

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

Order Instituting Rulemaking to Further
Develop a Risk-Based Decision-Making
Framework for Electric and Gas
Utilities.

Rulemaking 20-07-013
(Filed on July 16, 2020)

**PACIFIC GAS AND ELECTRIC COMPANY'S (U39M) 2020 SAFETY
PERFORMANCE METRICS REPORT IN COMPLIANCE WITH CALIFORNIA
PUBLIC UTILITIES COMMISSION DECISION 19-04-020**

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Dated: March 31, 2021

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Pacific Gas and Electric Company (PG&E) submits its 2020 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 the utility’s General Rate Case; and

¹ D.19-04-020, p. 26.

² D.19-04-020, Attachment 1.

Application: 15-05-003
(U 39 M)
Exhibit No.: _____
Date: March 31, 2021
Witness(es): Various

PACIFIC GAS AND ELECTRIC COMPANY

**2020 SAFETY PERFORMANCE METRICS REPORT IN
COMPLIANCE WITH CALIFORNIA PUBLIC UTILITIES COMMISSION
DECISION 19-04-020**



PACIFIC GAS AND ELECTRIC COMPANY
2020 SAFETY PERFORMANCE METRICS REPORT

TABLE OF CONTENTS

Chapter	Title	Page
1	INTRODUCTION	1-1
2	METRIC OVERVIEW	2-1
3	BIAS CONTROLS AND METHODOLOGY	3-1
4	2020 IMPUTED ADOPTED VALUES FOR SAFETY-RELATED RISK MITIGATION ACTIVITIES	4-1
5	SAFETY PERFORMANCE METRICS	5-1
Attachment A	MONTHLY METRIC DATA TABLES	AtchA-1
Attachment B	REPORT METRIC 22 – PUBLIC SIF SUBCATEGORIES PER SPD REQUEST	AtchB-1

PACIFIC GAS AND ELECTRIC COMPANY
2020 SAFETY PERFORMANCE METRICS REPORT
SECTION 1
INTRODUCTION

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **2020 SAFETY PERFORMANCE METRICS REPORT**

3 **I. Introduction**

4 Pacific Gas and Electric Company (PG&E or the Company) submits its 2020
5 Safety Performance Metrics Report (SPMR) in compliance with the Phase Two
6 Decision Adopting Risk Spending Accountability Report Requirements and
7 Safety Performance Metrics for Investor-Owned Utilities (IOU) and Adopting a
8 Safety Model Approach for Small and Multi-Jurisdictional Utilities, Decision
9 (D.) 19-04-020.

10 This report provides an overview of 25 Safety Metrics and their performance
11 over the last 10 years. PG&E is providing metric data for:

- 12 1) Transmission and Distribution (T&D) Overhead Wires Down;
- 13 2) T&D Overhead Wires Down – Major Event Days (MED);
- 14 3) Electric Emergency Response;
- 15 4) Fire Ignitions;
- 16 5) Gas Dig-In;
- 17 6) Gas In-Line Inspection (ILI);
- 18 7) Gas In-Line Upgrade;
- 19 8) Shut In The Gas Average Time – Mains;
- 20 9) Shut In The Gas Average Time – Services;
- 21 10) Cross Bore Intrusions;
- 22 11) Gas Emergency Response;
- 23 12) Natural Gas Storage Baseline Inspections Performed;
- 24 13) Not Applicable to PG&E;¹
- 25 14) Employee Serious Injuries and Fatalities (SIF);
- 26 15) Employee Days Away, Restricted, or Transferred (DART) Rate;
- 27 16) Employee Lost Workday (LWD) Case Rate;
- 28 17) Employee Occupational Safety and Health Administration (OSHA)
29 Recordables Rate;
- 30 18) Contractor OSHA Recordables Rate;

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 19) Contractor DART;
- 2 20) Contractor SIF;
- 3 21) Contractor LWD Case Rate;
- 4 22) Public SIF;
- 5 23) Helicopter/Flight Accident or Incident;
- 6 24) Percentage of Serious Injury and Fatality Corrective Actions Completed on
- 7 Time;
- 8 25) Hard Brake Rate; and
- 9 26) Driver's Check Rate

10 The information in this "2020 Safety Performance Metrics Report" confirm
11 areas where PG&E has shown significant safety progress over the past decade.
12 We saw promising signs of progress by ending the year with the lowest DART
13 rate in five years. At the same time, as shown in other data points, we have
14 more to do to get better when it comes to the safety of our system and the safety
15 of our customers, employees and contractors. Our number of serious injuries
16 and fatalities (SIF) went up in 2020 to a total of 12, compared to three in 2019.
17 To better understand the increase in SIF incidents, PG&E is collaborating with
18 our Contractors on the investigation of all SIF potential and actual events and
19 other corrective actions, which are described in Section 2 of this report.

20 Safety is PG&E's most important responsibility. Our customers and
21 communities deserve the assurance that we will deliver their electricity and
22 natural gas safely and reliably. We look forward to demonstrating, through our
23 actions, that we are working every day toward improved outcomes. We know
24 that restoring trust can only come through sustained performance and
25 accountability.

PACIFIC GAS AND ELECTRIC COMPANY
2020 SAFETY PERFORMANCE METRICS REPORT
SECTION 2
METRIC OVERVIEW

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **2020 SAFETY PERFORMANCE METRICS REPORT**

3 **II. Metrics Overview**

4 This section responds to the Ordering Paragraph 6D of D.19-04-020, which
5 states that the SPMR shall: “[p]rovide three to five examples of how the utility
6 has used Safety Performance Metrics (metrics) data to improve staff and/or
7 contractor training, and/or to take corrective actions to minimize top risks or risk
8 drivers; and provide three to five examples of how the utility is using metrics data
9 to support risk-based decision-making.”

10 Accordingly, PG&E provides a number of examples below of how PG&E
11 uses these metric data. These examples illustrate how PG&E uses metrics
12 data: (a) to improve staff and/or contractor training or take corrective actions
13 aimed at minimizing top risks or risk drivers, and (b) to support risk-based
14 decision-making.

15 **A. Improving Training and Taking Corrective Actions**

- 16 1. 911 Electric Emergency Response: In February 2020, there were major
17 weather events that significantly impacted 911 emergency response
18 performance. The February 2020 month-to-date performance for the 911
19 emergency response metric was approximately 91.5 percent, which is
20 approximately 4 percent lower than the second worst performance month in
21 2020 (August). To improve performance, a cause analysis was conducted
22 to develop corrective actions that would help PG&E respond better in the
23 future during these types of weather events.

24 Five years of data were evaluated to better understand how weather
25 events impact different parts of the service territory. As a result of this
26 analysis, the team obtained a better understanding of which areas needed
27 resources the most during weather events and PG&E implemented a plan to
28 more strategically distribute resources across the service territory during
29 weather events. Also, to meet the 911 emergency response demands
30 during weather events, PG&E trained additional personnel, including
31 personnel across lines of business such as Electric, Gas and Customer.
32 Having these additional personnel trained and ready to respond during

1 weather events will put PG&E in a better position to respond to emergency
2 calls in a timely manner.

3 2. Employee Days Away, Restricted and Transfer (DART): PG&E has
4 developed mitigations to address employee safety, which was informed by
5 the Employee, Lost Work Day, and Employee DART Rate metrics. To
6 improve upon these metrics results, PG&E has developed the following
7 mitigations:

- 8 – On-site Clinics: On-site clinics available for PG&E employees provide
9 employees with convenient access to health care services which will
10 lead to a healthier workforce by reducing the duration of DART cases,
11 including Lost Work Day (LWD) cases
- 12 – Fit 4 U program: Focuses on improving the health and well-being of
13 employees who have sustained a workers' compensation injury, by
14 providing them with the resources to maintain a healthy lifestyle with a
15 reduction in DART, including LWD cases
- 16 – Telephonic Case Management (TCM) program: PG&E's TCM program
17 will provide early case management intervention through the assignment
18 of a TCM nurse on all new Workers' Compensation (WC) claims
19 requiring a clinic visit. The TCM nurse will assist in managing employee
20 care and help employees get back to full duty sooner, providing better
21 recovery outcomes. For example, the nurse will help ensure employees
22 are following treatment recommendations and can pick up on symptoms
23 that may lead to more serious health care needs if not addressed right
24 away. The nurse will also help to expedite referrals or other needed
25 treatment. This will be an expansion of our current nurse case
26 management programs. Program goals include reducing claim costs
27 and injury severity (DART and LWD cases), and aiding in better
28 recovery outcomes.
- 29 – Industrial Athlete: The Industrial Athlete program efforts include
30 targeted interactions with an industrial athlete specialist with an
31 emphasis on high-risk areas identified by data analysis. The efforts
32 further supports a reduction in DART, including LWD cases.
- 33 – Office Ergonomics: The Office Ergonomics program efforts include a
34 continued effort on change management; including Supervisor training

1 within the organization for early symptom recognition and action,
2 working with facilities partners to ensure furnishings meet ergonomic
3 design specifications, and enhanced reporting moving toward predictive
4 modeling.

- 5 – Industrial Ergonomics: The Industrial Ergonomics program is taking a
6 risk-based approach to identify the most physically demanding tasks
7 based on interviews and past injury data using the Humantech software
8 to analyze and measure risks and risk reduction. The program also
9 includes partnering with line of business (LOB) sponsors and leads to
10 pilot and implement solutions.

- 11 3. Contractor SIF: Following a SIF incident involving a vegetation
12 management contractor, PG&E learned that the prime contractor hired a
13 subcontractor that was not approved to perform tree removal work and was
14 not ranked as a high-risk contractor. As a result, the PG&E Contractor
15 Safety team along with the VM team developed a procedure for assuring
16 that primary contractors adhere to contract terms and conditions which
17 require contractors to provide PG&E with a proposed list of sub-contractors
18 for approval prior to bringing them to a job location. The procedure includes
19 steps for onboarding tree work vendors including meeting fall protection
20 requirements for the work.

- 21 4. Contractor SIF: Following a 2020 fatal off-road utility vehicle (OUV) incident,
22 PG&E created new policies and procedures to better control against
23 potential SIFs. These include: (1) requiring Senior Vice President approval
24 to reinstate use of OUVs, based on risk and the need for use; (2) removing
25 the middle passenger seat to eliminate the possibility of a middle passenger
26 accidentally slipping their left foot onto the gas pedal of an OUV during
27 adverse roadway conditions; and (3) creating Contractor OUV requirements
28 which are verified to be implemented before allowing contractors to use
29 OUVs.

- 30 5. Employee SIF: A water system repair employee was fatally injured in
31 November of 2020 while operating a telescoping forklift on a roadway in the
32 vicinity of the Balch Camp Powerhouse. The forklift left the roadway and
33 went down a mountain side approximately 150 feet, landing in the Kings
34 River.

1 As a result, Power Generation is creating a Road Hazard Program to
2 conduct a Failure Modes and Effects Analysis (FMEA) to identify failure
3 mode criticality and priority and develop hazard risk ranking methodology
4 and criteria to establish allowable use (type of vehicle) for each road hazard
5 type. It also includes developing a road standard and corresponding
6 procedures to consistently risk rank road hazards across the fleet of roads,
7 outline specific road investment plans to be applied to high or very-high risk
8 roads, identify matrix for allowable uses (types of vehicles) based on road
9 ratings, hazards and conditions, implement tracking system for roads and
10 bridges by classification and mitigation application. Power Generation has
11 developed a pre-drive checklist for Power Generation for operation of
12 powered industrial requirements to be in 2-wheel front steer mode only while
13 driving on roads.

14 6. Third Party Dig-Ins: To reduce the rate of third party dig-ins, new web-
15 based trainings (WBT) were created in cooperation with the PG&E Academy
16 for improving internal safe excavation practices and limiting unintentional
17 impacts on locating resources through inefficient or improper USA tickets
18 (i.e., over delineation, unnecessary re-marks, etc.).

19 B. Supporting Risk-Based Decision-Making

20 1. Wires Down: T&D Overhead Wires Down data is used to inform the
21 Overhead Primary Deteriorated Conductor Replacement program. The
22 program centralizes the prioritization, tracking, and funding of conductor
23 replacement projects in non-high fire threat district (HFTD) areas and targets
24 replacement of primary conductor segments with elevated wires down rates,
25 especially small conductor and overlap of corrosion zones.

26 The program is informed with the Wires Down Database which tracks
27 attributes about the conductor (such as size, type, known splices, annealing)
28 as well as environmental factors and risks (such as corrosion zone, snow
29 loading zone, and HFTD. These attributes and factors are used to
30 determine conductor replacement project initiation, justification, and priority,
31 as well as to determine failure trends of types of conductors and
32 environmental factors, that may increase asset health deterioration.

33 2. Contractor OSHA recordables and Contractor SIF: As of early 2020,
34 PG&E's Contractor Safety Program requires that field safety observations

1 are performed and documented to verify contractor compliance with PG&E
2 and regulatory standards, rules, and codes. Field safety observation
3 frequencies are based on the risks associated with the contractor scope of
4 work. Both Contractor recordables and SIFs were used in the 2020 RAMP
5 model analysis to determine mitigation program effectiveness for the
6 Contractor Safety Incident risk.

7 The EHS Field Safety team developed and staffed the program with
8 field safety specialists to perform the field observations.

- 9 3. Contractor SIF: PG&E Vegetation Management (VM) work is performed by
10 contractors. During 2020, the Vegetation management department
11 experienced an increase in serious injuries.

12 To reduce the contractor safety risk, The VM team created a strategic
13 safety plan that includes proper contractor selection, work to establish
14 consistent VM worker training and competency requirements, and safe work
15 practices to ensure proper oversight on work by an experienced supervisor
16 to help reduce serious incidents.

17 PG&E field oversight is one of the major areas of focus. The VM team
18 is adding 75 Vegetation Management Inspectors (VMI) to provide field
19 oversight and real time feed back to the tree crews. With 75 VMI's and
20 approximately 1,500 tree crews, this provides a ratio of 20:1 crew to VMI.
21 PG&E worked with the IBEW to create the VMI position and is involved with
22 the recruitment of employees with tree crew experience. The VMIs will be
23 focused on safety and quality of the tree crews.

- 24 4. Gas Dig-in, Shut In The Gas Average Time – Services, Cross Bore
25 Intrusions, and Gas Emergency Response: In 2020, PG&E Gas Operations
26 continued the journey of Process Safety Management maturity. The
27 Process Safety Indicator (PSI) dashboard, based on a pyramid framework,
28 is reviewed monthly at Operational Review Meetings and other senior
29 leadership platforms. This includes review of relevant metrics including
30 relevant Safety Performance Metrics such gas dig-ins, shut the gas average
31 time—services, cross bore intrusions, and gas emergency response. The
32 hierarchy of the dashboard classifies process safety metrics into four tiers of
33 leading and lagging indicators (adapted from American Petroleum Institute
34 (API) RP754 and modified for PG&E Gas Operations):

- 1 • Tier A: Catastrophic Event;
- 2 • Tier B: Serious & Severe Event with injury and/property damage;
- 3 • Tier C: Low & Elevated Event with minor equipment or property
- 4 damage; and
- 5 • Tier D: Low Event Operating Disciplines (Training, Safety Culture,
- 6 Expectations).

7 The metrics alignment framework helps to drive ownership and
8 accountability to ensure leading indicators are acted upon to prevent a major
9 gas incident that can lead to serious injuries, fatalities, or cause significant
10 interruption to the gas business. Metrics are evaluated continuously and
11 calibrated at the beginning of the year to ensure that Gas Operations drive
12 the right continuous improvement conversations.

13 In 2020 the dashboard was also integrated with PG&E's Corrective
14 Action Program (CAP) which has helped to flag Process Safety issues in the
15 system and assist in driving ownership for each issue raised.

16 5. Third Party Dig-Ins :

17 3rd Party Dig-in data informed the development of the Global
18 Positioning System (GPS) devices in development by the Gas Research
19 and Development team. The GPS devices are affixed to pieces of
20 excavation equipment and have geo-fence alerts on them to notify the
21 equipment operator that they are approaching a PG&E Gas Transmission
22 facility. They are also trackable on a master system and they have
23 telemetry sensors that detect movements of the equipment consistent with
24 excavation activity. Based on location and excavation activity, use of the
25 equipment in an area without a USA ticket could/would initiate contact with
26 the excavation company to generate communication and remedy any
27 identified unsafe excavation. This technology was included in the 2020
28 RAMP as Alternative Plan 2: Mitigate Transmission Pipeline Third Party
29 Damage 1 Events.

30 In addition to the specific examples identified above, in June 2020,
31 PG&E filed its 2020 Risk Assessment and Mitigation Phase (RAMP) Report,
32 which used the data from many of the metrics gathered in this report.² For

² Application 20-06-012.

1 example, for the wildfire risk, PG&E provided five years of historical fire
2 ignition data compared to two years of data in PG&E's 2017 RAMP report.
3 Additionally, for the contractor safety risk, PG&E used contractor-specific
4 data rather than employee data used in the 2017 RAMP report.
5 Improvements to our data have enabled a transition from a risk
6 management process that primarily relied on the judgment of subject matter
7 experts (SMEs) and industry data to a process driven largely by
8 PG&E-specific data from historical events, supplemented as necessary with
9 SME and industry data. In evaluating PG&E's RAMP, SPD noted that
10 "PG&E's risk-based decision-making framework improved risk modeling
11 rigor and data quality."³

³ Safety Policy Division Report Evaluating PG&E's RAMP, p. 140.

PACIFIC GAS AND ELECTRIC COMPANY
2020 SAFETY PERFORMANCE METRICS REPORT
SECTION 3
BIAS CONTROLS AND METHODOLOGY

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **2020 SAFETY PERFORMANCE METRICS REPORT**

3 **III. Bias Controls and Methodology**

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

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

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

18 Individual or Group Performance Tied to Metrics

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

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

27 For this report, to determine if a metric is tied to a specific goal PG&E
28 reviewed all available 2020 goals and metrics for Officers and Directors for the
29 Enterprise. PG&E met this requirement by searching all LOB goals for
30 each SPMR metric name and identified the officers and Directors with
31 performance goals that are tied to each SPMR metric.

PACIFIC GAS AND ELECTRIC COMPANY
2020 SAFETY PERFORMANCE METRICS REPORT
SECTION 4
2020 IMPUTED ADOPTED VALUES FOR SAFETY-RELATED
RISK MITIGATION ACTIVITIES

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **2020 SAFETY PERFORMANCE METRICS REPORT**

3 **IV. 2020 Imputed Adopted Values for Safety-Related Risk Mitigation Activities**

4 The total estimated risk mitigation spending level as adopted in the 2020
5 General Rate Case (GRC) for 2020 and the recorded spend is provided in
6 Table 4-1 below.

TABLE 4-1
2020 TOTAL SAFETY-RELATED RISK MITIGATION IMPUTED ADOPTED VALUES AND
RECORDED COSTS

Line No.		Expense	Capital
1	2020 Imputed Regulatory Values	\$1,726,340.91	\$2,359,457.17
2	2020 Recorded	\$2,534,723.12	\$2,957,623.01

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
2020 SAFETY PERFORMANCE METRICS REPORT
SECTION 5 – SAFETY PERFORMANCE METRICS

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

2 **Metric Name and Description:** T&D Overhead Wires Down – Number of
3 instances where an electric transmission or primary distribution conductor is
4 broken and falls from its intended position to rest on the ground or a foreign
5 object; excludes down secondary distribution wires and Major Event Days
6 (MED) (typically due to severe storm events) as defined by the Institute of
7 Electrical and Electronics Engineers (IEEE). An MED is a day in which the daily
8 System Average Interruption Duration Index exceeds a Major Event Day
9 threshold value.

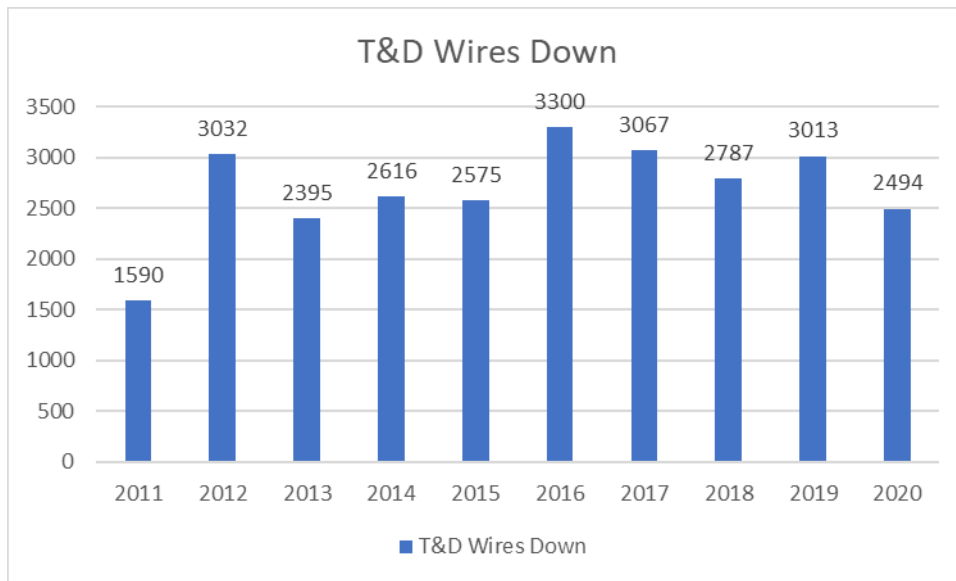
10 **Risks:** Wildfire, Transmission Overhead Conductor, and DOCP⁴

11 **Category:** Electric

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

13 **Summary:**

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



4 The Corporate Risk Register now has the following risks: (1) Wildfire, (2) Failure of Electric 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 **Narrative Context:** In 2012, PG&E initiated the Wires Down Program (including
2 introduction of the wires down metric) to address the Company's increased
3 focus on public safety by reducing the number of conductors that fail and result
4 in a contact with the ground, a vehicle, or other object. Before 2012, wires down
5 data was collected in the OUTAGE and ESLIC databases but not tracked or
6 used as a metric. The increase in wire down events starting in 2012 is due, at
7 least in part, to more accurate measurement. As part of the Wires Down
8 Program, in an effort to identify and mitigate the root cause of wires down
9 incidents, Electric Operations implemented a program to visit wires down
10 locations to gather essential data, understand the cause, and develop work
11 plans to mitigate future 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
18 vegetation-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 Yes, in 2020, Electric Asset Failure was a STIP metric. Electric Asset
30 Failure includes distribution equipment failure wire down events located within
31 Tiers 2 and 3.

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

3 Yes, the T & D Overhead Wires Down metric is linked to 2020 performance
4 goals for one or more Director-level position or higher.

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

6 Yes, the T & D Overhead Wires Down metric is linked to all individual goals
7 as part of 2020 STIP plan. In addition, this metric may be included as part of an
8 individual's performance goals.

9 **Bias Controls:** The T&D Wires Down metric is a strong proxy of the overall
10 goal of reducing the potential contacts with wires down and improving the
11 reliability of the electric system along with reducing public safety risk. From the
12 metric data, performance and target-setting perspective, there are several
13 controls put in place that have been verified by Internal Audit.

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

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

26 Significant work was performed to reduce wires down, including replacing
27 overhead conductor, vegetation clearing, hardening of distribution circuits,
28 infrared inspections of overhead lines to identify and repair hot spots,
29 investigating wires down incidents, and implementing learnings/corrective
30 actions.

31 At the time the 2020 GRC was filed, PG&E expected to maintain second
32 quartile performance in wires down. Due to year-over-year changes in industry

1 performance, and the recent metric performance, PG&E is currently in the
2 2nd quartile.

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

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

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

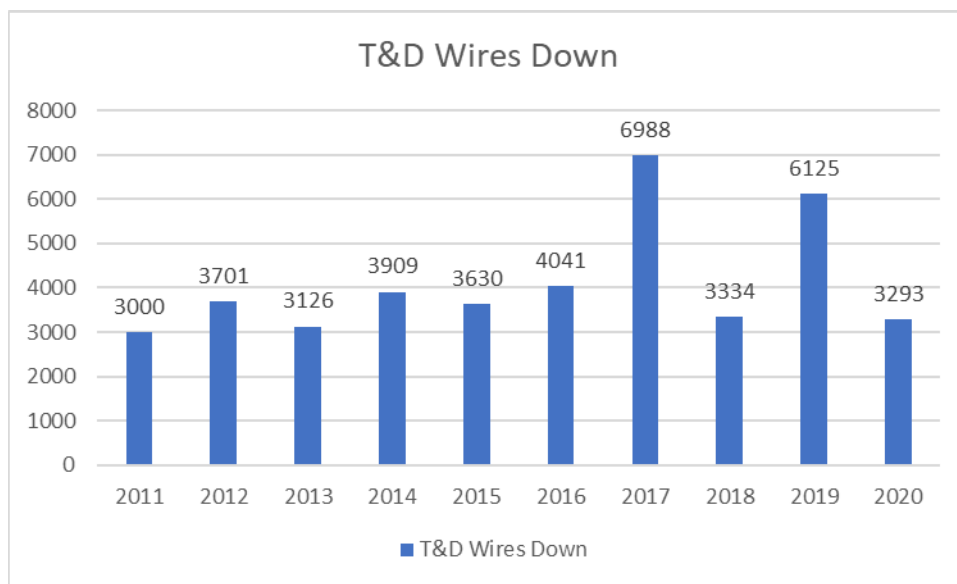
8 **Risks:** Wildfire, Transmission Overhead Conductor, DOCP⁵

9 **Category:** Electric

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

11 **Summary:**

**FIGURE 5-2
T&D OVERHEAD WIRES DOWN METRIC DATA (ANNUAL)**



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

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

1 heavily based on the number of severe weather event days in a particular year.
2 The IEEE established the MED criteria to exclude those days from industry
3 benchmarked reliability data to avoid having metric results driven primarily by
4 weather patterns. Given the fluctuations driven in this metric from weather
5 patterns, PG&E does not view it as an appropriate metric to properly assess
6 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 Yes, in 2020, Electric Asset Failure was a STIP metric. Electric Asset
10 Failure includes distribution equipment failure wire down events located within
11 Tiers 2 and 3.

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

14 Yes, the T and D Overhead Wires Down metric is linked to 2020 individual
15 performance goals for one or more Director-level position or higher.

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

17 Yes, the T and D Overhead Wires Down metric is linked to all individual
18 goals as part of 2020 STIP plan. In addition, this metric may be included as part
19 of an individual's performance goals.

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

22 **Rate Case Safety Goal Progress:** PG&E does not focus on this metric;
23 therefore, it is not used to track safety performance. The T&D Wires Down
24 metric excluding MEDs is used to track Public Safety Performance. See
25 Metric 1 discussion for additional detail.

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

1 **Metric 3: Electric Emergency Response**

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

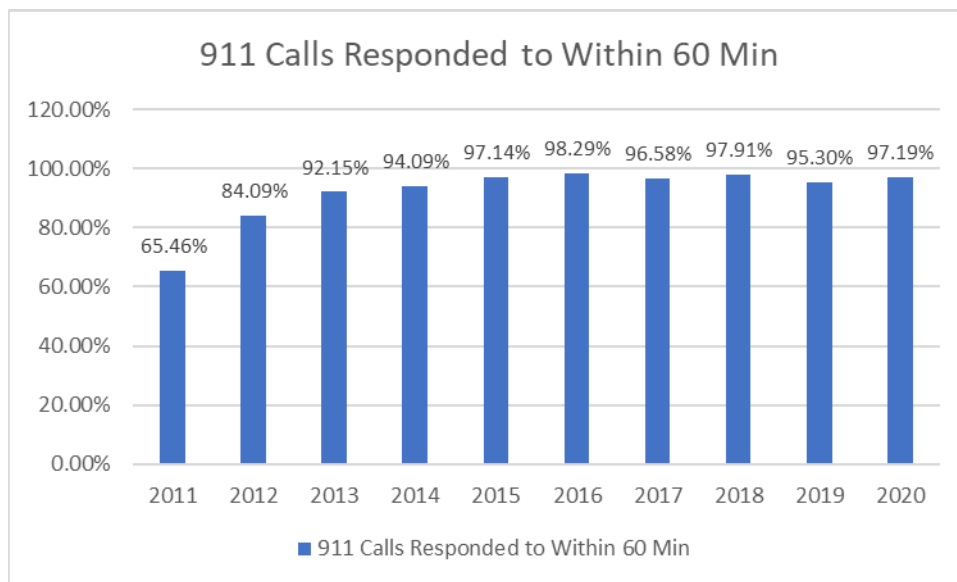
6 **Risks:** Wildfire, Overhead Conductor, Public Safety, Worker Safety⁶

7 **Category:** Electric

8 **Units:** Percentage of time response is within 60 minutes

9 **Summary:**

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



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

⁶ The Corporate Risk Register now has the following risks: (1) Wildfire, (2) Failure of Electric Distribution Overhead Assets, (3) Third-Party Safety Incident (4) Employee Safety Incident; and (5) Contractor Safety Incident. Distribution Overhead Conductor – Primary 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 2011-2020. By 2020, 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 97 percent. The recent 2020 performance was
20 in line with the average performance over the past 5 years (97.05 percent).

21 PG&E began benchmarking its response to 911 calls with other utilities in
22 2012. PG&E's 2011 performance was 3rd quartile, improving to 2nd quartile in
23 2012-2014, and reaching 1st quartile in 2015. Since 2015, PG&E's historical
24 performance has been within the first quartile and best-in-class in some years.

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

27 Yes, the Electric Emergency Response metric was used as a STIP metric
28 for 2020.

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

31 Yes, the Electric Emergency Response metric is linked to 2020 performance
32 goals for one or more Director-level position or higher.

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

2 Yes, the Electric Emergency Response metric is linked to all individual goals
3 as part of 2020 STIP plan. In addition, this metric may be included as part of an
4 individual's performance goals.

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

14 **Rate Case Safety Goal Progress:** PG&E has been continuously improving its
15 performance in responding to 911 calls and in the past achieved a best-in-class
16 performance in comparison to its peers. From 2015 through 2020, PG&E has
17 maintained first decile performance in 911 response time.

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

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

1 **Metric 4: Fire Ignitions**

2 **Metric Name and Description:** Fire Ignitions – The number of
3 powerline-involved fire incidents annually reportable to the California Public
4 Utilities Commission (CPUC) per D.14-02-015. A reportable event is any event
5 where utility facilities are associated with the following conditions:
6 – A self-propagating fire of material other than electrical and/or communication
7 facilities, and
8 – The resulting fire traveled greater than one linear meter from the ignition
9 point,⁷ and
10 – The utility has knowledge that the fire occurred.⁸

11 **Risks:** Overhead Conductor, Wildfire, Public Safety, Worker Safety,
12 Catastrophic Event Preparedness⁹

13 **Category:** Electric

14 **Units:** Count of number of fire ignition incidents

15 **Summary:**

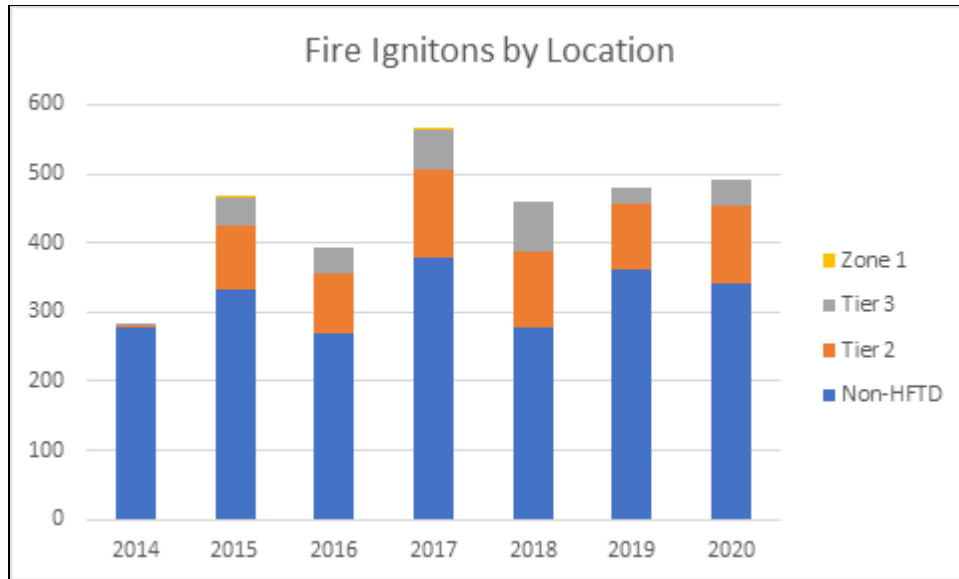
7 Per D.14-02-015, Appendix C at p. C-3.: Ignition Point is the location, excluding utilities facilities, where a rapid, exothermic reaction was initiated that propagated and caused the material involved to undergo change, producing temperatures greatly in excess of ambient temperature.

Note that PG&E has included ignition records attributable to PG&E Electrical Equipment where the fire size is unknown in the scope of this metric.

8 D.14-02-015, Appendix C at p. C-3.

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

**FIGURE 5-4
FIRE IGNITION METRIC DATA (ANNUAL)^{10,11}**



**TABLE 5-1
FIRE IGNITIONS METRIC DATA BY LOCATION (ANNUAL)**

Year	Non-HFTD	Tier 2	Tier 3	Zone 1	Total
2014	277	4	1		282
2015	332	94	40	2	468
2016	268	89	36		393
2017	378	128	58	1	565
2018	279	109	71		459
2019	362	94	25		481
2020	341	113	38		492

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

¹⁰ The 2015-2019 fire ignition metric data reflects fire ignitions previously not included in the 2019 Safety Performance Metrics Report due to a misidentification in a field-based documentation system. PG&E is currently conducting an audit of the datasets that may contain fire ignition data.

¹¹ PG&E has included the Zogg Fire in this ignition count because CAL FIRE has announced that the cause of the Zogg Fire was a pine tree contacting PG&E overhead electric lines. PG&E’s investigation into the cause of the Zogg Fire is ongoing.

1 this data in July 2014. The data is collected from multiple sources and validated
2 through our Fire Incident Data Collection Process (RISK-6306S/P):

- 3 • The Field Applications System provides ignition information from Distribution
4 Troublemakers as they respond to Field Orders. When a Troublemaker arrives
5 at an incident location and identifies signs that an ignition occurred, the
6 Troublemaker selects “Yes” in the “Fire Incident” field of their data entry
7 device. This then opens an “Ignitions” tab where the Troublemaker enters
8 information related to the ignition, including the fire location, suppressing
9 agency information, whether media is on site, if the fire was extinguished,
10 equipment ID numbers, weather, facility impacted, estimated wind, event
11 element, fire size, type of construction, and evidence collected. The
12 Troublemaker has an option to attach pictures and other documents to the
13 Field Order. This information is received by the Electric Incident
14 Investigations (EII) team who quality check (QC) and further investigate the
15 ignitions.
- 16 • The Transmission Outage Tracking and Logging system provides
17 information about any planned or unplanned outages on Transmission and
18 Substation assets. This system indicates if an ignition resulted from an
19 unplanned transmission system outage or interruption. The information is
20 logged by the Grid Control Operators. The interruptions resulting in an
21 ignition are sent to EII who reviews and further investigate the ignitions.
- 22 • The Integrated Logging Information System (ILIS)/Outage Information
23 System (OIS) systems contain information related to outages and switching
24 to restore customers that were de-energized due to an equipment failure or
25 electric incident. This information applies only to ignitions that result in an
26 outage and contains information about the fault, potential causes of the fault,
27 location and circuit information, customers affected by the outage, and steps
28 and times to restore power to affected customers.
- 29 • The information received from these systems goes through a thorough
30 investigation process. This process ensures that all required information for
31 an event is received shortly after the event has occurred, and also ensures
32 the ignition data is complete and accurate. The information is received by
33 the EII team and entered into the Fire Ignition Tracker. The EII team then
34 verifies the fire location, High Fire Threat District (HFTD), event element,

1 suspected initiating cause and other fields. The Ignition Investigations team
2 also communicates with Troublemakers and responding fire agency incident
3 leads and creating executive summaries to communicate findings.

- 4 • Discrepancies identified in our system of records
5 (ILIS/OIS/FAS/Transmission Operation Tracking and Logging) are corrected
6 during this investigation phase.
- 7 • The data is also sent to the appropriate Asset Family Owners to help those
8 teams identify and address failure trends and align mitigation strategies with
9 areas of risk. This data is also utilized to inform the wildfire risk model.

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

12 Yes, the Fire Ignitions metric was used as a STIP metric for 2020.

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

15 Yes, the Fire Ignitions metric is linked to 2020 performance goals for one or
16 more Director-level position or higher.

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

18 Yes, the Fire Ignitions metric is linked to all individual goals as part of 2020
19 STIP plan. In addition, this metric may be included as part of an individual's
20 performance goals.

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

- 25 • Inputs data from the various data sources into tracker;
- 26 • Performs initial QC to verify the fire Lat/Long, HFTD, Event Element, and
27 Suspected Initiating Cause;
- 28 • Once the information is added to the tracker and the initial review is
29 complete, the EII team performs an in-depth QC and an investigation when
30 necessary by doing the following:
 - 31 – Reviews information received from data sources for accuracy;

- 1 – Confirms or revises the initial assessment made at intake;
- 2 – Reaches out to Troublemakers and/or responding fire agencies as
- 3 necessary;
- 4 – Creates an executive summary for each reportable ignition that is
- 5 determined to be attributable to PG&E; and

6 **Rate Case Safety Goal Progress:** While this metric was not a stated safety
7 goal in the 2020 GRC, PG&E tracks the number of fires (ignitions) as one of its
8 key performance measures. PG&E’s 2020 General Rate Case (GRC)
9 testimony¹² discussed planned work to mitigate the risk of wildfires, and
10 indicated that the controls for this risk will continue to be strengthened in the
11 future due to the increasing severity of drought conditions, the size of PG&E’s
12 electric system, and the quantity and diversity of trees in the Company’s service
13 territory.

¹² See 2020 GRC Exhibit (PG&E-4), Chapter 2A (Wildfire Risk and Policy Overview) for a complete description of PG&E’s wildfire controls and mitigations.

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 as defined in California
7 Government Code 4216 (g). A third-party dig-in is damage caused by someone
8 other than the utility or a utility contractor.

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

16 **Risks:** Transmission Pipeline Failure – Rupture with Ignition and Distribution
17 Pipeline Rupture with Ignition (non-Cross Bore)¹³

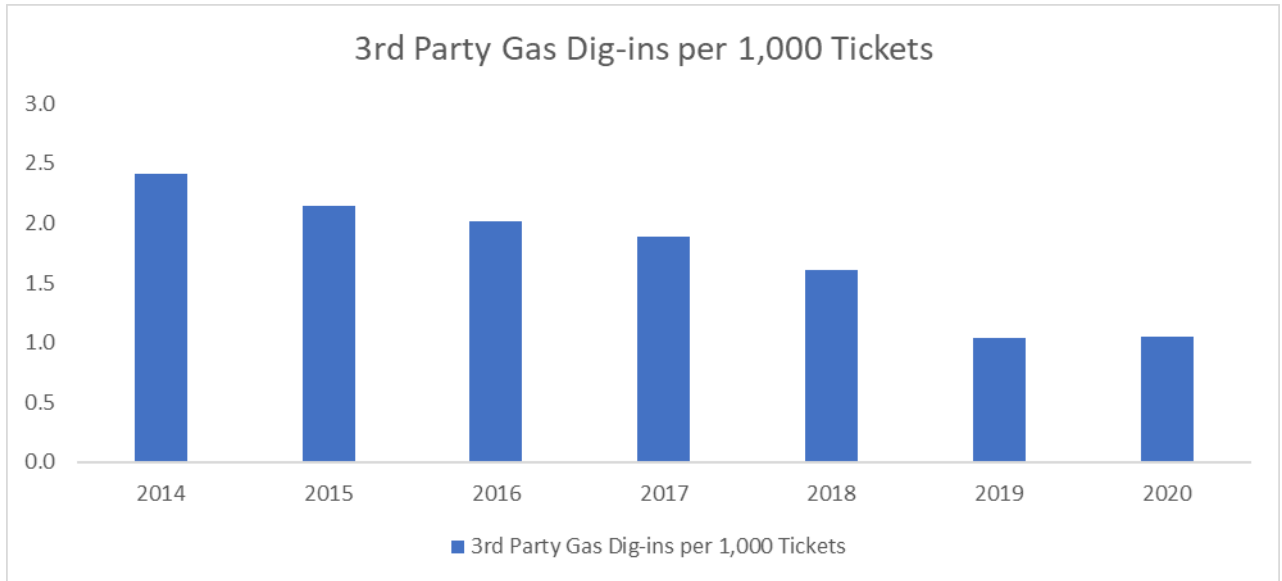
18 **Category:** Gas

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

¹³ The Corporate Risk Register now has the following risks: (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, with a slight uptick in 2020. At the same time,
4 the number of USA tickets has increased. From 2014-2020, PG&E experienced
5 a 129 percent increase in USA tickets. With the increase in USA tickets
6 received between 2014-2017 the dig-in count climbed, peaking in 2017, with
7 1,780 dig-ins and then began a steady decline to 1,604 dig-ins in 2020. PG&E
8 attributes the reduction in the number of dig-ins per 1,000 USA tickets to
9 PG&E’s increase in Damage 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 actions to take, as needed.

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

15 Yes, the Gas Dig-In metric was used as a Short-Term Incentive Plan metric
16 for 2020.

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

3 Yes, the Gas Dig-In metric is linked to 2020 group performance goals for
4 one or more Director-level position or higher.

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

6 Yes, the Gas Dig-In metric is linked to all individual goals as part of 2020
7 STIP plan. In addition, this metric may be included as part of an individual's
8 performance goals.

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

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

21 On a quarterly basis, a supporting documentation package is prepared by
22 the Damage Prevention team, reviewed by the Business Process Governance
23 team, and then routed for Gas Operations Senior Leadership approval. The
24 support packages are also reviewed quarterly by Compensation and Internal
25 Audit.

26 **Rate Case Safety Goal Progress:** This metric supports and reflects progress
27 in PG&E's safety goal of dig-in prevention for the safety of both PG&E
28 contractors and the public at large by reduced dig-ins per 1,000 tickets.¹⁴
29 Specific Damage Prevention and Public Safety initiatives that contribute to dig-in
30 reduction included in the 2020 GRC were: (1) continued participation in the

¹⁴ See 2020 GRC (1) Exhibit (PG&E-14), Chapter 12, pp. 14-26 through 14-30;
and (2) Exhibit (PG&E-3), Chapter 6, pp. 6-13 through 6-14.

1 Gold Shovel Program including providing certification to the contracting
2 community on dig-in prevention, (2) the use of caution tape in PG&E's
3 construction activities, which provides excavators with a clear sign that gas
4 facilities are present, (3) additional training for PG&E excavators to conduct a
5 "pre-sweep" prior to excavation, ensuring that all structures are identified, (4) a
6 Damage Prevention Manual to provide clear instruction around critical
7 processes, including troubleshooting of difficult to locate facilities, and (5) the
8 Public Awareness program which aims to improve public awareness by sending
9 bill inserts in the mail, making education links available on e-mail bill pay,
10 sending separate mailers, running ads in newspapers and the radio, and
11 conducting companywide campaigns for Call 811 Before You Dig.

12 PG&E's transmission-related Locate and Mark activities are discussed in the
13 2019 Gas Transmission and Storage (GT&S) Rate Case.¹⁵ Additionally, PG&E
14 describes its goal to maintain a "Line of Sight" for all pipeline markers in the
15 2019 GT&S Rate Case.¹⁶ Pipeline markers are effective for preventing dig-ins
16 or accidental damage of PG&E assets.

17 PG&E's Locate and Mark program is identified as a control to the Loss of
18 Containment on Gas Transmission Pipeline¹⁷ as well as Loss of Containment
19 on Gas Distribution Main and Service¹⁸ risk in the 2020 RAMP.

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

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

¹⁶ See 2019 GT&S Rate Case Prepared Testimony, Volume 1, Chapter 9, p. 9-29.

¹⁷ See 2020 Ramp, p. 7-20.

¹⁸ See 2020 Ramp, pp. 8-25 through 8-25.

1 **Metric 6: In-Line Inspection (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 Failure¹⁹

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)**



17 **Narrative Context:** Total miles of pipeline in-line inspected with traditional ILI
18 tools vary by year and are correlated with miles of pipeline upgraded and

¹⁹ The Corporate Risk Register now has the following risk: Loss of Containment on Gas Transmission Pipeline.

1 required re-inspection miles. D.11-06-017, as codified by Public Utilities Code
2 (Pub. Util. Code) Section 958, requires natural gas transmission pipelines in
3 California to be capable of ILIs, where warranted. In addition, both Title 49 of
4 the Code of Federal Regulations – Transportation (49 CFR) Part 192,
5 Subpart O, and PG&E’s traditional ILI Program procedures requires
6 reassessments, which drive the required ILI re-inspection miles in a given year.
7 Further, ILI is the most reliable pipeline integrity assessment tool currently
8 available to natural gas pipeline operators to assess the internal and external
9 condition of transmission line pipe. As of 2020, approximately 43 percent of the
10 system is piggable. In 2020 alone, PG&E upgraded 464 miles which is a six
11 percent increase to overall piggable mileage. In addition, PG&E inspected a
12 total of 359.7 miles with 299.7 of those miles assessed with ILI for the first time.

13 To continuously focus on improving performance, metric results are reported
14 monthly and reviewed at leadership meetings and weekly huddles to discuss
15 results and take action as needed. Performance in 2020 on target based on
16 planned work. As noted above, the number of miles in-line inspected vary by
17 year and are correlated with miles of pipeline upgraded and required re-
18 inspection miles.

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

21 No, the Gas In-Line Inspection metric was not used as a Short-Term
22 Incentive Plan (STIP) metric for 2020.

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

25 Yes, the Gas In-Line Inspection metric is linked to 2020 individual
26 performance goals for one or more Director-level position or higher.

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

28 In 2020, the following position(s) include individual goals that are linked to
29 the Gas In-Line Inspection metric:

- 30 – Senior Director, Gas Operations (1).

31 **Bias Controls:** Metric results are reported monthly by the Gas Operations
32 Business Process Governance team and reviewed at leadership meetings to

1 discuss performance and take action. In the event that there is a resulting need
2 for additional budget or resources, approval must be obtained from the
3 Gas Operations Senior Leadership team at the Work, Finance and Resource
4 Committee meeting.

5 During the years that this was a STIP metric, on a quarterly basis the
6 Gas Operations Business Process Governance team worked to confirm ILI
7 projects and mileage with various stakeholders. Mileage and unit capture dates
8 from the P6 database (scheduling program used by the GT Project Management
9 team) were verified by the Gas Operations Business Process Governance team
10 to ensure consistency with the Assessment Completion Notification (ACN) form
11 (Engineering record), which is signed by the ILI engineering Supervisor or
12 Manager. A supporting documentation package for metric results was prepared
13 quarterly by the Business Process Governance team, then routed for
14 Gas Operations Senior Leadership approval. The support packages were also
15 reviewed each quarter by Compensation and Internal Audit.

16 In 2020, the metric was no longer included as a STIP metric, however the
17 review process established by the Business Process Governance team was
18 maintained.

19 **Rate Case Safety Goal Progress:** This safety metric does not support a 2020
20 GRC safety goal given this metric is a gas transmission, not distribution, related
21 metric. Although the 2019 GT&S Rate Case testimony did not provide a specific
22 ILI inspection metric, the testimony supports this metric.²⁰ PG&E's ILI Program
23 is intended to bring the total first time ILI miles to approximately 3,109 miles by
24 the end of 2021, approximately 47 percent of PG&E's system, in addition to
25 performing re-inspections on approximately 1,000 miles over the 2019-2021
26 period.

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

²⁰ 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.

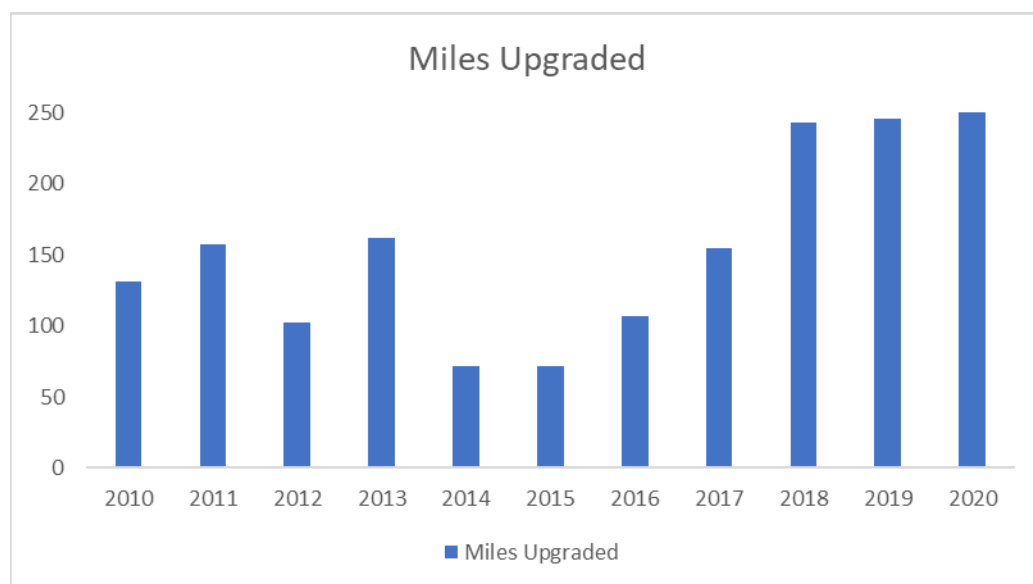
8 **Risks:** Failure – Loss of containment²¹

9 **Category:** Gas

10 **Units:** Miles of pipeline upgraded

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

²¹ The Corporate Risk Register now has the following risks: Loss of Containment on Gas 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.²² 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. Projects completed in 2020 are on pace with
31 rate case targets and the Company’s plans to upgrade its transmission pipeline

22 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 to accommodate Traditional ILLI tools on approximately 66 percent of its
2 transmission pipeline system by the end of 2029.

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

5 No, the Gas In-line Upgrade metric was not used as a Short-Term Incentive
6 Plan (STIP) metric for 2020.

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

9 Yes, the Gas In-Line Upgrade metric is linked to 2020 individual
10 performance goals for one or more Director-level position or higher.

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

12 In 2020, the following position(s) include individual goals that are linked to
13 the Gas In-Line Upgrade metric:

- 14 – Director Gas Operations (1)

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

21 During the years that this metric was a STIP metric (2014-2018), on a
22 quarterly basis the Gas Operations Business Process Governance team worked
23 to confirm ILLI projects and mileage with various stakeholders. Mileage and unit
24 capture dates from the P6 scheduling database were verified by the Gas
25 Operations Business Process Governance team to ensure consistency with SAP
26 and Engineering records. A supporting documentation package for metric
27 results was prepared quarterly by the Business Process Governance team, then
28 routed to Gas Senior Leadership approval. The support packages were also
29 reviewed quarterly by Compensation and Internal Audit.

1 In 2020, the metric was no longer included as a STIP metric; however, the
2 review process established by the Business Process Governance team was
3 maintained.

4 **Rate Case Safety Goal Progress:** This safety metric does not support a 2020
5 GRC safety goal given this metric is a gas transmission, not distribution, related
6 metric. PG&E's ILI Upgrade Program was included in PG&E's 2019 GT&S Rate
7 Case testimony.²³ As of 2020, approximately 43 percent of the system is
8 piggable. In 2020 alone, PG&E upgraded 464 miles which is a six percent
9 increase to overall piggable mileage. In addition, PG&E inspected a total of
10 359.7 miles with 299.7 of those miles assessed with ILI for the first time.

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

²³ See 2019 GT&S Prepared Testimony, Chapter 5, pp. 5-20 through 5-31.

1 **Metric 8: Shut In The Gas Average Time – Mains**

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

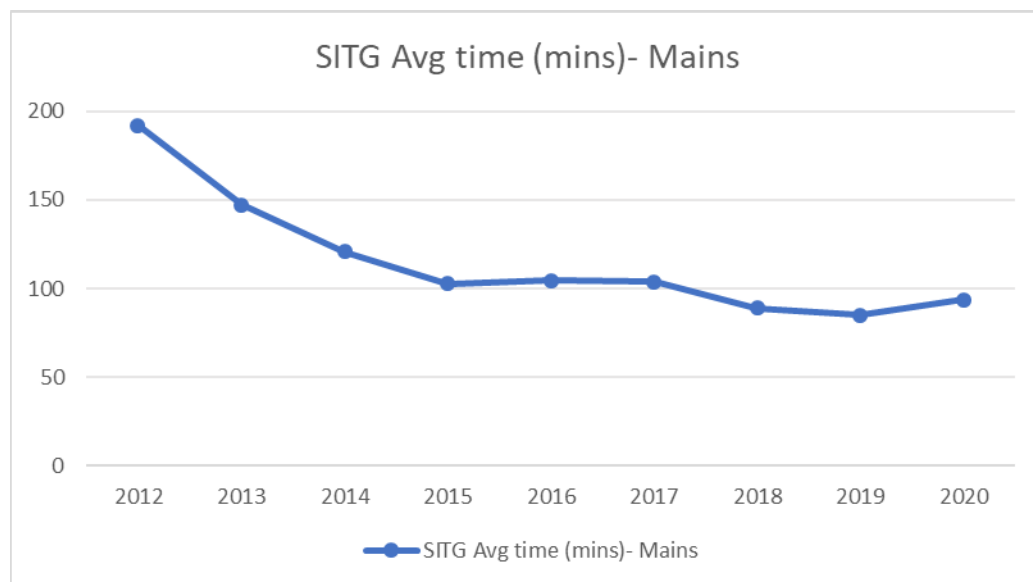
12 **Risks:** Distribution Pipeline Rupture with Ignition (non-Cross Bore)²⁴

13 **Category:** Gas

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

15 **Summary:**

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



²⁴ The Corporate Risk Register now has the following risks: Loss of containment on Gas Distribution Main or Service.

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

4 In 2012, PG&E began to measure the time required for resources to
5 respond to and make safe instances of blowing gas on distribution mains.
6 Specifically measured are distribution events relating to dig-ins, vehicle impacts,
7 explosions and material failures. In 2012, on average it required 192 minutes to
8 respond to and make safe events involving distribution mains. From 2012-2020,
9 that time has been reduced by 51 percent from 192 minutes to 93.72 minutes.

10 Metric results have improved and have been achieved through the following
11 process improvements implemented in the past 9years:

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

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

31 No, the Shut in the Gas Average time metric was not used as a Short-Term
32 Incentive Plan metric for year 2020.

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

3 Yes, the Shut in the Gas Average Time – mains metric is linked to 2020
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 Yes, in 2020, the following position(s) include individual goals that are linked
7 to the Shut in the Gas Average Time – mains metric:

- 8 – Director Gas Operations (1).

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

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

23 **Rate Case Safety Goal Progress:** This metric (improving the average time
24 required for PG&E to stop the flow of gas during incidents) supports the 2020
25 GRC safety goal of reducing the gas emergency response time.²⁵ The metric
26 supports PG&E’s target for this safety goal which is set at 21.00 minutes, and is
27 based on historical performance, benchmarking data, and PGE’s public safety
28 goal.

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

²⁵ See 2020 GRC Exhibit (PG&E-12), pp. 14-30 through 14-32.

1 **Metric 9: Shut In The Gas Average Time – Services**

2 **Metric Name and Description:** Shut In The Gas Average Time – Services –
3 The average time (measured in minutes) that a gas service representative
4 (GSR) or qualified first responder (Gas Crew, Leak Surveyor, etc.) takes to
5 respond and stop gas flow during incidents involving services. The timing for the
6 response starts when the utility first receives the report and ends when the
7 utility’s qualified representative determines, per the utility’s emergency
8 standards, that the reported leak is not hazardous or the utility’s representative
9 completes actions to mitigate a hazardous leak and render it as being
10 non-hazardous (i.e., by shutting-off gas supply, eliminating subsurface leak
11 migration, repair, etc.) per the utility’s standards.

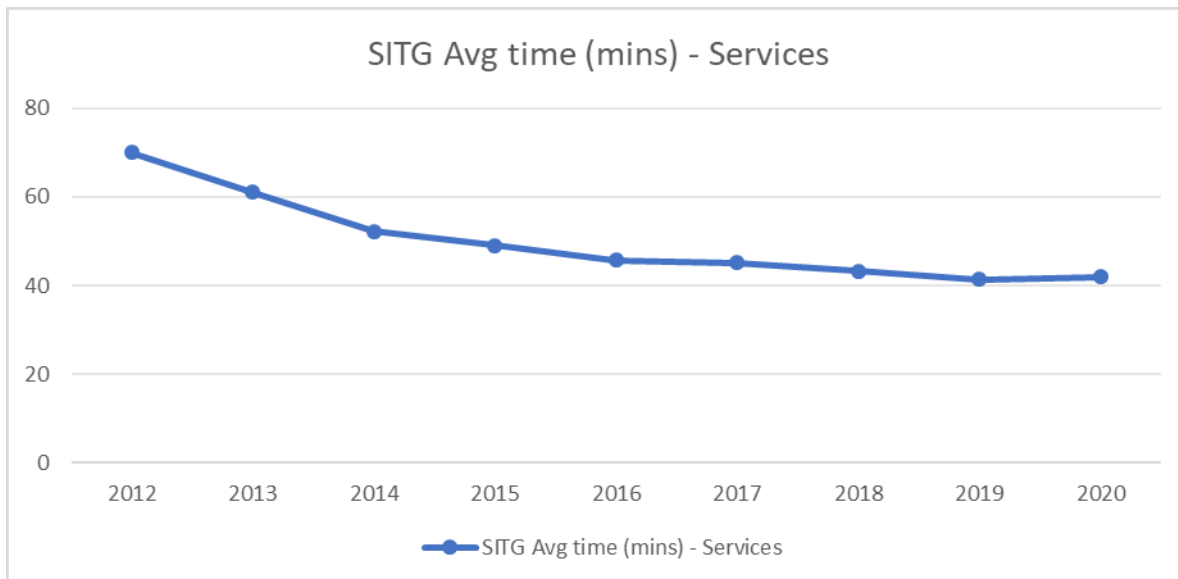
12 **Risks:** Distribution Pipeline Rupture with Ignition (non-Cross Bore)²⁶

13 **Category:** Gas

14 **Units:** Average (median) response time in minutes

15 **Summary:**

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



²⁶ The Corporate Risk Register now has the following risks: Loss of Containment on Gas Distribution Main or Service.

1 **Narrative Context:** In 2012, PG&E began to measure the time required to
2 respond to and make safe instances of blowing gas on distribution services.
3 Specifically measured are distribution events relating to dig-ins, vehicle impacts,
4 explosions, material failures and pipeline leaks. In 2012, on average it required
5 70 minutes to respond to and make safe events involving distribution services.
6 From 2012-2020, that required time has been reduced by 40 percent from
7 70 minutes down to 41.9 minutes in 2020. Metric results have improved and
8 have been achieved through the following process improvements implemented
9 during the past 8 years:

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

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

28 No, the Shut In The Gas Average Time – Services metric was not used as a
29 Short-Term Incentive Plan metric for 2020.

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

32 Yes, the Shut In The Gas Average Time – Services metric is linked to 2020
33 individual performance goals for one or more Director-level position or higher.

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

2 In 2020, the following position(s) include individual goals that are linked to
3 the Shut In The Gas Average Time – Services metric:

- 4 – Director Gas Operations (1).

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

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

20 **Rate Case Safety Goal Progress:** This metric (improving the average time
21 required for PG&E to stop the flow of gas during incidents) supports the 2020
22 GRC safety goal of reducing the gas emergency response time.²⁷ The metric
23 supports PG&E’s target for this safety goal which is set at 21.00 minutes, and is
24 based on historical performance, benchmarking data, and PGE’s public safety
25 goal.

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

²⁷ See 2020 GRC Exhibit (PG&E-12), pp. 14-30 through 14-32.

1 **Metric 10: Cross Bore Intrusions**

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

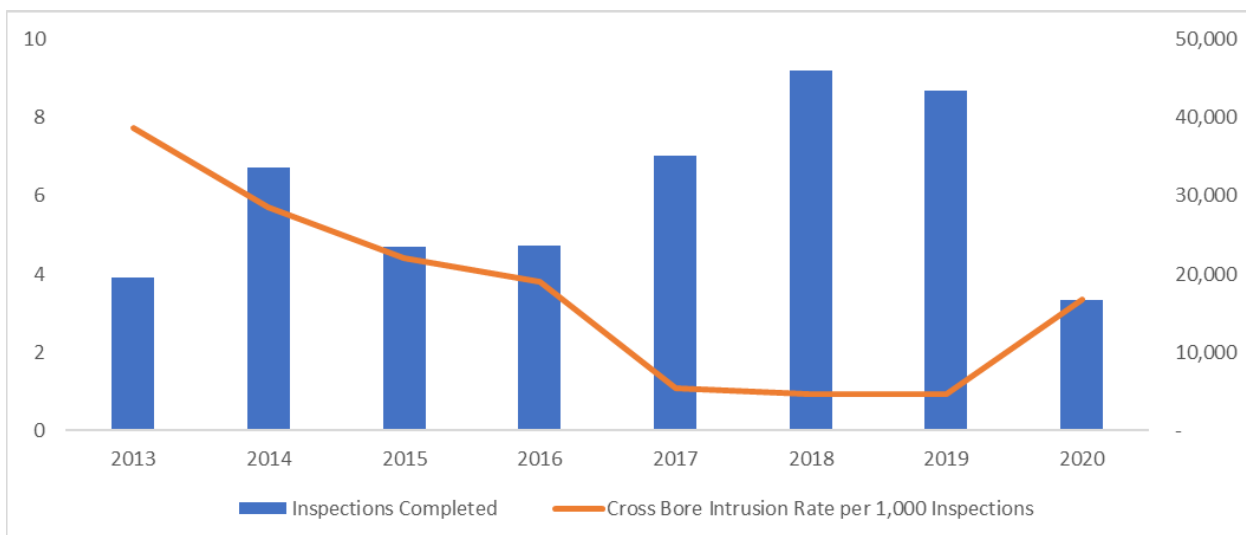
4 **Risks:** Catastrophic Damage Involving Pipeline Failure²⁸
5 Loss of Containment on Gas Distribution Main or Service

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

²⁸ The Corporate Risk Register now has the following risks: 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 There was an uptick in the find rate and a decrease in the number of
4 inspections completed in 2020 compared to prior years due to a focus on
5 completing work in the City of San Francisco. This area has been identified as
6 the highest risk of potential legacy cross bores, however is also one of the most
7 difficult geographic locations to perform inspections, which resulted in slower
8 production.

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

11 No, the Cross Bore Intrusions metric was not used as a Short-Term
12 Incentive Plan metric for 2020.

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

15 No, the Cross Bore Intrusions metric is not linked to 2020 individual
16 performance goals for one or more Director-level position or higher.

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

18 No, the Cross Bore Intrusions metric is not linked to individual goals in 2020.

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

28 **Rate Case Safety Goal Progress:** This safety metric does not support a stated
29 safety goal in the 2020 GRC.

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

1 **Metric 11: Gas Emergency Response**

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

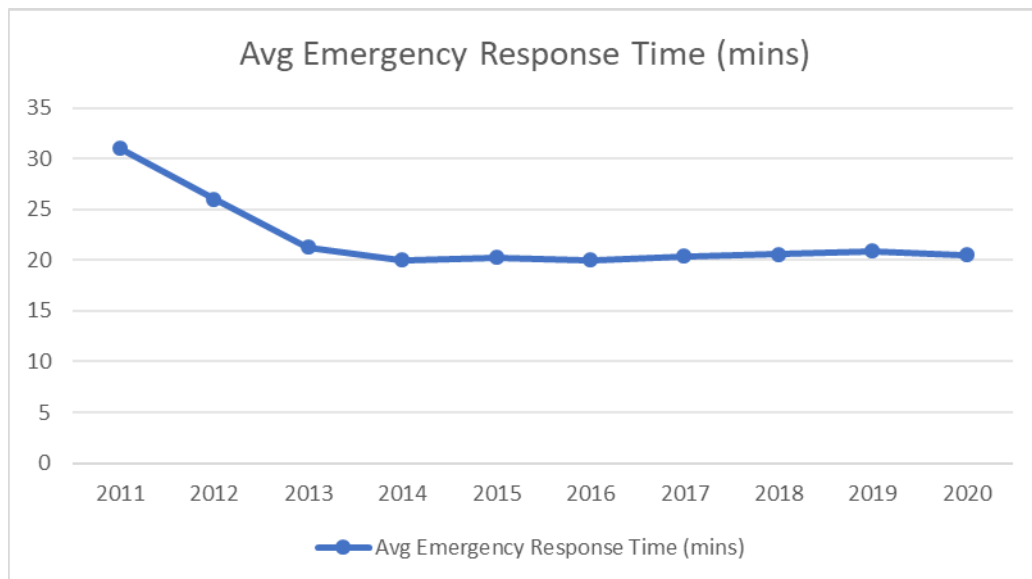
5 **Risks:** Distribution Pipeline Rupture with Ignition²⁹

6 **Category:** Gas

7 **Units:** Average response time in minutes, additionally: response times in
8 five-minute intervals, segregated first by business hours (0800-1700 hours),
9 after business hours and weekends/legal state holidays. The intervals start with
10 0-5 minutes, all the way to 40-45 minutes, an interval of 45-60 minutes and then
11 all response times greater than 60 minutes.

12 **Summary:**

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



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

²⁹ The Corporate Risk Register now has the following risks: Loss of Containment on Gas Distribution Main or Service.

1 (Including Business Hours and After Hours). The total response time divided by
2 total gas emergency orders (exclusions apply, see Bias Controls section below).

3 PG&E has maintained steady performance for the last several years. To
4 continuously focus on improving performance, metric results are reported
5 monthly and reviewed at leadership meetings and weekly huddles to discuss
6 results and 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 Yes, the Gas Emergency Response metric was used as a Short-Term
10 Incentive Plan metric for 2020.

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

13 Yes, the Gas Emergency Response metric is linked to 2020 performance
14 goals for one or more Director-level position or higher.

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

16 Yes, the Gas Emergency Response metric linked to all individual goals as
17 part of 2020 STIP plan. In addition, this metric may be included as part of an
18 individual's performance goals.

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

23 Monitoring controls also exist for this metric. The metric definition for this
24 metric including targets, target setting methodology, and exclusions, are
25 documented and approved by Gas Operations Leadership. Metric results are
26 reported monthly by the Gas Operations Business Process Governance team
27 and reviewed at leadership meetings to discuss performance and take action. In
28 the event there is a resulting need for additional dollars or resources, approval
29 must be obtained from the Gas Operations Senior Leadership team at the Work,
30 Finance and Resource Committee meeting.

31 On a quarterly basis, a report package is prepared by the IR team, reviewed
32 by the Business Process Governance team, then routed for Gas Operations

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

- 3 **Rate Case Safety Goal Progress:** This safety metric does not support a 2020
- 4 GRC safety goal.

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

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.

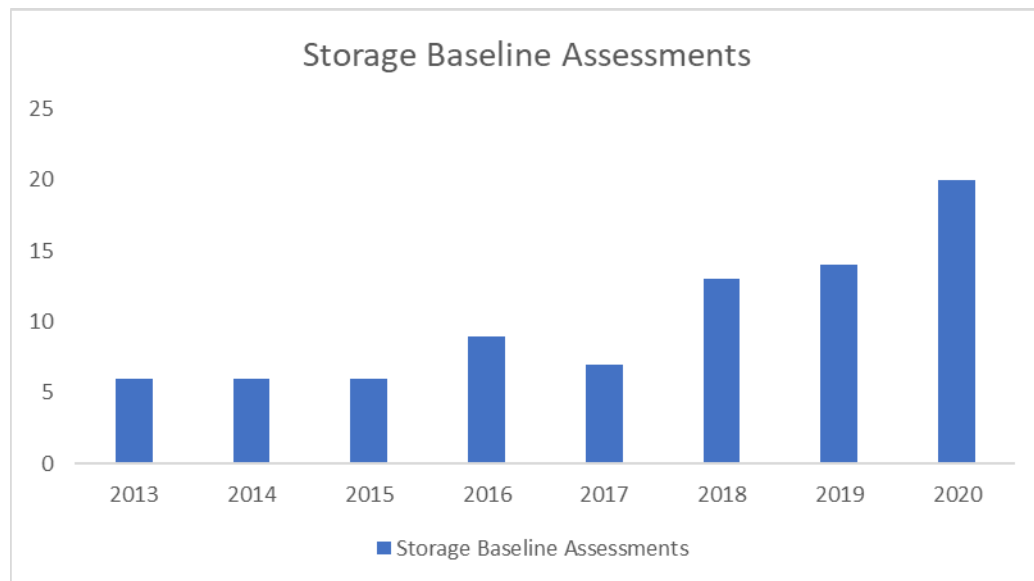
5 **Risks:** Gas Storage³⁰

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 PG&E planned to complete the inspections by 2025 per objectives defined in
12 PG&E’s Gas Storage Asset Management Plan and also adjusted to incorporate
13 an accelerated pace required by regulation changes in the storage industry at
14 both federal and state levels. From 2013-2020 PG&E has completed
15 approximately 61 percent of the assessments and is on track in meeting its
16 goals outlined in PG&E’s revised plan submitted to the California Geologic

³⁰ The Corporate Risk Register now has the following risks: Loss of Containment at Natural Gas Storage Well or Reservoir.

1 Energy Management Division (CalGEM, previously the California Division of Oil,
2 Gas and Geothermal Resources (DOGGR)) for their review and approval
3 January 15, 2021. The revised plan proposes completion of baseline casing
4 inspections of the storage wells by 2023; this plan has been accelerated per the
5 request of CalGEM and is pending their approval.

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

8 No, the Natural Gas Storage Baseline Inspections Performed metric was not
9 used as a Short-Term Incentive Plan metric for 2020.

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

12 Yes, the Natural Gas Storage Baseline Inspections Performed metric is
13 linked to 2020 individual performance goals for one or more Director-level
14 position or higher.

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

16 Yes, in 2020, the following position(s) include individual goals that are linked
17 to the metric:

18 – Director Gas Operations (1)

19 **Bias Controls:** Data Integrity – Project completion (assessment complete) is
20 tracked in the P6 scheduling tool and database and the Reservoir Engineering
21 team is responsible for validating that the assessment is a first-time inspection
22 and not a reinspection of the same well. CalGEM is also responsible for
23 validating work completion as annular well monitoring logs must be submitted to
24 them as part of regulation.

25 **Rate Case Safety Goal Progress:** This safety metric does not support a 2020
26 GRC safety goal given this metric is a gas storage, not distribution, related
27 metric. PG&E's 2019 GT&S Rate Case forecast was based on the final draft
28 CalGEM (previously DOGGR) regulations available at the time of the filing.
29 PG&E's plan reflected casing inspections (a.k.a. barrier inspection surveys) be
30 performed every other year starting in 2019; due to the pending nature of the
31 draft regulations PG&E tentatively forecast to perform them on half of the

1 storage wells in each year; however, filed a brief following publication of final
2 regulations that had previously been interpreted to allow inspection work to be
3 coupled with the conversion to dual barrier over a 7-year period. The Division
4 has changed leadership and that interpretation has shifted, and PG&E is
5 currently engaged with the CalGEM staff to find an inspection schedule that is
6 accelerated to the Division's satisfaction and also maintains reliability for
7 California's natural gas system. In addition, as a result of PG&E's Natural Gas
8 Storage Strategy, PG&E did not forecast to conduct integrity inspection and
9 surveys at the Los Medanos or Pleasant Creek storage wells during the rate
10 case period, however, inspections at each facility have been conducted during
11 the rate case period as the facilities were subject to the final CalGEM
12 regulations.

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

1 **Metric 14: Employee SIF**

2 **Metric Name and Description:** ³¹Employee SIF (serious incidents and
3 fatalities) – A work-related injury or illness that results in a fatality, inpatient
4 hospitalization for more than 24 hours (other than for observation purposes), a
5 loss of any member of the body, or any serious degree of permanent
6 disfigurement.³² PG&E incorporated the new OSHA definition into employee
7 reporting and recordkeeping with no change in the metric total.

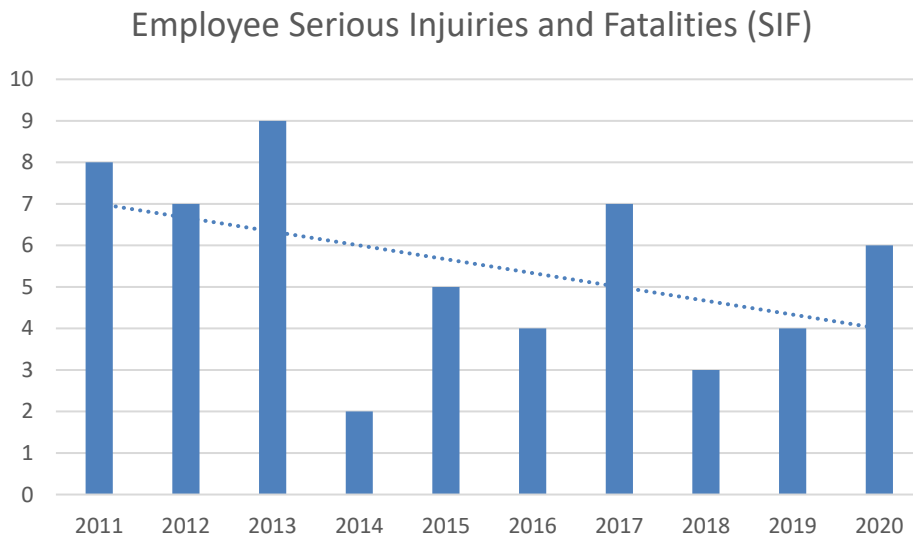
8 **Risks:** Employee Safety

9 **Category:** Injuries and fatalities

10 **Units:** Number of serious incidents and fatalities

11 **Summary:**

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



12 **Narrative Context:** Since 2011, there has been an overall downward trend
13 in Employee SIF events, with a brief spike in 2017 and 2020. The 2017 and

³¹ The Corporate Risk Register now has the following risks: Employee Safety Incident.

³² In 2020, OSHA updated the definition of Serious Injury to a work-related injury or illness that results in a fatality, inpatient hospitalization (other than for observation purposes or testing), or in which an employee suffers an amputation, loss of an eye or any serious degree of permanent disfigurement but does not include any injury or illness or death caused by an accident on a public street or highway, unless the accident occurred in a construction zone.

1 2020 events primarily involved injuries caused by third-party involvement,
2 electrical contact, and motor vehicle incidents. Corrective actions are underway
3 to address causes and precursors of incidents that could lead to a SIF. These
4 include implementing safe driving practices to ensure PG&E coworkers have the
5 proper tools when driving for work, using the appropriate vehicle for the task,
6 managing fatigue, educating workers on distracted driving, and creating job
7 hazard analyses to be completed before starting a job to ensure all potential
8 hazards are identified and mitigated. The implementation of the Health and
9 Safety Management System (HSMS) and a stronger focus on workforce safety
10 initiatives, such as development of critical risk standards, enhancing the field
11 safety observations program, leader safety connections, and lean operating
12 model, will help reduce this trend.

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

15 No, the Employee Serious Injuries and Fatalities metric was not used as a
16 STIP metric for 2020.

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

19 Yes, the Employee Serious Injuries and Fatalities metric is linked to 2020
20 individual performance goals for one or more Director-level position or higher.

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

22 In 2020, the following position(s) include individual goals that are linked to
23 this metric:

- 24 – Director Electric Operations (4)
- 25 – Senior Director Electric Operations (2)
- 26 – Director, Enterprise Health & Safety (5)
- 27 – Director Gas Operations (6)
- 28 – Senior Director Gas Operations (2)
- 29 – Vice President Gas Operations (1)
- 30 – Director Generation (17)
- 31 – Senior Director, Generation (3)
- 32 – Vice President, Generation (3)

- 1 – Vice President Human Resources (3)
- 2 – Director Office of the President & CEO (1)

3 **Bias Controls:** Data is compiled by the Law Department and Employee SIF
4 events are also reviewed monthly by the Enterprise Health and Safety team.

5 **Rate Case Safety Goal Progress:** While this metric was not a stated safety
6 goal in the 2020 GRC, the SIF metric dataset was used in the 2020 RAMP
7 model consequence analysis for the Employee Safety Incident risk,³³ RAMP
8 model results for the risk reduction programs being implemented indicate a
9 reduction in employee SIF events through 2026. The SIF metric reinforces the
10 importance of investigating an incident to understand the cause and developing
11 corrective actions to reduce the likelihood of serious injury and fatality
12 recurrence. Investigation results are communicated across the enterprise. All
13 corrective actions are tracked to closure.

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

³³ PG&E 2020 RAMP report, Chapter 16, Risk Mitigation Plan: Employee Safety Incident.

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.

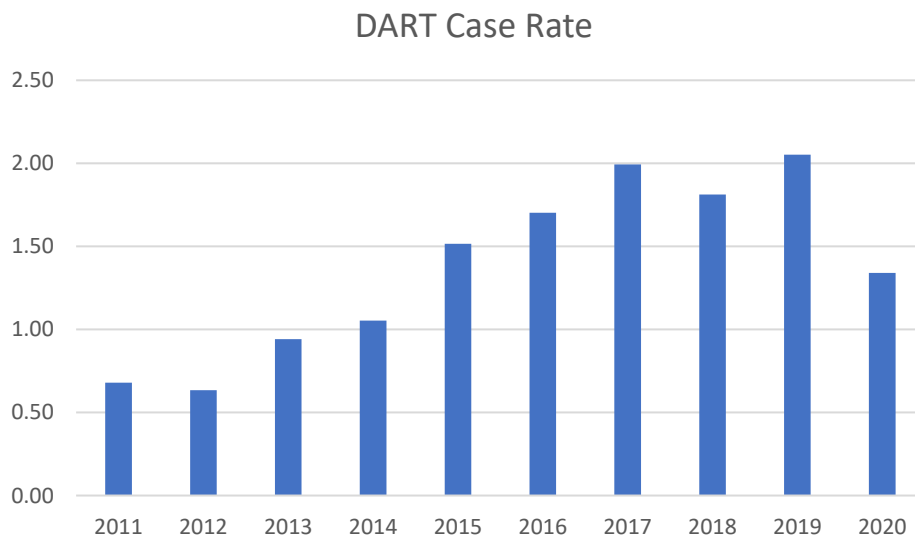
5 **Risks:** Employee Safety³⁴

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 2019 driven primarily by restricted duty
11 cases related to sprains and strains. In 2020, there was a 35 percent decrease
12 in the DART rate. The decrease was driven by a decline in restricted duty cases
13 but our lost time cases saw an increase over 2019 results. To further impact this
14 metric, we are continuing to open additional on-site clinics, and increase the
15 Industrial Athlete Specialists hours and their time on the job sites. The primary

³⁴ The Corporate Risk Register now has the following risk: Employee Safety Incident.

1 goal of these efforts is to provide injury prevention and early intervention care for
2 employees.

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

5 No, the Employee DART Rate metric was not used as a STIP metric for
6 2020.

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

9 Yes, the Employee DART Rate metric is linked to 2020 individual
10 performance goals for one or more Director-level position or higher.

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

12 Yes, in 2020, the following position(s) include individual goals that are linked
13 to the Employee DART Rate metric:

- 14 – Director Enterprise Health & Safety (3)
- 15 – Senior Vice President Enterprise Health & Safety (1)
- 16 – Director Shared Services (4)
- 17 – Director Supply Chain (1)

18 **Bias Controls:** Yes. OSHA regulates the definition of a DART case and we
19 rely on the physician determination of work relatedness and need for time off or
20 restricted duty. Internal Audit completed an audit of the DART classifications in
21 2019 to verify that bias controls are in place and effective.

22 **Rate Case Safety Goal Progress:**

23 The metric was previously stated in 2020 GRC Safety and Health chapter
24 (Chapter 1)³⁵ with an anticipated goal 0.45 by year 2022.

25 The annual average number of DART cases were used in the 2020 RAMP
26 model consequence analysis for the Employee Safety Incident risk³⁶. RAMP
27 model results for the risk reduction programs being implemented indicate a
28 reduction in employee DART cases through 2026.

³⁵ PG&E GRC Exhibit (PG&E-7), Chapter 1, Safety and Health, p. 1-19.

³⁶ PG&E 2020 RAMP Report, Chapter 16, Risk Mitigation Plan: Employee Safety Incident.

- 1 The 12-month rolling average DART case rate is a Key Risk Indicator for the
- 2 Employee Safety Incident risk. This metric is currently track and trend only.
- 3 **Monthly Data:** See Attachment A at the end of this report.

1 **Metric 16: Employee Lost Work Day (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.

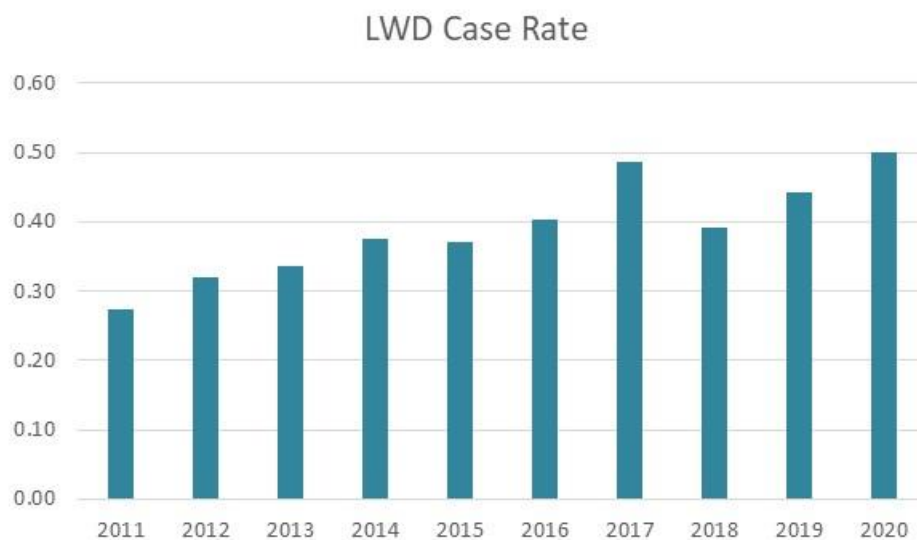
11 **Risks:** Employee Safety³⁷

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 has an upward trajectory from 2011 driven
16 primarily by sprain/strain injuries related to lifting/lowering, pushing/pulling,
17 kneeling and repetitive use of tools. To address this increase, we are opening

³⁷ The Corporate Risk Register now has the following risks: Employee Safety Incident

1 additional on-site clinics, and increasing the Industrial Athlete Specialists hours
2 and their time on the job sites.

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

5 No, the Employee LWD Case Rate metric was not used as a STIP metric for
6 2020.

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

9 Yes, the Employee LWD Case Rate metric is linked to 2020 individual
10 performance goals for one or more Director-level position or higher.

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

12 Yes, in 2020, the following position(s) include individual goals that are linked
13 to the Employee LWD Case Rate metric:

- 14 – Director Customer Care (2)
- 15 – Senior Director Customer Care (1)
- 16 – Director Electric Operations (6)
- 17 – Senior Director Electric Operations (3)
- 18 – Director Enterprise Health & Safety (3)
- 19 – – Senior Director Gas Operations (1)
- 20 – Director Generation (17)
- 21 – Senior Director Generation (3)
- 22 – Vice President Generation (3)
- 23 – Vice President Human Resource (3)
- 24 – Director Shared Services (3)
- 25 – Senior Director Shared Services (1)

26 **Bias Controls:** Yes. OSHA regulates the definition of an LWD case, and
27 PG&E relies on a physician determination that the injury is work related and the
28 need for time off.

1 **Rate Case Safety Goal Progress:** This metric was stated as a Key Safety
2 Metric in Table 1-1 of PG&E’s 2020 GRC Safety and Health chapter³⁸ with an
3 anticipated goal of 0.239 by year 2022. The LWD case rate through
4 December 2020 was 0.50. See the Narrative Context explanation above for
5 explanation of steps PG&E is taking to reduce the LWD case rate.

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

³⁸ PG&E GRC Exhibit (PG&E-7), Chapter 1, Safety and Health, p. 1-19.

1 **Metric 17: Employee OSHA Recordables Rate**

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

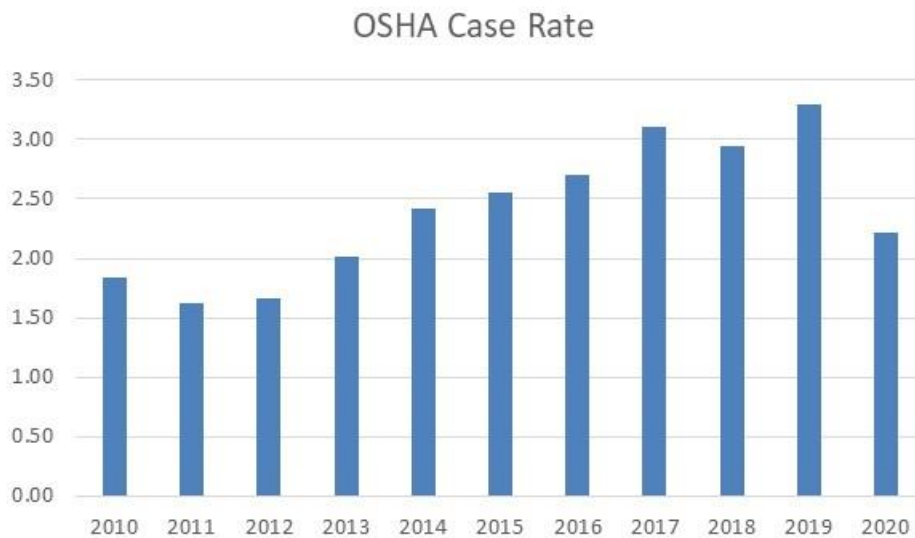
8 **Risks:** Employee Safety³⁹

9 **Category:** Injuries

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

12 **Summary:**

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



13 **Narrative Context:** This metric showed an incline from 2011 through 2019. In
14 2020 there was a greater than 30 percent decrease in the OSHA recordable
15 rate.

16 Over the course of 2020, there was a decline in both Restricted Duty and
17 Medical Only cases driven by reductions both office and field injuries. Office

³⁹ The Corporate Risk Register now has the following risks: Employee Safety Incident

1 workers moved to remote work during the year and were supported with virtual
2 ergo evaluations. Field employees also had fewer cases due partially to Shelter
3 in Place restrictions.

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

6 Yes, the Employee OSHA Recordables Rate metric was used as a STIP
7 metric for 2020.

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

10 Yes, the Employee OSHA Recordables Rate metric is linked to 2020
11 individual performance goals for one or more Director-level position or higher.

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

13 Yes, in 2020, the following position(s) include individual goals that are linked
14 to the Employee OSHA Recordables Rate metric:

- 15 – Director Electric Operations (4)
- 16 – Senior Director Electric Operations (1)
- 17 – Director Enterprise Health & Safety (5)
- 18 – Senior Vice President Enterprise Health & Safety (1)
- 19 – Director Finance (1)
- 20 – Director Gas Operations (10)
- 21 – Senior Director Gas Operations (4)
- 22 – Vice President Gas Operations (1)
- 23 – Director Generation (17)
- 24 – Senior Director Generation (3)
- 25 – Vice President Generation (3)
- 26 – Senior Director Human Resources (1)
- 27 – Vice President Human Resources (3)
- 28 – Director Information Technology (7)
- 29 – Senior Director Information Technology (5)
- 30 – Vice President Information Technology (1)
- 31 – Director Office of President & CEO (2)
- 32 – Director Shared Services (1)

1 – Senior Director Shared Services (1)

2 **Bias Controls:** OSHA regulates the definition of an OSHA case and PG&E
3 relies on a physician determination that the injury is work related and treatment
4 rendered in making the classification.

5 **Rate Case Safety Goal Progress:**

6 While this metric was not a stated safety goal in the 2020 GRC, the employee
7 OSHA recordable metric dataset was used in the 2020 RAMP model frequency
8 analysis for the Employee Safety Incident risk.⁴⁰ RAMP model results for the
9 risk reduction programs being implemented indicate a reduction in employee
10 OSHA recordable events through 2026. The OSHA recordable metric is also
11 indirectly supported by the LWD case and DART case rate goals.

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

⁴⁰ PG&E 2020 RAMP report, Chapter 16, Risk Mitigation Plan: Employee Safety Incident.

1 **Metric 18: Contractor OSHA Recordables Rate**

2 **Metric Name and Description:** Contractor OSHA Recordables Rate – An
3 OSHA recordable incident is an occupational (job-related) injury or illness that
4 requires medical treatment beyond first aid, time away from work, or results in
5 work restrictions, death or loss of consciousness. OSHA recordable rate is
6 calculated as OSHA recordable times 200,000 divided by contractor hours
7 worked.⁴¹

8 **Risks:** Contractor Safety⁴²

9 **Category:** Injuries

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

12 **Summary:**

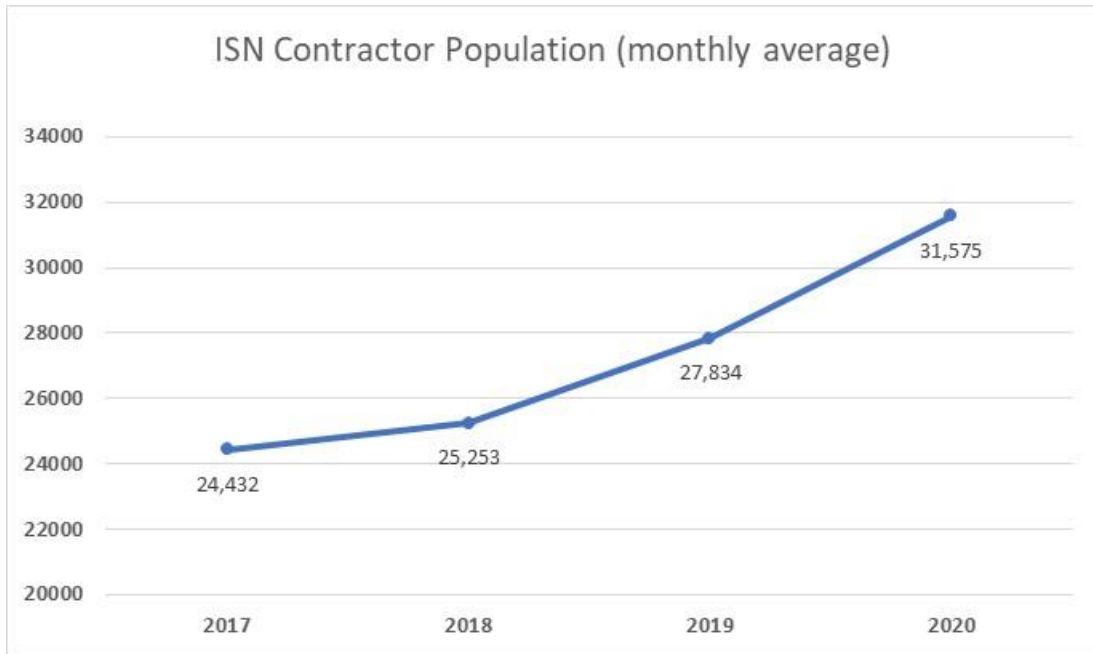
**FIGURE 5-18
CONTRACTOR OSHA RECORDABLE INCIDENT RATE METRIC DATA (ANNUAL)**



⁴¹ Contractors included are performing medium to high risk work.

⁴² The Corporate Risk Register now has the following risks: Contractor Safety Incident.

1 **Narrative Context:** Contractor OSHA recordable data became available with
2 the implementation of the Contractor Safety Program which was fully in place at
3 the beginning of 2017. PG&E did not track this metric prior to 2017. For 2017
4 through 2020 data show that the OSHA recordable rate for PG&E contractors
5 remains relatively flat while there was an increase in the contractor workforce
6 from 2017-2020 as indicated in the chart below.



7 Additional improvements to the Contractor Safety Program are being
8 evaluated as part of the 2020 RAMP Report and include Contractor Safety
9 Performance Audits and additional on-boarding and training requirements for
10 contractors who perform high and medium risk work activities.

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

13 No, the Contractor OSHA Recordables Rate metric was not used as a
14 Short-Term Incentive Plan metric for 2020.

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

17 Yes, the Contractor OSHA Recordables Rate metric is linked to 2020
18 individual performance goals for one or more Director-level position or higher.

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

2 Yes, in 2020, the following position(s) include individual goals that are linked
3 to the Contractor OSHA Recordables Rate metric:

- 4 – Director Electric Operations (5)
- 5 – Senior Director Electric Operations (1)
- 6 – Vice President Enterprise Health & Safety (2)
- 7 – Director Finance (1)
- 8 – Director Gas Operations (1)
- 9 – Senior Director Gas Operations (1)
- 10 – Director Generation (10)
- 11 – Senior Director Generation (1)
- 12 – Vice President Generation (1)
- 13 – Senior Director Human Resources (1)
- 14 – Vice President Human Resources (2)
- 15 – Director Shared Services (1)

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

19 **Rate Case Safety Goal Progress:** While this metric was not a stated safety
20 goal in the 2020 GRC, the contractor OSHA recordable metric dataset was used
21 in the 2020 RAMP model frequency analysis for the Contractor Safety Incident
22 risk.⁴³ RAMP model results for the risk reduction programs being implemented
23 indicate a reduction in contractor OSHA recordable events through 2026.

24 There is currently no goal (target) for this metric. See the Narrative Context
25 explanation above for explanation of steps PG&E is taking to reduce the
26 Contractor OSHA recordables rate.

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

⁴³ PG&E 2020 RAMP report, Chapter 17, Risk Mitigation Plan: Contractor Safety Incident.

1 **Metric 19: Contractor DART**

2 **Metric Name and Description:** Contractor DART – DART Rate: DART Cases
3 include OSHA-recordable LWD Cases and injuries that involve job transfer or
4 restricted work activity. DART Rate is calculated as DART Cases times 200,000
5 divided by contractor hours worked.⁴⁴

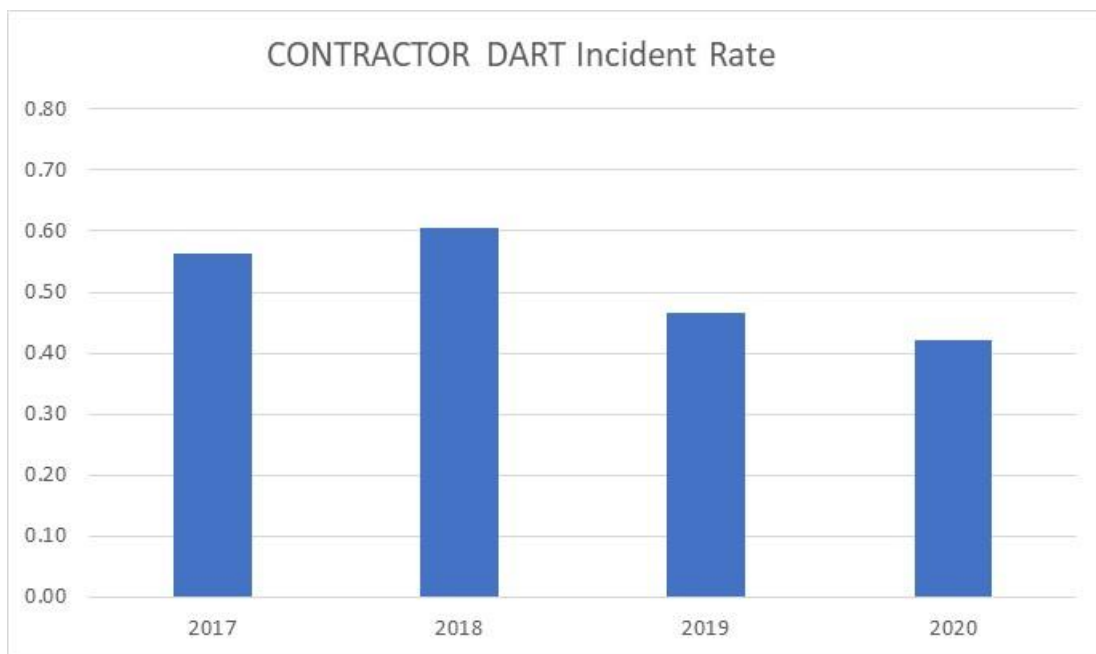
6 **Risks:** Contractor Safety⁴⁵

7 **Category:** Injuries

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

10 **Summary:**

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



11 **Narrative Context:** Contractor DART case rate data became available with the
12 implementation of the Contractor Safety Program which was fully in place at the
13 beginning of 2017. PG&E did not track this metric prior to 2017. Data show that
14 DART case rates for PG&E contractors decreased from 2018 through 2020 with

⁴⁴ Contractors included are performing medium to high risk work.

⁴⁵ The Corporate Risk Register now has the following risks: Contractor Safety Incident.

1 the increase in the PG&E contractor workforce. Additional improvements to the
2 Contractor Safety Program are being evaluated as part of the 2020 RAMP
3 Report and include Contractor Safety Performance Audits, and additional
4 on-boarding and training requirements for contractors who perform high and
5 medium risk work activities.

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

8 No, the Contractor DART metric was not used as a STIP metric for 2020.

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

11 Yes, the Contractor DART metric is linked to 2020 individual performance
12 goals for one or more Director-level position or higher.

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

14 Yes, in 2020, the following position(s) include individual goals that are linked
15 to the Contractor DART metric:

- 16 – Director Customer Care (1)
- 17 – Director Electric Operations (26)
- 18 – Senior Director Electric Operations (9)
- 19 – VP Electric Operations (3)
- 20 – Senior Vice President Enterprise Health & Safety (1)
- 21 – Director Finance (1)
- 22 – Director Generation (10)
- 23 – Senior Director Generation (1)
- 24 – Vice President Generation (1)
- 25 – Vice President Human Resources (1)
- 26 – Senior Director Office of the President & Chief Executive Officer (CEO) (1)
- 27 – Senior Vice President Office of the President & CEO (1)

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

1 **Rate Case Safety Goal Progress:** While this metric was not a stated safety
2 goal in the 2020 GRC, the Narrative Context section above includes an
3 explanation of steps PG&E is taking to reduce the Contractor DART Rate.

4 **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.⁴⁶

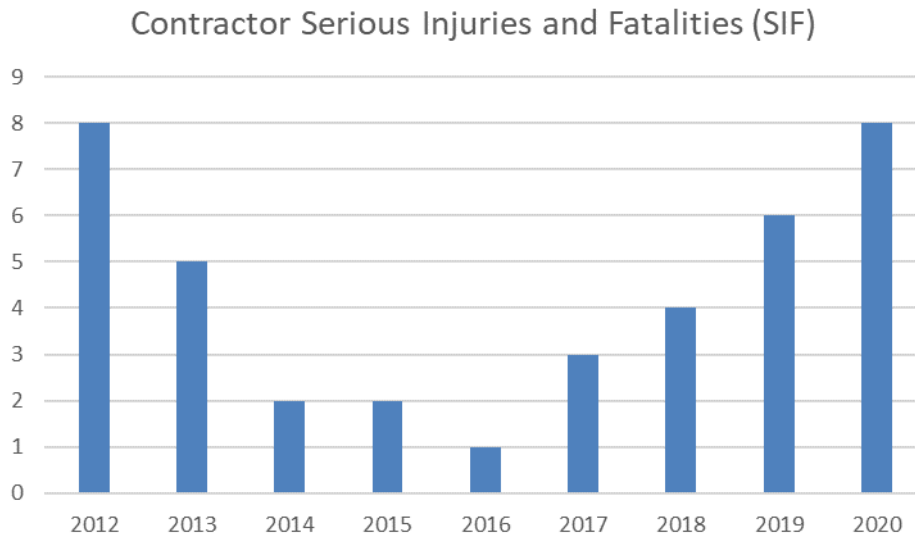
6 **Risks:** Contractor Safety⁴⁷

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)**



⁴⁶ In 2020, OSHA updated the definition of Serious Injury to a work-related injury or illness that results in a fatality, inpatient hospitalization (other than for observation purposes or testing), or in which an employee suffers an amputation, loss of an eye or any serious degree of permanent disfigurement but does not include any injury or illness or death caused by an accident on a public street or highway, unless the accident occurred in a construction zone.

⁴⁷ The Corporate Risk Register now has the following risks: Contractor Safety Incident.

1 **Narrative Context:** PG&E's process for internal reporting of serious incident
2 data was revised in 2012 to include contractor serious incidents. Contractor
3 serious injuries have been trending upwards due in part to the increase in work
4 considered high risk, including vegetation management associated with the
5 wildfire mitigation response. To mitigate the risk of future Contractor SIF
6 occurrences, PG&E performs an investigation of all Contractor SIF incidents.
7 Investigation results are communicated across the enterprise as Safety
8 Advisories, Daily Digest articles, and in the enterprise CAP system. All
9 corrective actions are tracked to closure. See Section 2 for examples of
10 corrective actions PG&E took in 2020 for contractor SIF.

11 Also, in an effort to reduce Contractor SIF, PG&E implemented the
12 Contractor Safety LOB assessment process in 2017. The Contractor Safety
13 LOB Assessments ensure that high and medium risk contractors are performing
14 work safely in compliance with the Contractor Safety Program.

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

17 No, the Contractor Serious Injury and Fatalities metric was not used as a
18 Short-Term Incentive Plan metric for 2020.

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

21 Yes, the Contractor Serious Injury and Fatalities metric is linked to 2020
22 individual performance goals for one or more Director-level position or higher.

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

24 Yes, in 2020, the following position(s) include individual goals that are linked
25 to the Contractor Serious Injury and Fatalities metric:

- 26 – Director Electric Operations (2)
- 27 – Senior Director Electric Operations (2)
- 28 – Director Enterprise Health & Safety (4)
- 29 – Senior Vice President Enterprise Health & Safety (1)
- 30 – Director Generation (10)
- 31 – Senior Director Generation (1)
- 32 – Vice President Generation (1)

1 – Vice President Human Resources (1)

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

6 **Rate Case Safety Goal Progress:** While this metric was not a stated safety
7 goal in the 2020 GRC, the contractor SIF metric dataset was used in the 2020
8 RAMP model consequence analysis for the Contractor Safety Incident risk.⁴⁸
9 RAMP model results for the risk reduction programs being implemented indicate
10 a reduction in contractor SIF events through 2026. This metric also maps to
11 Metric 23, the Helicopter and Flight Accident or Incident metric. Two of the
12 incidents described in the Metric 23 narrative resulted in contractor fatalities.
13 See the Narrative Context above for an explanation of steps PG&E is taking to
14 reduce the Contractor SIF rate.

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

⁴⁸ PG&E 2020 RAMP report, Chapter 17, Risk Mitigation Plan: Contractor Safety Incident.

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

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

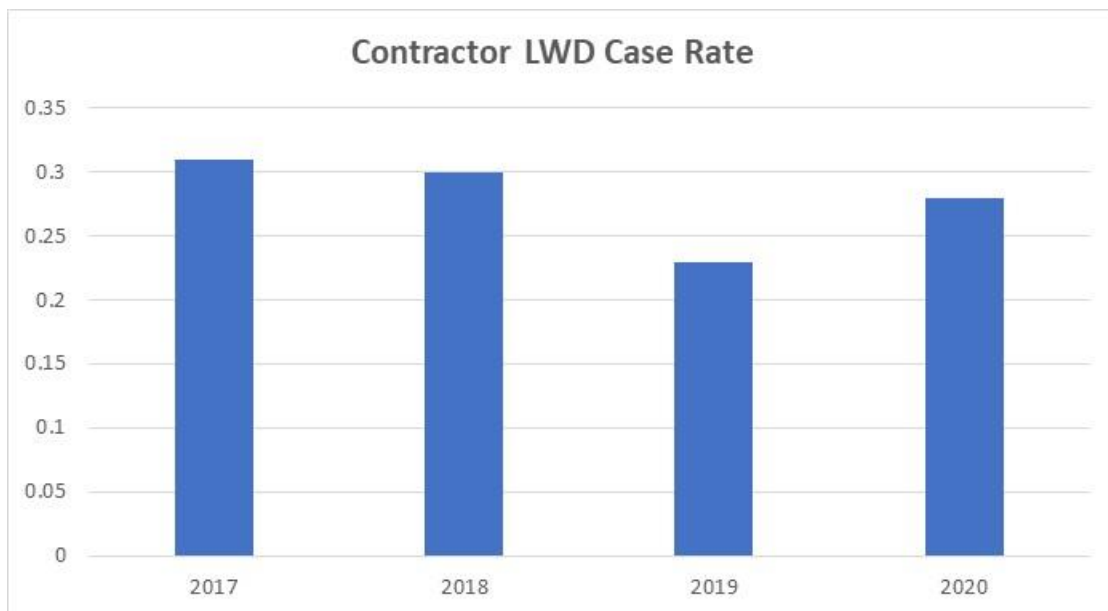
10 **Risks:** Contractor Safety⁴⁹

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

⁴⁹ The Corporate Risk Register now has the following risks: Contractor Safety Incident.

1 place at the beginning of 2017. PG&E did not track this metric prior to 2017.
2 Data show that LWD cases for PG&E contractors decreased from 2017-2019
3 with the increase in the PG&E contractor workforce. There was a slight increase
4 in 2020. Additional improvements to the Contractor Safety Program are being
5 evaluated as part of the 2020 RAMP filing and include Contractor Safety
6 Performance Audits and additional on-boarding and training requirements for
7 contractors who perform high and medium risk work activities.

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

10 No, the Contractor LWD Case Rate metric was not used as a Short-Term
11 Incentive Plan metric for 2020.

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

14 Yes, the Contractor LWD Case Rate metric is linked to 2020 individual
15 performance goals for one or more Director-level position or higher.

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

17 Yes, in 2020, the following position(s) include individual goals that are linked
18 to the Contractor LWD Case Rate metric:

- 19 – Director Customer Care (1)
- 20 – Senior Director Customer Care (1)
- 21 – Director Electric Operations (3)
- 22 – Senior Director Electric Operations (3)
- 23 – Senior Vice President Enterprise Health & Safety (1)
- 24 – Director Generation (10)
- 25 – Senior Director Generation (1)
- 26 – Vice President Generation (1)
- 27 – Vice President Human Resources (1)

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

1 **Rate Case Safety Goal Progress:** This metric was not a stated safety goal in
2 the 2020 GRC, 2020 RAMP model results for the risk reduction programs being
3 implemented indicate a reduction in contractor SIF events through 2026. See
4 the Narrative Context explanation above for explanation of steps PG&E is taking
5 to reduce the Contractor LWD rate.

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

1 **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.

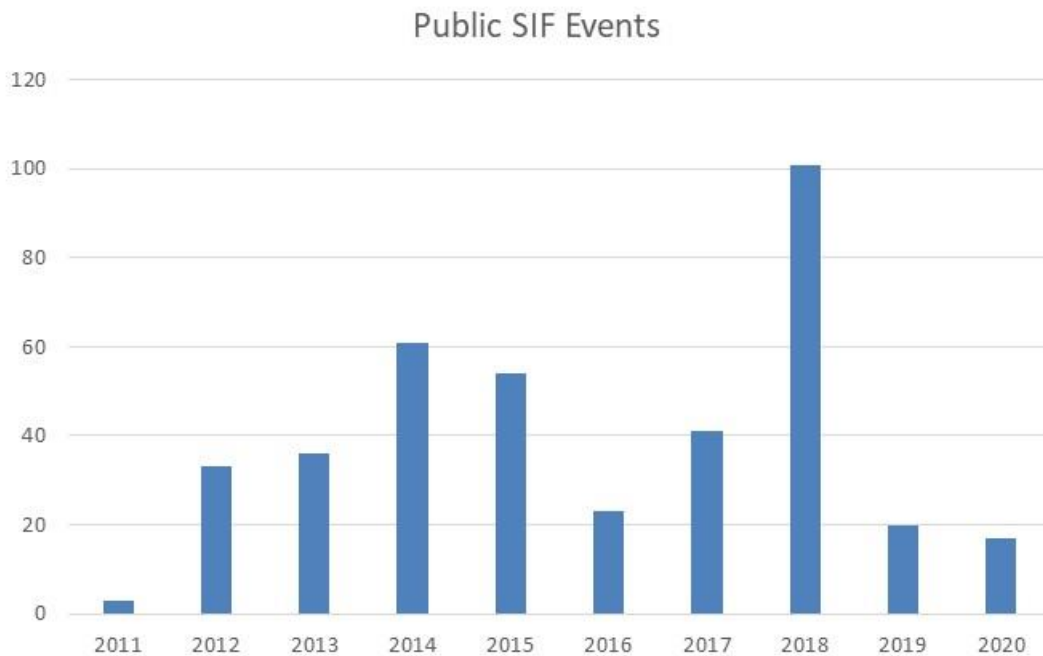
5 **Risks:** Public Safety⁵⁰

6 **Category:** Injuries

7 **Units:** Number of SIF

8 **Summary:**

FIGURE 5-22
PUBLIC SIF METRIC DATA (ANNUAL)⁵¹



50 The Corporate Risk Register now has the following risks: Third-Party Safety Incident.

51 PG&E has included the Zogg Fire in this report because CAL FIRE has announced that the cause of the Zogg Fire was a pine tree contacting PG&E overhead electric lines. PG&E's investigation into the cause of the Zogg Fire is ongoing.

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

10 On January 31, 2020, in compliance with the SMAP decision,⁵² PG&E
11 provided the SED with its Public SIF metric data for the last 10 years. On
12 March 11, 2020 SED responded to the California IOUs asking for the following
13 Public SIF subcategories to be provided in this report which are provided as
14 Attachment B.

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

17 No, the Public Serious Injury and Fatalities metric was not used as a STIP
18 metric for 2020.

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

21 Yes, the Public Serious Injury and Fatalities metric is linked to 2020
22 individual performance goals for one or more Director-level position or higher.

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

24 Yes, in 2020, the following position(s) include individual goals that are linked
25 to the Public Serious Injury and Fatalities metric:

- 26 – Director Electric Operations (1)
- 27 – Senior Director Electric Operations (2)
- 28 – Director Enterprise Health & Safety (2)
- 29 – Senior Vice President Enterprise Health & Safety (1)
- 30 – Director Shared Services (1)

52 D.19-04-020, p. 19.

1 – Senior Director Shared Services (1)

2 **Bias Controls:** This data is compiled by PG&E’s Law Dept.

3 **Rate Case Safety Goal Progress:** This metric was not a stated safety goal in
4 the 2020 GRC. The Third-Party Safety Incident risk is a new risk and was
5 added to the PG&E event based risk register in 2020 to place greater emphasis
6 on third party safety incidents that do not involve the failure of a PG&E asset.
7 The Third-Party SIF metric dataset was used in the 2020 RAMP model analysis
8 for the Third-Party Safety Incident risk.⁵³ RAMP model results for the risk
9 reduction programs being implemented indicate a reduction in third-party SIF
10 events through 2026. See the Narrative Context explanation above for
11 explanation of steps PG&E is taking to reduce the Public SIF rate down.

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

⁵³ PG&E 2020 RAMP Report, Chapter 15, Risk Mitigation Plan: Third-Party Safety Incident.

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 Federal Aviation
4 Administration per 49-CFR-830.

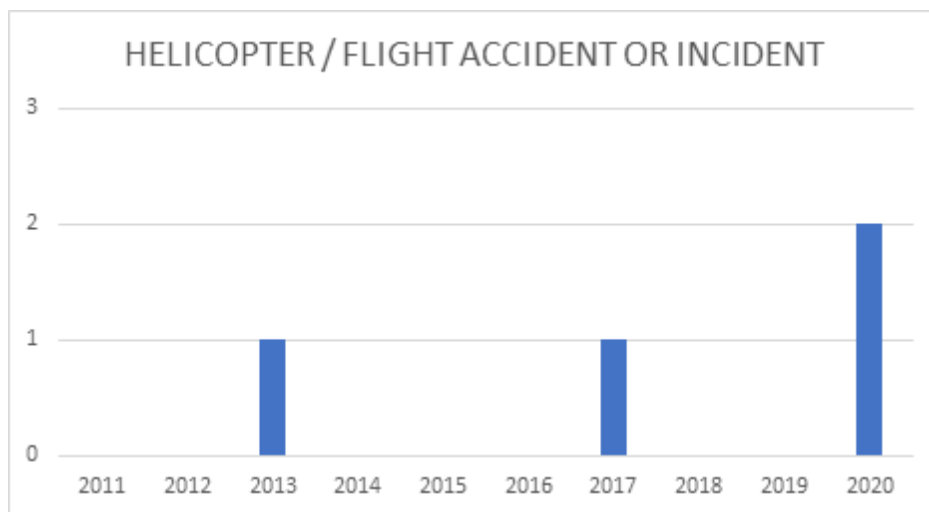
5 **Risks:** Aviation Safety, Helicopter Operations, Public Safety, Worker Safety and
6 Employee Safety

7 **Category:** Vehicle

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

10 **Summary:**

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



11 **Narrative Context:** For the past 10 years, there have been four reportable
12 incidents per 49 CFR 830.5.

- 13 • August 13, 2013: A contractor fixed wing patrol aircraft was performing a
14 gas transmission pipeline patrol with a contract aerial patroller near the
15 town of Paradise. The NTSB determined that during the patrol, while
16 orbiting near a canyon, the pilot failed to maintain control of the aircraft
17 while encountering an updraft. The aircraft collided with terrain near the
18 bottom of a canyon and was consumed by post impact fire. Both the
19 pilot and patroller were fatally injured.

- 1 • July 11, 2017: Helicopter was attempting to land at an unimproved
2 landing site near a dam when just prior to touchdown, the helicopter's
3 main rotor struck a tree causing it to suddenly fall several feet to the
4 ground resulting in severe damage to the helicopter and minor injuries to
5 several passengers.
- 6 • June 2, 2020: Helicopter was performing Human External Cargo
7 operations transporting two contract employees in support of a
8 transmission project when it struck and severed the bottom phase of an
9 energized transmission circuit. The helicopter lost lift, impacted the
10 ground and came to rest at the bottom of a hill resulting in fatal injuries to
11 the contract pilot and two contract employees.
- 12 • July 20, 2020: Helicopter was performing aerial powerline patrols with
13 two PG&E employees when smoke was detected in the aircraft. An
14 immediate emergency landing was initiated. Just prior to landing, engine
15 power was lost, and the helicopter impacted the ground in an upright
16 position. The pilot and two employees egressed as the smoke
17 intensified. The helicopter caught fire and was subsequently consumed.
18 There was one minor injury to an employee.

19 PG&E's internal evaluations resulted in the following actions to improve
20 PG&E processes and systems. The learnings also informed training and
21 guidance documents.

22 PG&E created a requirement that aircraft must not, under any
23 circumstances, fly underneath wires of any kind. This is applicable to all
24 helicopter operations. Additionally, all Human External Cargo (HEC) insertions
25 and extractions may only take place at established landing zones or approved
26 work locations. (Guidance Document Reference AVI-3001M)

27 The number of Helicopter Operations Specialists is being increased from
28 three to six. This is an increase in field oversight, safety and expertise in the
29 area of helicopter operations to support the broad PG&E service area for
30 employee and contractor work.

31 Revisions were made to the Helicopter Operations Field Manual, Chapter 2
32 Patrolling, to include improvements to the emergency landing procedures and

1 added additional requirements to the pilot's preflight briefing.
2 (Guidance Document Reference AVI-3001M)

3 Revisions were made to the Helicopter Operations Field Manual, Chapter 2
4 Patrolling, to include requirements that only three-point or four-point seat
5 restraints are to be used by passengers and prohibits the use of lap-belt only
6 seats. This is essential to ensure adequate restraint during emergency landings
7 and to reduce potential injuries (Guidance Document Reference AVI-3001M)

8 Helicopter Operations, working with Enterprise Health and Safety, and
9 research of industry best practices will evaluate helicopter mission profiles to
10 determine those that have the greatest risk of emergency landings and pose
11 threats to occupants. They will establish the minimum PPE requirements for
12 head protection and Fire Resistant (FR) clothing to be worn by employees and
13 contractors flying in low altitude line patrols and other evaluated missions.
14 These requirements will be documented in AVI-3001M. PG&E is also working to
15 update a number of procedures which will be reflected in the 2021 SPMR.

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

18 No, the Helicopter and Flight Accident or Incident metric was not used as a
19 STIP metric for 2020.

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

22 Yes, the Helicopter and Flight Accident or Incident metric is linked to 2020
23 individual performance goals for one or more Director-level position or higher.

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

25 Yes, in 2020, the following position(s) include individual goals that are linked
26 to the Helicopter and Flight Accident or Incident metric:

- 27 – Director Shared Services (1)
- 28 – Vice President Shared Services (1)

29 **Bias Controls:** None.

30 **Rate Case Safety Goal Progress:** This metric does not represent a 2020
31 stated safety goal.

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

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

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

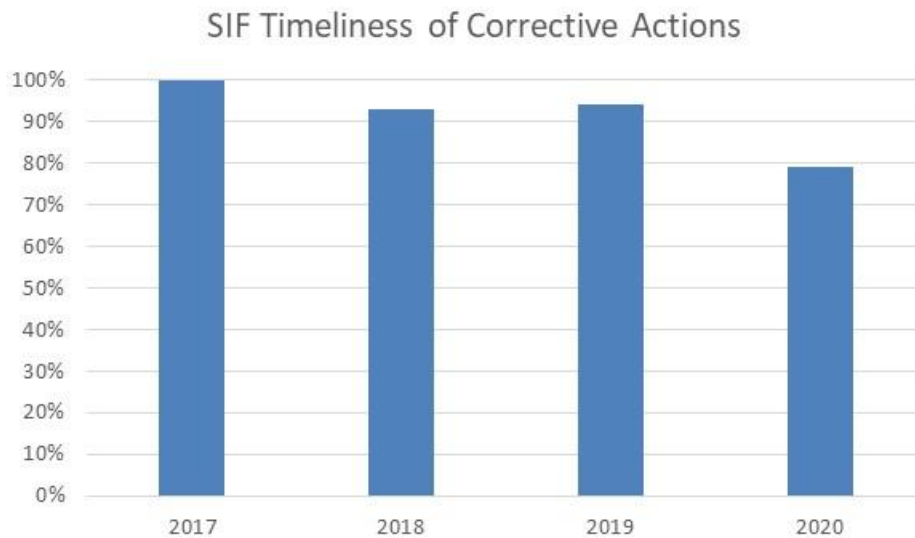
6 **Risks:** Employee Safety Incident, Contractor Safety Incident, Motor Vehicle
7 Safety Incident, and Third-Party Safety.⁵⁴

8 **Category:** Injuries

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

12 **Summary:**

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



54 The Corporate Risk Register now has the following risks: Employee Safety Incident, Contractor Safety Incident, Motor Vehicle Safety Incident, and Third-Party Safety Incident.

1 **Narrative Context:** The process for ensuring actions are completed on
2 schedule continues to mature with an uptick in the metric for 2019. In 2020,
3 79 percent of corrective actions coming from SIF investigations were closed
4 on-time, compared with 94 percent in 2019. The drop from 2019 to 2020 can
5 largely be attributed to the pandemic, which caused cancellations of field visits
6 or delayed shipment of tools or materials required to complete corrective actions
7 on time. In the second quarter of 2020, the SVP of Safety prohibited the
8 extension of any corrective actions related to SIF incidents.

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

11 No, the SIF Correction Actions Complete on Time metric was not used as a
12 STIP metric for 2020.

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

15 Yes, the SIF Correction Actions Complete on Time metric is linked to 2020
16 individual performance goals for one or more Director-level position or higher.

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

18 Yes, in 2020, the following position(s) include individual goals that are linked
19 to the SIF Correction Actions Complete on Time metric:

- 20 – Senior Director Electric Operations (1)
- 21 – Director Enterprise Health & Safety (2)
- 22 – Senior Director Gas Operations (1)
- 23 – Director Generation (17)
- 24 – Senior Director Generation (3)
- 25 – Vice President Generation (3)
- 26 – Vice President Human Resources (3)

27 **Bias Controls:** Yes. This metric is reviewed by PG&E Internal Audit on a
28 quarterly basis.

- 1 **Rate Case Safety Goal Progress:** This metric was a stated Key Safety Metric
- 2 in Table 1-1 of the 2020 GRC testimony on Safety and Health.⁵⁵
- 3 **Monthly Data:** See Attachment A at the end of this report.

⁵⁵ 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.

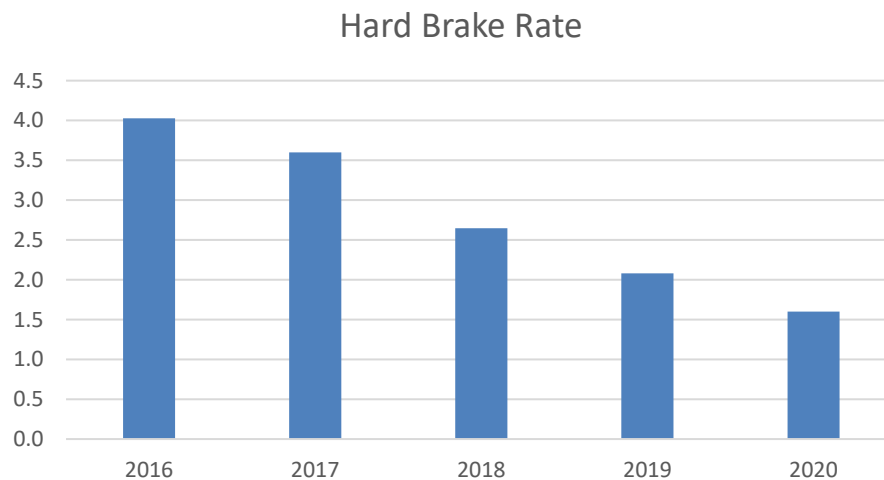
5 **Risks:** Motor Vehicle Safety⁵⁶

6 **Category:** Motor 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 2020. During
12 the 2017-2020 time period, the number of vehicles tracking hard braking has
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 No, the metric was not used as a STIP metric for 2020.

⁵⁶ The Corporate Risk Register now has the following risks: Motor Vehicle Safety Incident.

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

3 Yes, the Hard Brake Rate metric is linked to 2020 individual performance
4 goals for one or more Director-level position or higher.

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

6 Yes, in 2020, the following position(s) include individual goals that are linked
7 to the Hard Brake Rate metric:

- 8 – Senior Vice President Customer Care (1)
- 9 – Director Electric Operations (2)
- 10 – Director Enterprise Health & Safety (2)
- 11 – Director Finance (1)
- 12 – Director Gas Operations (1)
- 13 – Senior Director Human Resources (1)
- 14 – Director Information Technology (3)
- 15 – Senior Director Information Technology (3)
- 16 – Vice President Information Technology (2)
- 17 – Senior Vice President Information Technology (2)
- 18 – Director Office of the President & CEO (1)
- 19 – Senior Director Office of the President & CEO (1)
- 20 – Director Shared Services (5)
- 21 – Senior Director Shared Services (1)
- 22 – Director Supply Chain/Materials (2)

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

24 **Rate Case Safety Goal Progress:** While this metric was not specifically stated
25 in the 2020 GRC; it is part of the Safe Driving Rate metric, which also includes
26 Hard Acceleration. The Safe Driving Rate metric was stated in the 2020 GRC
27 with an anticipated 2022 forecast goal of 4.5.⁵⁷

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

⁵⁷ PG&E GRC Exhibit (PG&E-7), Chapter 1, Safety and Health, p. 1-19.

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.

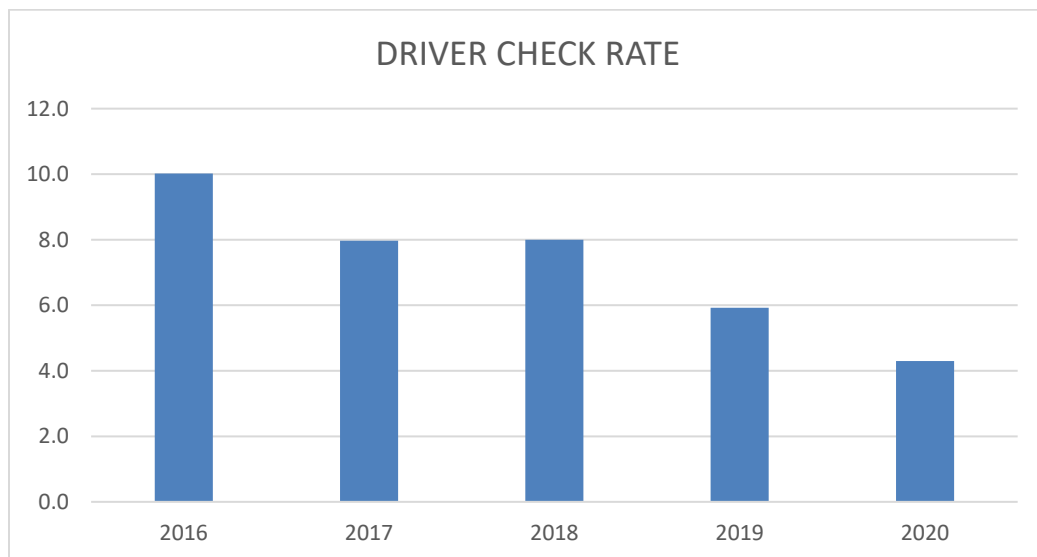
5 **Risk:** Motor Vehicle Safety⁵⁸

6 **Category:** Motor 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 over 50 percent since 2016. For every complaint
12 there is an e-mail to the Supervisor, which requires follow-up and coaching with
13 the employee.

⁵⁸ The Corporate Risk Register now has the following risks: Motor Vehicle Safety Incident.

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

3 No, the Driver's Check Rate metric was not used as a STIP metric for 2020.

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

6 Yes, the Driver's Check Rate metric is linked to 2020 individual performance
7 goals for one or more Director-level position or higher.

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

9 Yes, in 2020, the following position(s) include individual goals that are linked
10 to the Driver's Check Rate metric:

- 11 – Senior Vice President Customer Care (1)
- 12 – Director Electric Operations (5)
- 13 – Senior Director Electric Operations (2)
- 14 – Director Enterprise Health & Safety (2)
- 15 – Director Finance (1)
- 16 – Director Gas Operations (2)
- 17 – Senior Director Gas Operations (1)
- 18 – Senior Director Human Resources (1)
- 19 – Director Information Technology (1)
- 20 – Senior Director Information Technology (1)
- 21 – Director Office of President & CEO (1)
- 22 – Senior Director Office of President & CEO (1)
- 23 – Director Shared Services (4)
- 24 – Senior Director Shared Services (1)

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

26 **Rate Case Safety Goal Progress:** This metric was not stated in the 2020 GRC
27 as a safety goal.⁵⁹

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

⁵⁹ PG&E GRC Exhibit (PG&E-7), Chapter 1, Safety and Health, p. 1-19.

PACIFIC GAS AND ELECTRIC COMPANY
ATTACHMENT A
MONTHLY METRIC DATA TABLES

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 1

TRANSMISSION AND DISTRIBUTION (T&D) OVERHEAD WIRES DOWN

2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011	124	198	213	125	145	134	106	81	99	107	108	150	1590
2	2012	233	191	427	247	176	231	206	200	146	203	395	377	3032
3	2013	163	179	192	225	225	209	176	207	203	237	160	219	2395
4	2014	168	302	246	193	178	181	194	189	163	221	182	399	2616
5	2015	158	237	143	185	154	198	184	225	189	218	274	410	2575
6	2016	430	184	511	270	225	211	224	178	213	343	219	292	3300
7	2017	283	376	378	242	263	238	233	215	230	205	246	158	3067
8	2018	216	175	370	231	210	231	272	205	168	213	208	288	2787
9	2019	336	249	336	238	311	207	198	210	216	138	232	342	3013
10	2020	159	172	245	229	235	213	196	240	192	180	237	196	2494

- (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.

2020 SAFETY PERFORMANCE METRICS REPORT
TABLE 2
TRANSMISSION AND DISTRIBUTION (T&D) OVERHEAD WIRES DOWN
2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011	143	521	821	146	161	155	134	98	126	161	201	333	3000
2	2012	261	201	452	271	201	252	222	222	162	229	426	802	3701
3	2013	176	188	211	355	262	275	218	245	253	288	407	248	3126
4	2014	189	351	289	225	222	223	225	258	200	253	208	1266	3909
5	2015	185	760	167	208	174	232	237	250	215	250	325	627	3630
6	2016	476	308	767	320	254	230	246	193	227	452	244	324	4041
7	2017	2057	1483	409	515	282	287	256	247	361	526	284	281	6988
8	2018	249	189	457	262	252	264	310	231	185	246	369	320	3334
9	2019	967	1894	369	266	344	271	228	239	257	332	572	386	6125
10	2020	264	393	516	229	235	213	196	375	233	206	237	196	3293

- (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

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 3

ELECTRIC EMERGENCY RESPONSE

"911 Calls responded to within 60 minutes"

2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	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%
2	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%
3	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%
4	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%
5	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%
6	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%
7	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%
8	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%
9	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%
10	2020	96.76%	91.48%	97.71%	98.43%	99.04%	98.78%	98.61%	95.51%	98.39%	97.78%	97.96%	97.37%	97.19%

(a) 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.

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 4
FIRE IGNITIONS
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													
3	2013													
4	2014	1	1	0	3	2	50	73	45	36	41	18	12	282
5	2015	4	13	13	24	37	96	78	72	63	42	15	11	468
6	2016	2	5	1	26	38	83	69	66	59	37	7	0	393
7	2017	8	3	7	19	45	100	107	80	70	86	21	19	565
8	2018	7	8	6	11	39	106	93	72	52	34	28	3	459
9	2019	5	4	3	17	41	86	72	64	67	82	34	6	481
10	2020	1	14	9	16	50	103	65	86	52	56	25	15	492

(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) PG&E began tracking this metric in July 2014. The full year of metric data is only available for 2015-2020.

(c) The 2015-2020 2019 fire ignition metric data reflects fire ignitions previously not included in the 2019 Safety Performance Metrics Report due to a misidentification in a field-based documentation system. PG&E is currently conducting an audit of the datasets that may contain fire ignition data.

(d) PG&E has included the Zogg Fire in this ignition count because CAL FIRE has announced that the cause of the Zogg Fire was a pine tree contacting PG&E overhead electric lines. PG&E's investigation into the cause of the Zogg Fire is ongoing.

2020 SAFETY PERFORMANCE METRICS

TABLE 5

DIG-INS

2011-2020

Line No.	Year	UOM	January	February	March	April	May	June	July	August	September	October	November	December	EOY	Notes*
1	2011															No data available
2	2011															No data available
3	2011															No data available
4	2012															No data available
5	2012															No data available
6	2012															No data available
7	2013															No data available
8	2013															No data available
9	2013															No data available
10	2014	Gas Tickets													671313	GOST Response 12581
11	2014	3rd Party Dig-ins													1621	GOST Response 12581
12	2014	3rd Party Dig-in Ratio													2.41	GOST Response 12581
13	2015	Gas Tickets													788901	GOST Response 12581
14	2015	3rd Party Dig-ins													1694	GOST Response 12581
15	2015	3rd Party Dig-in Ratio													2.15	GOST Response 12581
16	2016	Gas Tickets	60154	68599	73839	69660	74564	76594	70610	84300	78050	73127	68549	60926	858972	
17	2016	3rd Party Dig-ins	84	115	114	147	149	179	167	211	190	142	145	91	1734	
18	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	
19	2017	Gas Tickets	62163	61145	82191	73287	85823	84379	77764	90450	81709	89552	80815	73387	942665	
20	2017	3rd Party Dig-ins	65	79	155	128	175	181	192	205	162	172	129	137	1780	
21	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	
22	2018	Gas Tickets	82986	77901	84149	89657	95567	91232	94206	104059	87105	101917	85994	74937	1069710	
23	2018	3rd Party Dig-ins	93	127	96	137	195	160	179	174	159	164	131	103	1718	
24	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	
25	2019	Gas Tickets	90140	93011	122101	130536	128393	122987	145646	157091	155556	165328	129355	115970	1556114	
26	2019	3rd Party Dig-ins	83	76	98	132	135	161	188	193	156	178	137	82	1619	
27	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	
28	2020	Gas Tickets	132997	130127	124530	119393	126695	142897	140577	134692	141309	136592	102979	102140	1534928	
29	2020	3rd Party Dig-ins	88	111	96	114	123	153	188	175	169	148	119	120	1604	
30	2020	3rd Party Dig-in Ratio	0.66	0.85	0.77	0.95	0.97	1.07	1.34	1.3	1.2	1.08	1.16	1.17	1.05	

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 6

GAS IN-LINE INSPECTION

2011-2020

"Miles Inspected"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													147.0
2	2012													175.6
3	2013													257.3
4	2014		52.1	20.3	17.9	11.9	6.4	66.8		6.9	96.3		142.8	421.3
5	2015			133.3				23.0	60.2	43.8		5.1		265.4
6	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
7	2017	0.7	21.3			33.4	73.4	9.1	28.0	27.3		55.4	60.2	308.8
8	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
9	2019		22.5	39.9	44.8	88.7	54.1	13.7	121.8	17.1	12.8	53.3	9.3	478.0 ^(b)
10	2020	0.4	0.0	29.0	62.7	67.3	120.9	17.1	25.7	1.3	8.9	22.4	4.0	359.6

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

(b) Prior year report incorrectly reported 2019 results; for EOY 2019 there were a total of 478.0 miles in-line inspected.

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 7
GAS IN-LINE UPGRADE
2011-2020
"Miles Upgraded"**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011										71.2	86.6		157.8
2	2012		15.8						7.3			79.6		102.7
3	2013							67.0		20.0	68.7		6.5	162.2
4	2014	6.7		21.9		32.9					4.0	6.4		71.9
5	2015					6.3		12.2		11.2	5.8	11.3	25.3	72.1
6	2016	1.5				44.3	21.7	11.9		4.8	10.5	12.4		107.2
7	2017						54.2				53.4	22.4	24.4	154.4
8	2018							13.1			97.9	63.2	68.7	243.0
9	2019			36.3	62.8	2.6		3.1		70.7	10.7		59.6	245.7
10	2020			44.0	43.6	47.2	55.9	85.9			48.8	95.5	43.3	464.2

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

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 8

SHUT IN THE GAS AVERAGE TIME - MAINS

2011-2020

"Average Number of Minutes"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													192
3	2013													147
4	2014													120.77
5	2015													102.8
6	2016													104.43
7	2017													103.78
8	2018													88.77
9	2019													85.13
10	2020													93.72

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

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 9

SHUT IN THE GAS AVERAGE TIME - SERVICES

2011-2020

"Average Number of Minutes"

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													70
3	2013													61
4	2014													52.2
5	2015													49
6	2016													45.76
7	2017													45.16
8	2018													43.3
9	2019													41.4
10	2020													41.9

(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.

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 10

CROSS BORE INTRUSIONS

2011-2020

Line No.	Year	Unit Type	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011														
2	2012														
3	2013	Inspections Complete													19,500
4	2013	Cross Bores Found													151
5	2013	Find Rate													7.74
6	2014	Inspections Complete													33,570
7	2014	Cross Bores Found													192
8	2014	Find Rate													5.72
9	2015	Inspections Complete													23,531
10	2015	Cross Bores Found													104
11	2015	Find Rate													4.42
12	2016	Inspections Complete													23,653
13	2016	Cross Bores Found													90
14	2016	Find Rate													3.81
15	2017	Inspections Complete	509	1000	1438	1923	2031	1936	653	3023	4707	5481	6291	6168	35,160
16	2017	Cross Bores Found	1	5	15	4	5	1	2	1	1	3	0	0	38
17	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
18	2018	Inspections Complete	3232	3215	2166	4419	3568	4407	4463	5613	4851	2701	3844	3569	46,048
19	2018	Cross Bores Found	2	5	4	4	6	2	3	3	1	5	1	7	43
20	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
21	2019	Inspections Complete	1739	1647	4365	2086	2816	9120	3480	6103	3035	3780	3880	1374	43,425
22	2019	Cross Bores Found	5	3	6	3	3	2	5	5	3	2	2	2	41
23	2019	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
24	2020	Inspections Complete	1788	1211	493	1435	1295	3053	680	1743	396	1720	622	2229	16665
25	2020	Cross Bores Found	5	3	7	10	4	1	7	3	4	3	6	3	56
26	2020	Find Rate	2.80	2.67	4.30	5.07	4.66	3.23	3.72	3.42	3.64	3.40	3.67	3.36	3.36

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2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 11
GAS EMERGENCY RESPONSE
2011-2020
"MINUTES"**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													31.0
2	2012													26.0
3	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
4	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
5	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
6	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
7	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
8	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
9	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	20.8 ^(b)
10	2020	20.9	20.9	19.5	19.4	20.0	20.7	20.8	20.9	20.3	20.4	21.5	20.5	20.5

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

(b) Prior year report incorrectly reported 2019 results; EOY 2019 average emergency response time was 20.8 minutes.

2020 SAFETY PERFORMANCE METRICS REPORT
TABLE 12
STORAGE BASELINE INSPECTIONS
2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													
3	2013				1	1	2	1	1					6
4	2014								2	3	1			6
5	2015						2	1	2	1				6
6	2016					1	1		2	3		1	1	9
7	2017							1	1	2	2	1		7
8	2018				3	2	4	1	2	1				13
9	2019			1	1	2	2	2	2	1	1	2		14
10	2020				3	3	5	3	4	2				20

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

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 14

EMPLOYEE SIF

2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY	EOY Rate
1	2011	1	0	0	1	1	1	0	0	1	3	0	0	8	0.04
2	2012	0	1	2	0	0	0	0	0	0	2	2	0	7	0.03
3	2013	0	3	0	1	1	1	0	1	0	0	1	1	9	0.04
4	2014	0	0	0	0	0	0	0	1	0	1	0	0	2	0.01
5	2015	0	1	0	1	1	0	1	0	1	0	0	0	5	0.02
6	2016	1	0	0	0	0	0	1	0	1	0	1	0	4	0.02
7	2017	1	2	0	2	0	1	1	0	0	0	0	0	7	0.03
8	2018	0	0	0	1	0	0	0	1	0	0	0	1	3	0.01
9	2019	1	1	0	0	0	0	0	0	1	0	1	0	4	0.02
10	2020	1	0	1	0	0	0	0	2	0	0	1	1	6	0.02

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 15
DART RATE
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	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
2	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
3	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
4	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
5	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
6	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
7	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
8	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
9	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
10	2020	0.76	1.44	1.34	1.30	1.19	1.17	1.22	1.37	1.31	1.36	1.37	1.34	1.34

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

(b) Rates are company-wide

(c) Rates are cumulative

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 16
LWD RATE
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	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
2	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
3	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
4	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
5	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
6	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
7	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
8	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
9	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
10	2020	0.16	0.35	0.35	0.31	0.33	0.33	0.38	0.44	0.42	0.43	0.47	0.50	0.50

(a) Rates are company-wide
(b) Rates are cumulative

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 17
OSHA RATE
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	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
2	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
3	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
4	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
5	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
6	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
7	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
8	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
9	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
10	2020	1.31	2.09	1.93	1.87	1.79	1.85	1.88	2.12	2.16	2.22	2.20	2.21	2.21

(a) Rates are company-wide
(b) Rates are cumulative

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 18

CONTRACTOR OSHA RECORDABLES RATE

2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	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
8	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
9	2019	0.85	0.53	0.91	1.12	1.08	0.87	0.88	1.00	0.91	1.15	0.50	0.86	0.90
10	2020	0.43	1.00	0.39	0.89	0.43	1.16	1.23	0.39	1.32	0.61	1.19	0.58	0.81

(a) ISNetworld program implementation began in 2017

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

2020 SAFETY PERFORMANCE METRICS REPORT
TABLE 19
CONTRACTOR DART CASE RATE
2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY Avg.
1	2011													
2	2012													
3	2013													
4	2014													
5	2015													
6	2016													
7	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
8	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
9	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
10	2020	0.34	0.43	0.15	0.24	0.22	0.71	0.77	0.34	0.78	0.42	0.22	0.37	0.42

(a) ISNetworld program implementation began in 2017

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

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 20
CONTRACTOR SIF
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY	EOY Rate
1	2011														
2	2012	0	0	0	0	1	3	2	0	1	0	1	0	8	
3	2013	1	0	0	0	1	0	1	2	0	0	0	0	5	
4	2014	0	0	0	0	0	0	0	0	1	1	0	0	2	
5	2015	0	0	0	0	0	0	0	0	0	1	0	1	2	
6	2016	0	0	0	0	0	0	0	0	0	0	0	1	1	
7	2017	0	1	0	1	0	0	0	0	0	1	0	0	3	0.02
8	2018	0	1	0	0	0	0	0	2	1	0	0	0	4	0.02
9	2019	0	0	0	0	0	4	3	0	0	0	0	0	7	0.03
10	2020	0	0	1	0	0	4	1	0	2	1	0	1	10	0.04

(a) 2020 counts based on number of injuries

(b) Additional incident added to July 2019

(c) Rate provide for Contractors who perform medium to high risk work

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 21
CONTRACTOR LWD CASE RATE
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	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
8	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
9	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
10	2020	0.26	0.19	0.05	0.24	0.05	0.51	0.41	0.19	0.58	0.31	0.22	0.26	0.28

(a) ISNetworld program implementation began in 2017

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

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 22
PUBLIC SIF
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011							1			1	1		3
2	2012	2	3	5	1	5	3	2	1	5	3	1	2	33
3	2013	2	1	3	5	1	7	2	6	1	2	4	2	36
4	2014	1	4	3	5	8	1	7	6	4	3	9	10	61
5	2015	2	5	3	8	2	8	4	7	6	3	4	2	54
6	2016	2		3	5	2		2	3	2	3	1		23
7	2017	3		2	2			1	4	2	23	3	1	41
8	2018		5	2	1	4		1		1		86	1	101
9	2019	2		2	1	2	3	4	2	2	1	1		20
10	2020			2	1	2	2	2		5		1	2	17

2020 SAFETY PERFORMANCE METRICS REPORT
TABLE 23
HELICOPTER / FLIGHT ACCIDENT OR INCIDENT
2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													
3	2013							1						1
4	2014													
5	2015													
6	2016													
7	2017							1						1
8	2018													
9	2019													
10	2020						1	1						2

2020 SAFETY PERFORMANCE METRICS REPORT

TABLE 24

SIF TIMELINESS OF CORRECTIVE ACTIONS

2011-2020

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													
3	2013													
4	2014													
5	2015													
6	2016													
7	2017				100%	100%	100%	87%	94%	100%	100%	96%	100%	100%
8	2018	100%	100%	100%	100%	96%	97%	96%	95%	92%	93%	93%	93%	93%
9	2019	69%	89%	91%	95%	95%	96%	96%	97%	95%	95%	93%	94%	94%
10	2020	86%	75%	65%	72%	68%	71%	72%	78%	78%	79%	80%	79%	79%

(a) Tracking began in 2017

(b) Percentages are cumulative

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 25
HARD BRAKE RATE
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													
3	2013													
4	2014													
5	2015													
6	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
7	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
8	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
9	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
10	2020	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.6

(a) Rates were not tracked until 2016

(b) Rates are cumulative

2020 SAFETY PERFORMANCE METRICS REPORT

**TABLE 26
DRIVER CHECK RATE
2011-2020**

Line No.	Year	January	February	March	April	May	June	July	August	September	October	November	December	EOY
1	2011													
2	2012													
3	2013													
4	2014													
5	2015													
6	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
7	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
8	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
9	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
10	2020	5.1	5.3	5.3	4.8	4.7	4.5	4.5	4.5	4.5	4.3	4.3	4.3	4.3

(a) Rates were not tracked until 2016

(b) Rates are cumulative

(c) Metric also known as "Driver Complaint Rate" within PG&E

**PACIFIC GAS AND ELECTRIC COMPANY
2020 SAFETY PERFORMANCE METRICS REPORT
ATTACHMENT B
REPORT METRIC 22 – PUBLIC SIF SUBCATEGORIES
PER SED REQUEST**

**2020 SAFETY PERFORMANCE METRICS REPORT
REPORT METRIC 22 - PUBLIC SIF SUBCATEGORIES PER SED REQUEST**

Event Date	Description	SED Subcategories	Total ^{(a) (b)} Fatalities
12/14/2020	Car/pole fatality - 3rd Party gunshot to chest and ejection from car	Vehicle Related	1
11/1/2020	Motorcycle rider lost control of bike, striking a street sign and power pole, resulting in fatal injuries	Vehicle Related	1
9/27/2020	Zogg Fire	Overhead Electric Contact - With energized fallen overhead conductors caused by falling trees/branches	4
7/5/2020	3rd party climbed pole and contacted high voltage conductors.	Overhead Electric Contact - With overhead conductors	1
6/20/2020	Fatality/drowning - A member of the public was out boating on Bass Lake, jumped into lake from boat while holding a floatation device then went under for unknown reason and became unresponsive resulting in a fatality.	Other Non-categorized Cause - Drowning	1
5/7/2020	Fatality/electrocution - 3rd party attempted meter bypass on UG secondary service cable resulting in fatality	Overhead Electric Contact - With overhead conductors	1
5/28/2020	Car/pole resulting in driver fatality -3rd party vehicle hit guy stub resulting in a fatality	Vehicle Related	1
4/2/2020	Fatality/drowning -fisherman drowned below the Pit 7 afterbay dam	Other Non-categorized Cause - Drowning	1
Event Date	Description	SED Subcategories	Total ^(c) Serious Injuries
12/2/2020	76 year old female fell off of horse when it was spooked during a helicopter OH line inspection. Punctured lung and several broken bones.	Other Non-Categorized Cause	1
9/7/2020	Property owner hired landscaper/tree trimmer to trim /remove tree. Tree trimmer's saw pole came in contact with our power line and he was injured and hospitalized.	Overhead Electric Contact - With energized fallen overhead conductors caused by falling trees/branches	1
7/30/2020	Electric contact with tree trimming tool caused entry and exit wounds on the third parties left calf and the top of his foot.	Overhead Electric Contact - With overhead conductors	1
6/18/2020	Trip & Fall; injured party was admitted to the hospital and CPUC was notified	Other Non-Categorized Cause	1
3/3/2020	Employee (3rd party) injured when his elbow hit 12 KV wire	Overhead Electric Contact - With overhead conductors	1

(a) Regarding wildfire fatality reporting, for 2020 PG&E is including data for fires CAL FIRE concluded were caused by PG&E equipment. Wildfire fatality data for 2011 through 2014 is based

(b) PG&E has included the Zogg Fire in this ignition report because CAL FIRE has announced that the cause of the Zogg Fire was a pine tree contacting PG&E overhead electric lines. PG&E's

(c) Wildfire serious injuries are not included in this report. As provided in PG&E's opening comments on the S-MAP proposed decision (D.19-04-020) PG&E does not track certain serious injuries, including serious injuries related to wildfire.