

EXECUTIVE SUMMARY

Recent catastrophic wildfires in California have created a new reality for large investor-owned utilities (IOUs) in California. With this, the California electric industry and the State of California must address the increasing risks that come from operating the largest electric system in the US in a State that is on the front lines of developing mitigation strategies for a changing climate.

The recent report by Governor Newsom's Strike Force, [Wildfires and Climate Change: California's Energy Future](#), recommended strengthening utility regulation and enforcing safety standards that reflect the new safety realities for utilities. This recommendation is the result of the last five years of deliberations between the Commission, utilities, stakeholders, the legislature and Executive Branch on developing a new sustainable utility safety framework for California in the 21st century.

Since the adoption of a [Safety Policy](#) (see Appendix B) for utilities in 2014, the Commission, working with the California electric industry and stakeholders, has developed this framework which includes adding a new risk-informed decision-making process as part of a utility's general rate case (GRC) proceeding. California's large IOUs now provide a report on their assessment of public safety risks associated with their operations and infrastructure every three years. Included in the report are preliminary mitigation proposals that attempt to identify the safety benefits of each mitigation to enable greater accountability and transparency in a utility's investment requests. This Risk Assessment and Mitigation Phase (RAMP) report is reviewed by the CPUC Safety and Enforcement Division (SED). SED produces an assessment or review (Review) of the utility RAMP report. In its review, SED examines how well the utility explains public safety risks in its service territory. Next, SED assesses whether there is satisfactory justification for the proposed mitigations based on the utility's estimated reduction in safety risk.

This review process has been in place since 2016 with both SEMPRA Utilities and Pacific Gas and Electric Company (PG&E) having previously submitted their RAMP reports with subsequent SED Reviews. This is the first RAMP report submitted by Southern California Edison (SCE) and is intended to address the utility's safety mitigation efforts within its service territory through 2023.

A NEW UTILITY SAFETY FRAMEWORK FOR CALIFORNIA

With the recent passage of Senate Bill (SB) 901, Governor Newsom's Executive Order on Wildfire Safety (N-05-019) and recent Commission Decisions related to utility safety, an evaluation of SCE's report was done within the context of a new era in utility safety and a new relationship between the IOUs and the citizens of California.

The signing of SB 901 in September 2018 serves as an agreement between the utilities and California. The Executive Order directed State agency attention and actions toward vulnerable communities, those communities with the highest public safety risk in the State. The Strike Force recommendations include reviewing high-risk industry regulatory models and exploring options for incorporating the latest climate work, such as the State's recently published [4th Climate Assessment](#).

Adding to this evolving regulatory setting was the fact that the SCE RAMP Report is the first to utilize a fully developed risk modeling protocol that was under development for the past five years through the Commission's Safety Model Assessment Proceeding (SMAP). With the first use of a Multi-Attribute Risk Score (MARS) that enables the comparison of risks across a utility's operations, a more comprehensive conversation is possible about risks, mitigations, and tradeoffs as part of a utility's general rate case proceeding. SED chose to do a full evaluation that meets the original intent of the Commission Decision adopting the RAMP process. That intent is to determine if a utility has fully identified the public safety risks within its service territory and then developed a mitigation program that is sufficiently supported by data and risk analytics.

Unlike the RAMP reports submitted by PG&E and SEMPRA, SCE's RAMP report was also complemented by two coincidental SCE submissions to the CPUC, their Wildfire Mitigation Plan (WMP) for 2019, and a March 2019 RAMP Report addendum that SCE voluntarily submitted to the Commission.

EVALUATION OF SCE RISK ASSESSMENT AND SAFETY MITIGATION PROPOSALS

The SCE Report identifies nine primary risks to public safety, including wildfire, cyberattack, and contact with energized equipment. The SED Review follows through on one Strike Force recommendation by utilizing a common tool in high-risk industries to prioritize the risks identified by SCE. By ranking SCE risks in terms of safety priorities, the CPUC can better evaluate where additional utility investment is needed. Using a format common in the chemical process industry, SED ranked wildfire safety and flooding/mudslides as Tier 1 risks that have the potential of catastrophic or cascading failure impacts on public safety. Tier 2 risks which are classified as standard operation risks that electric utilities must address on a day-to-day basis. Tier 2 risks defined by SED consists of 1) contact by energized equipment, 2) cyberattacks, 3) physical security, 4) underground equipment failure, 5) occupational (employee, contractor) safety and 6) seismic risks to generation, distribution and transmission assets. Tier 3 risks were defined as utility risks regulated by the Federal government, specifically hydro asset safety and nuclear decommissioning, storage and transportation.

In terms of the proposed mitigation plans that SCE put forth in its Report, the SED evaluation exposed shortcomings and lack of supporting information to justify the proposed utility expenditures.

For example, for the risk of contact with energized equipment, SED evaluation of this risk through an examination of reported injuries and fatalities associated with SCE operations from

2014 through 2018 indicate that this safety risk is in decline and SCE has shown improvement in safety performance for this risk. This evaluation also identified the key risk drivers and confirmed that events such as downed wires and mylar balloons have a limited impact on this risk. Yet SCE is proposing a mitigation effort costing over \$1/2 billion and its primary mitigation, covered distribution lines, does not address some of the major drivers for this risk.

For wildfire safety, unlike Sempra and PG&E in their prior RAMP filings SCE had three opportunities to propose mitigations with supporting documentation, 1) the RAMP report, 2) the Wildfire Mitigation Plan and the 3) SCE's RAMP addendum that it submitted in March 2019. For Wildfire Safety in particular, SCE submitted two different conflicting proposals in the WMP and RAMP filings. Additionally, the RAMP Report and addendum only address wildfire safety associated distribution assets and did not address wildfire risks associated with SCE transmission assets. This resulted in confusion and limited understanding of what SCE's actual wildfire mitigations proposals are for 2019, which the WMP covered, or for the years 2018 – 2023, which is the period of interest for the RAMP Report and upcoming general rate case. Also, all three documents omitted proposed expenditures for wildfire response and recovery. SB 901 amended Public Utilities Code Section 8386 with a requirement that utilities include a description of how it plans to prepare for and restore service after a wildfire. Yet in its WMP and both RAMP documents, SCE proposed no activities or funding for response and recovery efforts, unlike what the other two California IOUs proposed in their recent Wildfire Mitigation Plans.

With recent changes to California utility laws and regulations, electric utilities in the future will need to produce RAMP reports and Wildfire Mitigation Plans that identify all mandated program components and support risk-informed decision-making for proposed safety mitigation plans in upcoming general rate case filings.

CONCLUSIONS

While the SCE RAMP Report did break new ground in terms of risk modeling and assessment, it failed to fully identify all public safety risks within its jurisdiction¹. Inconsistency and in some cases, contradictions in SCE's RAMP Report with other documents indicate that SCE management needs to better coordinate planning and executing utility safety programs to protect the public. For its upcoming general rate case filing, this Review makes recommendations for how SCE should address this Report's shortfalls to allow the Commission to make a fully informed and vetted decision on the SCE funding requests. In closing, this Review exhibits the importance of in-depth regulatory review of utility safety programs, furthers the Commission's efforts in crafting transparent and accountable risk-informed

¹ In I. 16-08-018, Commission Order instituting investigation in to the risk assessment and mitigation phase submission of Southern California Edison Company was opened in accordance with the procedures adopted in D.14-12-025 and D.16-08-018. Those two Decisions requires the utility to prioritize risk mitigation and specifies a protocol that utilities must follow in identifying and prioritizing risks. This includes the utility starting with all risks listed in its enterprise risk register. The Safety Model Assessment Proceeding Final Decision D.18-12-014 established this protocol as Commission policy that all utilities are required to follow in their RAMP filing.

decisions and actions, and supports California's new utility safety framework. It is hoped that it results in stronger and sustainable utility safety program that results that minimizes public safety risks and maximizes resilience and reliability.