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VIA E-MAIL

Caroline Thomas Jacobs
Director, Office of Energy Infrastructure Safety
715 P Street, 20th Floor
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**RE: SDG&E Comments to Energy Safety Draft Decision Approving SDG&E's 2022 WMP (Draft Approval)
Docket 2022-WMPs**

Dear Director Thomas Jacobs:

San Diego Gas and Electric Company (SDG&E) hereby provides comments to the Office of Energy Infrastructure Safety's (Energy Safety) May 19, 2022 Draft Decision approving San Diego Gas & Electric's (SDG&E) 2022 Wildfire Mitigation Plan (WMP or Plan) Update released by Energy Safety on May 19. SDG&E greatly appreciates Energy Safety's thoughtful and thorough review of SDG&E's 2022 WMP. SDG&E's comments focus on areas where it believes there are opportunities for greater clarity or improvements to existing processes.

I. GENERAL COMMENTS

At the outset, SDG&E appreciates Energy Safety's thoughtful and thorough review of SDG&E's 2022 WMP Update. SDG&E continually strives to remain a leader in wildfire mitigation efforts, leveraging its experience, technological enhancements, and community partnerships to identify strategies and initiatives to reduce the risk of wildfire and minimize the impacts of Public Safety Power Shutoffs (PSPS). SDG&E's comments focus on areas where it believes there are opportunities for greater clarity, to reduce redundancies, or to make improvements to existing processes.

The Draft Approval includes several recommendations regarding increased collaboration through "new and existing working groups"¹ focused on several aspects of wildfire mitigation efforts. There are certainly benefits gained from workshops and working groups as the electrical corporations continue to build and identify best practices related to risk modeling, covered conductor, vegetation management, climate change, and new technologies. But SDG&E cautions that the implementation of additional working groups and increased execution of collaborative requests continues to put additional strain on the same resources responsible for executing the WMPs and working to mitigate the risk of wildfire. SDG&E respectfully requests that, in

¹ Draft Approval at 3.

ultimately creating and scheduling new working groups, Energy Safety weigh the benefits of additional working groups against the time and resources necessary for participation.

Finally, to the extent additional working groups are sought, it would be helpful for all parties to understand the objectives and end goals of the collaborative efforts. A clearly defined scope and sense of direction will go a long way in promoting efficiency and ensuring the effort is productive.

II. COMMENTS ON SPECIFIC AREAS OF IMPROVEMENT IDENTIFIED BY ENERGY SAFETY

a. Energy Safety Should Continue to Recognize that Risk Modeling is an Evolutionary Process and Avoid Imposing Additional Modeling Requirements for the 2023 WMPs Prior to New Guidelines

Energy Safety identified improvements to wildfire risk and consequence and equipment failure modeling as a key theme for improvement in future SDG&E WMPs.² Several of the identified areas of improvement also address potential changes to risk assessment and additional scoping meetings and potential working groups. SDG&E has been and remains a leader in risk assessment in part because of its continual efforts to improve risk models and increase available data. As Energy Safety notes, SDG&E has improved its PSPS modeling capabilities with the development of the Wildfire Next Generation System-Operations to scope and forecast Public Safety Power Shutoff Events.³ And SDG&E believes that risk modeling and assessment should be an iterative and evolutionary process that fosters the use of additional information where available. To that end, SDG&E believes there are benefits to continuing the ongoing risk modeling working groups hosted by Energy Safety and leveraging the existing working group to address some of the issues identified as areas for improvement—particularly those applicable to all electrical corporations.

Given the existing record at this time, SDG&E believes it is premature to mandate the incorporation of specific additional risk factors into the 2023 WMP approval. For instance, the Draft Approval appears to require SDG&E to “incorporate” risks associated with vulnerable communities, fire suppression efforts, fire duration, and climate change after evaluation and/or coordination with other utilities.⁴ SDG&E appreciates that the required areas for improvement in 2023 generally require the participation in available scoping meetings and continued efforts in the risk modeling working groups. Energy Safety should leverage these efforts to develop a comprehensive record regarding the merits of these various proposals and their effectiveness at mitigating the risk of wildfire consistent with Senate Bill 901 and Assembly Bill 1054. SDG&E has concerns that, without additional study, requiring the incorporation of certain factors, including but not limited to community vulnerability and fire suppression resources, may prove to be unhelpful with respect to targeting wildfire hardening efforts and other WMP initiatives.

² Draft Approval at 3.

³ Draft Approval at 2.

⁴ See e.g., SDG&E 22-04, SDG&E 22-05, SDG&E 22-06.

Finally, Energy Safety and stakeholders must understand that due to the long-term planning required to implement grid hardening projects such as covered conductor and strategic undergrounding, SDG&E must rely on the risk models currently in place to select and prioritize projects to achieve and maximize immediate and near-term wildfire mitigation benefits. And consistent with its 2022 WMP Update, SDG&E will continue with planned projects based on existing models. SDG&E is open to discussions regarding modeling improvements, but changes to the modeling will inform future initiatives and should not result in Energy Safety or stakeholders reopening approved projects to question in hindsight.

SDG&E thus requests that Energy Safety continue to facilitate discussions regarding risk assessment and mapping with the understanding that risk assessment is a continually evolving process that should promote forward-looking innovation and improvements. Energy Safety should further recognize and coordinate efforts with the California Public Utilities Commission (Commission), who continues to assess the utilities' assessments of risk (regarding wildfire as well as other matters) through various proceedings, including the RAMP, S-MAP, and Risk OIR. Because of the significance of these matters to SDG&E's long-term planning, wildfire hardening initiatives, and to maintain consistency, coordination among all parties is essential.

b. SDG&E's Existing Situational Awareness Tools and Emergency Response Better Address Real Time Faults and Outages

In SDG&E 22-10, Energy Safety requires SDG&E to describe how it explored using real time wildfire consequence modeling on the locations of faults and outages in the HFTD. This modeling is not necessary and would likely serve to distract real time emergency response and resiliency efforts. While SDG&E is continuing to advance and enhance its risk modeling efforts, both on the likelihood and consequence side, there is little benefit to implementing wildfire consequence modeling on the location of faults as they happen in real time.

In real time all outages/faults that occur on the system will immediately have a first responder dispatched to investigate. SDG&E has operational processes where SDG&E strategically places Electric Troubleshooters in each district of the territory to respond to outages. Also, service level agreements are in place for response time if additional resources need to be called out. This real time response, coupled with SDG&E's existing situational awareness tools such as cameras, smoke detection, and weather stations—in addition to SDG&E's relationships with emergency response teams—allow for rapid and efficient real time response to risk events.

Fault and outage information do provide relevant data points to inform modeling efforts and improve situational awareness. SDG&E incorporates all outages and faults into the development of its Probability of Ignition models. The integration of outage and fault data in risk modeling will help better understand the drivers of faults and resulting ignitions, ultimately gaining a deeper understanding of risk events that could lead to ignitions.

c. SDG&E Will Continue to Explore and Collaborate Regarding New Grid Hardening Technologies, but the Scope and Expectations of These Efforts Should Be Clarified

SDG&E-22-11 requires the utilities to provide additional information regarding lessons learned from and WMP changes made as a result of the covered conductor effectiveness study. SDG&E 22-13 further requires that the electrical corporations expand the covered conductor effectiveness study to address the effectiveness of new technologies to support grid hardening

and situational awareness, and broadens the scope to “cover grid hardening overall.”⁵ SDG&E does not object to continuing the efforts of the covered conductor effectiveness study, but requests that Energy Safety clarify its expectations regarding the scope and goals of the expanded effort.

SDG&E will continue to participate in, learn from, and implement lessons learned from the joint IOU covered conductor working group. The “alternatives” to covered conductor including rapid earth fault current limiter (REFCL), open phase detection (OPD), and early fault detection (EFD) are not considered by SDG&E as true alternatives, but instead additional technologies that can be used in addition to covered conductor. These technologies are all system protection initiatives that can help reduce the available fault current during a fault or detect faults that existing technology cannot detect, but will not stop a fault from occurring. Covered conductor, conversely, can help eliminate faults from foreign object contact. Therefore, the effectiveness of covered conductor itself would not change by implementing these other initiatives, but the overall risk reduction on the circuit or circuit segment could be improved by layering these technologies.

With respect to new technologies, SDG&E provided a detailed description of its analysis of REFCL, the costs to implement the technology, and the expected benefits of employing the technology.⁶ While SDG&E does not currently intend to pursue REFCL, SDG&E will continue to collaborate with the joint California IOUs to gain additional insights regarding system protection technologies for safety and wildfire mitigation.

In the 2022 WMP Update, SDG&E provided a number of examples of wildfire mitigation technologies under consideration. Section 4.4.2 describes SDG&E’s initiative to perform lab tests of covered conductor and partnership with the University of Wisconsin-Madison to detect fires using satellite imagery. Additionally, Section 7.1.5 describes several areas where SDG&E is exploring the integration of new technologies to reduce the risk of ignition and wildfire, including but not limited to Early Fault Detection (EFD) and Wire Down Detection (WDD) which are part of SDG&E’s Advanced Protection initiative (7.3.3.9). EFD utilizes sensors that proactively monitor the distribution system to detect failing overhead equipment before it can permanently fail and cause an outage or ignition. WDD utilizes existing Advanced Metering Infrastructure (AMI) data to detect high impedance faults that would previously have been undetected and could result in an ignition.

The expansion of the covered conductor study to review these additional technologies and other grid hardening initiatives will include new subject matter experts (SMEs) that are not currently participating in the working group for covered conductor. Bringing on additional SMEs to the covered conductor working group will further the burden on this working group which is already working on several workstreams. The inclusion of all grid hardening initiatives—totaling seventeen in SDG&E’s 2022 WMP Update—would also create a working group too large with a scope too broad to be effective.

For these reasons, SDG&E requests that Energy Safety clarify the scope increase requested for the covered conductor study, and review these additional technologies in a separate

⁵ Draft Approval at 113-114.

⁶ SDG&E 2022 WMP Update at 77.

workstream or workshop that would be addressed outside of the covered conductor effectiveness joint study.

d. SDG&E's Enhanced Fuels Treatment Is Backed By Reasonable Evidence and Provides Additional Wildfire Mitigation Benefits

Within the Draft Approval, Energy Safety states that it considers the choice of a 50-foot foot radius of fuels removal around selected poles as arbitrary and having no scientific backing.⁷ The 50-foot radius was selected to account for instances of catastrophic pole failure, and/or where pole-attached equipment subject to Public Resources Code 4292 clearance requirements may eject molten material beyond the required minimum 10-foot clearance radius. Increased thinning of fuels surrounding poles also presents the added benefit of worker safety and work site accessibility and can help reduce instances where facility maintenance activities may cause an ignition.

SDG&E will continue to consider alternatives to fuels modification such as grid hardening, undergrounding, covered conductor, etc. Additionally, SDG&E is currently working with a third-party vendor to study its methodology for fuels treatment activities including other alternatives such as fire retardant and the use of animal husbandry. It may prove difficult in the short term and prior to submission of the 2023 WMP to quantify the additional risk reduction associated with the increased radius due to data limitations or absence of usable data. SDG&E requests that Energy Safety allow SDG&E the time to perform this analysis with sufficient data to the extent it is not available prior to submission of the 2023 WMP.

e. Given SDG&E's Timeframe for Covered Conductor Installation, Energy Safety Should Allow Additional Time to Assess The Impacts of Covered Conductor on PSPS

SDG&E 22-23 requires SDG&E to coordinate with the other utilities regarding the impacts of covered conductor on PSPS events. SDG&E will continue to participate in, learn from, and implement lessons learned from the joint IOU covered conductor study. SDG&E will continue to review the impact covered conductor can have to PSPS mitigation, but these changes may not yet be implemented in time for the filing of the 2023 Wildfire Mitigation Plan. SDG&E implements PSPS on a full segment between two SCADA enabled sectionalizing devices. SDG&E has stated that the first fully covered circuit segment would not be completed until the end of 2023. SDG&E will continue to make progress on understanding the impacts covered conductor can have on PSPS wind speed thresholds, but may not be able to be put these into practice until late 2023. SDG&E will continue to use this time to gather as much information as possible, leveraging workstreams with other utilities, to implement changes to how PSPS will be used on fully covered circuit segments.

⁷ Draft Approval at 70.

f. Energy Safety Should Continue to Permit SDG&E to Assess Vegetation Management RSE Estimates Based on its Existing Schedule and Work Management Platforms

SDG&E 22-27's requirements to prepare vegetation management RSE estimates at a more granular level would likely not improve the effectiveness of its vegetation management initiatives and conflicts with its existing methods of tracking vegetation management work. SDG&E conducts all its activities following an annual Master Schedule using the Vegetation Management Area (VMA) polygons to plan, schedule, and perform work. SDG&E's service territory is broken into 133 geographically distinct VMAs, each that may encompass multiple circuits. The VMA boundaries are static and were drawn using varying inputs including jurisdictional borders (cities, municipalities), SDG&E district borders, etc. The size and shape of the VMAs also reflect a relative parity in the population of inventory trees. This is important to maintain a relative consistency in the work volume for the Vegetation Management contractors and planned resource needs. SDG&E has followed this planning strategy for multiple decades and feels it is the most effective in planning and executing its program.

That said, SDG&E will continue to explore options to assess vegetation risk at the circuit level. Vegetation Management does record the electric circuit number within its tree inventory database, and can use this information as well as RSE calculations and risk modeling to identify and determine relative risk at the circuit level.

g. Requirements Regarding Modeling Improvements May Conflict With Forthcoming 2023 WMP Guidance

SDG&E 22-31 requires SDG&E to provide an update on the performance of WiNGS-Ops and WiNGS-Planning models with respect to the PSPS decision-making process. SDG&E notes that it is continually working to update and modify its WiNGS-Ops and WiNGS-Planning models to be accurate and up to date. However, SDG&E is concerned that this requirement appears to conflict with a proposal from Energy Safety during the pre-draft 2023 WMP guidelines workshop.⁸ Energy Safety proposed to "freeze" fundamental risk models and high-level mitigation strategies and limit changes to those achieved through the petition process.⁹ While SDG&E does not object to SDGE-22-31, requirements such as these may be hindered in future WMP iterations if the proposed modeling freeze and petition process is included in the final 2023 WMP guidelines.

III. SDG&E REQUESTS CORRECTION OF ERRORS IN THE DRAFT APPROVAL

SDG&E respectfully wishes to clarify three references in Energy Safety's draft report approving SDG&E's 2022 WMP. These include:

⁸ Energy Safety's Pre-Draft Workshop help April 22, 2022.

⁹ Energy Safety Pre-Draft Workshop slides at 32.

1. The report states that SDG&E had five vegetation-related ignitions in 2021. SDG&E's Q4 QDR non-spatial data tables that showed these five vegetation-related ignitions in 2021 was incorrect. SDG&E's updated 2022 WMP Table 7.2 corrected this error and reflects that SDG&E has *zero* vegetation-related transmission or distribution ignitions in 2021.¹⁰
2. SDG&E installed a circuit *section* of covered conductor, but not the *full* segment, which is scheduled to be completed in 2023.¹¹
3. While SDG&E cannot quantify how many customers will benefit due to many competing factors that go into PSPS thresholds, customers *are* beginning to experience benefits of the wind thresholds being raised from 35-45 mph due to overhead distribution hardening.¹²

IV. CONCLUSION

SDG&E thanks Energy Safety for their thoughtful review and requests that Energy Safety take these recommendations into account in the process of issuing a final approval of SDG&E's 2022 WMP update.

Respectfully submitted,

/s/ Laura M. Fulton
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¹⁰ Draft Approval at 69-70.

¹¹ Draft Approval at page 77.

¹² *Id.*