BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018)	R.18-10-007 (Filed October 25, 2018)

COMMENTS OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) ADDRESSING APPROVAL OF ITS 2021 WILDFIRE MITIGATION PLAN

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INTRODUCTION

Pursuant to Rule 11.1 of the California Public Utilities Commission's (Commission) Rules of Practice and Procedure, San Diego Gas & Electric Company (SDG&E) files its comments addressing the Draft Resolution Ratifying the Wildfire Safety Division's Approval of SDG&E's 2021 Wildfire Mitigation Plan Update (WMP or Plan Update).[1]

I. Introduction and Summary

As California approaches the 2021 fire season, safety remains SDG&E's top value, and wildfire mitigation a top priority. As it has for nearly a decade, SDG&E continues to innovate and improve its wildfire mitigation initiatives in an effort to keep its communities safe through situational awareness, prevention, communication, and collaboration. SDG&E takes pride in continuing to be a leader in wildfire prevention and mitigation activities and appreciates the Commission's proposed approval of its 2021 WMP Update. SDG&E provides the following comments to address aspects of the Draft Resolution approving SDG&E's 2021 WMP Update and the Draft Action Statement provided by the Office of Energy Infrastructure Safety (OEIS),

[1] Draft Resolution WSD-019; "Resolution Ratifying Action of the Wildfire Safety Division on San Diego Gas & Electric's 2021 Wildfire Mitigation Plan Update Pursuant to Public Utilities Code Section 8386" (June 10, 2021) ("Draft Resolution").

namely transparency, consistency in risk modeling approach across utilities, covered conductor effectiveness and detail around mitigation efforts.

II. SDG&E-1: SDG&E Focuses on Mitigating Ignition Sources Within Its Control

The Draft Action Statement requires SDG&E to further explain how third-party ignition sources feed into its risk models, and prioritization of ignition sources.[2] SDG&E will continue to provide more clarity on how it targets its mitigation efforts to focus on ignition drivers that are within the utility's control. SDG&E's models are built on its ignition dataset which encompasses all types of ignitions. But SDG&E primarily focuses its wildfire mitigation efforts on identifying and targeting mitigations remains on ignition sources over which it has direct control, such as equipment and vegetation-related ignitions. This is evident through SDG&E's Plan, including SDG&E's programs geared towards maintaining and hardening the system to reduce equipment-related failures as well as vegetation activities to reduce the risk of trees coming into contact with the power lines. While these programs are not primarily geared towards mitigating other third-party ignition sources such as vehicle contacts or balloon contacts, as a byproduct of applying these programs, SDG&E believes there is a potential to reduce these ignitions as well. For instance, the potential for ignitions caused by vehicle contacts is mitigated by the replacement of wood poles with steel poles because the steel poles are more resilient to vehicle damage. And mylar balloon contacts are mitigated by the wider spread of the wires, allowing for balloons to more readily to go through the wires rather than getting caught between the wires.

[2] Draft Action Statement, SDG&E-1.

III. SDG&E-2 and SDG&E-11: SDG&E Supports IOU Benchmarking and Alignment Efforts

SDG&E supports the WSD's desire to increase alignment in risk modeling where appropriate. To that end, SDG&E has started participating in benchmarking sessions with the other large IOUs to learn more about each utility's different approaches and identify opportunities for alignment in the future. It is important to note that there are other proceedings that can influence these efforts, such as the S-MAP. Any effort to drive alignment on risk modeling should be coordinated with those proceedings to avoid conflicting or duplicative efforts. Further, finding alignment on risk modeling can and should take time to allow for thoughtful discourse. As a point of reference, the first S-MAP attempted to align utility risk models in a year, but it took three years to reach a settlement agreement on guidelines for developing their risk models that utilities now follow. Finally, with varying maturity levels in risk modeling, utilities will continue to have differing approaches based on the availability and quality of their data as well as other factors that can affect each utility's ability to implement certain approaches.

IV. SDG&E-3: SDG&E Continues to Assess the Effectiveness of Covered Conductor

SDG&E's estimate of the effectiveness of covered conductor builds on the efficacy studies previously conducted on bare conductor hardening programs that have multiple years of data to support it. The effectiveness of these bare conductor hardening programs can be thought of as a starting point of reference to which additional assumptions can be applied to increase effectiveness based on the added benefit of applying covered conductor. SDG&E's approach is reasonable because its foundational standards for implementing covered conductor are similar to those applied for implementing bare conductor hardening projects such as conversion of wood poles to steel poles.

SDG&E recognizes that there are opportunities to improve its assessment of the effectiveness of covered conductor but it is difficult to validate assumptions without broader implementation and gathering of data over multiple years. To continue to improve its ability to assess the effectiveness of covered conductor, SDG&E is collaborating with the large IOUs to further evaluate the covered conductor material, combine research that has been performed, and develop lessons learned for future improvements, along utilizing during PSPS events.

V. SDG&E-4: SDG&E Supports a Joint Study

SDG&E appreciates the WSD acknowledging that SDG&E has already submitted its study measuring the effectiveness of extended vegetation clearance as part of its 2021 WMP Update. SDG&E will certainly participate and contribute to a joint multi-year study of vegetation clearances, but notes that SDG&E's data currently meets the requirements. The study provided in the 2021 WMP Update clearly demonstrates that enhanced clearances—particularly with respect to certain tree species in SDG&E's service territory—reduce the risk of vegetation contact, and thus ignitions which could lead to a catastrophic wildfire. SDG&E will participate and assist with the multi-year study addressing clearances statewide, but wishes to clarify that its data and study regarding the effectiveness of enhanced clearance has been completed and demonstrated within SDG&E's service territory.

VI. SDG&E-5: Identification of Vegetation by Species is Neither Practical Nor Beneficial for Reducing Wildfire Risk

The Draft Action Statement requires SDG&E to "ensure proper identification of trees to the species level,"[3] but fails to explain how further classification of trees at the species level will be beneficial to reducing wildfire risk. The recording of species using taxonomic nomenclature

[3] Draft Action Statement, SDG&E-5.

has little to no relative value in determining proper and safe time-of-trim tree clearances. SDG&E maintains an electronic record of its approximately 450,000 inventory trees using the common name (i.e. genus). Building on SDG&E's vegetation management experience, the common name is appropriate and applicable in documenting tree growth rates and failure characteristics. Classifying by the subspecies level would create unreasonable and burdensome levels of work and cost which are not commensurate with the benefits of such an initiative. Some genera, such as eucalyptus, include hundreds of individual species, many of which have very similar growth patterns and failure rates. Due to these similarities in species type, classification at the species level would be unnecessary and would not result in the modification to the approach in management.

Alternatively, SDG&E proposes using its existing knowledge to identify particular species that pose additional outage risks, such as certain types of pine, and initiating a pilot for which only these particular species are identified with the required specificity. This would allow a more targeted approach that could result in corresponding benefits, to the extent any benefits exist from such a strategy, rather than a blanket vegetation management strategy that poses an unreasonable level of burden and cost. SDG&E proposes developing a list of trees and vegetation that will be identified by species through a working group or joint study with the other utilities to address concerns regarding consistency.

VII. SDG&E-6: Further Quantitative Analysis of "At-Risk" Species May Have Limited Value

SDG&E respectfully asserts it has performed an adequate quantitative analysis, based on its experience in vegetation management throughout the service territory, to determine its "at-risk" species, and that any additional quantitative analysis would have limited value. In identifying species with a high proclivity for tree failure and outage potential, SDG&E assessed

tree-related outage investigations dating back to the early 2000's, outage frequency analysis, known tree growth rates and hazard characteristics. In the Draft Action Statement, the WSD relies on comments from Mussey Grade Road Alliance to determine that SDG&E used inconsistent data in its methodology in determining at-risk species because SDG&E's list of "at risk species" excluded genera with relatively higher instances of outages per year, including cypress and Century plant. Though on its face the data may represent that cypress represents >1 outage per 1000 trees, SDG&E considers this an anomaly based more on the circumstances of the cypress location or other specific qualitative characteristics, rather than the quantitative characteristics of the cypress plant as a whole. The Cypress genus represents a relatively small percentage of SDG&E's total inventory tree population, its growth rate is slow, and does not have a propensity for shedding branches or complete tree failure.

With respect to century plants, these plants pose a unique vegetation management challenge because of the unpredictable timing of its flowering stalk at the end of its life cycle. These plants are not managed by pruning; the flower stalk must be cut soon after it emerges to prevent it from reaching the height of the power lines. Cutting the flower stalk as it emerges, does not immediately kill the plant but does prevent the new bloom from seeding and propogating more century plants. To effectively manage this species SDG&E conducts additional, annual inspections to intercept the flower stalk and uses herbicide to treat Century plants where applicable and approved. To that end, SDG&E's targeted approach to its population of century plants is illustrative of how, while certain categories of species may not be deemed "at risk" for purposes of SDG&E's WMP, SDG&E continues to employ specific strategies to address vegetation management based on the health and circumstance of the plants at issue.

SDG&E further contends that additional quantitative analysis and identification at the individual species level will have limited value pertaining to pruning operations. The quantitative analysis provided in SDG&E's 2021 WMP Update notes that it classifies certain species, specifically Eucalyptus, Palm, Oak, Pine and Sycamore, as high risk because they rank in the top five as far as risk event contribution and account for over 80% of all vegetation-related risk events.[4] Thus, these species are quantitatively the "top five" riskiest trees as established by the data. But SDG&E also establishes clearances for any species at the time of pruning by considering multiple qualitative site-specific factors including species, growth rate, decay, structural defects, etc. In stating that "qualitative evaluation of a tree's risk does not adequately address the quantitative risk of ignition or outage," the Draft Action Statement fails to recognize that in certain circumstances, even the safest of species can pose a threat to electrical lines. Safe pruning requires establishing clearances that may often far exceed recommendations to allow for growth and hazard mitigation. Failure to evaluate a tree based on both quantitative data and qualitative circumstances, however, could result in unnecessary risk of vegetation contacts and inadvertently increase the threat of catastrophic wildfire. As explained in SDG&E's 2021 WMP Update, SDG&E continues to develop and review more data and will continue to update the results of its clearance studies in future submissions.[5]

VIII. SDG&E-7: SDG&E Has Established Targets For All Vegetation Management Initiatives

WSD's description of this issue states that SDG&E only defines quantitative targets for four of twenty vegetation management initiatives. While the WMP template has the space for twenty vegetation management initiatives, SDG&E only defined ten initiatives within the body

[4] SDG&E 2021 WMP Update at 70.
[5] SDG&E 2021 WMP Update at 74.

of its 2021 WMP. Given the overlap of some initiatives, they are also cross-referenced and thus the data supporting some initiatives may in fact support multiple initiative targets. SDG&E has provided quantitative targets for four of the ten initiatives and has provided qualitative targets for the other six initiatives in the Quarterly Initiative Update (QIU). All ten initiatives have clearly defined goals and targets that are being tracked and reported on a quarterly basis.

Furthermore, several of the vegetation management initiatives are not suited for quantitative targets. Creating quantitative targets for these initiatives, such as "Additional efforts to manage community and environmental impacts" and "Vegetation Inventory System" would not help understand the program's intent or SDG&E's progress in these areas. While SDG&E is certainly accountable for compliance with all of its WMP initiatives, these qualitative initiatives are less subject to a quantitative audit than other metrics such as inspections, fuels management, and quality assurance. While Public Utilities Code Section 8386.3 requires an audit of an electrical corporation's vegetation management requirements, that audit is more specifically aimed at those quantitative metrics such as number of trees trimmed and inspected, and not each and every single WMP vegetation management initiative as established by WSD, such as the qualitative targets measured above.[6] Unlike a count of trees trimmed or inspections completed, SDG&E's qualitative initiatives, such as community outreach efforts, its Right Tree Right Place Program, and sustainability initiatives are continuously ongoing, and thus would never meet the statutory requirements of being "complete" as contemplated by Section 8386.3. SDG&E will continue to define quantitative targets for all applicable areas, which will allow for WSD to perform any required audits and will continue to provide updates to qualitative targets within the QIU and future Wildfire Mitigation Plans.

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[6] Pub. Util. Code §8386(c)(5)(A-C).

IX. SDG&E-8: SDG&E is Taking Steps to Validate Its SCADA Switches are Functional

The issue description for SDGE-8 utilizes a line from the SDG&E PSPS post-event report that broadly states that missed PSPS-related notifications "may be attributed to non-communicative SCADA switches." However, this is not the only reason why PSPS-related notifications can be missed. Due to the quick turnaround of the PSPS post event report, full audits and research of these items had not yet completed at the time of SDG&E's analysis as cited by the Draft Action Statement. After review of these PSPS events, only three items were related to an inoperable SCADA switch, and the rest were related to unexpected impacts from weather. Overall, SDG&E has maintained a very reliable 98% communication rate in its fleet of SCADA enabled devices.

The issue description also states, "SDG&E indicates that it has no plans to alter its existing practices to ensure this issue does not continue in the future." This statement overlooks SDG&E's response to Cal Advocates, in which SDG&E details improvements made to address these issues stating, "During the 2020 PSPS season and moving forward, SDG&E has instituted a process to minimize customer impacts of devices being inoperable. The process includes identifying devices out of communication and identifying bypassed SCADA switches prior to the start of an event. Any devices that may impact SDG&E's ability to PSPS will have mitigation measures applied, which include stationing someone to manually switch the device or adjusting the forecasted customer notification lists."[7] Thus, SDG&E is already taking the steps identified in SDG&E-8.

While within the WMP Update SDG&E does not directly discuss steps to validate SCADA switches remain functional or ensure newly installed SCADA switches are functional,

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[7] Cal Advocates Data Request 4, question 11.

this information was also provided as part of CalPA Data Request 4 question 11. SDG&E has internal operating procedures that call for testing SCADA switches in the fire area annually. SDG&E's maintenance procedure provides the guidelines for uniform inspection and maintenance performed at least every six years, and battery replacements every three years on all line SCADA devices. Additionally, newly installed SCADA equipment requires a standardized operational test procedure involving tests of local and remote operations, fault indications, and alarm systems to ensure full functionality.

These responses demonstrate that SDG&E has existing procedures and has developed enhancements to these procedures to ensure that SCADA devices remain fully functional throughout the year. SDG&E requests that the Draft Action Statement be amended to reflect these updates.

X. SDG&E Supports a Change Order Process with Modifications to WSD's Proposal

SDG&E supports a change order process to allow electric utilities the ability to respond to "significant" changes in the approved plan. But OEIS' proposed additional criteria in the change order process should be modified to align with the statutory requirements of PUC Section 8386 and focus on reducing wildfire risk. SDG&E agrees that change orders should be based on "significant" changes; however, given the nature of the work involved in WMP implementation, the proposed criteria for change orders should be revised. As OEIS has stated, the WMP is not about cost recovery. While cost information is important as it relates to RSEs and comparing mitigations, costs included in the current year, WMPs are forecasts which can change for many reasons. Instead, OEIS should base its criteria on whether the scope of a mitigation was purposely increased or decreased greater than 25% (e.g., number of miles of covered conductor purposefully increased or decreased by more than 25%). Mitigation scope is based on a particular activity's ability to reduce wildfire risk and/or the consequences of PSPS impacts on

customers to align with the focus of the WMP. A change in costs without a significant change in scope does not change the underlying intent of a particular mitigation, which should be the focus of a change order report. If scope has not changed and costs increase, the cost increase will be evaluated for reasonableness in a utilities' GRC or other applicable application and should not be litigated in a WMP proceeding, consistent with statutory requirements. Additionally, the subsequent years' plan would have reconstituted RSEs to assess updated costs and benefits. Further, a 25% threshold trigger is more in alignment with a "significant" change than the proposed 10%, which may not be the result of a deliberate risk-informed decision but merely a function of execution variance.

Directionally, SDG&E agrees with criteria for changes in risk reduction and radical shifts in strategic direction or purpose of an initiative. SDG&E offers a few changes to these criteria as well. SDG&E, thus, recommends the WSD modify the change order process proposed criteria as follows:

- A purposeful change that would result in an increase or decrease in the scope of a mitigation activity constituting a greater than 25% change.
- A purposeful change that reduces or increases the estimated risk reduction value of an initiative more than 25% and the scope is purposely changed as a result.
- A purposeful change that results in a radical shift of either the strategic direction or purpose of an initiative (e.g., introducing use of a novel risk model that reverses the risk profile of the utility's circuits).

XI. Additional Issues and Remedies

In addition to the 11 key opportunities for improvement identified in the Draft Resolution, there are additional issues and remedies that provide additional direction on several areas. SDG&E's comments on those additional issues are summarized below:

1. SDG&E is Minimizing Implementation of New Hardening Solutions in Previously Hardened Areas

SDG&E's grid hardening strategy remains focused on reducing wildfire risk in the HFTD as well as finding opportunities to reduce the PSPS risk as an additional benefit of its programs. As SDG&E continues to scope circuit segments for the implementation of covered conductor and undergrounding solutions, it is becoming more evident that in order to maximize PSPS reduction in the areas that are most prone to extreme conditions and frequent PSPS events, the removal or replacement of bare conductors is a necessary component of its scoping strategy. Bare conductors, whether they are hardened or not, continue to pose a risk of sparking ignitions during the extreme weather events that lead to PSPS. As such, although hardening in general can reduce that risk, when a segment is partially bare conductor and partially covered conductor or underground, the need to PSPS that segment will be driven by the weakest component in the segment–the bare conductor.

SDG&E is carefully examining each segment in its scoping effort and evaluating whether the re-hardening of previously hardened bare conductor to either underground or covered conductor can lead to tangible PSPS reductions. Such opportunities to mitigate PSPS will be carefully evaluated to minimize the scope of future re-hardening efforts.. SDG&E thus requests that the Draft Action Statement maintain some flexibility to permit necessary re-hardening efforts where such efforts are considered necessary, such as to minimize PSPS impacts on customers.

2. SDG&E Selects Undergrounding Over Other Alternatives by Considering Both the RSE of Undergrounding as Well as the Overall Risk Reduction Objective

Considering the RSE alone leads to the selection of cost-effective mitigations but results in a limited amount of risk reduction that can be achieved in the long run. SDG&E's long-term strategy for selecting underground considers both the risk reduction potential and objectives as well as the RSE values.

XII. Conclusion

SDG&E appreciates the Commission's review and WSD's approval of its Wildfire Mitigation Plan and respectfully requests that the Commission adopt the Draft Resolution Approving SDG&E's Wildfire Mitigation Plan Update at the Commission's July 15 business meeting in order to finalize guidance on wildfire mitigation activities and programs to be undertaken in 2021 prior to peak fire season.

Respectfully submitted,

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