



A  Sempra Energy utility®

Risk Assessment and Mitigation Phase Cross-Functional Factor

(SDG&E-CFF)

Introduction

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CROSS-FUNCTIONAL FACTOR: INTRODUCTION

I. INTRODUCTION

SDG&E's inclusion of this cross-functional factor (CFF) Volume is similar to the cross-cutting factors first presented by PG&E in their 2020 RAMP submission, providing additional information regarding foundational, safety-related initiatives that are associated with more than one RAMP risk. In response to feedback received, the Companies created the CFF volume to address some of the various topics raised by parties that would not be standalone risk chapters. The CFFs provide this information in chapter format for ease of presentation, rather than dispersing it throughout the RAMP Report.

SDG&E's CFF Volume comprises the following eight chapters:

A. CFF-1: Asset Management

Asset Management is an enterprise-wide framework that provides a standardized approach for managing risk and safety across assets and activities. The framework integrates people, processes, data, and technology to enable data-driven decision making through governance, strategy, data consolidation and analytics, and continuous improvement. The Asset Management CFF therefore spans multiple lines of business and helps address several RAMP risks in this Report.

B. CFF-2: Climate Change Adaptation, Energy System Resilience, and Greenhouse Gas Emissions

Climate Change Adaptation, Energy System Resilience, and GHG Emissions are being introduced as CFFs due to the influence they may have on certain RAMP risks. The nature of these CFFs and the activities associated with them are not easily quantified with respect to measuring their effects on particular RAMP risks. However, these factors are discussed by SDG&E because of their significance and to share SDG&E's policies and activities in looking at ways to mitigate certain RAMP risks.

C. CFF-3: Emergency Preparedness and Response and Pandemic

SDG&E's Emergency Preparedness & Response (EP&R) and Pandemic is included in the 2021 RAMP as a CFF to describe how SDG&E's Emergency Management Department coordinates the emergency preparation and emergency operations of several internal departments and external agencies, and to describe the many activities initiated by different groups responded to the COVID-19 Pandemic. EP&R activities include planning, training, exercising, and

supporting responses and recovery efforts related to incidents, emergencies, disasters, and catastrophes. These provide a high level of safety through informed decision-making and improved responders' competency and confidence of responders across all operational areas. COVID-19 introduced several pandemic-related activities in 2020, with many of them carrying into and beyond 2021. While future pandemics are unpredictable, the applicable departments will implement the processes and procedures that were identified and refined during COVID-19 if similar events occur in the future.

D. CFF-4: Foundational Technology Systems

Foundational Technology Systems is included in the 2021 RAMP as a Cross Functional Factor due the criticality and necessity of providing SDG&E stable technology platforms. These foundational technology systems are used in every aspect of operations, customer engagement, and emergency response. Included are a significant portion of the Companies' software application systems, communication networks, monitoring systems, end-user systems, and hardware and software platforms hosted in the Companies' data centers and on internal and external cloud platforms. The safety and reliability of operations depends on Foundational Technology Systems; thus, it is critical for these systems to be resilient and recoverable to allow focus on mitigating risks.

E. CFF-5: Physical Security

Physical security encompasses the systems and activities that maintain the safety of employees, contractors, vendors, the public, SDG&E facilities, and infrastructure, through people, processes, and technology. Having a strong physical security program is foundational to many of our RAMP risks.

F. CFF-6: Records Management

Inadequately maintained records can have impacts on employee and public safety as well as reliability. For example, safety protocols must be followed in day-to-day operations, and if there are inadequate documents for asset operations or inaccurate operational systems integrity documents being relied upon, the safety repercussions can be detrimental. The presentation of Records Management as a CFF is to highlight the role that adequately maintained records, embedded within many of the RAMP risk controls and mitigations, may have in contributing to the company's overall safety and reliability.

G. CFF-7: Safety Management Systems (SMS)

Established in 2020, SDG&E's current Safety Management System (SMS) is a systematic, enterprise-wide framework to manage and reduce risk and promote continuous improvement in safety performance through deliberate, routine, and intentional processes. Safety is a core value at SDG&E, and its safety-first culture focuses on its employees, customers, and the public, and is embedded in every aspect of the Company's work. The SMS implements Five Pillars of Safety¹ to focus on both individual safety behaviors and process safety management. The Five Pillars of Safety are: (1) People Safety, (2) Asset Management, (3) Gas and Electric Operations, (4) Risk Identification and Management, and (5) Emergency Preparedness and Incident Response. Given the impact and reach of the SMS, it is included as a CFF.

H. CFF-8: Workforce Planning/Qualified Workforce

SDG&E endeavors to maintain a workforce with the proper skills and experience in order to execute work in a manner that's safe to both employees and the public. In order to accomplish that goal, SDG&E utilizes a decentralized workforce planning model whereby each department plans for its current and future resource needs and also identifies the necessary training that goes with those needs. This decentralized model is assisted by the Human Resources Organizational Effectiveness (OE) department that works with various operating departments to not only implement leadership training, but also to assist in developing and maintaining a skilled, safe, and qualified workforce. Workforce Planning/Qualified Workforce is "cross-functional" in that the activities and support provided by OE are built into many of the controls and mitigations associated with the RAMP risks.

¹ Refer to Figure 1 within SDG&E's SMS Cross Functional Factor Chapter (CFF-7).