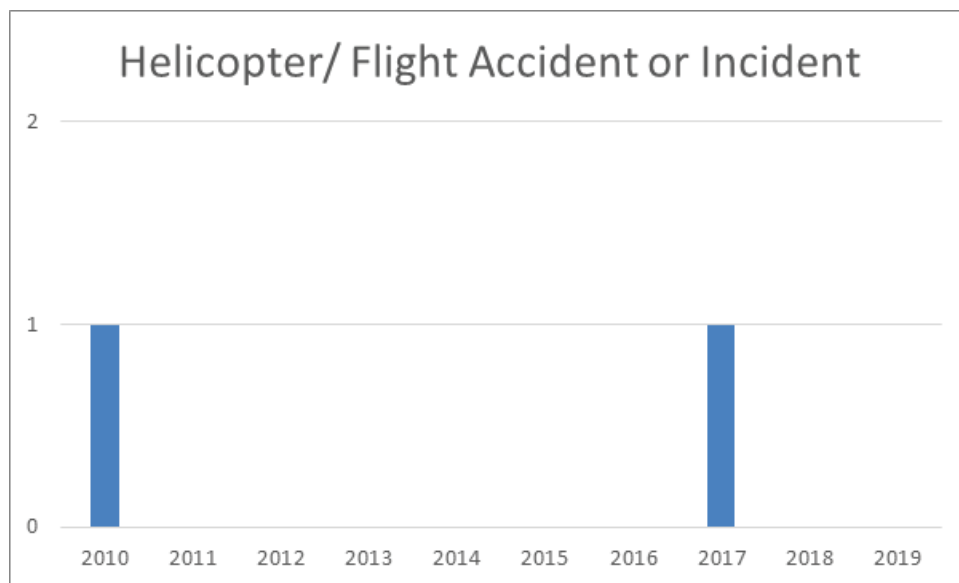
4 **Risks:** Aviation Safety, Helicopter Operations, Public Safety, Worker Safety and
5 Employee Safety

6 **Category:** Vehicle

7 **Units:** Number of accidents or incidents (as defined in 49 CFR Section 830.5
8 “Immediate Notification”) per 100,000 flight hours.

9 **Summary:**

FIGURE 5-23
HELICOPTER/FLIGHT ACCIDENT OR INCIDENT METRIC DATA (ANNUAL)



10 **Narrative Context:** For the past 10 years, there have been only two reportable
11 NTSB incidents per 49 CFR 830.5 from PG&E helicopter vendors.

- 12 – October 14, 2010: Helicopter was on a repositioning flight when it contacted
13 a privately-owned electric power line causing the pilot to make an
14 emergency landing which resulted in substantial damage to the helicopter
15 and no injuries. The line was removed following the accident.
- 16 – July 11, 2017: Helicopter was attempting to land at an unimproved landing
17 site near a dam when just prior to touchdown, the helicopter’s main rotor

1 struck a tree causing it to suddenly fall several feet to the ground resulting in
2 severe damage to the helicopter and minor injuries to several passengers.

3 **Is Metric Used for the Purposes of Determining Executive (Director Level**
4 **or Higher) Compensation Levels and/or Incentives?**

5 No, the Helicopter and Flight Accident or Incident metric was not used to
6 determine incentives for the years 2010-2019.

7 **Is Metric Linked to the Determination of Individual or Group Performance**
8 **Goals?**

9 Yes, the Helicopter and Flight Accident or Incident metric is linked to the
10 2019 individual performance goals for one or more Director-level position or
11 higher.

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

13 In 2019, the following position(s) include individual goals that are linked to
14 this metric:

- 15 – Director Shared Services (1)

16 **Bias Controls:** None.

17 **Rate Case Safety Goal Progress:** This metric does not represent a 2017
18 stated safety goal.

19 **Monthly Data:** See Attachment A at the end of this report.

Metric 24: Percentage of Serious Injury and Fatality (SIF) Corrective Actions Completed on Time

Metric Name and Description: Percentage of Serious Injury and Fatality Corrective Actions Completed on Time – A SIF corrective action is one that is tied to a SIF actual or potential injury or near hit.

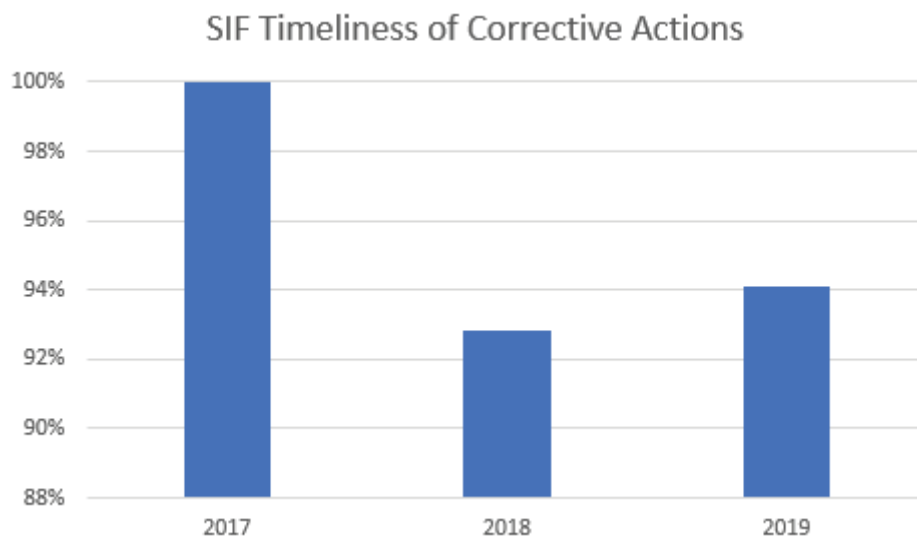
Risks: Employee Safety Incident, Contractor Safety Incident, Motor Vehicle Safety Incident, and Third-Party Safety Incident.⁴⁰

Category: Injuries

Units: Total number of SIF corrective actions completed on time (as measured by the due date accepted by LOB Corrective Action Review Boards) divided by the total number of SIF corrective actions past due or completed.

Summary:

FIGURE 5-24
SIF TIMELINESS OF CORRECTIVE ACTIONS METRIC DATA (ANNUAL)



Narrative Context: 2017 was the first year that this metric was tracked and included Electric, Gas and Generation. At the end of that year, 69 corrective actions were part of the metric. In 2018 and 2019, there were over 150 actions

⁴⁰ In the 2019 Enterprise Risk Register, these risks are now called (1) Employee Safety Incident; (2) Contractor Incident; and (4) Motor Vehicle Safety Incident; and (3) Third-Party Safety Incident.

1 with the remaining LOBs participating. The process for ensuring actions are
2 completed on schedule continues to mature with an uptick in the metric for 2019.
3 The improvement can be attributed to an increase in resources to track actions,
4 more frequent communications on upcoming actions and better participation of
5 the sponsors.

6 **Is Metric Used for the Purposes of Determining Executive (Director Level**
7 **or Higher) Compensation Levels and/or Incentives?**

8 The metric was used as a STIP metric for the years 2017-2019.

9 **Is Metric Linked to the Determination of Individual or Group Performance**
10 **Goals?**

11 The metric was included in the 2019 STIP metrics for all eligible employees.

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

13 The metric was included in the 2019 STIP metrics for all eligible employees

14 **Bias Controls:** Yes. This metric is reviewed by Internal Audit on a quarterly
15 basis.

16 **Rate Case Safety Goal Progress:** This metric was included as a Key Safety
17 Metric in Table 1-1 of the 2017 GRC testimony on Safety and Health.⁴¹ There
18 currently is no goal (target) for this metric. See the Narrative Context
19 explanation above for explanation of steps PG&E is taking to increase the
20 Timely SIF Corrective Actions.

21 **Monthly Data:** See Attachment A at the end of this report.

⁴¹ PG&E GRC Exhibit (PG&E-7), Chapter 1, Safety and Health, p. 1-19.

1 **Metric 25: Hard Brake Rate**

2 **Metric Name and Description:** Hard Brake Rate – The total number of hard
3 braking events (greater than or equal to 8 mph per second decrease in speed)
4 per thousand miles driven in a given period.

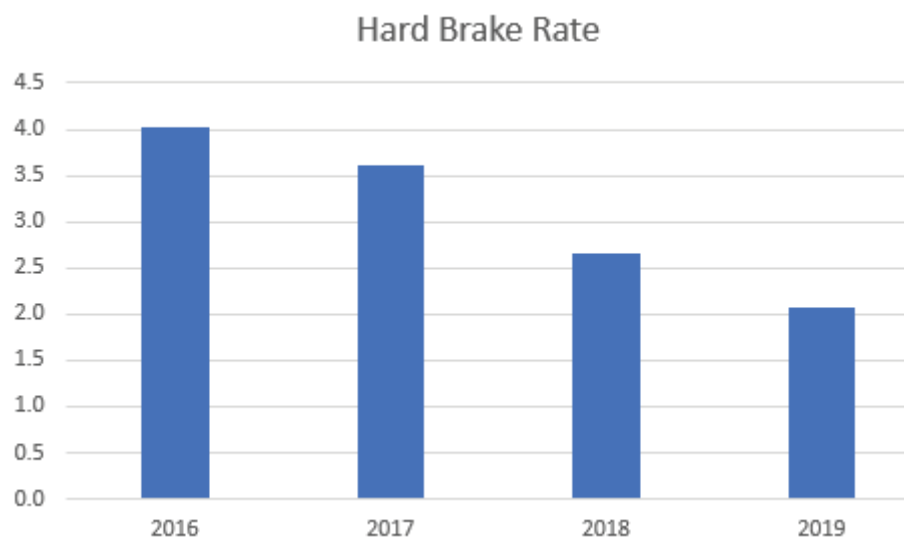
5 **Risks:** Motor Vehicle Safety

6 **Category:** Vehicle

7 **Units:** Total number of hard braking events per thousand miles driven in a
8 given period.

9 **Summary:**

FIGURE 5-25
SUMMARY CHART OF ACCOMPANYING METRIC DATA (ANNUAL)



10 **Narrative Context:** PG&E began tracking the hard brake rate metric in 2016.
11 The hard brake rate has been in steady decline between 2016 and 2019. During
12 the 2017-2019 time period, the number of vehicles tracking hard braking
13 increased from 6,500 to approximately 8,000.

14 **Is Metric Used for the Purposes of Determining Executive (Director Level**
15 **or Higher) Compensation Levels and/or Incentives?**

16 The metric was used as a STIP metric for the year 2018.

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

Yes, individual performance goals related to Preventable Motor Vehicle Incident (PMVI) rate linked to the 2019 individual performance goals for one or more Director-level position or higher.

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

In 2019, the following position(s) include individual goals that are linked to the PMVI metric:

- Director Customer Care (6)
- Senior Director Customer Care (2)
- Director Electric Operations (53)
- Senior Director Electric Operations (15)
- VP Electric Operations (5)
- SVP Electric Operations (1)
- Senior Director Ethics & Compliance (2)
- SVP Ethics & Compliance (1)
- Director Finance and Risk (14)
- Senior Director Finance and Risk (4)
- VP Finance and Risk (5)
- SVP Finance and Risk (1)
- Director Gas Operations (8)
- Senior Director Gas Operations (2)
- VP Gas Operations (1)
- Director Generation (2)
- Senior Director Generation (1)
- Director HR (1)
- Director IT (3)
- Senior Director IT (3)
- VP IT (1)
- Director Power Generation (3)
- Director Safety, Health, ECAP & DOT (2)
- Director Shared Services (5)
- Senior Director Shared Services (1)

- 1 – Director Strategy & Policy (2)
- 2 – Senior Director Strategy & Policy (1)
- 3 – Director Supply Chain/Materials (2)
- 4 – VP Supply Chain/Materials (1)

5 **Bias Controls:** Data on Hard Brake Rate is provided by a third-party vendor.

6 **Rate Case Safety Goal Progress:** The Hard Brake Rate metric was proposed
7 as a safety goal for the Motor Vehicle Safety risk in the RAMP 2017 Motor
8 Vehicle Safety Risk chapter.⁴² with no stated target. This metric was not
9 included in the 2017 GRC, however metrics for PMVI Rate and Safe Driving
10 Rate are with stated goals for 2022 of 1.74 and 4.5, respectively.

11 **Monthly Data:** See Attachment A at the end of this report.

⁴² PG&E 2017 RAMP, Chapter 16, Motor Vehicle Safety, p. 16-20.

1 **Metric 26: Driver's Check Rate**

2 **Metric Name and Description:** Driver's Check Rate – This metric measures
3 the total number of Driver Check complaint calls received per 1 million miles
4 driven by vehicles included in the Driver Check Program.

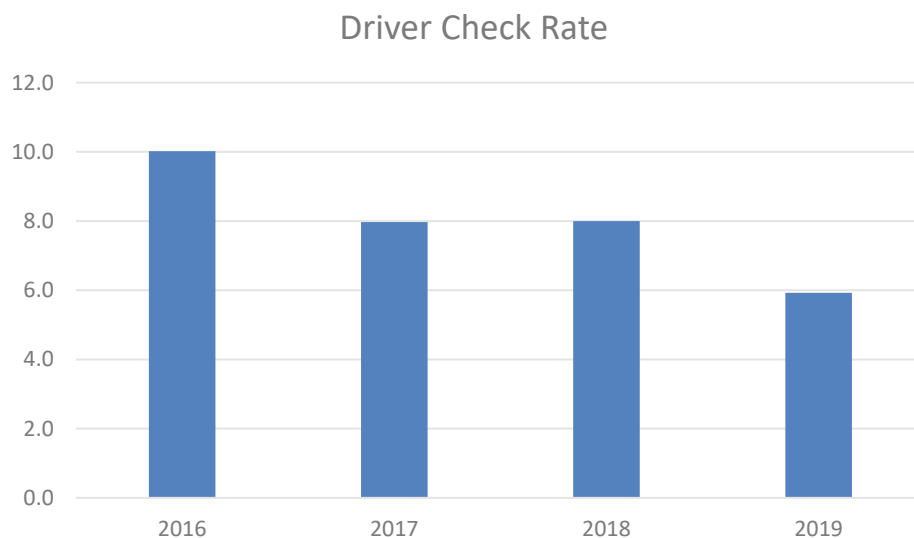
5 **Risk:** Motor Vehicle Safety

6 **Category:** Vehicle

7 **Units:** Total number of Driver Check complaint calls received per 1 million miles
8 driven

9 **Summary:**

FIGURE 5-26
DRIVER CHECK RATE METRIC DATA (ANNUAL)



10 **Narrative Context:** PG&E began tracking this metric in 2016. The driver
11 complaint rate has dropped 40 percent since 2016. For every complaint there is
12 an e-mail to the Supervisor, which requires follow-up and coaching with the
13 employee.

14 **Is Metric Used for the Purposes of Determining Executive (Director Level**
15 **or Higher) Compensation Levels and/or Incentives?**

16 No, the Drivers Check Rate metric was not used to determine incentives for
17 the years 2010-2019

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

Yes, individual performance goals related to PMVI rate linked to the 2019 individual performance goals for one or more Director-level position or higher.

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

In 2019, the following position(s) include individual goals that are linked to the PMVI metric:

- Director Customer Care (6)
- Senior Director Customer Care (2)
- Director Electric Operations (53)
- Senior Director Electric Operations (15)
- VP Electric Operations (5)
- SVP Electric Operations (1)
- Senior Director Ethics & Compliance (2)
- SVP Ethics & Compliance (1)
- Director Finance and Risk (14)
- Senior Director Finance and Risk (4)
- VP Finance and Risk (5)
- SVP Finance and Risk (1)
- Director Gas Operations (8)
- Senior Director Gas Operations (2)
- VP Gas Operations (1)
- Director Generation (2)
- Senior Director Generation (1)
- Director HR (1)
- Director IT (3)
- Senior Director IT (3)
- VP IT (1)
- Director Power Generation (3)
- Director Safety, Health, ECAP & DOT (2)
- Director Shared Services (5)
- Senior Director Shared Services (1)
- Director Strategy & Policy (2)

- 1 – Senior Director Strategy & Policy (1)
- 2 – Director Supply Chain/Materials (2)
- 3 – VP Supply Chain/Materials (1)

4 **Bias Controls:** Data on driver check calls is provided by a third-party vendor.

5 **Rate Case Safety Goal Progress:** The Driver's check metric was proposed as
6 a safety goal for the Motor Vehicle Safety risk in the 2017 RAMP Motor Vehicle
7 Safety Risk chapter⁴³ with no stated target. This metric was not included in the
8 2017 GRC, however metrics for PMVI Rate and Safe Driving Rate are with
9 stated goals for 2022 of 1.74 and 4.5, respectively. See the Narrative Context
10 explanation above for explanation of steps PG&E is taking to reduce Driver's
11 Check rate.

12 **Monthly Data:** See Attachment A at the end of this report.

⁴³ PG&E 2017 RAMP, Chapter 16, Motor Vehicle Safety, p. 16-20.

PACIFIC GAS AND ELECTRIC COMPANY
ATTACHMENT A
MONTHLY METRIC DATA TABLES

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 1

TRANSMISSION AND DISTRIBUTION (T&D) OVERHEAD WIRES DOWN

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	141	153	132	224	127	108	124	98	94	105	162	229	1697
2	2011	124	198	213	125	145	134	106	81	99	107	108	150	1590
3	2012	233	191	427	247	176	231	206	200	146	203	395	377	3032
4	2013	163	179	192	225	225	209	176	207	203	237	160	219	2395
5	2014	168	302	246	193	178	181	194	189	163	221	182	399	2616
6	2015	158	237	143	185	154	198	184	225	189	218	274	410	2575
7	2016	430	184	511	270	225	211	224	178	213	343	219	292	3300
8	2017	283	376	378	242	263	238	233	215	230	205	246	158	3067
9	2018	216	175	370	231	210	231	272	205	168	213	208	288	2787
10	2019	336	249	336	238	311	207	198	210	216	138	232	342	3013

- (a) PG&E has utilized its Integrated Logging Information System-Operations Data Base (ILIS-ODB) to provide the number of distribution outages that involved wire down event conditions.
- (b) Distribution wire down conditions during PSPS events are not included in these totals since these are generally not the initiating cause of the reported outage event.
- (c) PG&E's current definition for distribution wire down events are only related to sustained outages of its primary distribution system reported in its ILIS-ODB data base.
- (d) Transmission wire down events were not tracked until 2012; 2011 data was estimated based on the analysis of all outages in 2011, not actuals.
- (e) 2010 - only Distribution Data is included; see (d).

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 2

TRANSMISSION AND DISTRIBUTION (T&D) OVERHEAD WIRES DOWN

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	705	173	144	253	152	135	143	112	105	152	328	307	2709
2	2011	143	521	821	146	161	155	134	98	126	161	201	333	3000
3	2012	261	201	452	271	201	252	222	222	162	229	426	802	3701
4	2013	176	188	211	355	262	275	218	245	253	288	407	248	3126
5	2014	189	351	289	225	222	223	225	258	200	253	208	1266	3909
6	2015	185	760	167	208	174	232	237	250	215	250	325	627	3630
7	2016	476	308	767	320	254	230	246	193	227	452	244	324	4041
8	2017	2057	1483	409	515	282	287	256	247	361	526	284	281	6988
9	2018	249	189	457	262	252	264	310	231	185	246	369	320	3334
10	2019	967	1894	369	266	344	271	228	239	257	332	572	386	6125

- (a) PG&E has utilized its Integrated Logging Information System-Operations Data Base (ILIS-ODB) to provide the number of distribution outages that involved wire down event conditions.
- (b) Distribution wire down conditions during PSPS events are not included in these totals since these are generally not the initiating cause of the reported outage event.
- (c) Although PG&E's current definition for distribution wire down events are only related to sustained outages of its primary distribution system, PG&E has also included secondary and service conductor related sustained outages with wire down conditions as reported in its ILIS-ODB data base.
- (d) Transmission wire down events were not tracked until 2012; 2011 data was estimated based on the analysis of all outages in 2011, not actuals
- (e) 2010 - only Distribution Data is included; see (d)

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 3

ELECTRIC EMERGENCY RESPONSE

"911 Calls responded to within 60 minutes"

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	50.66%	69.81%	75.77%	68.20%	74.37%	70.97%	74.69%	74.10%	71.62%	65.69%	57.58%	62.95%	65.74%
2	2011	50.66%	57.42%	48.96%	71.75%	67.45%	71.90%	73.22%	76.68%	73.84%	71.27%	71.62%	57.65%	65.46%
3	2012	73.45%	80.15%	77.97%	83.50%	84.95%	85.18%	87.47%	86.04%	85.96%	89.61%	87.47%	81.89%	84.09%
4	2013	93.72%	93.33%	93.67%	89.13%	89.82%	93.77%	95.59%	94.91%	93.84%	94.07%	85.14%	93.66%	92.15%
5	2014	96.47%	96.46%	96.50%	94.58%	95.07%	94.99%	94.98%	94.06%	94.25%	94.46%	94.91%	90.38%	94.09%
6	2015	95.44%	92.02%	98.37%	98.59%	98.18%	97.66%	96.71%	98.44%	98.19%	98.03%	98.34%	98.09%	97.14%
7	2016	97.87%	98.29%	97.45%	97.93%	98.89%	98.48%	98.50%	98.08%	98.20%	98.56%	98.43%	99.24%	98.29%
8	2017	95.84%	94.73%	98.08%	93.31%	98.41%	98.16%	98.39%	97.85%	96.49%	96.62%	98.08%	98.03%	96.58%
9	2018	98.36%	98.86%	97.70%	99.06%	97.71%	98.09%	97.87%	97.97%	98.64%	97.88%	96.27%	97.81%	97.91%
10	2019	90.33%	94.07%	96.86%	97.43%	96.85%	97.95%	98.72%	97.97%	98.17%	89.52%	96.54%	97.37%	95.30%

(a) 2010-2011 performance is calculated manually and is not included in the system (911 Standby Reporting System). Please give consideration to this when viewing 911 metric performance

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 4
FIRE IGNITIONS
2015-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012													
4	2013													
5	2014													
6	2015	4	12	13	21	36	92	71	67	56	38	14	11	435
7	2016	2	5	1	24	36	77	61	61	54	35	6	0	362
8	2017	4	2	5	17	39	93	94	71	64	73	20	19	501
9	2018	4	7	6	10	38	100	87	70	50	33	26	3	434
10	2019	3	3	3	18	39	84	65	61	67	79	32	5	459

(a) Metric includes all powerline-involved fire incidents annually reportable to the CPUC per Decision 14-02-015 and within the entire PG&E service territory (not just HFTD). A reportable fire incident includes all of the following: 1) Ignition is associated with PG&E powerlines and 2) something other than PG&E facilities burned and 3) the resulting fire traveled more than one meter from the ignition point.

(b) Metric data is only available for 2015-2019. Both Distribution and Transmission fire ignitions are included

(c) 2019 data is still being validated and finalized; some of the "CPUC Reportable" designations may change before the ignitions are reported to the CPUC in April 2020

2019 SAFETY PERFORMANCE METRICS

TABLE 5

DIG-INS

2010-2019

Line No.	Year	UOM	January	February	March	April	May	June	July	August	September	October	November	December	EOY	Notes*
1	2010															No data available
2	2010															No data available
3	2010															No data available
4	2011															No data available
5	2011															No data available
6	2011															No data available
7	2012															No data available
8	2012															No data available
9	2012															No data available
10	2013															No data available
11	2013															No data available
12	2013															No data available
13	2014	Gas Tickets													671313	GOST Response 12581
14	2014	3rd Party Dig-ins													1621	GOST Response 12581
15	2014	3rd Party Dig-in Ratio													2.41	GOST Response 12581
16	2015	Gas Tickets													788901	GOST Response 12581
17	2015	3rd Party Dig-ins													1694	GOST Response 12581
18	2015	3rd Party Dig-in Ratio													2.15	GOST Response 12581
19	2016	Gas Tickets	60154	68599	73839	69660	74564	76594	70610	84300	78050	73127	68549	60926	858972	
20	2016	3rd Party Dig-ins	84	115	114	147	149	179	167	211	190	142	145	91	1734	
21	2016	3rd Party Dig-in Ratio	1.4	1.68	1.54	2.11	2	2.34	2.37	2.5	2.43	1.94	2.12	1.49	2.02	
22	2017	Gas Tickets	62163	61145	82191	73287	85823	84379	77764	90450	81709	89552	80815	73387	942665	
23	2017	3rd Party Dig-ins	65	79	155	128	175	181	192	205	162	172	129	137	1780	
24	2017	3rd Party Dig-in Ratio	1.05	1.29	1.89	1.75	2.04	2.15	2.47	2.27	1.98	1.92	1.6	1.87	1.89	
25	2018	Gas Tickets	82986	77901	84149	89657	95567	91232	94206	104059	87105	101917	85994	74937	1069710	
26	2018	3rd Party Dig-ins	93	127	96	137	195	160	179	174	159	164	131	103	1718	
27	2018	3rd Party Dig-in Ratio	1.12	1.63	1.14	1.53	2.04	1.75	1.9	1.67	1.83	1.61	1.52	1.37	1.61	
28	2019	Gas Tickets	90140	93011	122101	130536	128393	122987	145646	157091	155556	165328	129355	115970	1556114	
29	2019	3rd Party Dig-ins	83	76	98	132	135	161	188	193	156	178	137	82	1619	
30	2019	3rd Party Dig-in Ratio	0.92	0.82	0.8	1.01	1.05	1.31	1.29	1.23	1	1.08	1.06	0.71	1.04	

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2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 6
GAS IN-LINE INSPECTION
2010-2019
"Miles Inspected"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													38.0
2	2011													147.0
3	2012													175.6
4	2013													257.3
5	2014		52.1	20.3	17.9	11.9	6.4	66.8		6.9	96.3		142.8	421.3
6	2015			133.3				23.0	60.2	43.8		5.1		265.4
7	2016	3.0	7.1	0.8	15.9	29.0	12.8	57.5	8.6	7.7	114.6	1.9	0.6	259.5
8	2017	0.7	21.3			33.4	73.4	9.1	28.0	27.3		55.4	60.2	308.8
9	2018	43.2	22.4	7.4	36.9	42.9	0.6	1.3	18.3	6.0	75.2	43.2		297.4
10	2019		22.5	39.9	44.4	88.7	54.2	13.7	121.9	17.1	12.8	52.0	10.5	477.7

(a) Includes miles inspected for PSEP and base reliability work

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 7
GAS IN-LINE UPGRADE
2010-2019
"Miles Upgraded"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010		74.5	26.0			18.9				11.5			130.8
2	2011										71.2	86.6		157.8
3	2012		15.8						7.3			79.6		102.7
4	2013							67.0		20.0	68.7		6.5	162.2
5	2014	6.7		21.9		32.9					4.0	6.4		71.9
6	2015					6.3		12.2		11.2	5.8	11.3	25.3	72.1
7	2016	1.5				44.3	21.7	11.9		4.8	10.5	12.4		107.2
8	2017						54.2				53.4	22.4	24.4	154.4
9	2018							13.1			97.9	63.2	68.7	243.0
10	2019			36.3	62.8	2.6		3.1		70.7	10.7		59.6	245.7

(a) Includes miles upgraded in both PSEP and base reliability programs.

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 8

SHUT IN THE GAS AVERAGE TIE - MAINS

2010-2019

"Average Number of Minutes"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012													192
4	2013													147
5	2014													120.77
6	2015													102.8
7	2016													104.43
8	2017													103.78
9	2018													88.77
10	2019													85.13

(a) Monthly data not available due to various tools/databases utilized to measure SITG since 2012.

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 9

SHUT IN THE GAS AVERGAE TIME - SERVICES

2010-2019

"Average Number of Minutes"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012													70
4	2013													61
5	2014													52.2
6	2015													49
7	2016													45.76
8	2017													45.16
9	2018													43.3
10	2019													41.4

(a) *Year end data has been provided from 2012 through 2019. Monthly data is not available due to various tools utilized to manage daily dispatch time that have since been retired.

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 10
CROSS BORE INTRUSIONS
2010-2019

Line No.	Year	Unit Type	January	February	March	April	May	June	July	August	September	October	November	December	EOY
10	2013	Inspections Complete													19,500
11	2013	Cross Bores Found													151
12	2013	Find Rate													7.74
13	2014	Inspections Complete													33,570
14	2014	Cross Bores Found													192
15	2014	Find Rate													5.72
16	2015	Inspections Complete													23,531
17	2015	Cross Bores Found													104
18	2015	Find Rate													4.42
19	2016	Inspections Complete													23,653
20	2016	Cross Bores Found													90
21	2016	Find Rate													3.81
22	2017	Inspections Complete	509	1000	1438	1923	2031	1936	653	3023	4707	5481	6291	6168	35,160
23	2017	Cross Bores Found	1	5	15	4	5	1	2	1	1	3	0	0	38
24	2017	Find Rate	1.96	3.98	7.13	5.13	4.35	3.51	3.48	2.72	2.03	1.67	1.31	1.08	1.08
25	2018	Inspections Complete	3232	3215	2166	4419	3568	4407	4463	5613	4851	2701	3844	3569	46,048
26	2018	Cross Bores Found	2	5	4	4	6	2	3	3	1	5	1	7	43
27	2018	Find Rate	0.62	1.09	1.28	1.15	1.27	1.09	1.02	0.93	0.83	0.91	0.85	0.93	0.93
28	2019	Inspections Complete	1739	1647	4365	2086	2816	9120	3480	6103	3035	3780	3880	1374	43,425
29	2019	Cross Bores Found	5	3	6	3	3	2	5	5	3	2	2	2	41
30	2019	Find Rate	2.88	2.36	1.81	1.73	1.58	1.01	1.07	1.02	1.02	0.97	0.93	0.94	0.94

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 11
GAS EMERGENCY RESPONSE
2010-2019
"MINUTES"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													31.0
3	2012													26.0
4	2013	23.0	21.0	21.0	21.0	22.0	22.0	22.0	22.0	22.0	20.0	20.0	20.0	21.3
5	2014	19.9	20.3	20.0	19.7	19.9	19.6	19.4	19.7	20.2	20.2	20.4	19.7	20.0
6	2015	19.7	19.8	20.1	20.1	20.5	20.7	20.8	21.0	20.7	20.4	20.4	19.9	20.3
7	2016	20.6	20.2	20.1	20.2	19.8	19.9	19.8	19.7	20.0	19.6	19.9	20.0	20.0
8	2017	20.2	19.9	19.7	19.8	20.0	20.5	21.1	20.8	21.1	20.9	20.8	21.0	20.4
9	2018	20.5	20.5	20.3	20.5	20.4	20.5	20.8	21.2	21.3	21.0	20.4	20.4	20.6
10	2019	20.6	21.0	20.7	20.0	20.1	20.8	20.9	20.8	21.2	21.2	21.3	20.8	20.9

(a) PG&E did not track this metric on a monthly basis until 2013

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 12

STORAGE BASELINE INSPECTIONS

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012													
4	2013				1	1	2	1	1					6
5	2014								2	3	1			6
6	2015						2	1	2	1				6
7	2016					1	1		2	3		1	1	9
8	2017							1	1	2	2	1		7
9	2018				3	2	4	1	2	1				13
10	2019			1	1	2	2	2	2	1	1	2		14

(a) PG&E did not track this metric before 2013

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 14
EMPLOYEE SIF
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	0	1	1	0	0	0	0	1	1	0	0	1	5
2	2011	1	0	0	1	1	1	0	0	1	3	0	0	8
3	2012	0	1	2	0	0	0	0	0	0	2	2	0	7
4	2013	0	3	0	1	1	1	0	1	0	0	1	1	9
5	2014	0	0	0	0	0	0	0	1	0	1	0	0	2
6	2015	0	1	0	1	1	0	1	0	1	0	0	0	5
7	2016	1	0	0	0	0	0	1	0	1	0	1	0	4
8	2017	1	2	0	2	0	1	1	0	0	0	0	0	7
9	2018	0	0	0	1	0	0	0	1	0	0	0	1	3
10	2019	1	1	0	0	0	0	0	0	1	0	1	0	4

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 15
DART RATE
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011	0.46	0.73	0.70	0.75	0.69	0.68	0.68	0.67	0.65	0.72	0.70	0.68	0.68
3	2012	0.42	0.56	0.58	0.63	0.78	0.74	0.73	0.73	0.69	0.63	0.60	0.63	0.63
4	2013	0.32	0.60	0.82	1.01	0.96	0.99	0.98	1.03	0.98	0.99	0.96	0.94	0.94
5	2014	0.27	0.19	0.28	0.38	0.35	0.37	0.37	0.38	0.86	0.94	0.98	1.05	1.05
6	2015	0.23	0.59	0.72	0.70	0.73	1.11	1.25	1.33	1.39	1.46	1.53	1.52	1.52
7	2016	0.57	1.41	1.39	1.31	1.33	1.31	1.35	1.51	1.58	1.52	1.59	1.70	1.70
8	2017	0.36	0.83	1.05	1.61	1.90	1.89	2.03	2.03	2.01	2.02	1.99	1.99	1.99
9	2018	1.22	1.30	1.29	1.47	1.56	1.51	1.65	1.74	1.81	1.78	1.74	1.81	1.81
10	2019	0.65	0.98	1.43	1.66	1.76	1.89	1.96	2.09	2.01	2.03	2.04	2.05	2.05

(a) Change in reporting process in 2016 which resulted in earlier classification

(b) decisions Rates are company-wide

(c) Rates are cumulative

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 16

LWD RATE

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	0.33	0.30	0.21	0.22	0.23	0.25	0.30	0.33	0.38	0.38	0.40	0.40	0.40
2	2011	0.20	0.13	0.14	0.17	0.16	0.16	0.20	0.20	0.23	0.26	0.26	0.27	0.27
3	2012	0.12	0.15	0.13	0.18	0.21	0.21	0.27	0.28	0.27	0.25	0.27	0.32	0.32
4	2013	0.05	0.09	0.11	0.12	0.15	0.19	0.24	0.29	0.28	0.30	0.31	0.34	0.34
5	2014	0.22	0.16	0.11	0.21	0.21	0.25	0.27	0.29	0.31	0.35	0.36	0.38	0.38
6	2015	0.06	0.17	0.23	0.24	0.28	0.27	0.29	0.30	0.32	0.33	0.36	0.37	0.37
7	2016	0.17	0.16	0.19	0.20	0.27	0.27	0.29	0.32	0.35	0.37	0.41	0.40	0.40
8	2017	0.15	0.26	0.30	0.29	0.45	0.43	0.43	0.49	0.50	0.49	0.49	0.49	0.49
9	2018	0.00	0.06	0.14	0.19	0.20	0.21	0.24	0.26	0.32	0.37	0.35	0.39	0.39
10	2019	0.00	0.11	0.24	0.25	0.29	0.28	0.31	0.38	0.39	0.41	0.43	0.44	0.44

(a) Rates are company-wide

b) Rates are cumulative

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 17
OSHA RATE
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	1.93	1.54	1.53	1.67	1.66	1.87	2.01	2.03	1.97	1.95	1.89	1.84	1.84
2	2011	0.98	1.30	1.45	1.65	1.63	1.63	1.57	1.63	1.64	1.74	1.70	1.62	1.62
3	2012	0.84	1.47	1.39	1.55	1.91	1.82	1.84	1.81	1.70	1.58	1.56	1.66	1.66
4	2013	0.38	1.02	1.37	1.67	1.56	1.70	1.69	1.79	1.81	2.02	1.97	2.01	2.01
5	2014	0.66	0.87	1.55	1.82	1.87	2.12	2.18	2.14	2.36	2.43	2.39	2.41	2.41
6	2015	0.81	1.70	1.84	2.11	2.24	2.28	2.42	2.46	2.46	2.55	2.61	2.55	2.55
7	2016	0.63	1.89	2.10	2.09	2.22	2.24	2.29	2.50	2.60	2.49	2.52	2.71	2.71
8	2017	0.51	1.36	1.68	2.54	2.90	2.76	2.89	2.96	3.03	3.06	3.09	3.11	3.11
9	2018	1.78	1.80	2.05	2.32	2.50	2.64	2.88	2.90	2.97	2.94	2.89	2.94	2.94
10	2019	1.29	1.67	2.17	2.64	2.80	3.05	3.21	3.35	3.24	3.29	3.31	3.29	3.29

(a) Rates are company-wide

(b) Rates are cumulative

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 18

CONTRACTOR OSHA RECORDABLES RATE

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	2017	1.02	0.52	1.14	0.81	1.18	0.66	0.97	0.75	1.02	0.72	1.28	0.74	0.9
9	2018	1.36	1.43	1.09	0.62	0.78	0.95	0.93	1.03	1.24	0.63	0.62	0.83	0.93
10	2019	0.85	0.53	0.91	1.12	1.08	0.87	0.88	1.00	0.91	1.15	0.5	0.86	0.9

(a) ISNetworld program implementation began in 2017

(b) Data is self-reported for PG&E performance work

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 19
CONTRACTOR DART CASE RATE
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY Avg.
1	2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	2017	0.73	0.22	0.68	0.41	0.74	0.46	0.90	0.44	0.58	0.33	0.81	0.47	0.56
9	2018	0.85	1.21	0.95	0.54	0.14	0.44	0.50	0.57	0.83	0.37	0.47	0.39	0.61
10	2019	0.36	0.13	0.49	0.65	0.77	0.55	0.58	0.27	0.51	0.60	0.25	0.43	0.47

(a) ISNetworld program implementation began in 2017

(b) Data is self-reported for PG&E performance work

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 20
CONTRACTOR SIF
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012	0	0	0	0	1	3	2	0	1	0	1	0	8
4	2013	1	0	0	0	1	0	1	2	0	0	0	0	5
5	2014	0	0	0	0	0	0	0	0	1	1	0	0	2
6	2015	0	0	0	0	0	0	0	0	0	1	0	1	2
7	2016	0	0	0	0	0	0	0	0	0	0	0	1	1
8	2017	0	1	0	1	0	0	0	0	0	1	0	0	3
9	2018	0	1	0	0	0	0	0	2	1	0	0	0	4
10	2019	0	0	0	0	0	4	2	0	0	0	0	0	6

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 21
CONTRACTOR LWD CASE RATE
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	2017	0.36	0.15	0.46	0.20	0.29	0.20	0.48	0.31	0.51	0.22	0.27	0.20	0.31
9	2018	0.25	0.9	0.15	0.39	0.07	0.22	0.14	0.4	0.41	0.21	0.36	0.19	0.30
10	2019	0.21	0.07	0.24	0.24	0.31	0.33	0.27	0.14	0.36	0.28	0.05	0.27	0.23

(a) ISNetworld program implementation began in 2017

(b) Data is self-reported for PG&E performance work

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 22

PUBLIC SIF

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010		1				1	1		60				63
2	2011							1			1	1		3
3	2012	2	3	5	1	5	3	2	1	5	3	1	2	33
4	2013	2	1	3	5	1	7	2	6	1	2	4	2	36
5	2014	1	4	3	5	8	1	7	6	4	3	9	10	61
6	2015	2	5	3	8	2	8	4	7	6	3	4	2	54
7	2016	2		3	5	2		2	3	2	3	1		23
8	2017	3		2	2			1	4	2	23	3	1	41
9	2018		5	2	1	4		1		1		86	1	101
10	2019	2		2	1	2	3	4	2	2	1	1		20

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 23

HELICOPTER / FLIGHT ACCIDENT OR INCIDENT

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010										1			1
2	2011													
3	2012													
4	2013													
5	2014													
6	2015													
7	2016													
8	2017							1						1
9	2018													
10	2019													

(a) Helicopter records were reviewed for the past ten years. There we only two incidents during this time period.

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 24

SIF TIMELINESS OF CORRECTIVE ACTIONS

2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012													
4	2013													
5	2014													
6	2015													
7	2016													
8	2017				100%	100%	100%	87%	94%	100%	100%	96%	100%	100%
9	2018	100%	100%	100%	100%	96%	97%	96%	95%	92%	93%	93%	93%	93%
10	2019	69%	89%	91%	95%	95%	96%	96%	97%	95%	95%	93%	94%	94%

(a) Tracking began in 2017

(b) Percentages are cumulative

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 25
HARD BRAKE RATE
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012													
4	2013													
5	2014													
6	2015													
7	2016	4.3	4.5	4.6	4.7	4.6	4.3	4.2	4.0	4.0	4.1	4.1	4.0	4.0
8	2017	3.3	3.3	3.4	3.4	3.5	3.6	3.7	3.7	3.7	3.7	3.6	3.6	3.6
9	2018	3.0	3.0	3.0	2.9	2.9	2.8	2.7	2.7	2.7	2.7	2.7	2.6	2.6
10	2019	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1

(a) Rates were not tracked until 2016

(b) Rates are cumulative

2019 SAFETY PERFORMANCE METRICS REPORT

TABLE 26
DRIVER CHECK RATE
2010-2019

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2010													
2	2011													
3	2012													
4	2013													
5	2014													
6	2015													
7	2016	12.8	11.0	10.6	10.7	10.3	10.1	10.2	10.3	10.5	10.2	10.2	10.0	10.0
8	2017	6.5	7.9	8.5	8.2	8.4	8.6	8.4	9.4	9.7	8.0	7.9	8.0	8.0
9	2018	7.7	8.2	9.3	8.8	8.4	7.7	7.3	8.4	8.3	8.1	8.0	8.0	8.0
10	2019	5.4	6.2	6.3	5.7	5.8	6.0	6.4	6.4	6.3	6.3	6.1	5.9	5.9

(a) Rates were not tracked until 2016

(b) Rates are cumulative

PACIFIC GAS AND ELECTRIC COMPANY
2019 SAFETY PERFORMANCE METRICS REPORT
ATTACHMENT B
REPORT METRIC 22 – PUBLIC SIF SUBCATEGORIES
PER SED REQUEST

**2019 SAFETY PERFORMANCE METRICS REPORT
REPORT METRIC 22 - PUBLIC SIF SUBCATEGORIES PER SED REQUEST**

Event Date	Fatality Description	SED Subcategories	Total (a)(b) Fatalities
9/11/2019	Motor vehicle accident, car went into Bass Lake	Other non- categorized cause (vehicle related)	1
8/19/2019	Two fatalities involving a car pole accident	Electric- Vehicle-related	2
7/25/2019	Fork lift made contact with OH primary conductors	Electric- Contact with intact overhead conductors	1
7/22/2019	Fatal injuries following vehicle struck by commuter train: 20 year old male attempted to beat the train by going around the cross arm warning gates. He was struck in the rear panel of the ford focus which caused the car to slam into the PG&E utility pole resulting in fatal injuries. No other passengers in vehicle. No injuries reported to passengers on commuter train.	Other non- categorized cause (vehicle related)	1
7/2/2019	Adult male attempted to save his daughter who fell off an inflatable tube being pulled by a houseboat they had rented on Bass Lake, the adult male drowned	Other non- categorized cause	1
6/16/2019	Aircraft flown well below 500' limit struck distribution lines causing aircraft to fall into reservoir below and quickly sink with pilot inside.	Electric- Vehicle-related	1
5/11/2019	Person jumped off parking garage and struck conductors on the way down.	Electric- Contact with intact overhead conductors	1
5/1/2019	Third party lost power in aircraft and made contact with 12kV line.	Electric - Aircraft collision with utility infrastructure	1
1/17/2019	PG&E employee was driving a line truck pulling a pole trailer when he fatally struck a member of the public lying in the road.	Other non- categorized cause	1
1/14/2019	A member of the public was fatally injured after coming into contact with PG&E contractor parked vehicle.	Other non- categorized cause	1
Event Date	Serious Injury Description	SED Subcategories	Total (a)(b) Serious Injuries
11/23/2019	Burn injury to left arm/hand, entry to right shoulder exit left hand	Electric- Contact with intact overhead conductors	1
10/1/2019	3rd party injury -Electric Contact (Between Humans and Energized Facilities)	Electric contact with intact overhead conductors	1
9/18/2019	PG&E Troublemaker responded to an outage and fire. Vacaville Police and Fire were on scene and reported that a homeless individual sustained burns after allegedly attempting to tap into a PG&E power pole. Per the Vacaville Police, the individual was transported to Kaiser and then to the UC Davis Burn Unit.	Electric- Contact with energized fallen overhead conductors due to theft/vandalism	1
7/9/2019	Slip and fall caused broken femur: 3rd party slipped and fell near an open trench that was being used to install a new gas main pipe.	Gas- other non-categorized causes	1
6/28/2019	Power line down across Hwy 1 causing injury to motorcyclist	Electric- Contact with energized fallen overhead conductors due to other causes	1
6/6/2019	3rd party individual trespassed into PG&E substation and made contact with a 230 kV circuit breaker.	Electric- Contact with energized fallen overhead conductors due to theft/vandalism	1
4/1/2019	Hot air balloon hit primary lines. Burn victim airlifted. 2 other minor injuries	Electric - Aircraft collision with utility infrastructure	1
3/11/2019	A member of the public was installing metal panes for new gas station canopy. While in the man-lift, the panel rocked up into the overhead conductors resulting in burns to the left rib cage.	Electric- Contact with intact overhead conductors	1
3/4/2019	A member of the public was installing streetlights and made contact with energized conductors. Contractor on ground touching the pole sustained electric burns.	Electric- Contact with intact overhead conductors	1