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ASSESSMENT OF PACIFIC GAS AND ELECTRIC CORPORATION AND PACIFIC GAS AND ELECTRIC COMPANY'S SAFETY CULTURE

FIRST UPDATE

**PREPARED FOR
CALIFORNIA PUBLIC UTILITIES COMMISSION
MARCH 29, 2019**

FINAL REPORT



NORTHSTAR CONSULTING GROUP

MANAGEMENT CONSULTANTS

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CHAPTER I: EXECUTIVE SUMMARY

A. BACKGROUND

On August 27, 2015, the California Public Utilities Commission (CPUC or Commission) opened an investigation to determine whether Pacific Gas and Electric Company's (PG&E) and PG&E Corporation's (PG&E Corp.) organizational culture and governance prioritize safety and adequately direct resources to promote accountability and achieve safety goals and standards (I.15-08-019 Order Instituting Investigation to Determine Whether PG&E and PG&E Corporation's Organizational Culture and Governance Prioritize Safety (Safety Culture Investigation or OII)). NorthStar Consulting Group, Inc. (NorthStar) was selected to perform the assessment on behalf of SED. The review began in April 2016. Detailed fieldwork was conducted from May through December 2016. NorthStar completed its final audit report on May 8, 2017. The Final Report provided five recommendations for the Commission and over 60 recommendations for PG&E.

In July 2018, at the request of SED, NorthStar developed a Statement of Work (SOW) to determine the status of PG&E's implementation of the following NorthStar recommendations:

- Develop a plan and status updates to ensure NorthStar's recommendations were implemented. Status updates were to be provided to SED. (Recommendation F-1)
- Develop a comprehensive safety strategy. (Recommendation F-4)
- Increase field supervision. (Recommendation F-2)
- Expedite safety leadership training for crew leads. (Recommendation F-3)
- Improve Board qualifications and involvement. (Recommendation III-1)
- Communicate the comprehensive safety strategy to the PG&E workforce. (Recommendation IX-1)

This report reflects NorthStar's completion of the July 2018 SOW. During the course of the assessment, NorthStar also endeavored to determine whether changes to PG&E's safety culture are evident, whether there continue to be impediments to optimized safety performance, whether structural or organization flaws exist, and whether recent analytical efforts effectively translate into programs and actions. In accordance with SED's direction, NorthStar did not review the status of all recommendations or perform a detailed follow-up review of PG&E's safety culture. NorthStar's observations regarding PG&E's progress or changes to its safety culture in areas outside the SOW scope are discussed in the NorthStar Observations section of this Chapter (on the following page).

B. NORTHSTAR OBSERVATIONS

Overall, NorthStar found significant improvements in the safety culture and processes of PG&E, including the following:

- Improvements in the qualifications of Corporate Safety personnel and less turnover within Safety, Health & Enterprise Corrective Action Program (CAP) reporting to the Chief Safety Officer (CSO) (also referred to as Corporate Safety in this report).
- Increased analytics and structure behind safety activities.
- The development of the *One PG&E Occupational Health and Safety Plan* (OH&S Plan) which provides a structured approach for improving occupational health and safety.
- Increased visibility and governance over employee and contractor safety.
- Continued evolution of the safety message such as “what failed, not who” and how to fail safely.
- Increased dialogue and constructive discussion of safety and potential issues at the Executive level as evidenced in the Enterprise Safety Committee meetings.
- A more structured, coordinated approach to safety communications.
- Improved exchange of best practices and greater engagement by differing levels within the organization.

Although PG&E has made improvements to its safety culture, a number of issues remain.

- There continue to be differences in the safety cultures and level of adoption of safety practices between and within the Lines of Business (LOB).
- PG&E does not have a single, comprehensive safety strategy addressing all aspects of safety. Currently, the Integrated Planning Process (IPP) for the entire corporation is the only point at which all potential safety risks and associated mitigations come together. Many of the IPP-identified risks are at a more macro level
- Safety, Health and Enterprise CAP is not responsible for certain safety risks, including asset management, cyber security, process safety and public safety, which remain the responsibility of the LOBs. Governance and monitoring of these risks is not currently within the purview of the CSO.
- While PG&E agrees that increased supervisory time in the field is critical, little progress has been made across the organization to enable additional supervisory time in the field.
- New safety initiatives continue to be rolled out without the benefit of detailed cost-benefit analyses. PG&E is implementing a safety initiative governance process; however, due to the timing of that process, NorthStar could not review it.
- There are indications that PG&E as an organization continues to have a reactive, rather than proactive approach to potential issues and a potential focus on productivity and performance targets relative to safety. These are cultural issues that require ongoing focus.
- As always, there is an ongoing potential for cost-cutting efforts to impact safety.

C. FINDINGS AND CONCLUSIONS

Exhibit I-1 provides NorthStar’s high-level assessment of the status of PG&E’s implementation of the NorthStar recommendations within the scope of this phase of NorthStar’s review. A detailed discussion of the implementation of each recommendation is provided in Chapter III. Although a recommendation may be considered “complete” or “implemented” ongoing improvement is always possible.

Exhibit I-1
NorthStar Recommendations – January 30, 2019

| No. | Recommendation | NorthStar Status Assessment as of November 30, 2018 |
|-------|---|---|
| F-1 | Develop an Implementation Plan and Status Updates | Plan implemented, but additional rigor possible. |
| F-4 | Develop a Comprehensive Safety Strategy | A Corporate Safety Plan was developed, but does not include all aspects of safety. NorthStar continues to be concerned about potential silos. PG&E did not perform a review of existing safety initiatives in the manner recommended. |
| F-2 | Increase Field Supervision | Limited progress to date. |
| F-3 | Expedite Safety Leadership Training | Implemented. |
| III-1 | Improve the Board’s Qualifications and Involvement | Implemented. |
| IX-1 | Communicate the Safety Strategy to the PG&E Workforce | Implemented. |

D. RECOMMENDATIONS

Exhibit I-2 provides a list of NorthStar’s recommendations based on its review of PG&E’s implementation of the six recommendations that formed the scope of this Phase of NorthStar’s follow-up assessment. NorthStar continues to believe that greater communication between the Commission and PG&E is warranted and has repeated its recommendations for the Commission from its May 2017 Report.

Exhibit I-2
NorthStar Recommendations – January 30, 2019

| No. | Recommendation |
|--|---|
| Recommendations for PG&E based on Phase II Follow-Up Assessment | |
| 1 | Institute version control over, and include dates for the implementation plans, completion narratives, sustainability plans and for the IA sign-off process. |
| 2 | Increase the rigor and formality over target completion date changes, status changes and scope changes associated with the implementation of NorthStar’s recommendations. Review the implementation status of all recommendations to ensure all elements of the recommendations have been addressed or PG&E’s modifications have been documented and justified. |
| 3 | Develop processes to ensure the sustainability of the implementation of NorthStar’s recommendations. |
| 4 | In addition to the status of the implementation of NorthStar’s recommendations, continue to report to the Commission on any significant changes that might affect the sustainability of the recommendations. |

| No. | Recommendation |
|-----|--|
| 5 | Report to the Commission on a quarterly basis the status of the One PG&E Operational Health & Safety (OH&S) Plan and associated metrics (in process). |
| 6 | Increase CSO oversight and governance over public and other aspects of safety to mitigate potential silos and ensure risks are adequately addressed. |
| 7 | Communicate results of Internal Audit (IA) safety-related audits and LOB management response to Safety, Health and Enterprise CAP (reporting to the CSO). |
| 8 | Include the Generation Safety Lead in routine meetings between Electric Operations and Gas Operations and Safety & Health regarding the implementation of OH&S plan. |
| 9 | Conduct an annual (or biennial) blue sky strategic safety planning exercise to concentrate on the changing environment, potential risks and threats. The exercise should force a comprehensive analysis of all safety-related opportunities and threats and a formal, proactive action plan. The planning exercise should: <ul style="list-style-type: none"> Consider the environmental, financial, political, technological, infrastructure, public, workforce and other risks and safety advancements. Include executives, management and potentially the BODs. Be facilitated by an outside expert. Cover ALL potential contributors to safety. |
| 10 | Increase the number of Supervisors in Electric Operations, Gas Operations and Power Generation field operations to comply with Corporate Procedure HR-2010-P01 thereby limiting the span of direct reports to a maximum of 1:20. |
| 11 | Commit to a target level of dedicated time in supervisors calendars each week for time in the field; guidance will remain flexible for each LOB to take into consideration the different job functions and geographic work considerations. |
| 12 | Transfer administrative tasks that can be done by office-based staff, such as scheduling of work, training and paperwork review, from the Supervisor to the office-based staff. |
| 13 | Formalize Gas, Electric, and Power Generation management expectations for supervisors spending time in the field and communicate techniques for how to reduce impediments in each LOB thereby increasing time in the field. |
| 14 | Move completed work review to the jobsite, allowing for immediate feedback before electronic records and paperwork are finalized, as discussed in PG&E's January 8, 2018 Testimony (p. App 2A-4/Adobe p. 129/521). |
| 15 | Reduce travel requirements for field personnel and supervisors who are frequently assigned to work or attend meetings outside their normal work locations. |
| 16 | Continue to provide Crew Lead Safety Leadership training courses for employees that move into Crew Lead positions. Automatically include Crew Lead Safety Leadership training in the training profiles for new crew leads. |
| 17 | On an annual basis, revise Safety Leadership Development (SLD) training to address any areas of concern identified in the review of SafetyNet observation data. |
| 18 | Report any changes in the Board of Director (BOD) skills matrix, and any changes to the composition of the BOD to the CPUC. |
| 19 | Continue to update the BOD on safety and other significant industry issues. |
| 20 | Encourage BOD members to inquire and challenge PG&E executives to ensure a robust governance process. Revise PG&E Corp.'s Governance Guidelines to include expectations for Directors. As an example, see the Sempra Energy Corporate Governance Guidelines. Among other items, the Sempra Energy Guidelines include the following: <ul style="list-style-type: none"> Maintain an attitude of constructive skepticism, ask relevant, incisive, probing questions and engage in direct and forthright discussions with the Board and management. Develop and maintain a broad understanding of the corporation's business and risk profile, its strategic, financial and operating opportunities and plans, and its internal control systems and disclosure controls and procedures, including environmental, and health and safety systems and procedures.... Balance prompt action with thorough deliberations, prioritize matter requiring attention, gather sufficient information, engage in open discussion, invite differing views, evaluate the benefits and risks of various courses of action and support the acceptance of prudent business risks to permit informed and timely decision making. |

| No. | Recommendation |
|--|--|
| 21 | Implement the recommendations identified in the outside vendor's communications audit. |
| 22 | Revise the communications plan as necessary to address any safety and health issues that are identified in recent and on-going Premier surveys and associated analyses |
| Recommendations for the Commission (from NorthStar's May 2017 Report) | |
| 1 | Eliminate penalties for self-reporting of safety-related incidents by the California utilities; instead, implement a system that encourages reporting of actual and potential safety incidents to be shared among the utilities in order to identify best practices and share lessons learned. Actual incidents should be reported, as well as near hits. The CPUC should work with the California IOUs to define the parameters of near hit reporting. The system should be open to municipalities to encourage lessons learned sharing across the state. |
| 2 | Working with all California IOUs, develop a listing and consistent definitions of key safety-related metrics to be tracked on a monthly basis and reported to the CPUC at an agreed upon frequency. (Currently addressed by the Safety Model Assessment Proceeding (SMAP).) Performance reporting should be handled in a non-punitive manner, but subject to audit by the CPUC. On an annual basis, each utility's Internal Audit function should audit and render an opinion as to the accuracy of the information reported to the CPUC. |
| 3 | Consider the implementation of a performance-based ratemaking mechanism with a fixed component based on traditional ratemaking principles and a variable adder based on safety performance. Both components should have defined ranges. Safety performance can be defined in a variety of ways. As with any incentive mechanism, the potential for gaming is real. NorthStar's recommendations to PG&E, includes items that should provide a greater tie between safety performance and executive compensation. |
| 4 | Perform periodic audits of the safety programs and culture of PG&E, and potentially the other major California investor-owned utilities. |
| 5 | Work planning and preparation has a significant impact on job safety. When utility work has an identified public safety impact, the CPUC needs a multi-agency hot line that PG&E (or other utilities) can call and request that the Commission contact the municipal permit department to encourage interagency collaboration and expedite work permits on an exception basis. |
| Additional Recommendations for the Commission | |
| 6 | Identify ways to enhance direct communications between PG&E and the Commission given existing regulatory constraints. Potential options include: <ul style="list-style-type: none"> • Reevaluation of original objectives and modification to the ex-parte rules to better serve present issues. • Quarterly workshops involving the Commission and PG&E (and other utilities) providing safety updates and exchange of best practices. • Ongoing monitoring by an independent party. |

CHAPTER II: BACKGROUND

Phase I of the Proceeding

On August 27, 2015, the California Public Utilities Commission (CPUC or Commission) opened an investigation to determine whether Pacific Gas and Electric Company's (PG&E) and PG&E Corporation's (PG&E Corp.) organizational culture and governance prioritize safety and adequately direct resources to promote accountability and achieve safety goals and standards.¹ During the first phase of the proceeding, the Commission directed its Safety and Enforcement Division (SED) to evaluate PG&E's and PG&E Corp.'s organizational culture, governance, policies, practices, and accountability metrics in relation to PG&E's record of operations, including its record of safety incidents, and to produce a report on the issues and questions contained in the Order Instituting Investigation (OII). The Commission stated that, in a later phase of this investigation, it may consider "revising existing or imposing new orders and conditions on PG&E or PG&E Corp. as necessary and appropriate to optimize public utility resources and achieve the operational standards and performance record required by law."

NorthStar Consulting Group, Inc. (NorthStar) was selected to perform the Phase 1 assessment on behalf of SED. The review began in April 2016. Detailed fieldwork was conducted from May through December 2016. NorthStar completed its final report on May 8, 2017. The report provided five recommendations for the Commission and over 60 recommendations for PG&E.

Phase II of the Proceeding

On May 8, 2017, Assigned Commissioner Picker issued a "Scoping Memo and Ruling of Assigned Commissioner" (Scoping Memo), beginning Phase 2 of the proceeding. Attached to the Scoping Memo was NorthStar's final report. The Scoping Memo states that Phase 2 is intended to "evaluate the safety reform recommendations of NorthStar which may lead to the Commission's adoption of the recommendations in the Report, in whole or in part. This phase of the proceeding will also consider all necessary measures, including, but not limited to, a reduction of PG&E's return on equity until any recommendations adopted by the Commission are implemented."

On August 1, 2017, the Commission held a prehearing conference at which the parties discussed Phase 2 of this proceeding. At the prehearing conference, counsel for the Office of Ratepayer Advocates (ORA) and The Utility Reform Network (TURN) requested the scope of the proceeding be refined and asked for an opportunity to determine the disputed issues of fact. On November 17, 2017, Assigned Commissioner Picker issued the "Assigned Commissioner's Ruling Setting Scope of Testimony and Schedule" (ACR). The ACR set forth the scope of Testimony, which included a series of questions addressing six overarching themes:

¹ I.15-08-019 Order Instituting Investigation to Determine Whether PG&E and PG&E Corporation's Organizational Culture and Governance Prioritize Safety (Safety Culture Investigation or OII)

- The NorthStar Report
- The One PG&E Safety Action Plan
- NorthStar Data Request 144 (which lists PG&E's safety initiatives from 2011 through 2016)
- PG&E's and PG&E Corp's Boards of Directors (BOD)
- PG&E's Corrective Action Program (CAP)
- PG&E's actions in response to five enumerated safety incidents.

On January 8, 2018, PG&E submitted its prepared Testimony in response to the ACR (PG&E Testimony or Testimony). PG&E's implementation plan, as provided in Appendix 2-A of its Testimony, describes the implementation plan for the NorthStar recommendations PG&E believes are applicable to PG&E. (Some of NorthStar's recommendations were for the Commission.) Appendix 3-A of the Testimony provides PG&E's "*One PG&E Occupational Health and Safety Plan*" (also referred to as the Safety Action Plan, Safety Plan, One PG&E OH&S Plan or OH&S Plan). The Safety Plan addresses four elements:

- Employee safety and health (includes safety leadership)
- Contractor safety
- Motor vehicle safety
- An Enterprise Safety Management System (ESMS).

Asset/system safety, public safety and other critical safety elements are not included as part of the Safety Plan. According to PG&E, robust asset management and process safety, safety culture, identification and analysis of occupational safety and health risks, and management of potential environmental impacts will comprise the foundation of its ESMS; however, the ESMS will not be implemented across PG&E until 2021.²

NorthStar Support

On February 19, 2018, NorthStar provided SED with a statement of work (SOW) under its existing contract to perform a gap analysis between PG&E's Testimony and NorthStar's critical recommendations (identified as such in NorthStar's May 2017 report). NorthStar also committed to providing the SED Staff (Staff) with recommendations for the ongoing monitoring of PG&E's performance. The objective of the gap analysis was to address the following questions:

- Does the Testimony provide adequate support for PG&E's assertion regarding whether or not the recommendations are implemented?
- What additional information is necessary to determine whether the recommendation(s) is implemented?
- How should the Staff monitor PG&E's performance going forward and is additional information from PG&E required?

² PG&E January 8, 2018 Testimony, p. App3A-3

On April 2, 2018, NorthStar provided SED with its gap analysis and recommendations for ongoing monitoring of PG&E's implementation of NorthStar's critical recommendations. NorthStar determined that the information provided was insufficient to determine that status of PG&E's implementation of NorthStar's recommendations.

Based on the results of the gap analysis, PG&E's Testimony at evidentiary hearings held on April 11, 2018, and input from SED, NorthStar developed another SOW (July 2018) to determine the status of PG&E's implementation of the following recommendations:³

- Develop a plan and status updates to ensure NorthStar's recommendations were implemented. Status updates were to be provided to SED. (Recommendation F-1)
- Develop a comprehensive safety strategy. (Recommendation F-4)
- Increase field supervision. (Recommendation F-2)
- Expedite safety leadership training for crew leads. (Recommendation F-3)
- Improve Board qualifications and involvement. (Recommendation III-1)
- Communicate the comprehensive safety strategy to the PG&E workforce. (Recommendation IX-1)

This report reflects NorthStar's completion of the July 2018 SOW. During the course of the assessment, NorthStar also endeavored to determine whether changes to PG&E's safety culture are evident, whether there continue to be impediments to optimized safety performance, whether structural or organization flaws exist, and whether recent analytical efforts effectively translate into programs and actions. NorthStar worked with SED and PG&E to develop a template for the ongoing assessment of PG&E's implementation of NorthStar's recommendations. NorthStar was not asked to review the status of PG&E's implementation of all the NorthStar recommendations.

This Report assumes familiarity with NorthStar May 8, 2017 Report and the findings and conclusions contained therein. In general, throughout this report, Corporate Safety refers to the organization reporting to the Chief Safety Officer.

³ Recommendation nomenclature is based on PG&E's January 8, 2018 Testimony. An "F" designation indicates the recommendation was a critical recommendation included in the Executive Summary of NorthStar's May 2017 Report

CHAPTER III: IMPLEMENTATION STATUS

This Chapter provides the results of NorthStar’s assessment of PG&E’s implementation of the following recommendations:⁴

Item 1: Develop an Implementation Plan and Status Updates (Recommendation F-1)

Item 2: Develop a Comprehensive Safety Strategy (Recommendation F-4)

Item 3: Increase Field Supervision (Recommendation F-2)

Item 4: Expedite Safety Leadership Training (Recommendation F-3)

Item 5: Improve the Board’s Qualifications and Involvement (Recommendation III-1)

Item 6: Communicate the Safety Strategy to the PG&E Workforce (Recommendation IX-1).

In accordance with SED’s direction, NorthStar did not review the status of all recommendations or perform a detailed follow-up review of PG&E’s safety culture. NorthStar’s observations regarding PG&E’s progress or changes to its safety culture in areas outside the audit scope are discussed in the Executive Summary.

⁴ Recommendation nomenclature is based on PG&E’s January 8, 2018 Testimony. An “F” designation indicates the recommendation was a critical recommendation included in the Executive Summary of NorthStar’s May 2017 Report.

A. ITEM 1: DEVELOP AN IMPLEMENTATION PLAN AND STATUS UPDATES

NorthStar recommended that PG&E develop an implementation plan for NorthStar's recommendations, which was to be submitted to the CPUC. NorthStar further recommended that PG&E "...provide periodic updates on its implementation status. This information shall be used by SED to ensure timely and effective implementation of NorthStar's recommendations."

In order to track the progress of its implementation of NorthStar's recommendations, PG&E developed a Project Management Office (PMO). PG&E identified the necessary program management resources and established project management processes during the July-September 2017 timeframe. The PMO tracks the progress of each plan and supports issue identification and resolution.⁵ The PMO consists of a three-member executive team (VP-Safety and Health (S&H), VP-Regulatory Affairs and the Senior Director-S&H); and a Core Team of six employees led by a PMO Lead.⁶

Each of the implementation plans is assigned to an implementation plan Owner and a Plan Sponsor, which may be outside the core PMO team.⁷ All implementation plans contain the following elements:⁸

- Reference ID (to NorthStar's recommendations)
- The text of the recommendations covered by the implementation plan
- Definition of key terms
- The implementation plan
- A timeline
- The implementation status
- Assessment of completion and sustainability of PG&E's implementation plan.

In implementing NorthStar's recommendations, PG&E grouped recommendations, resulting in 51 implementation plans for 64 recommendations.⁹ As NorthStar was not tasked with reviewing the implementation of all recommendations, NorthStar cannot determine whether key elements of recommendations may have been lost during this process.

During the period from September 2017 through June 2018, the PMO conducted three sets of recurring, roughly bi-weekly, meetings:

- Program Management Team (PMT) - Co-chaired by the PMO Lead and the Regulatory Case Manager and attended by Leads from all LOBs as well as regulatory stakeholders.

⁵ PG&E's January 8, 2018 Testimony

⁶ DR 893

⁷ DR 893 and Attachment

⁸ PG&E's January 8, 2018 Testimony

⁹ PG&E's January 8, 2018 Testimony

- Safety & Health (S-H) - Chaired by the PMO Lead and attended by the Safety and Health implementation plan owners.
- Human Resources (HR) - Chaired by the PMO Lead and attended by the HR Lead for the OII and her assistant.

PG&E began internal implementation status reporting in September 2017, following the kick-off of the PMO. The status reports, referred to as the RAG (red-amber-green) reports, show the status of each individual implementation plan. Status is categorized as follows:

- Complete (blue)
- In progress - issues identified, resolution plan not identified (red)
- In progress - issues identified, resolution plan in progress (amber)
- In progress - no issues identified (green).

RAG status is reported at each of the process stages shown in **Exhibit III-1**.¹⁰ Initiatives that fall behind are flagged as red or amber status. According to PG&E, at that point the Sponsor is engaged to address bottlenecks and potentially free up resources.¹¹ Upon completion of the stated milestones, PG&E develops a “completion narrative” for each implementation plan. The completion narrative describes the implementation, provides evidence of its completion and describes its sustainability. The completion narrative is submitted to Internal Audit (IA) for review. IA reviews the completion narrative against the implementation criteria and reviews the sustainability plan. IA may require additional information or clarification before it “signs-off” on the implementation. A snapshot of PG&E’s status reporting is provided as **Exhibit III-2** (following page).

Exhibit III-1

Implementation Plan Stages and Status as of July 27, 2018 and December 3, 2018

| Stage | Definition | July 27, 2018 | | December 3, 2018 | |
|--------------|---|---------------|---------------|------------------|---------------|
| | | Count | Percent | Count | Percent |
| 1 | No Baseline Plan | 1 | 1.6% | 1 | 1.6% |
| 2 | Approved Baseline Plan, Not Yet Started | 2 | 3.1% | 2 | 3.1% |
| 3 | Implementation in Progress | 11 | 17.2% | 9 | 14.1% |
| 4 | Implementation Complete/Key Milestones Complete | 4 | 6.3% | 2 | 3.1% |
| 5 | Internal Audit Review | 17 | 26.6% | 13 | 20.3% |
| | Plan Complete and Approved by Internal Audit | 29 | 45.3% | 37 | 57.8% |
| Total | | 64 | 100.0% | 64 | 100.0% |

Source: DR 896 and Attachments, DR 941 Attachment 26, DR 1067 and Attachments.

The Program Management Team and Safety & Health meetings were discontinued in July 2018, and replaced with individual status meetings for specific implementation plans when PG&E determined it had completed over 80 percent of NorthStar’s

¹⁰ DR 894 and Attachments, DR 896 and Attachments

¹¹ DR 894 Attachments, IR 16

recommendations.¹² The HR meetings continue primarily to check in on implementation status and to identify and resolve issues.

¹² DR 894 and 895

Exhibit III-2 Sample PMO Implementation Plan Progress Report

Safety Culture and Governance OIL_DR_NorthStar_896Atch22

3/15/2018 = print/save date

Overall Status

98%

Issues, Risks & Recovery Plans (if recommendations affected)

RED VII-7 Executive Best Practices Sharing - Communication of responsibilities and supporting tools has not occurred; Plan Owner and Sponsor working on a revised communication plan (due date: 3/31/2018) (1)

Executive Summary

1) One plan (1 recommendation) remains in RED status due to lack of a recovery plan
2) Internal Audit approval of plan completion increased to 13 plans (15 recommendations) of 23 submitted for review
3) Implementation milestones have been completed for 4 additional plans (1 recommendation)
4) 7 of 8 plans (14 of 15 recommendations) with expected completion dates in through May 2018 are on track for timely implementation (1 is in RED status)
5) Analysis of the potential schedule impact of the CPUC (SED, specifically) approval process for one March 2018 plan is underway, related to cause evaluation guidance documents and the Kern Oil settlement

Lifecycle Status Summary

Count of Recommendations by Lifecycle Stage & Status

| | 75% | 0% | 23% |
|---|-----|----|-----|
| Stage 1: No Plan | 0 | 0 | 0 |
| Stage 2: Approved Plan (Not Yet Started) | 1 | 0 | 0 |
| Stage 3: Plan in Progress | 82 | 0 | 1 |
| Stage 4: Key Milestones Complete | 1 | 0 | 0 |
| Stage 5: Internal Audit Completion Sign-off | 14 | 0 | 0 |

94

Status Key

Stage complete
Stage in-progress, no issues identified
Stage in-progress, issues identified, resolution plan in-progress
Stage in-progress, issues identified, resolution plan not identified
Stage not started

Owner Changes Since Last Report

End Date Changes Since Last Report

Plans with New Status Update

Plans with IA Completion Approval

Recent Status Notes

| Master ID | Plan Title (note: master plans in bold address multiple recommendations) | App- roved Plan | Plan in Pro- gress | Key Mile- stones Com- plete | IA Sign- off | Lead Log | Sponsor | Owner | End Date | |
|-----------|---|-----------------|--------------------|-----------------------------|--------------|----------|-------------|----------------|----------|---|
| VII-7 | VII-7_2014 OQ Review | | | | | GO | Kerry Klein | Mike Bradley | Jun-18 | 3/14 - resource assigned has begun to scope the volume of work performed by contractors. |
| VII-8 | VII-8_OQ Feasibility Study | | | | | GO | Kerry Klein | Mike Bradley | Apr-18 | 3/14 - draft content is in progress. |
| F-5 | F-5_Safety Specialist and Best Practices Includes IV-5, IV-4, IV-7, V-1, V-2, V-5 | | | | | SAH | Todd Hohn | Jeff Thomas | Mar-18 | 3/14 - Proposed process changes approved by Todd and John. Decision to explore in external vendor rather than internal resources for some of the new Safety Specialist training. All other milestones complete. Completion narrative development in progress. |
| VI-2 | VI-2_Safety IPR Includes III-4 | | | | | SAH | Todd Hohn | Kath Berman | Apr-18 | 3/14 - Review of deliverables and project/plot approval process scheduled for 3/22. Deliverables on track for that meeting. |
| VII-7 | VII-7_Expanded Best Practices Sharing | | | | | SAH | Todd Hohn | Diane Thurman | Mar-18 | 3/14 - Diane to schedule a meeting with John Higgins to review the plan and gain agreement on actions assigned to him in order to meet 3/23 due date. |
| VIII-3 | VIII-3_SLD 380 | | | | | SAH | Todd Hohn | David Widner | Mar-18 | 3/13 - Status presented to J. Higgins and T. Hohn. Process accepted. Metrics defined as Observations % Solved. At-risk. Preparing to close by 3/31. |
| | | | | | | | | | | 03/12 - Finalized Cap Benefits, Governance Costs, and Backlog Monitoring with ECAP leadership. |
| X-2 | X-2_Cap-NH Costs and Benefits | | | | | SAH | Gary Close | Mario Carrasco | Apr-18 | Confirmed with ECAP CE Manager of Standard/Procedure revision will be completed in April. Confirmed with IT of New Hit at Home automation went into production in February. Working on final project scope with ECAP Ops manager to be completed by April 27. |

Source: DR 896 Attachment 01.

Implementation Timeline

The timeline for the development of an implementation plan, as outlined in PG&E's January 2018 Testimony, is summarized in **Exhibit III-3**.

Exhibit III-3
Recommendation Implementation Plan Timeline – F-1

| Date | Milestone |
|-----------|---|
| Jun. 2017 | Preliminary implementation plans developed |
| Aug. 2017 | PMO established |
| Sep. 2017 | PMO processes operating sustainably |
| Ongoing | Milestone tracking, issue resolution, documentation |

PG&E Status Assessment (Based on PG&E's January 8, 2018 Testimony)

Complete.

NorthStar Status Assessment

Partially Complete. PG&E developed the required implementation plan; however, the process would benefit from additional rigor and documentation, as discussed in the Findings and Conclusions section of this item. PG&E accepted NorthStar's recommendations and developed a governance process to ensure they were implemented; however, as part of this process, PG&E grouped recommendations that it considered to be similar in nature. As NorthStar was not asked to review the implementation of all recommendations, it cannot determine if critical elements may have been inadvertently overlooked during this process.

PG&E did not provide the Commission with routine status reports as recommended by NorthStar, until it was ordered to by the Commission. On December 28, 2018, PG&E provided its first quarterly status report covering the period through November 30, 2018. Going forward, PG&E will provide quarterly status reports one month following the end of each calendar quarter.¹³

Findings and Conclusions

- 1. PG&E internally reports its "overall status" as the percent of implementation plans with Internal Audit sign-off plus the percent of plans with a green status, regardless of the stage the plans are in, which conveys greater progress than actually achieved in terms of completion.¹⁴**

- PG&E aggregated NorthStar's 64 recommendations into 51 implementation plans.

¹³ In D. 18-11-050, the Commission directed PG&E to implement the recommendations of the Commission's Safety and Enforcement Division (SED), as set forth in a report prepared by the NorthStar Consulting Group (NorthStar), no later than July 1, 2019, and to serve quarterly reports on the status of its implementation to the service list for this proceeding, beginning the fourth quarter of 2018.

¹⁴ Review of DR 896 Attachments

- However, for purposes of tracking and reporting status, PG&E “counts” each recommendation individually, i.e., an implementation plan that encompasses five NorthStar recommendations will have its status reported five times, as shown in **Exhibit III-4**, which provides the status by stage and status as of December 3, 2018.

Exhibit III-4
Recommendation Count by Status and Stage – December 3, 2018

| Stage | Status | | | | Total |
|--|-----------|----------|----------|--------------------|-----------|
| | Green | Amber | Red | Blue (Complete) | |
| Stage 1: No Plan | 1 | 0 | 0 | | 1 |
| Stage 2: Approved Plan (not yet started) | 2 | 0 | 0 | | 2 |
| Stage 3: Plan in Progress | 8 | 1 | 0 | | 9 |
| Stage 4: Key Milestones Complete | 2 | 0 | 0 | | 2 |
| Stage 5: IA Completion Sign-Off | 13 | 0 | 0 | | 13 |
| Total Count by Stage and Status | 26 | 1 | 0 | 37 | 64 |

Source: DR 1067 Attachment 7

- In its December 3, 2018, PMO RAG Report, PG&E reported the overall status as 98 percent on target. **Exhibit III-5** provides the basis for the calculation. Actual completion as measured by IA sign-off was 58 percent.

Exhibit III-5
Overall Percent Complete Calculation – December 3, 2018

| Stage Completed | Count | Percent | Cumulative Percent |
|--|-----------|---------|--------------------|
| Done and Approved | 37 | 58% | 58% |
| Stage 5: IA Completion Sign-Off | 13 | 20% | 78% |
| Stage 4: Key Milestones Complete | 2 | 3% | 81% |
| Stage 3: Plan in Progress | 9 | 14% | 95% |
| Stage 2: Approved Plan (not yet started) | 2 | 3% | 98% |
| Stage 1: No Plan | 1 | 2% | 100% |
| Total | 64 | | |

Source: DR 1067 Attachment 7, NorthStar Calculation.

2. PG&E developed and filed its implementation plans with the CPUC, as recommended by NorthStar; however, due to the procedural schedule, this was not done until January 2018, roughly six months after the implementation plans were initially developed.

- According to PG&E, initial implementation plans were developed by June 30, 2017.¹⁵
- On September 22, 2017, PG&E issued its first internal implementation plan status report (PMO RAG Report). At that time, the implementation of many of the recommendations already had been deemed complete by IA.¹⁶

¹⁵ PG&E’s January 8, 2018 Testimony, DR 893

- PG&E submitted its implementation plans to the CPUC in its January 2018 Testimony, in response to the ACR issued November 17, 2017 in I.15-08-019. Chapter 2 of PG&E's Testimony addresses the recommendations in the NorthStar Report. At that time, PG&E considered 36 percent of NorthStar's recommendations to have been completed.¹⁷

In summary, PG&E agrees with all of the 67 recommendations and supports their adoption by the Commission. PG&E has established an implementation plan for the 61 recommendations directed at PG&E, included as Appendix 2-A. As noted in those plans, implementation of 22 (36 percent) of the PG&E recommendations is already complete and an additional 36 will have implementation completed in 2018, bringing the total at that point to 95 percent complete.

- On November 28, 2018 (D.18-11-050), PG&E was ordered to:
 - Implement the recommendations set forth in the NorthStar Report no later than July 1, 2019.
 - Submit quarterly reports on the status of its implementation of the recommendations set forth in the NorthStar Report to the Commission's Safety Enforcement Division and to serve those reports to the service list for this proceeding, beginning the fourth quarter of 2018.
- On December 28, 2018, PG&E issued its first quarterly report covering the period through November 30, 2018. Future quarterly reports be based on quarterly data submitted on a one-month lag. For example, PG&E's second Report will include data through the first quarter of 2019 (January 1 – March 31) and will be submitted on April 30, 2019.¹⁸

3. The implementation process would benefit from more rigor and formal documentation.

- There is no formal PMO Charter or process documentation.
- The implementation plans vary in terms of specificity and level of detail. The majority of the implementation plans are not based on task interdependencies and detailed milestone schedules. As a result, progress reporting is subjective.
- PG&E did not maintain version control over the information submitted to IA. Once the implementation was considered complete, the completion narrative and sustainability plan were developed and electronically submitted to IA for review.¹⁹ According to PG&E, early in the process, copies of the completion documentation were provided to IA with notice that the plan was ready for review. After the first few plan completions, PG&E shifted to providing a link to the online version of the

¹⁶ DR 896

¹⁷ PG&E's January 8, 2018 Testimony, p. 1-7.

¹⁸ Pacific Gas and Electric Company Safety Culture and Governance Quarterly Report No. 01-2018, in Compliance with CPUC Decision 18-11-050, submitted December 28, 2018 (PG&E's First Quarterly Report)

¹⁹ DR 941

document to IA. Plan Owners generally edited the online version in response to IA feedback. In most cases, the original document provided to IA is not available.²⁰ As a result, one cannot readily determine the changes made based on IA's review.

- Implementation is considered "complete" once the Sponsor/Owner determines the key milestones have been "implemented", but before the completion narrative is developed/finalized and before IA's review. Based on the selected sample, NorthStar found IA's review to be beneficial, and IA's findings/questions may have necessitated additional activities or documentation on the part of the Plan Owner. The development of the completion narrative and IA sign-off may not occur for a few months as shown in **Exhibit III-6**.²¹

Exhibit III-6
Completion to Internal Audit Sign-Off
Selected Sample of Initiatives with Milestones Completed as of February 11, 2019

| Number | Recommendation Summary | Milestones Complete | Completion Narrative Submitted to IA | Time Between Milestone Complete and Narrative (days) | IA Review/ Sign-Off | Time Between Milestone Complete and IA Review /Sign-Off (days) |
|-------------------------------------|--|-----------------------------|--------------------------------------|--|--|--|
| F-2/V-4 | Increase field supervision | In Progress - Not Completed | | | | |
| F-3/VIII-1 | Expedite crew lead safety training | In Progress - Not Completed | | | | |
| F-4/III-2, III-3, V-3 | Develop a comprehensive safety strategy | January 5, 2018 | January 29, 2018 | 24 | Completed March 9, 2018 | 63 |
| F-5/IV-5, IV-6, IV-7, V-1, V-2, V-5 | LOB/Corporate Safety organizational issues | March 30, 2018 | April 19, 2018 | 24 | Completed May 31, 2018 | 62 |
| III-1 | Increase BOD safety qualifications | January 5, 2018 | February 2, 2018 | 24 | Completed March 8, 2018 | 62 |
| V-6 | Reduce miles driven | Not Completed | | | | |
| VI-2/III-4 | Support for new initiatives | June 29, 2018 | December 4, 2018 | 158 | Not Completed as of December 4, 2018. According to PG&E, as of February 11, 2019, IA had completed its first review. | Minimum of 157 |

²⁰ DR 941

²¹ Review of DR 941

| Number | Recommendation Summary | Milestones Complete | Completion Narrative Submitted to IA | Time Between Milestone Complete and Narrative (days) | IA Review/ Sign-Off | Time Between Milestone Complete and IA Review /Sign-Off (days) |
|-----------|--|---------------------|--------------------------------------|--|----------------------------|--|
| IV-3/IV-4 | Workload and morale issues in Corporate Safety | February 28, 2018 | May 10, 2018 | 71 | August 3, 2018 | 156 |
| IX-1 | Develop a strategic communications plan | December 29, 2017 | February 5, 2018 | 38 | Completed October 23, 2018 | 298 |
| X-4 | Develop an evaluation program for Serious Incidents and Fatalities (SIF) | May 9, 2018 | May 18, 2018 | 9 | August 6, 2018 | 89 |
| X-7 | Communication of incidents and corrective actions | June 20, 2018 | July 3, 2018 | 13 | Completed October 26, 2018 | 128 |
| XI-1 | Contractor safety review project selection and unannounced reviews | December 1, 2017 | January 29, 2018 | 59 | May 9, 2018 | 89 |

Source: DRs 896, 941, 941 Supplement and Attachments, DR 1057 Attachment 1, DR 1067 Attachment 7, DR 1078 (Verification DR).

- Completion narratives reflect what PG&E “did”, and not what the results were or whether it accomplished what was intended. According to PG&E, it plans to establish processes to determine whether the recommendation implementation has resulted in meaningful improvement.
- PG&E’s classification of status as red, amber or green is somewhat subjective, rather than based on the achievement of defined milestones. NorthStar reviewed the status reporting for a sample of implementation plans and found the following:
 - Status reports appropriately evidence changes in status at each stage in both directions based on events and progress, i.e., status moved from green to amber to red and from red to amber to green.
 - In most cases, the changes in status were reasonable based on reported progress, as shown in **Exhibit III-7**. However, in some cases NorthStar is not clear as to why the status changed, as shown in the Exhibit.

Exhibit III-7
Implementation Status Changes per PMO RAG Reports – through December 3, 2018

| PG&E ID No. | Implementation Plan/Recommendation(s) | Status Change and NorthStar Assessment | |
|---------------|--|--|--|
| | | Change Justification Explained/Appropriate | Change Justification Unclear |
| F-2/V-4 | F-2: The need for clear definition of supervisory requirements, including an assessment of workload requirements, ongoing field monitoring efforts and time requirements, and associated staffing levels. V-4: Reevaluate staffing, roles, responsibilities and work requirements to increase Supervisor's time in the field supervising crews. | Draft plan status appropriately changed from amber to red on December 8, 2017 when plan ownership had yet to be resolved. Status changed back to amber on December 16 with the identification of a plan owner. On June 12 the approved plan status changed from complete to green (a reversal), as the plan was revised by the new sponsor. On September 21, 2018, draft plan status changed to green following completion of a first-line supervisor workshop. Status remained that way through December 3, 2018. | On January 6, 2018 PG&E reported the Draft and Approved Plans were completed; only the draft plan was completed (1/5/18) |
| F-2/V-6 | V-6: Reevaluate the travel requirements placed on employees to reduce the overall mileage driven. Accelerate the use of mobile technology and electronic information exchange. PG&E employees drive a significant number of miles per year and are frequently called upon to support workload at great distances from their normal assigned locations. | Draft plan status appropriately changed to amber when this initiative was separated from the F-2 implementation plan and then to red when PG&E was unable to identify/assign a plan owner. Draft plan status changed to green with identification of a plan owner, and remained that way through December 3, 2018. | |
| F-3 VIII-1 | F-3: Expedited completion of the safety leadership training for crew leads and foremen. VIII-1: Accelerate crew foremen safety leadership training. | On November 3, 2017, PG&E appropriately indicated that Plan in Progress was trending toward red due to EO cancelling training in October due to fire response, and concerns about its ability to meet the accelerated schedule. Status officially changed to red on December 8, 2017. On December 16, the status changed to amber: "key stakeholder agreement to 2018 training targets justifying shift from RED to AMBER". Status changed to green on January 5, 2018 with the note: "Meeting set for 02/06/18 to identify enrollment & metrics review." Status remained green through December 3, 2018 with the cautionary note: "holding as green, however assessing impact of CAMP fire support on remaining Crew Leads. Possible this will go to amber or red depending on which Crew Leads are called to support fire related efforts and how long emergency status remains in place". | |

| PG&E ID No. | Implementation Plan/Recommendation(s) | Status Change and NorthStar Assessment | |
|------------------------------|---|--|---------------------------------|
| | | Change Justification Explained/ Appropriate | Change Justification Unclear |
| F-4 III-2 III-3 V-3 | <p>F-4: Development of a comprehensive safety strategy, with associated timelines/deliverables, resource requirements and budgets, personnel qualifications, clear delineation of roles and responsibilities; action plans, assignment of responsibility for initiatives, and associated metrics to assess effectiveness. This should be followed with the identification of necessary corporate and LOB safety resource requirements and development of an appropriate organization structure. Also shared with SED.</p> <p>III-2: Reassess and stabilize the safety culture change initiatives. The rigor applied to the integrated planning process (discussed in Chapter VI: Budgeting and Spending) should be applied to safety culture. The overwhelming number of initiatives and constant shifting of priorities is detrimental to a stable, consistent safety culture.</p> <p>III-3: Develop a comprehensive safety plan (by the end of 2017) that incorporates LOB and Corporate Safety activities to eliminate duplication, prevent gaps and appropriately prioritize expenditures. The plan should address culture, employee health and wellness, contractor safety, employee safety and public safety. Solicit input from throughout the organization, particularly the field, in the development of the plan. The environmental function was removed for the Safety, Health & Environment organization. It should have its own plan. The plan should be updated annually for at least two years and then at least every three years thereafter, with quarterly/annual monitoring of progress relative to the plan. The comprehensive plan should include all safety plans and programs of the Company, except for specific asset-related safety plans (such as asset management plans, leak survey programs or vegetation management) that should continue to be the responsibility of the various LOBs. The plan should be approved by the NOS Committee and the Boards, and endorsed and supported by executive management and the CPUC. The plan must be clearly communicated throughout the organization.</p> <p>V-3: Perform a broad reassessment of all safety programs and initiatives to: evaluate overall effectiveness and make improvements, and eliminate scope overlap (e.g., the Corrective Action Program (CAP) vs. the Safety and Environmental Management System (SEMS) follow-up responsibility).</p> | No changes in reported status until a stage was completed - appropriate. | |
| III-1 | III-1: Add safety to the list of qualifications used in selecting Independent Directors to the Board(s) of PG&E Corp. and PG&E. Periodically revisit the qualifications matrix and requirements for Independent Director as the industry and requirements change. Add Independent Directors to the Board who have experience with safety, perhaps in another industry such as aviation. | No changes in reported status until a stage was completed - appropriate. | |

| PG&E ID No. | | Implementation Plan/Recommendation(s) | | Status Change and NorthStar Assessment | |
|---------------|--|---|--|--|---|
| | | | | Change Justification Explained/ Appropriate | Change Justification Unclear |
| VI-2 III-4 | | VI-2: Develop business case support and a record of management approval for safety initiatives in accordance with PG&E's Project Approval Procedure. III-4: Clearly define and articulate any new initiatives to improve safety culture. Perform cost-benefit analyses of these initiatives and identify performance measures. Corporate Safety recently produced an analysis of lost work days that might serve as a starting point for the thought process and analytics involved. | | Key Milestones Complete status changed to amber then red when nearing due date. According to PG&E this occurred when the original plan owner left the department. | McKinsey enlisted to assist in meeting the due date, but according to the progress reports the McKinsey proposals not implementable by the due date. Plan revised to meet a revised internal deadline. Status changed back to green on May 25. It appears the plan was changed to meet a due date and McKinsey's proposal rejected rather than revising the due date. According to PG&E (DR 1073b) the McKinsey plan (which is now in use) did not include the time needed to develop required tools in-house. However, the response does not explain what changed to allow completion by the due date. |
| | | | | Stage status appropriately changed when sent to IA for review. Progress changed to green on 12/16 as multiple meetings on organization design issues had occurred, back to amber 1/20 as the plan to achieve the 1/31/18 due date had been developed but completion was at risk due to the ambitious schedule. On 2/2/18 it remained amber but the due date was extended to 2/28/18, with critical path tasks still at risk. On 3/1/18 the remaining milestones were completed. | On 3/16/18, the key milestones were complete and closed out and IA sign-off was in process (as the completion narrative was in progress). On 4/1/18 the progress dropped back a stage and remained that way until 5/25/18. PG&E cannot locate documentation to explain the change |
| IV-3 IV-4 | | IV-3: Examine workload levels, potential morale issues and other demands to understand and mitigate the reasons for the high turn-over at the Sr. Director, Safety and Health position and throughout the Corporate Safety organization. IV-4: Following the development of the safety strategy, review the structure, reporting relationships and staffing levels of the Corporate Safety organization to ensure PG&E has the resources necessary for strategy execution and proper coordination with/support for the LOBs. | | | |

| PG&E ID No. | Implementation Plan/Recommendation(s) | Status Change and NorthStar Assessment | |
|--|---|--|---|
| | | Change Justification Explained/ Appropriate | Change Justification Unclear |
| IX-1 | Develop and implement a strategic communications plan that does not overwhelm employees with too much information, but effectively addresses the issues identified in the January 2015 Monitor 360 Study, the 2016 Premier Survey (and PG&E's narrative analysis.) | No changes in reported status until a stage was completed - appropriate. | |
| F-5 IV-6 IV-5 IV-7 V-1 V-2 V-5 | <p>F-5: Greater coordination among the LOBs and with Corporate Safety to increase consistency, improve efficiencies, minimize operational gaps, and facilitate sharing of best practices.</p> <p>IV-6: Simplify and clarify the roles and responsibilities of the Corporate Field Safety Specialists (FSS) vis-à-vis the LOB FSS to eliminate duplication, and align activities with the respective skill sets. Work with the LOBs to determine service levels and staffing requirements.</p> <p>IV-5: Improve the safety credentials of personnel in PG&E's safety functions and organizations.</p> <p>IV-7: Establish, and adhere to, minimum qualifications for Corporate and LOB FSS. Establish training requirements for LOB FSS to ensure they are up to date on current methods and procedures and have a working knowledge of key regulatory requirements.</p> <p>V-1: Improve processes used to evaluate and translate best practices and techniques from one LOB organizational unit to others. Focus LOB FSS roles and responsibilities on integrating best practices among all LOBs, facilitating the implementation of corporate safety initiatives, and improving safety practices and awareness across all organizational units.</p> <p>V-2: NorthStar does not believe the FSS can be effective even in significantly great numbers given the geographic challenges associated with PG&E's service territory and the diverse job requirements. A more effective use of the FSS would be to have them focus on and support the first-line supervisors – foremen and crew leads.</p> <p>V-5: Increase the training requirements for LOB FSS. Existing OSHA training is somewhat generic and not sufficiently related to PG&E's public and occupational hazards.</p> | <p>Plan in Progress shifted from green to amber on October 2, 2017 due to the impact of an organizational realignment.</p> | <p>Plan in Progress status shifted back to green on November 3, 2017. According to the status report, this was due to the consolidation of initiatives. The status report provided the following comment: "Sponsor approved combining the Roles and Responsibilities and Training and Certifications tracks with existing initiatives currently underway. Work being done to modify the project plan." In response to a NorthStar information request, PG&E subsequently indicated the status returned to green once the impact of consolidating the field safety specialists within Corporate Safety and Health was known. Information is conflicting.</p> |
| X-4 | Develop an evaluation program for Serious Incident Investigations to include periodic audits of the processes by Internal Audit | | Plan in progress consistently green indicating the work was progressing as planned, despite the need for target date extensions. Date extensions would generally indicate progress was behind schedule. Status moved back a stage from 3/16 to 4/1 |
| X-7 | Develop a protocol involving concise, targeted, timely communications to notify other crews, work locations and LOBs of incidents or corrective actions that are applicable to that group. | All changes in reported status explained or when a stage was completed - appropriate. | |

| PG&E ID No. | Implementation Plan/Recommendation(s) | Status Change and NorthStar Assessment | |
|-------------|--|---|------------------------------|
| | | Change Justification Explained/ Appropriate | Change Justification Unclear |
| XI-1 | Corporate Contractor Safety should select the projects for review rather than the LOBs, and conduct "surprise" field visits to assess contractor safety practices. | PG&E provided explanation for status changes. | |

Source: DR 869 and 941, NorthStar Analysis, DR 1073a, 1073b, 1074, 1076, 1077.

- Targeted completion date for some recommendations changed over time (earlier and later) as shown in **Exhibit III-8**. The rationale for the dates changes is not always clear based on the PMO progress reports. Date changes without sufficient explanation are highlighted in yellow.

Exhibit III-8
Detailed Implementation Plans Sample – Target Date Changes

| Number | Recommendation Summary | Initial Target Date | Target Date Changes (thru September 7, 2018) |
|-------------------------------------|--|--|--|
| F-2/V-4 | Increase field supervision | After mid-2018 is date provided in first PMO progress report | June 2019 in Testimony, no date changes after |
| F-3/VIII-1 | Expedite crew lead safety training | December 2018 | None |
| F-4/III-2, III-3, V-3 | Develop a comprehensive safety strategy | February 2018 is date provided in first PMO progress report | Date changed to December 2017 on 11/3/17, no date changes after. According to PG&E the date change was the result of organizational changes affecting the overall implementation |
| F-5/IV-5, IV-6, IV-7, V-1, V-2, V-5 | LOB/Corporate Safety organizational issues | June 2018 | Date changed to March 2018 on 12/16/17 |
| III-1 | Increase BOD safety qualifications | December 2017 | None |
| V-6 | Reduce miles driven | Initially part of F-2 | TBD – June 2019 at latest |
| VI-2/III-4 | Support for new initiatives | April 2018 | None, despite revision of internal deadline to June 2018 |
| IV-3/IV-4 | Workload and morale issues in Corporate Safety | December 2017 | Date changed to June 2018 on 11/3/17 and to January 2018 on 11/10/17 and then February 2018 due to a delay in the sponsor's sign-off |
| IX-1 | Develop a strategic communications plan | December 2017 | Date changed to June 2018 on 10/2/17, and back to December 2017 on 10/17/17. No date changes after. According to PG&E, no additional documentation exists for the target date changes |
| X-4 | Develop an evaluation program for Serious Incidents and Fatalities (SIF) | December 2017 | Date changed to March 2018 on 11/1/17, to June 2018 on 12/8/17, and back to March 2018 on 1/5/18. Changes to April 2018 on 4/1. PG&E subsequently explained the changes. According to PG&E the comments in the 4/1 RAG may have been transposed. |
| X-7 | Communication of Incidents and corrective actions | August 2018 | Changed to December 2017 on 10/17/17 based on a preliminary assessment and then to June 2018 on 12/16/17 to align with recommendation X-4 and X-6. |

| Number | Recommendation Summary | Initial Target Date | Target Date Changes (thru September 7, 2018) |
|--------|--|---------------------|--|
| XI-1 | Contractor safety review project selection and unannounced reviews | October 2017 | Changed to December 2017 on 11/3/17 |

Source: DR 941 and Attachments, DR 1073a, 1073b, 1074, 1076, 1077.

4. Currently there is no ongoing oversight or monitoring to ensure implementation sustainability.

- According to PG&E, it plans to change this and to increase the rigor over implementation monitoring.
- According to its First Implementation status report issued December 28, 2018, “moving forward, PG&E will conduct a sustainability and effectiveness review to confirm that 1) the initial sustainability plan is still sufficient, 2) the plan has been operationalized and is still ongoing, and 3) that the sustainability plan is having the intended impact on our business. Any required changes will be used to update the plan to meet the aforementioned goals of the sustainability and effectiveness review.”²²

Recommendations

1. Institute version control over, and include dates for the implementation plans, completion narratives, sustainability plans and for the IA sign-off process.
2. Increase the rigor and formality over target completion date changes, status changes and scope changes associated with the implementation of NorthStar’s recommendations. Review the implementation status of all recommendations to ensure all elements of the recommendations have been addressed or PG&E’s modifications have been documented and justified.
3. Develop processes to ensure the sustainability of the implementation of NorthStar’s recommendations.
4. In addition to the status of the implementation of NorthStar’s recommendations, continue to report to the Commission on any significant changes that might affect the sustainability of the recommendations.
5. Report to the Commission on a quarterly basis the status of the One PG&E OH&S Plan and associated metrics (in process).

²² PG&E’s First Quarterly Implementation Status Report, p. 6

B. ITEM 2: DEVELOP A COMPREHENSIVE SAFETY STRATEGY

Background

In its May 2017 Report, NorthStar found that PG&E's safety culture efforts were disjointed and not part of a comprehensive, company-wide health and safety plan. There was no plan that encompassed all aspects of safety and which clearly defined the roles, responsibilities and inter-relationships between the LOBs and Corporate Safety (Safety Health, and Enterprise CAP as of August 2018). Each of the primary operational LOBs had its own plan, and Corporate Safety had a separate plan. Any enterprise-wide "safety plan" was fluid at best. NorthStar believed that PG&E felt considerable pressure to improve performance following San Bruno, and launched a number of initiatives aimed at improving safety culture without sufficient consideration of the potential impact on the workforce or its ability to determine the effectiveness of individual campaigns.

NorthStar Recommendation F-4 recommended that PG&E develop a "comprehensive safety strategy, with associated timelines/deliverables, resource requirements and budgets, personnel qualifications, clear delineation of roles and responsibilities; action plans, assignment of responsibility for initiatives, and associated metrics to assess effectiveness. This should be followed with the identification of necessary corporate and LOB safety resource requirements and development of an appropriate organization structure." The plan/strategy was to be shared with SED.²³

PG&E included NorthStar Recommendations III-2, III-3 and V-3 in its implementation plan for Recommendation F-4:

- III-2:** Reassess and stabilize the safety culture change initiatives. The rigor applied to the integrated planning process (discussed in Chapter VI: Budgeting and Spending of NorthStar's May 2017 Audit Report) should be applied to safety culture. The overwhelming number of initiatives and constant shifting of priorities is detrimental to a stable, consistent safety culture.
- V-III:** Perform a broad reassessment of all safety programs and initiatives to: evaluate overall effectiveness and make improvements, and eliminate scope overlap (e.g., the Corrective Action Program (CAP) vs. the Safety and Environmental Management System (SEMS) follow-up responsibility).
- III-3:** Develop a comprehensive safety plan (by the end of 2017). As recommended by NorthStar, the plan should:
 - Address culture, employee health and wellness, contractor safety, employee safety and public safety.
 - Solicit input from throughout the organization, particularly the field, in the development of the plan. The environmental function was removed from the

²³ NorthStar's May 2017 Report, p. I-10.

Safety, Health & Environment organization. It should have its own plan.

- Incorporate LOB and Corporate Safety activities to eliminate duplication, prevent gaps and appropriately prioritize expenditures.²⁴
- Include all safety plans and programs of the Company, except for specific asset-related safety plans (such as asset management plans, leak survey programs or vegetation management) that should continue to be the responsibility of the various LOBs.
- Be approved by the NOS Committee and the Boards, and endorsed and supported by executive management and the CPUC.
- The plan must be clearly communicated throughout the organization.
- Be updated annually for at least two years and then at least every three years thereafter, with quarterly/annual monitoring of progress relative to the plan.

Implementation Timeline

The timeline for the development of a comprehensive safety strategy, as outlined in PG&E's January 2018 Testimony, is provided in **Exhibit III-9**.

Exhibit III-9
Recommendation Implementation Plan Timeline – F-4, III-2, III-3 and V-3

| Date | Milestone |
|--------------|--|
| Mar 2017 | Session D, S-1 Kickoff |
| May 2017 | One PG&E Occupational Health and Safety Plan Working Meeting, S-1 Mid Cycle Check-In |
| Jun 2017 | S-1 Final Financials Due |
| Jun/Jul 2017 | One PG&E Occupational Health and Safety Plan Meeting (pre-S-2) |
| Jun 2017 | S-1 Final Draft Due (document includes One PG&E Occupational Health and Safety Plan (actions by LOB)) |
| Jul 2017 | VP and Sr. Director Session 1 meetings, One PG&E Occupational Health and Safety Plan Working Meeting, SVP Session 1 meeting, S-2 kickoff |
| Aug 2017 | Session C meetings |
| Sep 2017 | One PG&E Occupational Health and Safety Plan Working Meeting, Board of Director |
| Oct 2017 | S-2 Financials Due, S-2 Final Draft Due |
| Oct/Nov 2017 | Session 2 Meetings |
| Dec 2017 | Final delivery of One PG&E Occupational Health and Safety Plan to internal stakeholders |
| Q1 2018 | Board of Directors |

Source: PG&E's January 8, 2018 Testimony.

PG&E Status Assessment (Based on PG&E's January 8, 2018 Testimony)

Complete.

²⁴ NorthStar's May 2017 Report, p. I-10.

NorthStar Status Assessment

Partially implemented. In response to NorthStar's recommendation, PG&E developed its One PG&E OH&S Plan. The One PG&E OH&S Plan incorporates employee and contractor safety and plans for an ESMS but does not address other critical aspects of safety, such as public safety. Many of the safety programs continue to be the responsibility of individual LOBs. Additionally, PG&E did not conduct the detailed review of its numerous existing safety initiatives as recommended by NorthStar.

Findings and Conclusion

5. In response to NorthStar's recommendations, PG&E developed the One PG&E OH&S plan, which provides a more structured, disciplined approach than prior Corporate Safety strategies, and represents a significant improvement over prior efforts.

- The One PG&E OH&S plan is more detailed and structured than prior efforts.
- The OH&S plan was developed through PG&E's IPP process. Prior to issuance of the NorthStar Report in May 2017, PG&E had begun work on an integrated occupational health and safety plan and used PG&E's IPP to drive the process. According to PG&E, once the NorthStar Report was issued, PG&E reviewed the recommendations and determined how best to address them within the context of the OH&S Plan. The OH&S Plan is a comprehensive view for improving employee and contractor safety and health over the next five years.
- As PG&E explains in its Testimony, in Session D of its IPP process in early 2017, PG&E identified its top risks and mitigation objectives. These objectives were reviewed and approved by PG&E's and PG&E Corporation's senior leadership and set the foundation for 5-year strategic planning in Session 1. PG&E identified eight specific five-year health and safety objectives:
 - Achieve first quartile Lost Work Day performance
 - Achieve 35 percent reduction in Days Away, Restrictions and Transfers rate
 - Reduce severity of musculoskeletal disorders
 - Reduce percentage of workforce unavailable due to health by 8 percent
 - Expand safety education beyond current workshops
 - Achieve 80 percent of prime contractors with "A" grade
 - Achieve first quartile preventable motor vehicle incidents performance
 - Achieve conformance with an independent occupational safety and health standard such as American National Standards Institute Z10.²⁵
- Corporate Safety categorized these objectives into four broad categories (i.e., employee, contractor, motor vehicles and the Safety Management System) and eight focus areas, five of which fall under employee health and safety. The eight focus

²⁵ PG&E's January 8, 2018 Testimony p. 3-5

areas are listed below. **Exhibit III-10** (on the following page) shows the relationship between the four categories and the eight focus areas:

- Musculoskeletal Disorder, Sprains and Strains
 - Safety Leadership
 - Serious Injury and Fatality (SIF) Prevention
 - Injury Management
 - Health and Wellness
 - Contractor Safety
 - Motor Vehicle Safety
 - Enterprise Safety Management System.²⁶
- The establishment of five-year goals provides stability to the OH&S Plan. The five year goals (shown on **Exhibit III-10** and discussed above) are tied to the four broad categories and are consistent with the executive guidance provided during the IPP.
 - Each of the eight focus areas has supporting initiatives or tactics, as delineated in **Exhibit III-11**. Each focus area also has a more detailed three-year plan with activities, start dates, implementation dates, applicable LOBs, LOB owners and Key Measures of Success. In some cases, the Key Measures of Success are initiative-specific; in other cases, they may directly tie to the executive guidance goals.

Exhibit III-11

OH&S Plan Focus Area and Initiatives

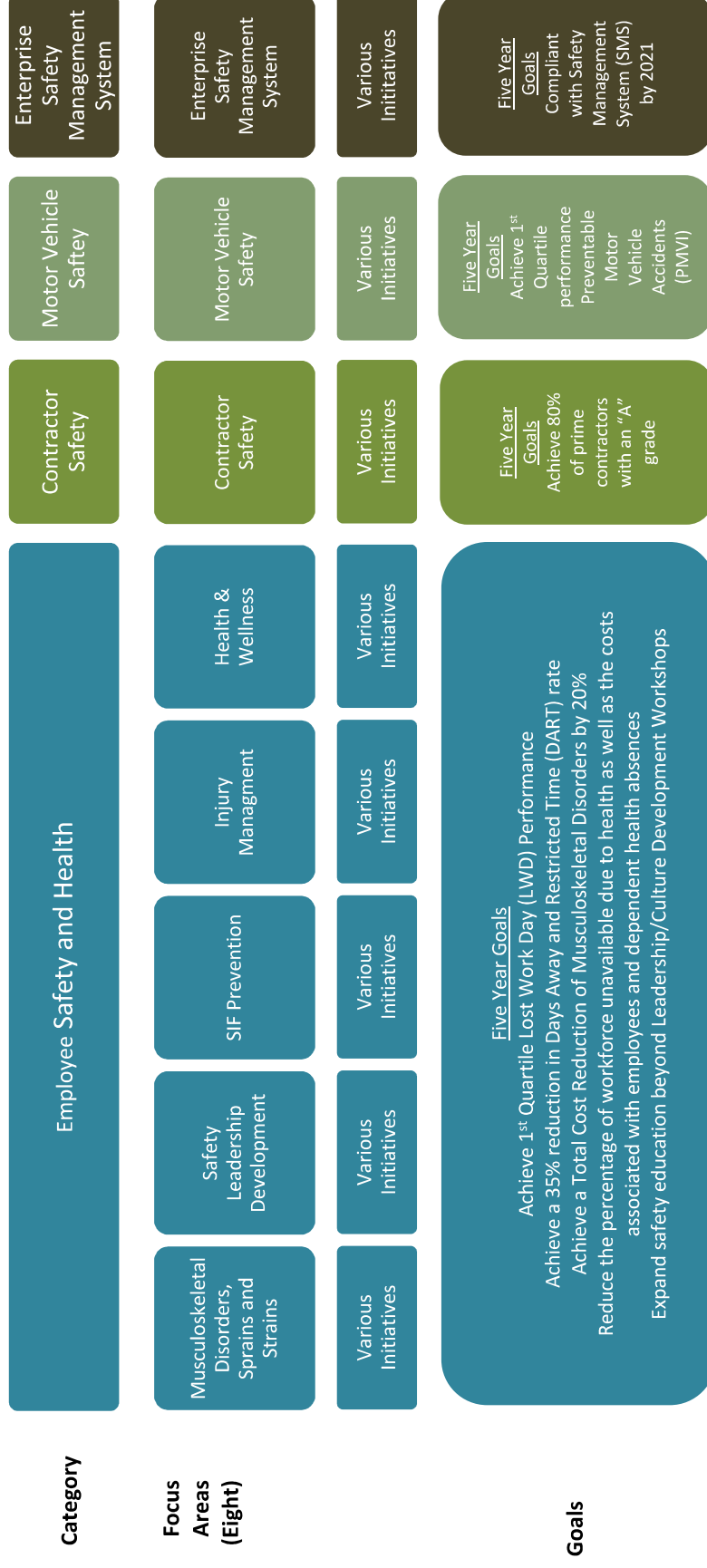
| Category/Focus Area | Initiatives/Tactics | |
|---|---|--|
| Category: Employee | | |
| Musculoskeletal Disorder, Sprains and Strains | <ul style="list-style-type: none"> • Office ergonomics • Industrial athlete | <ul style="list-style-type: none"> • Industrial ergonomics • Vehicle ergonomics |
| Safety Leadership | <ul style="list-style-type: none"> • Coaching • Operational Learning | <ul style="list-style-type: none"> • Safety Leadership Development Training • Safety Academy |
| SIF Prevention | <ul style="list-style-type: none"> • Observations | <ul style="list-style-type: none"> • Investigations |
| Injury Management | <ul style="list-style-type: none"> • Nurse Report Line • Physician Outreach Program | <ul style="list-style-type: none"> • Return to Work (RTW) • Transitional RTW Task Program |
| Health and Wellness | <ul style="list-style-type: none"> • Health Screenings • Health Promotion • Health Coaching | <ul style="list-style-type: none"> • Mental Health Support • On-site Care/Telemedicine • Condition Management |
| Category: Contractor | | |
| Contractor Safety | <ul style="list-style-type: none"> • Training and Qualifications • Field Observations and Performance Review | <ul style="list-style-type: none"> • Enhance Program Scope/Contractor Management • Standardize Safety Plans/Templates |
| Category: Motor Vehicle | | |
| Motor Vehicle Safety | <ul style="list-style-type: none"> • 1800 - How's My Driving • Driver Training • Motor Vehicle Reports | <ul style="list-style-type: none"> • Vehicle Safety Technology • Driver Selection |
| Category: ESMS | | |
| Enterprise SMS | <ul style="list-style-type: none"> • Safety Management System | <ul style="list-style-type: none"> • |

Source: One PG&E OH&S Plan.

²⁶ PG&E's January 8, 2018 Testimony pp. 3-5 to 3-6

Exhibit III-10
One PG&E Occupational Health and Safety Plan Structure

One PG&E Occupational Health and Safety Plan



Source: PG&E's January 8, 2018 Testimony, DR 938.

- For each of the initiatives, the relative roles and responsibilities of Corporate Safety and the LOBs are defined at a high-level.
 - Executives and senior LOB managers interviewed by NorthStar found the additional rigor and focus on a One PG&E approach to OH&S to be beneficial.²⁷
- 6. PG&E established an effective process for monitoring the execution of the OH&S plan.²⁸ Note: the processes for monitoring the OH&S plan are not the same as the ones for monitoring the implementation of NorthStar’s recommendations.**
- Each of the eight focus areas has a Program Manager and Executive Sponsor.
 - The Program Manager oversees the day-to-day progress of the assigned focus area throughout the LOBs, and meets regularly with the Executive Sponsor to discuss focus area progress and develop five-year and two-year plans for the focus area.²⁹ The OH&S Program Managers are in the Safety & Health organization.³⁰
 - The Executive Sponsor is typically a Vice President who provides guidance to the Program Manager and helps to remove roadblocks to achieving focus area goals.³¹
 - NorthStar’s interviews with select Executive Sponsors indicate that they meet with the Program Managers on a regular basis and are engaged in the delivery of the OH&S program.
 - The OH&S plan has high-level defined responsibilities for Corporate Safety and Health and the LOBs at the initiative (tactic) level.
 - As shown in **Exhibit III-12**, PG&E has established a hierarchy of meetings that focus on the execution of the OH&S plan.

²⁷ Various interviews

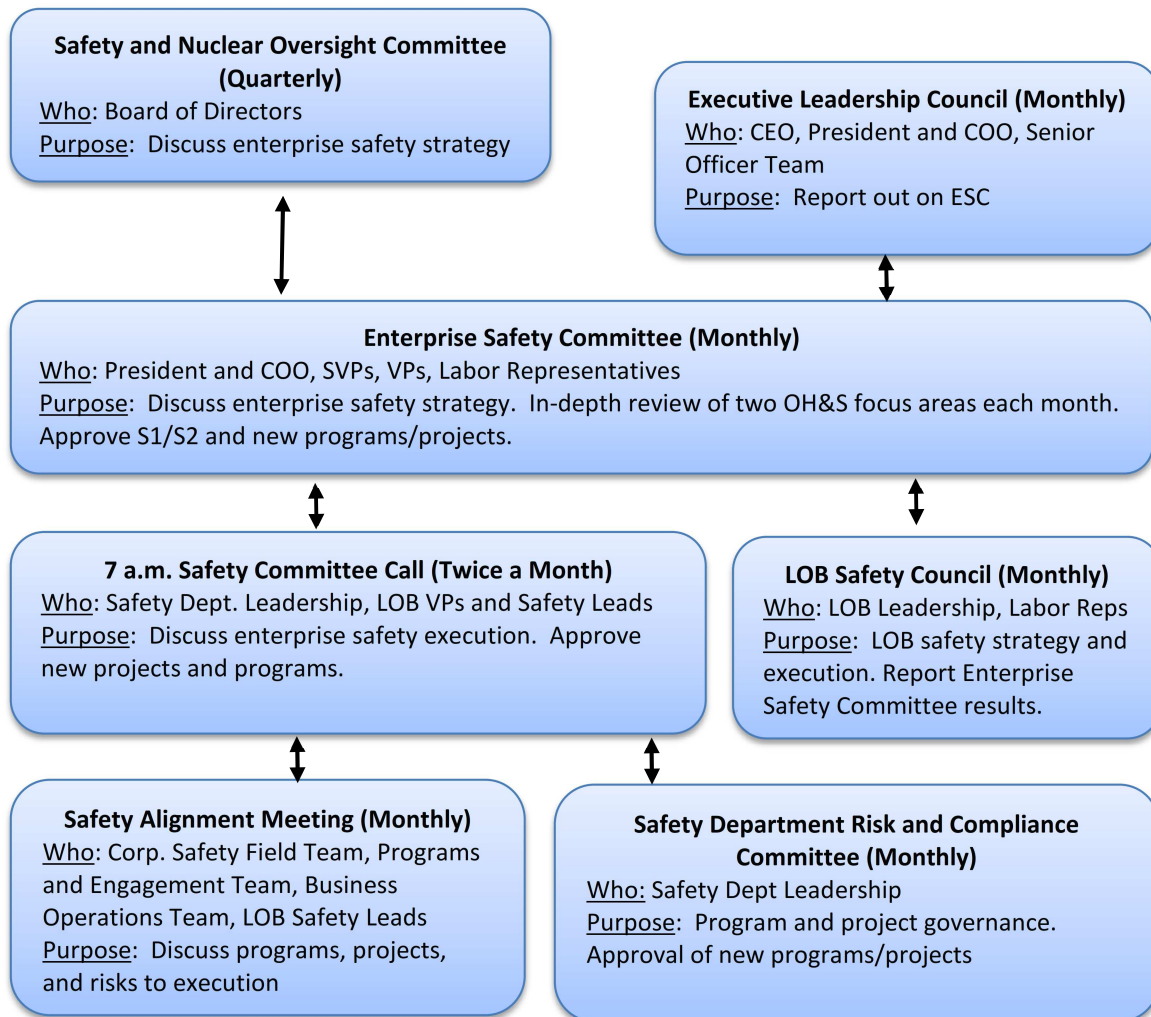
²⁸ Note, this process is in addition to and differs from the PMO processes established to monitor the implementation of NorthStar’s recommendations.

²⁹ DR 1003 Attachment 1

³⁰ DR 993 Attachment 1 and DR 892 Attachment 1

³¹ DR 1003 Attachment 1

Exhibit III-12
Hierarchy of Safety Meetings – One PG&E OH&S Plan



Source: DR 1003 Attachment 1.

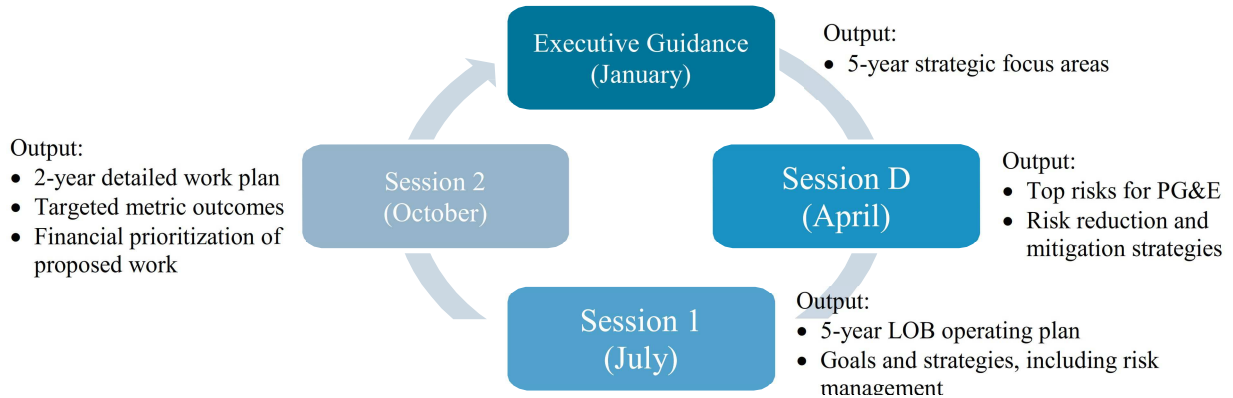
7. Although the One PG&E OH&S Plan is an improvement, it does not currently represent the comprehensive strategy envisioned by NorthStar in its recommendation. NorthStar is concerned about the ongoing silos or disconnects between Corporate Safety and each of the LOBs, and between the LOBs, and the need for overarching governance over safety.

- As discussed in the Background section, in recommendations F-2 and III-3 NorthStar recommended that PG&E develop a comprehensive safety plan that includes all of PG&E's safety plans and programs (culture, employee health and wellness, contractor safety, employee safety, and public safety).
- The One PG&E O&HS Plan primarily addresses employee health and wellness and safety and contractor safety. The Safety Leadership Development category addresses some elements of culture. The ESMS component of the plan should provide a more

over-arching view of safety; however, the ESMS is still in the early assessment phase and will not be completed for several years.

- Risks for each LOB, including Safety & Shared Services are identified and prioritized during the IPP. **Exhibit III-13** provides an overview of the IPP taken from NorthStar’s May 2017 Report. Modifications may have been made since May 2017.

Exhibit III-13
Overview of PG&E IPP



| Step | Discussion |
|--------------------|--|
| Executive Guidance | PG&E’s CEO and President(s) establish company-level goals and objectives over the next five-year planning horizon. While each year’s Executive Guidance includes four of the years from the prior year, targets for those years are often changed in the new Executive Guidance. |
| Session D | Senior officers discuss: 1) the top risks for the Company and for each LOB; 2) risk reduction or mitigation progress to date; 3) strategies to manage any risk mitigation challenges; 4) future risk management plans; and 5) areas where collaboration across LOBs or additional resources may be required to manage risk. A major outcome of Session D is a list of risk priorities for the Company, and identified enterprise risks that are overseen by the Board of Directors. |
| Session 1 (S-1) | Each LOB develops its 5-year operating plan to achieve the Company’s and the LOB’s strategic goals. In the S-1 submission, the LOBs identify their top operational and compliance risks and describe how the strategic plans included in S-1 address the risks and compliance items identified in Session D. S-1 requires each LOB to identify: 1) anticipated funding levels for mitigating or managing each top risk; 2) an estimate of how the risk status will change over time as mitigation and management initiatives are implemented; and 3) a metric for assessing progress in addressing the risk. At the S-1 meetings in July, the Company’s CEO and senior officers from every LOB meet to discuss and understand each other’s goals, strategies, and priorities. At the completion of the S-1 meetings, the Company’s leaders agree on the strategic plans and the estimated funding for each LOB to achieve the Company’s strategic goals. |
| Session 2 (S-2) | The objective of the S-2 financial prioritization meeting is a final set of work and budget targets for each LOB for the coming year. Following Session 1, each LOB engages in the Session 2 process to develop a detailed 2-year work plan to execute goals, strategies, and priorities agreed upon during the S-1 process. The S-2 submission includes targeted performance outcomes for the proposed work plan, and each LOB also provides an analysis showing how its overall risk profile will change year over year as it implements its work plan. In the S-2 process, the LOBs start with the funding recommendations from the S-1 financial prioritization meeting. The Company’s CEO and senior officers from every LOB meet collectively during the S-2 meetings in October or November to discuss each LOB’s execution plan, align on performance metrics, and ultimately approve budgets for the following year for each LOB. |

Source: NorthStar’s May 2017 Report.

- The output of this process is a 5-Year Operating Plan for each LOB. The One PG&E OH&S Plan is the product of this process for Safety & Shared Services. It does not encompass the other LOB risks identified during the IPP process and is not a “comprehensive safety strategy”. Currently the IPP is the central point at which all risks are identified.
 - As part of the 2017 Session 1 development process, Safety and Shared Services worked jointly with the operational LOBs to develop a single enterprise-wide employee and contractor safety plan. Previously, each LOB, including Safety and Shared Services, produced its own employee and contractor safety improvement plan following Corporate Safety guidance.
 - Currently, each operational LOB remains responsible for its asset management plans and other elements of public safety developed during the IPP.³² PG&E’s Gas Safety Excellence Program encompasses Gas Operation’s safety culture, process safety and asset management. The most recent version of the plan describing the results of the program was filed with the CPUC on March 15, 2018, in accordance with General Order 112-F Section 123.2(k), and Public Utilities Code §§961 and 963.³³ Goals are developed through the IPP process.
 - Electric Operations and Power Generation risks are also determined through the IPP process.
- Most LOB risks (public safety, asset management, and financial risks) are governed by the Risk and Compliance Committees (RCC) of each LOB, not as part of the Enterprise Safety Committee. Until the recent wildfires, public safety was not discussed during the Enterprise Safety Committee.
- PG&E recognizes the OH&S plan is not comprehensive, and points to the ESMS as the comprehensive plan. PG&E plans to integrate all safety efforts in its ESMS, but this is not expected to be fully implemented until 2021. The OH&S plan states.

“To achieve our desired results, we need to improve the comprehensiveness, consistency and integration of our safety efforts. This will include:

- **Robust asset management and process safety in operations**, designed to reduce the risk of incidents impacting the PG&E system, while improving the safety of the public and of the employees and contractors who operate and maintain that system.
- **A safety culture** where we communicate with each other, hold each other accountable, learn from incidents, and perform in-depth follow-through.
- Rigor in the **identification and analysis of occupational safety and health risks to employees and contractors**, along with the programmatic response to those risks, each of which are critical for the prevention of injuries.
- Active **management of potential environmental impacts** from PG&E operations, as well as physical and virtual asset security.

³² PG&E’s January 8, 2018 Testimony p. 3-9

³³ DR 952 Attachment 1

These four areas compose the foundation of our Enterprise Safety Management system..., which is currently being developed and will be implemented across the enterprise by 2021.”³⁴

- **Exhibit III-14** is a high-level view of PG&E’s ESMS, which is currently under development. The development of the ESMS is one of the eight OH&S focus areas.

Exhibit III-14
PG&E’s Proposed Safety Management System



Source: OH&S Plan, PG&E’s January 8, 2018 Testimony App 3A-4

- In its Testimony, PG&E states that asset management plans and other elements of public safety that are current addressed by each LOB will be unified under the ESMS.³⁵ At the time of NorthStar’s audit, PG&E’s ESMS was not sufficiently developed to determine whether it will encompass all LOB safety programs.
- 8. In developing the One PG&E OH&S Plan, PG&E did not perform a detailed review of the costs and effectiveness of the existing initiatives as NorthStar had envisioned in Recommendation III-2. During NorthStar’s audit field work in 2018, PG&E did not yet have the ability to effectively risk stack the various initiatives and was just implementing a process to prioritize new initiatives.**
- During its initial audit, NorthStar found the number of initiatives to be overwhelming and contributed to initiative overload in the field.
 - NorthStar recommended that PG&E reassess and stabilize the safety culture change initiatives. The rigor applied to the integrated planning process (discussed in Chapter VI: Budgeting and Spending of NorthStar’s May 2017 Audit Report) should be applied to safety culture. The overwhelming number of initiatives and constant shifting of priorities is detrimental to a stable, consistent safety culture.
 - As described in its Testimony, PG&E initially prioritized implementation of its Plan based on the maximum benefit towards safety performance of the 5-year objectives set forth in PG&E’s 2017 Session D process. No detailed analysis was performed of

³⁴ PG&E’s January 8, 2018 Testimony, p. App3A-3

³⁵ PG&E’s January 8, 2018 Testimony, p. 3-9.

the existing initiatives. The lack of detailed analysis of the costs and benefits of existing initiatives was confirmed by PG&E.³⁶

- PG&E planned to prioritize its new safety initiatives in 2018. However, this prioritization process was not completed during NorthStar's fieldwork. According to PG&E:³⁷

Beginning in 2018, the prioritization process will be informed by a process comparable to the RIBA [Risk Informed Budget Allocation] framework to prioritize and allocate funding for new management-initiated safety mitigations. The effectiveness of PG&E's Plan will be assessed in a number of ways. First, the Plan will be assessed on a continual basis through various governance forums and annually as part of the IPP. At the highest level, PG&E tracks progress toward the 5-year objectives through the monthly Business Plan Review (BPR) process. Where performance is not meeting expectations, evaluations into the underlying causes and development of mitigation strategies are a routine part of the process. This process is designed to identify one or more focus areas that are the source of the underperformance. Second, the Plan itself contains specific metrics and timelines for each of the eight focus areas. The BPR and other PG&E governance processes provide visibility to the overall performance within the focus area and can help identify opportunities for improvement. Finally, each health and safety program within the eight focus areas of the Plan has associated metrics that are used to monitor the effectiveness of the program. The BPR and other PG&E governance processes provide visibility to the overall performance of each program and can help identify opportunities for improvement...

Additionally, the concept of risk spend efficiency, which reflects the mitigation benefits measured in a risk reduction value, relative to its cost, was introduced as part of PG&E's 2017 RAMP filing. This process will continue to evolve in future IPPs.

- During various interviews, PG&E personnel confirmed that PG&E did not yet have the ability to effectively risk stack the various initiatives in terms of anticipated cost-benefit when developing the OH&S Plan. As discussed in Conclusion 9, in 2018 PG&E began to implement a project L-gate process to review and approve new initiatives.
- As shown in **Exhibit III-15**, the OH&S plan introduced new initiatives, rather than eliminating initiatives. New initiatives are highlighted in yellow.

³⁶ DR 1058

³⁷ PG&E's January 8, 2018 Testimony, pp. 3-9 to 3-12.

Exhibit III-15
OH&S Plan Focus Areas and Initiatives
(Highlighted Initiatives have been Introduced Since NorthStar’s 2017 Audit as Documented in DR 144)

| Focus Area | Initiatives (Related DR 144 Initiative) | No. |
|---|---|-----------|
| Musculoskeletal Disorder, Sprains and Strains | <ul style="list-style-type: none"> Office ergonomics Industrial athlete Industrial ergonomics Vehicle ergonomics | 4 |
| Safety Leadership | <ul style="list-style-type: none"> Safety Leadership Development Training Coaching Observations Operational Learning | 4 |
| Serious Injury and Fatality Prevention | <ul style="list-style-type: none"> Observations Investigations | 2 |
| Injury Management | <ul style="list-style-type: none"> Nurse Report Line Physician Outreach Program Return to Work (RTW) Transitional RTW Task Program | 4 |
| Health and Wellness | <ul style="list-style-type: none"> Health Screenings Health Promotion Health Coaching Mental Health Support On-site Care/Telemedicine [Note 1] Condition Management | 6 |
| Contractor Safety | <ul style="list-style-type: none"> Training and Qualifications Field Observations and Performance Review Enhance Program Scope/Contractor Management Standardize Safety Plans/Templates | 4 |
| Motor Vehicle Safety | <ul style="list-style-type: none"> 1800 - How's My Driving Driver Training Motor Vehicle Reports Vehicle Safety Technology Driver Selection | 5 |
| Safety Management System | <ul style="list-style-type: none"> Safety Management System | 1 |
| Total Number of Initiatives | | 30 |

Note 1: An On-site Health Care was in-place in 2016, but not included in DR 144.

Source: PG&E OH&S Plan, PG&E’s January 8, 2018 Testimony, Appendix 3C, DR 4 Attachment 4, NorthStar Assessment.

9. PG&E has established a typical project management “gate” process to review and approve the new safety initiatives. NorthStar has not yet reviewed the process.

- In 2018, PG&E developed the safety and health project management governance process shown in **Exhibit III-16** (on the following page). According to PG&E, the phases and approval gates are aligned to the PG&E corporate standard framework.³⁸
- According to PG&E, as part of the recently developed project governance process each new Safety & Health project which supports one of the eight focus areas will

³⁸ DR 997 Attachment 1

have a risk-spend efficiency (RSE) calculation, which will help determine the value of the initiative. Each project will also have established performance measures as part of the business case, including what metric will be improved and how much improvement is expected. In the “Track Impact” phase of the project, prior to approval at Gate L5, the project implementation will be monitored to confirm and measure the benefits to determine if the project delivered the expected value before it is closed.³⁹

Exhibit III-16 PG&E Safety Project Governance Process

| Gate | L0 | L1 | L2 | L3 | L4 | L5 |
|------------------------------|---|-------------------------------------|--|---|---|--|
| Description | Idea Generated | Estimated | Validated | Planned | Implemented | Realized |
| Phase | Screen | Validate and Assess | Business Case for Impact and Cost | Implement | Track Impact | Benefits and Measured and Confirmed |
| Gate Exit Deliverable | • Intake Submission | • Business Case • Stakeholder ID | • Project Charter Sign-Off • High Level Risks and Mitigation Plan • Risk Spend Efficiency (RSE) Assessment | • Project Plan • Stakeholder Engagement Plan • Communication Plan | • Implemented Project Plan • Up to Date KPIs, RSE • Engagement/Communication Plan Status • Transition from Project to Operations | • Benefits measured and confirmed as part of S&H plan • Project close-out • Updates to Operations Plan |
| Cadence | Weekly Project Management Review | Weekly screen by S&H leadership | Bi-monthly review in Wednesday safety call | Monthly ESC Meeting | Monthly ESC Meeting or bi-monthly safety call | Monthly ESC Meeting or bi-monthly safety call |
| Sign-Off | Sr. Manager of Programs Safety & Health (S&H) | Sr. Director – S&H | Bi-Monthly Safety Call, VP-S, H & ECAP | ESC Leadership Consensus | Bi-monthly Safety Call or ESC per VP-S, H & ECAP discretion | Bi-monthly Safety Call or ESC per VP-S, H & ECAP discretion |

Source: DR 997 Attachment 1.

- Not all projects and initiatives are subject to the gate process. Safety project governance threshold criteria are shown in **Exhibit III-17**.

³⁹ DR 1002

Exhibit III-17 Safety Project Governance Criteria

| In Scope | Out of Scope |
|---|--|
| <p>Projects. As defined by PG&E, a project is a temporary endeavor designed to result in an outcome. It has a defined beginning and end, defined scope and resources to deliver on-time, on-budget.</p> <p>Pilots. As defined by PG&E, a pilot is a short-term project to test an approach, system, technology, and requires minimal LOB involvement and impacts, with LOB Officer sign-off. Cost not to exceed \$100,000. Duration not to exceed 4 months.</p> | <p>Maintenance of existing operations and minor continuous improvement changes to existing programs that do not meet the following threshold criteria. If a project meets one of the following criteria it is subject to the L-Gate process.</p> <ul style="list-style-type: none"> • Impacts multiple LOBs • Medium or high degree of change • Cost >\$100,000 • New resources are required (FTE or contract) • New or changes to technology • Over 1,000 people need to change actions, behaviors or mindset • Organizational change is required. |

Source: DR 997 Attachment 1, DR 1058.

- NorthStar did not review the effectiveness of this process as it was in the initial implementation stage during our audit fieldwork. According to PG&E, two projects have been evaluated through the L-Gate process and are currently in L-Gate 2; however, this response was received February 14, 2019, so NorthStar has not been able to review the process.⁴⁰

10. There are processes in place to foster communication between the Electric and Gas Safety Leads and Safety & Health regarding implementation of the OH&S plan. The Safety Leads for other LOBs, such as Generation, are involved in some, but not all joint efforts regarding the OH&S plan implementation.

- Electric Operations and Gas Operations LOBs have established director-lead safety organizations that report directly to Senior VPs. The organizations supporting the safety leads differ, in part due to differences between the Gas and Electric organizations as a whole. For example, Gas Operations had an existing organization in place to support contractor safety which is tasked with implementation of the OH&S plan (workforce safety group); Electric Operations did not have a similar existing organization.
 - The Director of Electric Operations Safety reports to the Senior Vice President (SVP) of Electric Operations. This group has three principle functional areas:
 - Safety Programs
 - Human Performance
 - SIF process.

⁴⁰ DR 1058

- The Director of Gas Operations' Safety, Quality and Contract Management group reports directly to the SVP of Gas Operations. This group has five principal teams.
 - Workforce Safety
 - Quality Management (Data)
 - Quality Management (Field)
 - Corrective Action Program
 - Gas Safety Excellence.⁴¹
- Electric Operations is currently developing an organization similar to the Gas Operations workforce safety organization that will be responsible for the execution of the OH&S plan.⁴²
- The LOB Safety Leads are responsible for the execution of the OH&S plan. The Electric Operations and Gas Operations Safety Directors serve as Safety Leads. In contrast, the Safety Lead for Generation reports to an O&M director.
- The Electric and Gas Safety Directors meet weekly with the Safety, Health & Enterprise CAP Director of Business Operations, the Safety & Health Director of Programs & Engagement, and the Safety & Health Director of Field Safety Operations.⁴³ LOB Safety Leads that are not directors do not participate in this meeting; however, they are included in the monthly Safety Alignment meeting to discuss programs, projects and risks to execution.⁴⁴
- Project Managers in Gas Operation's Workforce Safety group implement the One PG&E plan.⁴⁵ Like everything at PG&E, there is a hierarchy of meetings to address Gas Operations OH&S plan efforts.
 - The Workforce Safety Manager has a monthly meeting with the OH&S program managers.
 - The Workforce Safety Manager and Safety Director have a monthly alignment meeting.
 - The results of this meeting are reported at the weekly Directors' meeting.
- Interviews with PG&E personnel confirm sharing of information between Electric and Gas.⁴⁶ The Generation Safety Lead is a manager who reports to the director of O&M North, and does not participate in the director-level meetings between Electric Operations and Gas Operations.
- In September 2018, the Electric Operations Safety organization began superintendent safety conversations to develop a Safety Action Plan that is tailored for each

⁴¹ IR 39

⁴² IR 40

⁴³ IR 39

⁴⁴ DR 1003 Attachment 1

⁴⁵ IR 39

⁴⁶ IR 39 and IR 40

superintendent. The Electric Operations Safety Director expects that the area-specific Safety Action Plan will facilitate ownership of the safety program in the minds of the superintendent and promote tangible behavioral changes supported by relevant, meaningful metrics and data views, include a consistent, on-going partnership with Safety personnel.⁴⁷ According to PG&E, the Safety Action plan will be:

- Developed from insights driven by metrics
- Informed from a concrete sense of what is happening within their teams
- Built from select programs, tactics and activities that will make a difference in their teams.⁴⁸

Electric Operations had just begun to implement this superintendent-driven Safety Action plan during the audit field work, NorthStar is unable to assess the quality or execution of the plan.

Recommendations

6. Increase CSO oversight and governance over public and other aspects of safety to mitigate potential silos and ensure risks are adequately addressed.
7. Communicate results of Internal Audit (IA) safety-related audits and LOB management response to Safety, Health and Enterprise CAP (reporting to the CSO).
8. Include the Generation Safety Lead in routine meetings between Electric Operations and Gas Operations and Safety & Health regarding the implementation of OH&S plan.
9. Conduct an annual (or biennial) blue sky strategic safety planning exercise to concentrate on the changing environment, potential risks and threats. The exercise should force a comprehensive analysis of all safety-related opportunities and threats and a formal, proactive action plan. The planning exercise should:
 - Consider the environmental, financial, political, technological, infrastructure, public, workforce and other risks and safety advancements.
 - Include executives, management and potentially the BODs.
 - Be facilitated by an outside expert.
 - Cover ALL potential contributors to safety.

⁴⁷ DR 1012 Attachment 1

⁴⁸ DR 1012 Attachment 1

C. ITEM 3: INCREASE FIELD SUPERVISION

Background

NorthStar's initial safety culture assessment found that PG&E's front-line supervisors do not spend enough time in the field. Supervisor and Superintendent presence in the field is critical for continued awareness and work/safety coaching, but is limited due to competing managerial duties and extended spans of control. During NorthStar's initial review, PG&E had not described a plan to improve work management, planning or levels of supervision. LOB field personnel appeared to be genuinely committed to safety, but lacked sufficient supervisory attention.

In its Testimony, PG&E aggregated NorthStar's recommendations F-2, V-4 and V-6 into one implementation plan:

- F-2:** The need for clear definition of supervisory requirements, including an assessment of workload requirements, ongoing field monitoring efforts and time requirements, and associated staffing levels
- V-4:** Reevaluate staffing, roles, responsibilities and work requirements to increase Supervisor's time in the field supervising crews.
- V-6:** Reevaluate the travel requirements placed on employees to reduce the overall mileage driven. Accelerate the use of mobile technology and electronic information exchange. PG&E employees drive a significant number of miles per year and are frequently called upon to support workload at great distances from their normal assigned locations.

Using internal and benchmarking data, PG&E intended to develop a plan to improve the clarity of supervisor responsibilities, the appropriateness of staffing levels and travel requirements, and the impact supervisors have on the safety of their employees. A cross-functional team representing those LOBs with field responsibilities would develop a single plan applicable to all LOBs. According to PG&E's Testimony, this is a continuation, and expansion, of work started in Gas Operations. Gas Operations recognized a need for more and better quality field oversight.

PG&E's implementation plan started with the theory that increased supervisor/crew contact will improve safety, quality and productivity, and identified the following actions to implement this recommendation:

- Review opportunities to transfer administrative tasks from the Supervisor to the office-based staff. Several office-based tasks, such as scheduling of work, training and paperwork review, should all be evaluated for reassignment.
- Move completed work review to the jobsite, allowing for immediate feedback before electronic records and paperwork are finalized.

- Periodically deploy, on an as-needed basis, seasoned supervisors to travel the system, coaching and mentoring less experienced supervisors.
- Use field technology, such as Telogis and SafetyNet, to monitor time in field. Provide contact time data and safety observation data to leaders in the organization.
- Evaluate the effectiveness of safety observation training for supervisors.
- Evaluate strategies to reduce supervisory travel for meetings and training.

PG&E subsequently revised its implementation plan for F-2 and V-4 and later removed V-6 (travel requirements) from the plan. The revised implementation plan consists of the following elements:

- **Assessment Phase** - Survey supervisors/leaders to assess the baseline of the current state with respect to time spent in the field, hurdles to spending more time in the field and other related topics. Benchmark with American Gas Association (AGA), the Edison Electric Institute (EEI) and any other sources that have examined this topic. Leverage benchmarking opportunities scheduled for other purposes.
- **Analysis Phase** - Review survey and benchmarking results to identify key issues and potential solutions. Identify opportunities to reduce supervisory burdens and streamline their work with tools/technology.
- **Action Plan Development** - Identify strategies to address issues identified in the analysis phase. Action plan will include specific strategies and tactics along with change and communication plans, expected outcomes/performance metrics, etc. May identify multiple phases.
- **Execution & Implementation Assessment** - Expect implementation to be an iterative exercise as different strategies are tried, assessed and improved/replaced.

Implementation Timeline

The timeline for the completion of F-2 and V-4, as outlined in PG&E's January 2018 Testimony, and as subsequently revised by PG&E and approved by the PMO, is summarized in **Exhibit III-18**.⁴⁹

Exhibit III-18
Implementation Timeline - F-2/V-4

| Date per Initial Plan | Date per Revised Plan | Milestone |
|-----------------------|-----------------------|--|
| December 2017 | March 2018 | Identify cross-functional team lead |
| | May 2018 | Short term actions identified |
| | June 2018 | Implementation plan finalized (does not include implementation phase milestones) |

⁴⁹ Revised plan emailed to NorthStar at the beginning of Phase II.

| Date per Initial Plan | Date per Revised Plan | Milestone |
|-----------------------|---|--|
| | June 2018 | Survey complete |
| April 2018 | July 2018 | Analysis complete |
| March 2018 | July 2018 | Benchmarking complete |
| | July 2018 | Action Plan developed based on findings |
| | July 2018 | Implementation phase milestones added to implementation plan |
| June 2018 | | Improvement strategies approved |
| July 2018 | Aug. 2018 | Implementation plan approved |
| | <i>Add implementation phase milestones here once approved</i> | |
| | Oct. 2018 | Short term actions implemented |
| June 2019 | June 2019 | Phase 1 Implementation complete |

Source: PG&E's January 8, 2018 Testimony and Revised Implementation Plan.

PG&E Status Assessment (As of November 30, 2018 - Based on PG&E's First Implementation Status Report)

Plan in Progress.

NorthStar Status Assessment

The implementation is not progressing well. Activities performed to date have been limited. The implementation initiative largely consists of analytical tasks and activities (identifying resources, survey, analysis, and benchmarking) rather than concrete actions to increase supervisory time in the field.

Findings and Conclusion

11. As of November 30, 2018, limited progress had been made on Recommendation V-6 Reduce Overall Mileage

- PG&E initially included recommendation V-6 in its implementation plan for Recommendation F-2.⁵⁰ As a result it received the same reported implementation status.
- In June 2018, PG&E separated Recommendation V-6 from the F-2 master plan. At that point, Recommendation V-6 had no Executive Sponsor or Implementation Owner.⁵¹ PG&E categorized it as Lifecycle Stage: Draft Plan – green status.⁵² On June 29, 2018, the status changed to amber as no Sponsor or Owner had been identified, and subsequently to red.⁵³
- An Executive Sponsor was identified on September 7, 2018.⁵⁴ An Implementation Plan Owner was identified on September 21, 2018.⁵⁵

⁵⁰ PG&E's January 8, 2018 Testimony

⁵¹ DR 896 Attachment 33

⁵² DR 896 Attachment 33

⁵³ DR 896 Attachment 35, DR 941 Attachment 24

⁵⁴ DR 941 Attachment 26

- PG&E's First Implementation Status Report indicated the plan was in progress. As of December 3, 2018, PG&E had not yet developed a plan and was continuing to review past initiatives.⁵⁶

12. The F-2/V-4 implementation plan – increasing supervisor time in the field – has suffered from shifting sponsorship and inconsistent leadership.

- This implementation initiative has been assigned to three separate executive sponsors in CY2018 and shuffled among numerous resources - Barry Anderson, Bernie Cowens, Jon Franke and Debbie Powell.⁵⁷
- The Plan Owner at the time of NorthStar's interviews (Debbie Powell) was elevated to VP Power Generation on September 17, 2018, and a new Plan Owner was under consideration.
- In November 2018, Debbie Powell became the Executive Sponsor and a new Plan Owner was appointed.⁵⁸

13. PG&E has made no meaningful progress towards completion of the F-2/V-4 implementation plan.

- NorthStar's report was provided in mid-2017 and PG&E's Testimony including the implementation plan, was submitted in early 2018. The initiative status report dated August 2018 shows most activities are not completed. The detailed report lists 56 activities.⁵⁹
 - Activities completed: 6
 - Activities in-progress: 10
 - Activities not started: 40
- The milestone for "VP Sign-off of the Action Plan" was August 2018, as noted above. The detailed status report noted that the activity was planned to start in August, would be completed in October, and has not yet started.
- The implementation milestone for October 2018 indicates that "short term actions" will be implemented. NorthStar did not find this to be the case for actual changes to supervisory activities implemented and certainly not the case for implementation across all LOBs.

⁵⁵ DR 1067 Attachment 2

⁵⁶ DR 1067 and Attachments

⁵⁷ DRs, 896, 941 and 1067 and associated Attachments

⁵⁸ DR 1067 Attachment 6

⁵⁹ DR 941 Attachment 2

- Given the above, NorthStar requested an update on the Action Plan. In its August 8, 2018 response, PG&E stated that at this time, the Action Plan is still under development and that it “will” include the following.⁶⁰
 - Appropriate level of time supervisors should have in the field.
 - Supervisor time in the field communication content and platform.
 - Solutions for email and meeting overload.
 - Opportunities for mobile technology to transfer office activities to the field.⁶¹
 - Methods to measure time and quality.
 - Development and implementation of a “Time-in-the-Field and Quality-in-the-Field” metric by LOB.
- On February 13, 2019, PG&E indicated that a revised plan had been developed in February.⁶² Given the timing, NorthStar has not reviewed this plan.

14. PG&E’s analyses regarding how supervisors currently spend their time and how to strengthen the role of this key management position have been weak.

- PG&E stated that the objectives of the supervisor position were to ensure safe work practices, enhance work productivity and timely work completion.⁶³ All other activities are subordinate and serve these objectives.
- The Gas Operations LOB appears to lead other LOBs in an approach to increasing supervisor time in the field. Gas Operations Maintenance & Construction has developed a Leader Standard Work program to set leadership expectations, and modeling supervisor’s time in the form of a “Week in the Life Of” (WILO) and “Day in the Life Of” (DILO) to orient time toward value-added activities as shown in **Exhibit III-19**.⁶⁴ Gas Operations has also:
 - Deployed functional “huddle boards” for planning/tracking supervisor time in the field daily.
 - Created the Leader Standard Work initiative (LSD) specifically addresses maximizing value.
 - Provided examples for blocking out time for the field.

⁶⁰ DR 940 (e)

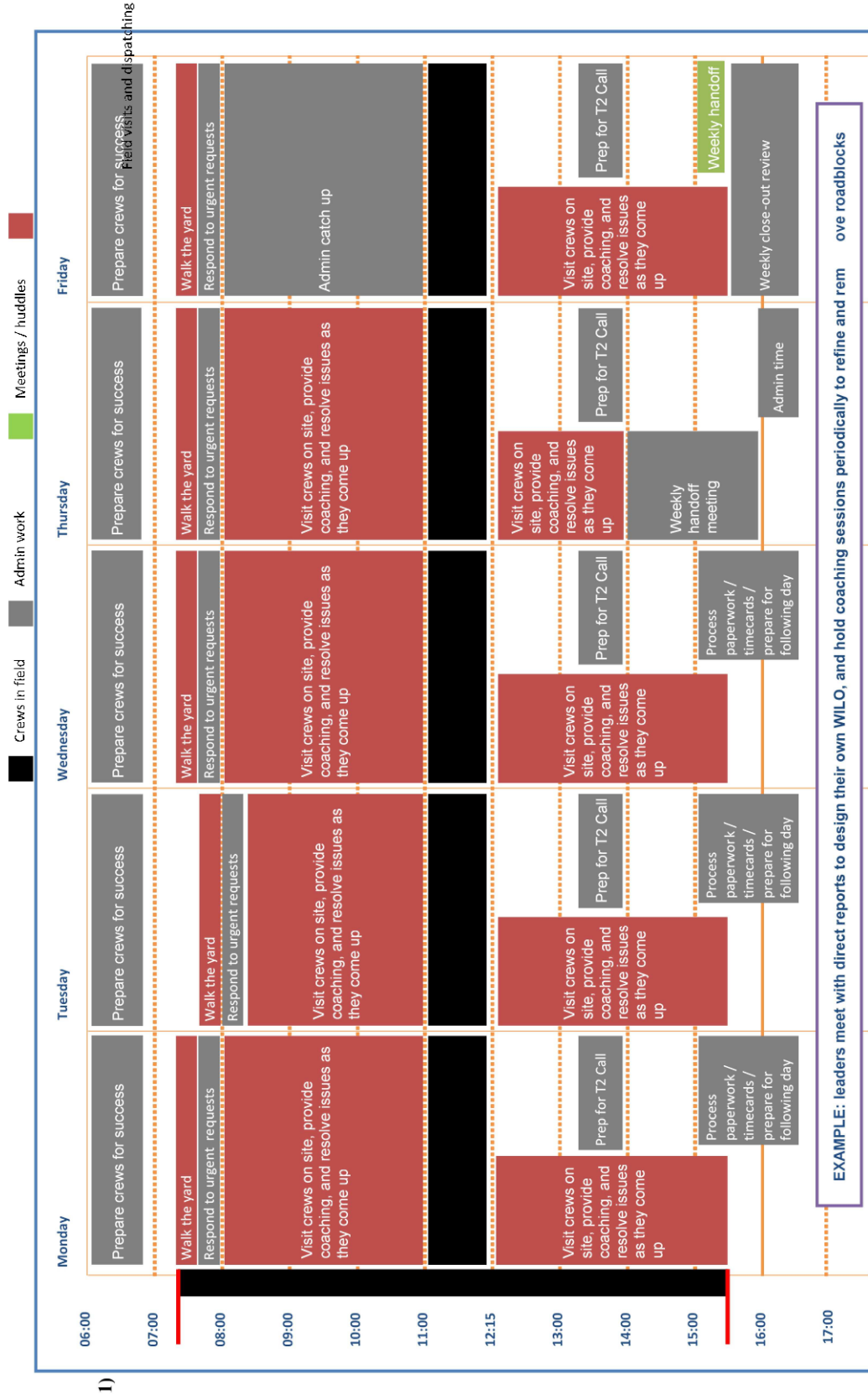
⁶¹ It should be noted that transferring office activities to the field does not increase levels of supervision, rather the location that administrative are performed.

⁶² February 13, 2019 phone interview with the CSO

⁶³ IR 23

⁶⁴ DR 1024 and 1024 Attachment 2 (page 5), DR 1043

Exhibit III-19 PG&E Illustration of Structurally Orienting Time Toward Value-Added Activities



Source: DR 1024 Attachment 2.

- For PG&E Electric and Generation LOBs, establishing a baseline for supervisor activities and what needs to change is more accurately characterized as future intentions.⁶⁵
 - With respect to increasing supervisor time spent in the field, PG&E is executing two different strategies in parallel. The first strategy is aimed at establishing directives that address the systemic issues that keep supervisors from being in the field. This is viewed as a multi-year effort to create sustainable change and will be an iterative process. The second strategy is aimed at having leaders experience the impacts of being out in the field more often, learning from those experiences, and using those experiences to inform broader, company-wide changes.
 - PG&E held a workshop on September 17, 2018 with supervisors from Gas Operations, Electric Operations, and Power Generation. The feedback and results gathered during the workshop are currently being reviewed to determine which issues, if addressed, would have the largest impact on increasing supervisor time in the field.
- Power Generation’s “Leader in the Field Committee” has developed a 5-minute meeting to be used for tail-boarding with supervisors and has been identifying tasks that keep supervisors from getting out in the field.

15. The value of the survey used as the foundation for PG&E’s initial implementation plan is questionable.

- The implementation plan included a supervisor/leader survey.⁶⁶ NorthStar reviewed the supervisor/leader survey instrument, analysis and results completed in mid-2018.⁶⁷
- The survey results were not isolated by management position. Including Superintendents, Managers, Directors and Others in the survey data diluted the focus on Supervisors and skewed the results by using a broad cross-section of management positions. The work requirements and roles of Superintendents, Managers, Directors and Others, are much different than Supervisors and not as critical to direct crew supervision.
 - The PG&E survey was broadcast to Directors, Superintendents, Managers, Supervisors, and “Other” positions within Electric, Gas and Power Generation LOBs.⁶⁸ Approximately two-thirds of the survey participants were Supervisors.
 - The number of surveys completed by each LOB included: Gas Operations – 131, Electric Operations – 65, and Power Generation – 60.⁶⁹ Electric Operations employs many more resources than Gas Operations, yet its participation in the leader survey was less than half of Gas Operations.

⁶⁵ DR 1024

⁶⁶ DR 940

⁶⁷ DR 940 Attachments 1 - 3

⁶⁸ DR 940 Attachment 1

⁶⁹ DR 971

- Respondents provided a broad range of answers.
 - The survey asked: “how much time, on average do you spend in the field per week?” Reported time spent in the field covered a wide range: less than two hours per week to over 20 hours per week.
 - Similarly, the same range of hours and responses were reported for how much time in the field is needed to effectively lead your employees.
- The underlying findings from the enterprise surveys on supervisor time in the field and direct conversations with supervisors across the organization included the following:⁷⁰
 - The majority of PG&E’s leaders understand time in the field should focus on:
 - Ensuring proper methods and procedures are being followed
 - 1:1 coaching and team building.
 - The actual time in the field spent versus the desired time varies by position type; for supervisors, the average time spent is approximately 7-8 hours and 10-15 hours is the desired level. It is noteworthy that the leadership survey concluded that for supervisors, 10-15 hours per week in the field is the desired level. This is less than Gas Operation’s current estimated level, as discussed in the next bullet.
 - The quantity of meetings and emails appear to be the main items challenging PG&E’s leaders in increasing their time in the field.
 - Mobile application use has general awareness and is being taken advantage of; however, there is additional opportunity to increase awareness, increase training, and implement new mobile applications for tasks such as time card and document approval.
 - Over the last 12 month period, average time in the field has remained the same or slightly decreased based on survey results.
- In its January 2018 Testimony, PG&E stated that a study performed indicated that Gas Operations supervisors reported that they spend an average of 16 hours in the field each week. At that time, PG&E anticipated that similar results would be found for other work groups.⁷¹ More specifically:
 - The Gas Operations Supervisor Enablement initiative collected data from Gas Maintenance and Construction Supervisors mid-2016.⁷²
 - Sixteen Gas Divisions participated.
 - Average hours that Supervisors spend in the field per week ranged from 6 to 25 with an overall average of 16.

⁷⁰ DR 940 Attachment 1 and 2

⁷¹ PG&E’s January 8, 2018 Testimony, App2A-4

⁷² DR 903

- PG&E’s Gas Survey results underscore the status quo as “the desired level” of supervisory time in the field – basically contradicting NorthStar’s findings and recommendations.

16. The benchmark survey cited by PG&E as part of the basis for its implementation plan provided limited comparative data.

- PG&E stated that a benchmark survey of Supervisor’s time in the field was performed in July 2018.⁷³ Characterizing this effort as a “benchmark survey” is overly generous based on its actual execution.
 - “Benchmarking” is a measurement of the quality of an organization’s policies, products, programs, strategies, etc., and their comparison with standard measurements, or similar measurements of the organization’s peers. The objectives of benchmarking are (1) to determine what and where improvements are called for, (2) to analyze how other organizations achieve their high performance levels, and (3) to use this information to improve performance.⁷⁴
- PG&E’s effort was an informal, broadcasted solicitation for feedback to seven questions sent to members of the Electric Utility Cost Group (EUCG).⁷⁵ There was no peer group for comparison and it was not based on a panel of utilities with particularly high safety records.
 - Feedback was provided by individuals from four utilities:⁷⁶
 - CPS Energy – the nation’s largest municipally owned energy utility providing both natural gas and electric service in San Antonio, Texas.
 - El Paso Electric – a regional electric utility providing generation, transmission and distribution service to approximately 417,000 retail and wholesale customers in a 10,000 square mile area of the Rio Grande valley in west Texas and southern New Mexico.
 - Austin Energy – the nation’s 8th largest publicly owned electric utility serving more than 448,000 customers in Austin, Texas.
 - New Brunswick Power – a Crowne Corporation, the primary electric utility in the Canadian province of New Brunswick).⁷⁷
- Participants were asked the following questions:⁷⁸
 - Do you see a correlation between supervisor presence in the field and the success in your safety results?

⁷³ DR 940 Attachment 5

⁷⁴ <http://www.businessdictionary.com/definition/benchmarking.html>

⁷⁵ DR 1031

⁷⁶ DR 1031

⁷⁷ DR 987

⁷⁸ DR 940 Attachment 5

- Do you have a formal safety program or effort to get your supervisors into the field?
 - What is the expected amount of time in the field for your supervisors? Is this formally measured, culturally expected, or both?
 - What are the key issues that prevent your supervisors from being in the field with their crews?
 - Please describe any formal training you have that is focused on coaching your supervisors on how to have positive and productive interactions with the crews while in the field. Please provide examples.
 - What training do you provide to your non-traditional supervisors who are leading field crews?
 - What is your expectation for all levels of leaders to spend time in the field?
- While the conversations provide perspective, they can hardly provide conclusive guidance for supervisor time in the field.
 - Two responses confirmed the relationship between Supervisor time in the field and safety.
 - Two of the responses cited a formal safety program to get supervisors in the field.
 - Recording crew observations were noted but specific goals were not common among the four respondents.
 - Administrative duties were noted as limiting supervisor's time in the field with their crews.

17. PG&E does not aggressively manage supervisor's span of control. Large spans of control along with the numerous other responsibilities limit the amount of time supervisors are able to spend with their direct reports.

- PG&E recognizes that increased supervisor/crew contact will improve safety, quality and productivity.⁷⁹
- Time in the field can mathematically be related to the supervisor's span of control – number of direct reports – which increase the amount of administrative duties, work planning and other supervisory activities not done in the field. NorthStar requested current organizational span of control for field supervisors, foremen and crew leads (i.e., the number of employees per crew lead, number of crew leads per foreman, number of foremen per field supervisor) along with the organization charts - gas, electric and generation.⁸⁰
- PG&E's Organizational Spans and Layers Standard, HR-2010S, defines span of control as the number of employees reporting directly to any people leader.⁸¹ The standard also explains the requirement for each Leadership Track position to be assigned a span range. Additionally, it specifies the number of direct reports the person in each Leadership Track position must have to fall within the assigned range.

⁷⁹ CR-2/F-2, V-4 and V-6 (PG&E's January 8, 2018 Testimony, pp. App2A-3 to App2A-4)

⁸⁰ DR 900

⁸¹ DR 1018 Attachment 1

This procedure explains how to assign span ranges. Corporation Procedure: HR-2010P-01, Table 2 provides a span of control assignment procedure and calculation criteria, as shown in **Exhibit III-20**.⁸² The assignment table provides five “Range” levels. LOB Supervisors correspond to a cross-section of these criteria and span range as shown below.

Exhibit III-20
Span of Control Ranges – Procedure HR-2010P-01

| | Work Variability | Time Spent with Direct Reports Leader Spends: | Training Burden on Leader | Process Maturity Standardized processes or documented guidelines exist for: | Span Range |
|----------------|---|---|--|---|-------------------|
| Range 1 | Subordinates perform unique tasks that are not repeated. | Limited (40% or less of his/her time) managing or working with direct reports (least time available to supervise, has own work) | All job skill training must be provided by leader | Only a few (25% or fewer) of the team’s work activities | 4 - 7 |
| Range 2 | Most subordinates perform similar tasks that are repeated infrequently. | About half (40% - 60%) of his/her time managing or working with direct reports. | Some formal training exists, but some training must still be done by leader | Some (25% - 50%) of the team’s work activities | 8 - 10 |
| Range 3 | Most subordinates perform nearly identical tasks that are repeated frequently | Most of his/her time (60%-80%) managing or working with direct reports | Broad, significant training program exists, requiring only limited training by leader | Most (50-75%) of the team’s work activities | 11 - 15 |
| Range 4 | All subordinates perform identical tasks that are always repeated. | Almost all (80% or more) of his/her time managing or working with direct reports (most time available to supervise) | A comprehensive training program fully qualifies employees, with not training required by leader | Virtually all (more than 75%) of the team’s work activities | 16 - 20 |

Source: DR 1017 Attachment 1, Table 2.

- PG&E Human Resources measures and tracks span of control for those employees who have a direct supervisory responsibility for other employees in a monthly “Spans Tracker” report.⁸³ PG&E stated that “crew leads and foremen do not have direct supervisory responsibility (other than when they are temporarily upgraded to a supervisor position) and therefore have no specific span of control as measured and tracked by PG&E.” While this may be PG&E’s official position, and only supervisors perform the many administrative, planning and personnel duties, it

⁸² DR 1017 Attachment 1, Table 2

⁸³ DR 900 and 1014 Attachments 1-52

directly conflicts with NorthStar’s observations in the field where crew members constantly receive work direction from the most senior member of the team on site at the time – specifically crew leads or foremen.

- Corporation Procedure: HR-2010P-01 provides a method for calculating the span range for leadership positions. Regardless of variations and uncertainty a field Supervisor span should not exceed 20 unless “special circumstances” have been determined.⁸⁴
- NorthStar’s analysis of Electric Operations, Gas Operations and Power Generation field supervisor’s direct reported span during 2018 indicated that PG&E does not follow Corporation Procedure: HR-2010P-01.⁸⁵ NorthStar observed numerous examples of a field supervisor’s span count exceeded 1:20, exceeding the assigned span range – the report indicated that these were “in range.”
- **Exhibit III-21** shows the average, minimum and maximum span of control for employees at or upgraded to the supervisor level by organization as of July 2018. Organizations included are those most likely to have predominantly field employees. Average spans appear to exceed the HR Corporate Procedure.

Exhibit III-21
Reported PG&E Spans of Control

| Organization | Average Number of Direct Reports (Excluding vacancies) | Minimum Number of Direct Reports | Maximum Number of Direct Reports |
|---|---|----------------------------------|----------------------------------|
| Electric T&D Operations | 12 | 1 | 44 |
| Gas T&D Operations and T&D Construction | 14 | 1 | 55 |
| Power Generation Operations, Engineering and Projects | 9 | 4 | 20 |

Source: DR 900.

- It does not seem reasonable for one supervisor to effectively provide leadership and guidance regarding the PG&E safety program with 44 direct reports (Electric LOB) or 55 direct reports (Gas T&D).

Recommendations

10. Increase the number of Supervisors in Electric Operations, Gas Operations and Power Generation field operations to comply with Corporate Procedure HR-2010-P01 thereby limiting the span of direct reports to a maximum of 1:20.
11. Commit to a target level of dedicated time in supervisors calendars each week for time in the field; guidance will remain flexible for each LOB to take into consideration the different job functions and geographic work considerations.

⁸⁴ DR 1017 Attachment 1 – Table 1

⁸⁵ DR 1014 Attachments 1 – 52 and NorthStar analysis

12. Transfer administrative tasks that can be done by office-based staff, such as scheduling of work, training and paperwork review, from the Supervisor to the office-based staff.
13. Formalize Gas, Electric, and Power Generation management expectations for supervisors spending time in the field and communicate techniques for how to reduce impediments in each LOB thereby increasing time in the field.
14. Move completed work review to the jobsite, allowing for immediate feedback before electronic records and paperwork are finalized, as discussed in PG&E's January 8, 2018 Testimony (p. App 2A-4/Adobe p. 129/521).
15. Reduce travel requirements for field personnel and supervisors who are frequently assigned to work or attend meetings outside their normal work locations.

D. ITEM 4: EXPEDITE SAFETY LEADERSHIP TRAINING FOR CREW LEADS

Background

NorthStar's 2017 assessment found that PG&E's Safety Leadership Development (SLD) program, which was delivered between 2014 and 2016, would have a positive impact on safety culture, but it was not given to crew foremen. Officers and directors, managers, superintendents, and supervisors received SLD training. The SLD program consisted of six safety leadership workshops, a 360-degree feedback process, and in-field coaching with safety leadership coaches.⁸⁶

At the time of the review, PG&E planned to implement a safety training program for crew leaders in 2017, but did not plan to complete the training until the end of 2019. In 2016, PG&E, in conjunction with union representation and an outside consultant began designing additional safety development courses for non-management field leadership. All leaders (crew leaders and above) in the six operational LOBs were to participate in Leading Forward: Safety Leadership starting in 2017.⁸⁷ Leading Forward: Safety Leadership includes content from the SLD workshops delivered between 2014 and 2016. Areas addressed include:

- The influence a leader's behavior has on safety culture, and how safety culture impacts the level of exposure at PG&E
- Effective safety observations
- Job safety briefings
- Physical hazard inspections
- Keys to Life
- Examples of how to change the safety conversation.⁸⁸

NorthStar's 2017 assessment recommended that PG&E accelerate crew foreman safety leadership training. PG&E included accelerated crew leader training in the Safety Leadership focus area of the One PG&E OH&S Plan, as part of the Safety Leadership Development Training "tactic." The OH&S Plan requires 97+ percent of crew leaders complete training by year-end 2018, and for all crew leaders to have completed training by year-end 2019.⁸⁹

Implementation Timeline

The timeline for the completion of crew lead safety leadership training, as outlined in PG&E's January 2018 Testimony, is summarized in **Exhibit III-22**.

⁸⁶ DR 724 Attachment 1

⁸⁷ NorthStar's May 2017 Report

⁸⁸ DR 961 PG&E Safety Leadership Playbook

⁸⁹ OH&S Plan, p. 13

Exhibit III-22
PG&E Crew Leadership Training Timeline – F-3

| Date | Milestone |
|-----------|--|
| Dec. 2017 | Complete update of Crew Lead Safety Leadership course curriculum. |
| Jan. 2018 | Attendance targets by month by Line of Business developed and agreed upon. |
| Monthly | Attendance tracking. |
| Dec. 2018 | All targeted crew leads complete Safety Leadership Training. |

Source: PG&E's January 2018 Testimony, p. App 2A-65.

PG&E Status Assessment (As of November 30, 2018 - Based on PG&E's First Implementation Status Report)

Plan in Progress. According to PG&E, courses are scheduled through the end of the year. PG&E has issued targeted communications to employees identified to complete this training and PG&E Academy is continuing to track and offer training sessions at locations based on the need. The current completion status of the Crew Lead training is 98 percent.⁹⁰

NorthStar Status Assessment

On target. NorthStar agrees with PG&E's expectation to complete crew lead safety training by December 2018.

On February 14, 2019, PG&E indicated that it had met its target completion of crew lead SLD training as of December 2018.⁹¹

Findings and Conclusion

18. The Crew Lead Safety Leadership Program training includes both on-the-job-training and classroom training that address the crew lead as safety leader and how to identify and control safety hazards in the field.

- After accepting the OII recommendation to accelerate Crew Leader Training, PG&E revised the curriculum to two days by eliminating some redundancies in the previous SLD training and modifying the curricula to make the training more relevant to field personnel.⁹²
- As summarized in **Exhibit III-23**, there are five components of the revised program:
 - SAFE-9106 (Day One of the Crew Lead Safety Leadership Course)
 - SAFE-9107 (Day Two of the Crew Lead Safety Leadership Course)
 - Three On the Job Assessments/Training (OJTs)

⁹⁰ First Quarterly Implementation Status Report, Attachment 1, page 7

⁹¹ DR 1053

⁹² IR 17 and December 2017 One PG&E OH&S Plan, p.25.

Exhibit III-23
Components of 2018 Crew Lead Safety Training

| Component | Overview |
|---|--|
| First OJT | Employees meet with their Supervisors a week in advance of the class to discuss their goals and expectations for the Safety Leadership training course and the importance of a safety culture. |
| Day One of Training: Shaping a Safety Culture | <p>Module 1: Your Value as a Leader – messages from leadership about the work being done, illustrating leadership commitment to support crew leads, reaffirming the power of crew leads and their influence.</p> <p>Module 2: Setting the Stage – Expectations for training and the crew lead as a safety leader.</p> <p>Module 3: Redefining Safety and Safety Culture – foundational concepts.</p> <p>Module 4: Shaping a Safety Culture: Your Leadership Role – How leaders shape an organization’s culture.</p> <p>Module 5: Moving Forward – Controlling exposures and engaging your crew in safety connections.</p> |
| Second OJT | <p>Employees must complete the following activities and their supervisor must sign-off on the completion.</p> <ol style="list-style-type: none"> 1. Discuss exposures with their crew daily. 2. Conduct effective safety connections with their team. <ol style="list-style-type: none"> a. Use Context Action Result (CAR) to provide success feedback. b. Use Context Action Result - Alternative Action/Alternative Result (CAR-AR) to provide guidance feedback. c. Seek and receive feedback from your crew. 3. Discuss their role as a safety leader with their immediate supervisor. |
| Day Two of Training: Identifying and Controlling Exposures | <p>Physical Hazard Inspection Tools/Applying Concepts of Value-Drive Safety Culture</p> <p>Module 1: Getting Started</p> <p>Module 2: Job Safety Briefings – Identifying worksite exposures.</p> <p>Module 3: Physical Hazard Inspections</p> <p>Module 4: Applying What You’ve Learned – Communicating identifying hazards, exposures, controls, and job-pause prompts to the crew.</p> <p>Module 5: Moving Forward – Putting skills into practice.</p> |
| Final OJT | Employees meet with their Supervisor for 30 minutes for a discussion focused on how concepts taught in the courses can be applied, and how the supervisor will support the crew lead. |

Source: DR 907 and DR 973 Attachments 1 and 2.

19. PG&E is on track to complete safety leadership training of its crew leads by the end of 2018.

- PG&E plans to complete the Crew Lead safety training by December 31, 2018. Some LOBs expect to have their employees complete the training earlier than the end of the year.⁹³
 - As of June 30, 2018, there were 1,250 crew leads.⁹⁴

⁹³ DR 958

⁹⁴ DR 909 Attachment 2

- 439 crew leads completed an earlier version of the SLD training in 2016 and 2017.⁹⁵
- PG&E's June 30, 2018 plan called for 949 crew leads to complete training in 2018. The population of crew leads changes over time due to retirements and additions. As of August 31, 2018, the 2018 target was 907, for a total of 1,346 (439 + 907).⁹⁶
- In its December 28, 2018 Safety Culture and Governance OII Quarterly Report, PG&E reported that as of November 30, 2018, 98 percent of crew leaders had completed the crew leader workshops.⁹⁷
- **Exhibit III-24** shows the actual and planned completions by LOB and month for 2018.

Exhibit III-24
Crew Lead Safety Leadership Development Program – as of November 26, 2018 [Note 1, 2]
Plan and Actual Completions by Month (including Diablo Canyon)
As of June 30, 2018

| LOB | Plan/ Actual | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Total |
|--------------|-----------------|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|------------|
| Electric Ops | Plan | | | | | 160 | 207 | 15 | | | 43 | 25 | 15 | 465 |
| [Note 3] | Actual | | | 8 | 52 | 246 | 47 | 26 | | 19 | 26 | 10 | | 434 |
| Gas Ops | Plan | | 200 | 144 | | | | | 10 | | 32 | 28 | 2 | 416 |
| [Note 4] | Actual | 5 | 154 | 163 | 1 | 14 | 11 | 18 | 4 | 10 | 26 | 11 | | 417 |
| Customer | Plan | | | | | | | | 14 | 18 | | | | 32 |
| Care | Actual | | | | | | | | 2 | 27 | 3 | | | 32 |
| Generation | Plan | | | | | | | 23 | 25 | | | | 1 | 49 |
| | Actual | | | 5 | | 3 | 4 | 30 | | 2 | 1 | | | 45 |
| Information | Plan | | | | | | | | 5 | | | | | 5 |
| Technology | Actual | | | | | | | | 2 | | 1 | 2 | | 5 |
| Corporate | Plan | | | | | | | 3 | | | 16 | | | 19 |
| Services | Actual | | | | | | | 3 | | | 16 | | | 19 |
| Diablo | Plan | 7 | | | | | | | | | | | 6 | 13 |
| Canyon | Actual | 7 | | | | | | | | | | | | 7 |
| Total | Plan | | | | | | | | | | | | | 999 |
| | Actual | | | | | | | | | | | | | 959 |

Note 1: Actual completions shown are only for employees either currently in a Crew Lead position or who were in a Crew Lead position when they completed the course. This table does not include completions by other employees who were previously in a Crew Lead role or those that a supervisor believes will benefit from the program.

Note 2: November results are preliminary. The actual results have increased for the month of June from the table provided in the original response to DR 908, to account for completions that had not been recorded by June 30th.

Note 3: Electric Operations includes Field Metering due to a company reorganization.

Note 4: Gas Operations includes Supply Chain due to a company reorganization.

Source: DR 908, 1052.

⁹⁵ DR 909 Attachment 1

⁹⁶ DR 991.

⁹⁷ December 28, 2018 Safety Culture and Governance OII Quarterly Report, p. 24

- As of August 31, 2018, PG&E had identified 127 employees currently in a Crew Lead job classification that need to complete Day 1 of training and 203 employees who need to complete Day 2). The Learning Academy is monitoring their course completion.⁹⁸
- PG&E took steps to facilitate the completion of crew lead safety training in 2018.
 - PG&E added training locations to reduce travel requirements (Auburn, Bakersfield, Chico, San Jose, Ukiah and Winter). The bulk of the training classes continued to be held at PG&E's San Ramon Valley conference center.⁹⁹
 - For the remainder of 2018, PG&E Academy is monitoring enrollments in the Crew Lead Safety Training courses. Once open sessions reach 18 participants per session (maximum is 24 participants), additional sessions will be opened and made available for enrollment.¹⁰⁰
- On February 14, 2019, PG&E indicated that it had met its target completion of crew lead SLD training as of December 2018.¹⁰¹

20. PG&E identified appropriate job classifications to receive the crew lead safety training.

- PG&E identified 76 crew lead job classifications to receive the training. NorthStar's review confirms that these classifications are, in fact, field, shop or plant lead positions.¹⁰²
- PG&E will enroll employees who are new to these classifications into the program on an ongoing basis.¹⁰³ Crew lead job classifications are profiled to complete the Crew Lead Safety Leadership program courses and OJTs.¹⁰⁴

21. Post-training assessments indicate that both the Crew Lead Safety Leadership training participants and their supervisors consider the training to be effective.

- PG&E uses three post-training assessments to evaluate the effectiveness of the Crew Lead Safety Leadership training. The first assessment (Level 1) is sent to participants immediately after they complete each course, and primarily focuses on the quality of the course and its expected value. The second two assessments are sent to participants 90 days after they complete *each* course (Level 3), and their immediate supervisors 90 days after the participants completed the final course (Leader Follow-Up Survey).¹⁰⁵

⁹⁸ DR 991

⁹⁹ DR 971 Attachment3

¹⁰⁰ DR 958

¹⁰¹ DR 1053

¹⁰² DR 990

¹⁰³ DR 958

¹⁰⁴ DR 912 and DR 958

¹⁰⁵ DR 913

- Ninety days after completing each course, the majority of participants had favorable review of the impact of the SLD training on their work, as shown in **Exhibit III-25**.

Exhibit III-25
Crew Lead Safety Leadership Level 3 Assessment Results
(through June 30, 2018)

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Agree + Strongly Agree |
|---|-------------------|----------|----------------------------|-------|----------------|------------------------|
| I was able to apply the knowledge/skills I learned in training to my job. | 3% | 7% | 21% | 55% | 14% | 69% |
| The participant materials (manual, presentation handouts, job aids, etc.) have been useful on the job. | 4% | 10% | 23% | 47% | 17% | 64% |
| This training has improved my job performance. | 9% | 6% | 28% | 44% | 13% | 57% |
| After training, my leader and I discussed how I will use the learning on my job. | 5% | 2% | 26% | 44% | 23% | 67% |
| I was provided adequate resources (time, equipment, post-training support) to successfully apply this training. | 5% | 0% | 28% | 43% | 24% | 67% |
| This training will be a worthwhile investment in my development. | 11% | 9% | 21% | 40% | 18% | 58% |

Source: DR 913 Attachment 3, DR 1054 Attachment 1.

- The majority of supervisors had favorable review of the impact of the Crew Lead Safety Leadership training on their employees' development and work performance, as shown in **Exhibit III-26**.

Exhibit III-26
Crew Lead Safety Leadership Leader Follow-Up Survey Results
(through June 30, 2018)

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Agree + Strongly Agree |
|---|-------------------|----------|----------------------------|-------|----------------|------------------------|
| After training, this employee and I discussed how he/she will use the learning on his/her job. | 0% | 1% | 7% | 63% | 29% | 92% |
| The employee has been able to successfully apply the knowledge/ skills learned in this training to his/her job. | 1% | 2% | 20% | 68% | 9% | 77% |
| This training has improved the employee's job performance. | 1% | 4% | 27% | 59% | 9% | 68% |
| This training was a worthwhile investment in my employee's development. | 1% | 3% | 18% | 62% | 16% | 78% |

Source: DR 913 Attachment 4, DR 1054 Attachment 1.

22. PG&E plans to continue to give safety leadership training to new crew leads.

- The PG&E Academy is planning to offer regular sessions of the two Crew Lead training courses so that as new employees move into Crew Lead positions, they will be able to enroll in the required courses. In addition, leaders throughout the organization may profile or recommend the training for employees who occasionally act in a Crew Lead-type of a role or who have indicated they are interested in becoming a Crew Lead.
- In the long run, the SLD training may be modified based on the review of SafetyNet observation data. PG&E's safety observation system, Predictive Solutions' SafetyNet includes an SLD observation checklist. The checklist contains observable behaviors based on the content of the SLD workshop curriculum.¹⁰⁶

Recommendations

16. Continue to provide Crew Lead Safety Leadership training courses for employees that move into Crew Lead positions. Automatically include Crew Lead Safety Leadership training in the training profiles for new crew leads.
17. On an annual basis, revise Safety Leadership Development (SLD) training to address any areas of concern identified in the review of SafetyNet observation data.

¹⁰⁶ DR 992

E. ITEM 5: IMPROVE THE BOARD'S QUALIFICATIONS AND INVOLVEMENT

Background

NorthStar's May 2017 report found that the composition of the BODs did not change significantly immediately following San Bruno. Independent Directors with utility experience were added in 2012, 2013 and 2015. At the time of NorthStar's initial review, safety was not a component of the skills matrix used to assess the needs of the Boards, and the existing members had limited direct safety experience. **Exhibit III-27** provides the Independent Director membership at the end of 2016, including the dates each Director joined the Boards, and their age as of April 11, 2016.

Exhibit III-27
PG&E/PG&E Corp. Independent Directors as of April 2016

| Board Member | Background | Date First Joined | Year | | | | | | | |
|-----------------------------|---|-------------------------|------|----|----|----|----|----|----|----|
| | | | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Barry Lawson Williams (71) | Business investment and consulting | 1990-PG&E 1996-Corp. | | | | | | | | |
| Barbara L. Rambo (63) | Financial services and technology | 2005 | | | | | | | | |
| Maryellen C. Herringer (72) | Attorney, shipping and rail transportation | 2005 | | | | | | | | |
| Richard A. Meserve (71) | Scientific research, legal counsel, Former Chair of NRC | 2006 | | | | | | | | |
| Roger H. Kimmel (69) | M&A, capital markets - investment banking, legal | Jan 2009 | | | | | | | | |
| Forrest E. Miller (63) | Corporate strategy and development, telecom. | Feb 2009 | | | | | | | | |
| Rosendo G. Parra (56) | Marketing, sales and customer service, technology | Sep 2009 | | | | | | | | |
| Lewis Chew (53) | CFO National Semiconductor Audit Partner – KPMG, LLP | Sep 2009 | | | | | | | | |
| Fred Fowler (70) | Retired Chairman, Spectra Energy Partners, Duke Energy | Mar 2012 | | | | | | | | |
| Richard C. Kelly (69) | CEO Xcel Energy | Jun 2013 | | | | | | | | |
| Anne Shen Smith (62) | Retired Chairman and CEO, Southern California Gas | Feb 2015 | | | | | | | | |
| Eric Mullins (54) | CEO of a private equity firm – oil and gas properties | Sep 2016 | | | | | | | | |

Source: NorthStar's May 2017 Report.

In its May 2017 Report, NorthStar recommended that PG&E add safety to the list of qualifications used in selecting Independent Directors to the BODs; that it periodically revisit the BOD qualifications matrix and requirements for Independent Directors as the industry and requirements change; and, add Independent Directors to the Board who have experience with safety, perhaps in another industry such as aviation.

Implementation Timeline

The timeline for increasing the BOD’s safety experience, as outlined in PG&E’s January 2018 Testimony, is provided in **Exhibit III-28**.

Exhibit III-28 Recommendation Implementation Plan Timeline – III-1

| Date | Milestone |
|---------------|---|
| December 2017 | Management will recommend that the PG&E Corporation and PG&E Boards consider adding safety experience/expertise to the desired characteristics and qualifications of director candidates. [NOTE: This plan covers actions that management can take unilaterally. As such, it does not address any Board-level actions required to implement the recommendations] |

Source: PG&E’s January 8, 2018 Testimony.

PG&E Status Assessment (Based on PG&E’s January 8, 2018 Testimony)

Complete.

NorthStar Status Assessment

This recommendation has been implemented.

Findings and Conclusions

23. PG&E has added safety to the skills matrix for new and existing Independent Directors, as recommended by NorthStar.

- At its December 19, 2017 meeting, the Nominating and Governance Committee discussed the various types of experience that could be considered safety experience and agreed to add safety to the BOD skills matrix.¹⁰⁷
- At the full BOD meetings, the Nominating and Governance Committee presented its proposal to add safety experience as an assessment factor for new and existing Directors. To mitigate potential ambiguity and subjectivity, the Committee provided the following examples of “safety expertise”.¹⁰⁸
 - Executive safety experience (e.g., direct oversight for a company’s safety function and performance).
 - Service on another public company Board’s safety committee.
 - Service on a CEO-level task force on industry safety.
 - Service on a Board or Committee of a prominent safety advocate organization or society.
 - Previous safety-related training or coursework, or safety-related credentials.

¹⁰⁷ DR 938 BOD Materials are CONFIDENTIAL

¹⁰⁸ DR 938 BOD Materials are CONFIDENTIAL

- Safety was added as an element of the BOD skills matrix in PG&E Corporation's March 26, 2018 Proxy Statement.¹⁰⁹ According to the 2018 Proxy Statement, five members of the Corporate Board and six members of the Utility Board possess safety experience.

24. PG&E and PG&E Corp. have increased the safety expertise of their BODs.

- The Nominating and Governance Committee retains an outside search firm to assist with the identification of potential BOD members. The position description used in February 2016, contained the following requirements:¹¹⁰

We are seeking candidates with the skills and experience to help build upon PG&E's leadership on a national scale in safety, operations and the environment. We are targeting executives with a successful track record of working with complex businesses. The successful candidate will have strong business acumen and demonstrated experience in corporate governance. Experience in the functional areas of environmental policy, cybersecurity/risk or finance would be beneficial. Business or political experience in California would also be helpful.

Additional criteria include:

- Must have boardroom experience (as executive or Board Member)
- Executive presence
- Availability to be an active Board Member and not be overcommitted

A strong commitment to PG&E's objectives, values, and strategic direction is equally as important as the skill sets and experience.

- This position description ultimately led to the election of former U.S. Secretary of Homeland Security Jeh C. Johnson to the BODs of PG&E and PG&E Corp on May 31, 2017, based on his expertise with governmental affairs and security, particularly cyber security. At that same meeting, the Nominating and Governance Committee agreed to continue to search for Director candidates throughout 2017 due to planned retirements.¹¹¹ Secretary Johnson resigned from the utility BOD on December 7, 2017, so that he would not hold interlocking positions as a director of the Utility and a Director of Lockheed Martin Corporation.¹¹² He subsequently retired from the Corporation BOD effective May 22, 2018, as the utility and Corporate BOD meetings are held concurrently.¹¹³
- In 2017, Barry Lawson Williams and Maryellen Herringer retired from the BODs, thus changing the relative composition of the BODs. Mr. Lawson was 72, and Ms. Herringer was 73.
- In December 2017, the Nominating and Governance Committee presented several potential candidates with technology experience and with safety experience to the

¹⁰⁹ <http://investor.pgecorp.com/financials/sec-filings/sec-filings-details/default.aspx?FilingId=12647354>

¹¹⁰ DR 946 Attachment 2, CONFIDENTIAL

¹¹¹ DR 938, BOD Materials are CONFIDENTIAL

¹¹² DR 938, BOD Materials are CONFIDENTIAL

¹¹³ DR 937

BOD.¹¹⁴ The position description used by the executive search firm at that time emphasized: “1) strong operational safety experience; 2) executive leadership experience within the electric and gas utility sector; 3) leadership in the technology sector, with an emphasis on clean technology; 4) deep public policy experience within the State of California.”¹¹⁵

- In July 2018, PG&E/PG&E Corp. added the President and Chief Operating Officer (COO) of Alaska Airlines Mr. Benito (Ben) Minicucci to both Boards. According to the announcement:¹¹⁶

Ben is an excellent fit for our boards given his deep experience in driving a strong safety culture at Alaska Airlines, which has been consistently recognized as one of the world’s safest airlines, while continuing to drive growth and customer satisfaction,” said Dick Kelly, non-executive Chair of the PG&E Corporation Board of Directors.

Minicucci is responsible for all aspects of safety, performance, and customer service for Alaska Airlines’ daily operation of over 800 flights throughout North America. He directs flight operations, maintenance and engineering, inflight and call center services, systems operations control, airport operations, and labor relations.

Minicucci joined Alaska Airlines in 2004 as the staff vice president of maintenance and engineering. He became vice president of Seattle operations in 2007 and was promoted to Executive Vice President, Operations and Chief Operating Officer in 2009. In May 2016, Minicucci became President of Alaska Airlines. With the airline’s acquisition of Virgin America Airlines in December 2016, he was named the CEO of Virgin America and is responsible for the ongoing integration process.

- On February 20, 2018, PG&E provided its plan for recurring safety training for the BODs covering the following topics.¹¹⁷ In interviews with NorthStar, individual directors stated that they found the training to be useful.
 - PG&E’s Five Year Health and Safety Plan
 - Understanding safety in high risk operations
 - Understanding safety culture
 - Safety governance and safety systems
 - Clarifying the Boards’ roles in driving safety and reducing risk
 - Understanding catastrophic failure and mitigation strategies.
- NorthStar reviewed the Safety and Nuclear Operations (SNO) Committee meeting minutes from 2017 through 2018. The Committee was provided with numerous PG&E-specific updates, and also with information on current industry issues such as gas storage (post-Aliso Canyon) and a tree industry roundtable update.¹¹⁸ During 2018, the BOD Members toured the Wildfire Safety Operations Center (WSOC).

¹¹⁴ DR 938, BOD Materials are CONFIDENTIAL

¹¹⁵ DR 946 Attachment 3 CONFIDENTIAL

¹¹⁶ DR 937 Attachment 2

¹¹⁷ DR 927

¹¹⁸ DR 938 Attachments – CONFIDENTIAL, and attendance at meetings.

25. NorthStar found the BODs to be more engaged and probing during its follow-up review than during NorthStar's initial assessment.

- NorthStar interviewed the members of the Nominating and Governance Committee and the Safety and Operations Committee as well as the newer members of the BODs.¹¹⁹
- NorthStar attended two full BOD meetings, one meeting of the Finance Committee and two meetings of the Safety and Nuclear Operations Committee. NorthStar also reviewed the agendas, materials provided to, and the minutes of the Nominating and Governance and SNO Committees and the full BOD meetings.¹²⁰ Discussions were good and the BOD was actively engaged.¹²¹

Recommendations

18. Report any changes in the Board of Director (BOD) skills matrix, and any changes to the composition of the BOD to the CPUC.
19. Continue to update the BOD on safety and other significant industry issues.
20. Encourage BOD members to inquire and challenge PG&E executives to ensure a robust governance process. Revise PG&E Corp.'s Governance Guidelines to include expectations for Directors. As an example, see the Sempra Energy Corporate Governance Guidelines. Among other items, the Sempra Energy Guidelines include the following:
 - Maintain an attitude of constructive skepticism, ask relevant, incisive, probing questions and engage in direct and forthright discussions with the Board and management.
 - Develop and maintain a broad understanding of the corporation's business and risk profile, its strategic, financial and operating opportunities and plans, and its internal control systems and disclosure controls and procedures, including environmental, and health and safety systems and procedures....
 - Balance prompt action with thorough deliberations, prioritize matter requiring attention, gather sufficient information, engage in open discussion, invite differing views, evaluate the benefits and risks of various courses of action and support the acceptance of prudent business risks to permit informed and timely decision making.

¹¹⁹ IRs 6, 8-15 and 61

¹²⁰ DR 938 and 979

¹²¹ IRs 41, 42, 58, 59, 60, DRs 936,

F. ITEM 6: COMMUNICATE THE SAFETY STRATEGY TO THE PG&E WORKFORCE

Background

In its May 2017 Report, NorthStar found that there was limited company-wide communication regarding PG&E's overall safety culture strategy. Although not part of a specific or unified campaign, the overarching message PG&E has been striving to instill in its workforce is that nothing is more important than safety and employees should "speak-up" where safety is concerned. The 2017 audit found that PG&E had made significant strides in this area; however, this belief had not been firmly and sustainably entrenched within the organization. NorthStar recommendation IX-1 directed PG&E to "[d]evelop and implement a strategic communications plan that does not overwhelm employees with too much information, but effectively addresses the issues identified in the January 2015 Monitor 360 Study, the 2016 Premier Survey (and PG&E's narrative analysis.)"

PG&E's implementation plan for Recommendation IX-1 states that the strategic communication plan will:

- Evolve the message around Speak Up culture to include listening and follow-up.
- Clearly articulate PG&E's OH&S Plan, so that employees understand the enterprise safety priorities and how they can (and are expected to) take action.
- Recognize employees who take action to improve safety for others or themselves.
- Better connect processes, procedures, and broader company changes to vision on safety.¹²²

Implementation Timeline

The timeline for the implementation of a strategic safety communications plan, as outlined in PG&E's January 2018 Testimony, is summarized in **Exhibit III-29**.

Exhibit III-29
PG&E Strategic Safety Communications Plan Timeline – IX-1

| Date | Milestone |
|-----------|--|
| Jul. 2017 | Draft of enterprise communication plan, which includes Objectives, Key messages, Proposed tactics, Target audiences, High-level budget |
| Dec 2017 | Plan approval |

Source: PG&E January 2018 Testimony, p. App 2A-65.

PG&E Status Assessment (Based on PG&E's January 8, 2018 Testimony)

Complete.

¹²² PG&E's January 8, 2018 Testimony, p. App 2A-65)

NorthStar Status Assessment

Complete.

Findings and Conclusions

26. PG&E implemented a comprehensive process to communicate the OH&S plan in 2018.

- According to PG&E, because the OH&S Plan is the primary, integrated plan for employee and contractor health and wellness, the large majority PG&E's safety communications are focused on the OH&S Plan.¹²³
- The 2018 Enterprise Safety & Health Communications Plan, issued December 2017, focuses on the following strategies for internal communications:
 - Use the One PG&E OH&S Plan as the anchor for all program-related communications.
 - Reiterate the plan name, and draw a connection from the program to the OH&S focus area it maps to (e.g. 24/7 Nurse Report Line as part of Injury Management).
 - Streamline the messages to a few core themes, so that employees understand the Health & Safety focus areas and the connection between the Safety and Health programs PG&E provides.
 - More emphasis on tangible examples of “employees having success” (e.g. case studies, testimonials) and less emphasis on generic program education.
 - Improve support for “people channels” (e.g. safety councils, safety business partners, safety specialists, grassroots safety teams, focus area sponsors, wellness ambassadors).
 - Help leaders throughout the company to speak authentically, consistently and frequently about safety & health.¹²⁴
- The monthly enterprise safety communications plan for 2018 outlines specific areas to be addressed through digital channels (email, @work, and video), people channels (leaders, safety councils, grass roots, safety business partners, and wellness ambassadors), and safety summits.¹²⁵
- NorthStar's review of samples of the OH&S plan communications collateral found that communications were clear and focused on the OH&S plan and its elements.¹²⁶
- The 2018 communication plans included podcasts which address each of the eight focus areas of the OH&S plan. These podcasts have had relatively limited views, as summarized in **Exhibit III-30**.

¹²³ DR 917

¹²⁴ DR 934 Attachment 1

¹²⁵ DR 934 Attachment 1

¹²⁶ NorthStar review of DR 917 and DR 935 Attachments 1 to 6.

Exhibit III-30
OH&S Communication Plan Podcasts Views through September 2018

| Episode | Topic | Month Released | Total Views |
|---------|-------------------------------|----------------|-------------|
| 1 | Safety Action Plan | January 2018 | 288 |
| 2 | MSD - Sprains & Strains | February 2018 | 1,312 |
| 3 | Injury Management Program | March 2018 | 1,102 |
| 4 | Contractor Safety | March 2018 | 1,152 |
| 5 | Integrated Health & Wellness | April 2018 | 1,110 |
| 6 | Motor Vehicle Safety | April 2018 | 1,030 |
| 7 | Safety Leadership Development | July 2018 | 946 |
| 8 | SIF | May 2018 | 56 |

Source: DR 999.

27. PG&E took steps to improve the development and execution of the 2018 safety communications plan.

- PG&E identified weaknesses in its 2017 safety communications, including the following:
 - Enterprise communications supported a number of individual programs, but did not integrate themes or programs optimally.
 - Communications responded to multiple requests for ad hoc or reactive communications, adding to feeling of communications “noise”.
 - Many Safety & Health programs received somewhat equal attention, leading the audience to question enterprise priorities.¹²⁷
- PG&E established a Safety and Health Communication Advisory Committee in August 2017.
 - The Advisory Committee includes LOB safety leads from Electric Operations, Gas Operations, Generation, Supply Chain, Information Technology, and Customer Care, as well as Corporate Communications, Corporate Safety, and Safety and Health business partners.
 - The group meets throughout the year as part of PG&E’s LOB alignment meetings to discuss the top priority safety and health messages to be shared enterprise-wide, to ensure timely and consistent messaging across the LOBs, assess communication effectiveness and identify improvement opportunities.¹²⁸
- According to PG&E, the 2018 strategic communications plan focuses on collaborative communications between PG&E’s Marketing & Communications, Corporate Safety & Health, and the LOB program managers.¹²⁹ The collaboration includes:

¹²⁷ DR 934 Attachment 1

¹²⁸ DR 1020 and DR 1021

¹²⁹ DR 917 and DR 934 Attachment 1

- Weekly alignment meetings between Marketing & Communications and Corporate Safety & Health to ensure role clarity and avoid overlap.
 - Cross-functional review of each other's communications.
 - Co-development of major communications deliverables (e.g. Safety Summit materials and roll-outs of large initiatives).¹³⁰
- The Marketing & Communications team dedicated to safety communications works with the Marketing & Communications individuals responsible for all LOB-specific communications to discuss messaging, tactics and strategy, to ensure alignment with enterprise initiatives.¹³¹ LOB-specific communications tools for safety and other issues are listed in **Exhibit III-31**.

Exhibit III-31
LOB Communication Tools for Safety and Other Issues

| Communication Tool | Frequency |
|----------------------------------|----------------------|
| Electric | |
| Electric intranet pages | Weekly |
| Executive field visits | Monthly |
| Line of Business teleconferences | Quarterly |
| Electric Ave newsletter | Mar, June, Sept, Nov |
| Pat Hogan Columns | Mar, June, Sept, Nov |
| Safety Kick-offs | Feb, Mar, April, May |
| ELT Leadership meetings | Mar, June, Sept/Oct |
| Executive safety messages | Periodic |
| Incident communications | As needed |
| Gas | |
| Gas intranet pages | Weekly |
| Gas Line of Sight 2017 meeting | 1Q |
| Executive field visits | Monthly |
| Standard & Procedures Update | Monthly |
| Tailboards & brown bag lunches | Monthly |
| 2017 Line of Sight toolkit | Quarterly |
| Soto/Gas teleconference | Quarterly |
| Gas Matters Newsletter | Quarterly |
| Executive safety messages | Periodic |
| Incident communications | As needed |
| Customer Care | |
| Customer Care intranet pages | Weekly |
| Tailboards | Weekly |
| Executive field visits | Monthly |
| Customer Voice Newsletter | Quarterly |
| Grassroots Safety Initiative | Quarterly |
| Safety Kick-off meetings | Jan |
| 2017 ELT Kickoff | Mar |
| Executive safety messages | Periodic |
| Incident communications | As needed |

Source: DR 936.

¹³⁰ DR 936 and DR 1023

¹³¹ DR 936

- Specific safety communications responsibilities of Safety & Health and Marketing & Communications are summarized in **Exhibit III-32**.

Exhibit III-32
2018 Safety Communications

| Communications Vehicle | Desired Outcome |
|---|--|
| Marketing and Communications | |
| SIF Actual Incident All Employee Email | Notify all employees of incident |
| Press Release and Media availabilities (proactive media engagement) | Highlight company's focus and progress on safety; allow external media to see and report on PG&E's innovative programs |
| Media Response (reactive) | Respond to media inquiries on Safety & Health topics in the news |
| @ Work articles | Showcase employee and program successes |
| Daily Digest (writing or editing) | Notification of policy changes or highlighting @ Work articles |
| Talking points for leadership | Prep for meetings |
| Officer email communications | Employee awareness/understanding of organizational changes, ongoing topics or other needed communications |
| Event support (strategy, event coordination, Q&A management, etc.) | Meetings that run on time, are engaging and fulfill their intended purpose |
| Review/feedback on other LOB communications | Ensure consistency with higher-level messaging, and coordination with other enterprise communications |
| Messaging Frameworks | Align on core messages |
| Video production for select engagements (ad hoc) | Video content that supports stories about and for employees |
| Corporate Safety and Health | |
| Company Safety Standards, Tailboards, 5 Minute Meeting | Notification of regulatory or policy changes; new or updated guidance |
| Leader Packets | Highlight Safety Action Program elements, creating a consistent message and conversation for leaders across the enterprise |
| Safety Calendar Management | Create a cadence for consistent and timely messaging |
| Daily Digest (writing or editing) | Showcase employee and program successes |
| @ Work articles | Notification of policy changes or highlighting @ Work articles |
| Monthly Webcast | Creating a conversation with leaders and employees on safety action plan elements and relevant topics |
| Safety Advisory Committee Meeting Management | Review and align on communication strategy and calendar, share best practices |
| Talking points for leadership | Prep for meetings |
| Daily Briefs (Future) | TBD |
| Intranet Site Management (Re-Mapping, Updating) | Provide a useful tool for employees to access safety and health tools and information |
| Review safety communications requests through internal Safety email mailbox | Manage requests and coordinate safety communications |
| Host Safety Experts | Positioning PG&E to share and learn from safety and industry experts |
| Video production for select engagements (ad hoc) | Video content that supports stories about and for employees |

Source: DR 934 Attachment 1.

28. PG&E is taking steps to improve its safety communications by working with a vendor to determine the best way to communicate with employees without overwhelming them.

- PG&E has hired a vendor to determine the best way to communicate its safety message to supervisors without overwhelming them.
- The vendor's scope of work in support of the Safety & Health communications plan began in August 2018. Work performed through November 2018 included the following:
 - Developed a communications and action items tracker to understand the magnitude of work, prioritize deliverables and track milestones completion.
 - Organized monthly meetings with each focus area to discuss initiative milestones and strategic communications approach.
 - Completed a communications audit with key takeaways and items for consideration to provide more impactful communications to drive behavioral change.¹³²
- The vendor completed its communications audit in October 2018 and assessed the content, visual impact and reach of select PG&E communications tactics. Tactics reviewed and key findings and recommendations are listed in **Exhibit III-33**.

Exhibit III-33
PG&E Communications Audit - Fall 2018
Key Findings and Recommendations Regarding Communications Tactics
(as summarized by NorthStar)

| Communication Tactic | Key Findings | Key Recommendations |
|---|---|---|
| Building a Better You (Workforce Safety and Health pamphlet) | <ul style="list-style-type: none">• Contains messaging and program details in one central location.• Employees can reference as they hear reinforcing messages from other sources on a continuing basis.• Covers a large amount of information with helpful call outs, bullet points, sidebars and infographics.• Minimal time and resources to keep updated. | <ul style="list-style-type: none">• Use as cornerstone for long term communications strategy.• Include all focus areas.• Include summaries of initiatives at top of each page to highlight why employees should care. |
| Daily Digest/ @Work Articles (PG&E Intranet) | <ul style="list-style-type: none">• Safety & Health is competing with external and internal emails and other topics on the Daily Digest resulting in low click rates/readership.• Metrics confirmed employee stories and messages from leadership are more commonly viewed than program updates or leader packets; behavioral change can be driven by lessons learned stories and leadership endorsements. | <ul style="list-style-type: none">• Use Daily Digest/@Work articles as supporting communication tactics, instead of the main tactic/strategy. |

¹³² DR 1005 and DR 1055

| Communication Tactic | Key Findings | Key Recommendations |
|------------------------------------|---|--|
| Podcasts/Videos (PG&E Intranet) | <ul style="list-style-type: none"> • Safety & Health is competing with external and internal videos/podcasts. • High production costs for limited click rate/ views. • Podcasts are more accessible to field employees and can be listened to and from work. • Podcast episodes featuring leadership highlights importance. | <ul style="list-style-type: none"> • Shorter videos/podcasts (2 mins) • Layover text in videos to highlight key takeaways. • Steady publishing cadence for podcast episodes. • Professional host with experience in corporate communications to help create audio and visual content. • To increase views: <ul style="list-style-type: none"> - Focus on engaging topics - Be sure the videos/podcasts are adequately promoted - Re-purpose, as appropriate |

Source: DR 1055, NorthStar Analysis.

- The communications audit pointed out that Daily Digest, @Work articles, podcasts and videos are all forms of communication that require cooperation from the intended audience, and suggested possible opportunities to reinforce messages where employees cannot avoid them.¹³³ Additional recommendations in the audit include:
 - Prioritization: Create an editorial calendar to help ensure focus areas aren't competing against each other and help increase message saturation.
 - Repetition: After distributing a comprehensive set of information, subsequent materials should strive to repeatedly emphasize individual takeaways to make it easier for audiences to practice the suggested behavior change.
 - Simplicity: Key takeaways outlining the benefits for the reader should be consistently elevated and highlighted.
 - "Shareability": Materials should be "shareable" – sufficiently entertaining to compel a user to share and discuss with colleagues and drive a change in behavior. Additional materials should be created and tailored to field employees.¹³⁴
- In November 2018, the vendor began to provide creative support to PG&E's Safety & Health communications.¹³⁵

29. PG&E has adequately addressed all elements of NorthStar's 2017 recommendation regarding communications.

- NorthStar's 2017 recommendation regarding the safety communications plans is as follows: IX-1 – Develop and implement a strategic communications plan that does not overwhelm employees with too much information, but effectively addresses the issues identified in the January 2015 Monitor 360 Study, the 2016 Premier Survey (and PG&E's narrative analysis).

¹³³ DR 1055

¹³⁴ DR 1055

¹³⁵ DR 1055

- PG&E's Internal Audit review of the implementation of NorthStar's recommendation noted that the 2018 Safety Communications Plan did not directly address the issues identified in the January 2015 Monitor 360 Study and the 2016 Premier Survey. Safety & Health responded to the Internal Audit concerns, as documented in the final completion narrative.¹³⁶ Internal Audit accepted PG&E's response and determined the implementation to be complete on October 23, 2018.¹³⁷
- NorthStar reviewed Safety & Health's explanation regarding the implementation of issued raised in the 2015 and 2016 surveys, and agrees with PG&E's assessment that implementation of Recommendation IX-1 is complete.

Recommendations

21. Implement the recommendations identified in the outside vendor's communications audit.
22. Revise the communications plan as necessary to address any safety and health issues that are identified in recent and on-going Premier surveys and associated analyses

¹³⁶ DR 1057 Attachment 1

¹³⁷ DR 1057 Attachment 2