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Comments of The Utility Reform Network on public Workshop on Safety Requirements to Address Increasing Wildfire Risk from Climate Change and Aging Infrastructure

1. Introduction

Section 326(a)(7) of the California Public Utilities Code requires the Office of Energy Infrastructure Safety (Energy Safety) to “review, as necessary, in coordination with the California Wildfire Safety Advisory Board and necessary Commission staff, safety requirements for electrical transmission and distribution infrastructure and infrastructure and equipment attached to that electrical infrastructure, and provide recommendations to the commission to address the dynamic risk of climate change and to mitigate wildfire risk.”¹ On July 13-14, 2023, Energy Safety convened two days of workshops to discuss the potential modifications to the Commission’s general orders and other directives that would be required to address wildfire and climate change.

The Commission’s General Orders (GOs) were largely drafted before the gravity of the emerging wildfire and climate change threats became clear, but also before the introduction of a wide variety of new technologies now available to support safe and reliable utility service. While TURN supports updating the GOs to reflect our new circumstances, TURN notes any changes to the general orders should balance safety and reliability with the Commission’s charge to ensure that utility rates are “just and reasonable.”²

TURN provides the following initial comments for Energy Safety’s consideration as they develop recommendations for changes the Commission’s General Orders. TURN reserves the right to provide additional feedback on this issue in the future.

2. Any Modifications to the General Orders Should Promote the Goal of Safe, Reliable and Affordable Utility Service.

TURN acknowledges that the California utilities face increasing wildfire and climate change threats that will require investment in utility assets to ensure that these assets continue to provide safe and reliable service. The response to these threats must, however, acknowledge, the ongoing affordability crisis facing California ratepayers. This balance is reflected in Public Utilities Code Section 326(a)(7) which requires Energy Safety to:

Review, as necessary, in coordination with the California Wildfire Safety Advisory Board *and necessary commission staff*, safety requirements for electrical transmission and distribution infrastructure and infrastructure and equipment attached to that electrical infrastructure, and provide recommendations to the commission to address the dynamic risk of climate change and to mitigate wildfire risk.³

Statute explicitly delegates the responsibility for updates to the GOs to both Energy Safety and the Commission, implicitly requiring that any proposed changes balance the pursuit of increased safety with affordable ratepayer bills consistent with the Commission directive to only approve rates that it considers “just and reasonable.”⁴

TURN agrees with workshop parties that updates to GOs should provide additional flexibility in how certain standards are met. The utilities should not, however, have the freedom to choose their preferred mitigation without any guidance given the detrimental impacts on their ratepayers of asset decisions that fail to balance safety and affordability considerations. For example, it may not be reasonable to always pursue the investment with the greatest safety risk reduction because it might come at an extraordinary cost. An alternative investment, or combinations of investments, may be able to provide comparable risk reduction potential at a more affordable rate. Any changes to the GOs should not provide cover for the utilities to serve their shareholders’ bottom lines to the disadvantage of ratepayers’ pockets. Instead, the GOs should direct the utilities to use the Commission approved approach for quantitative risk analysis to identify the most cost-effective approach for compliance.

A cost-effective approach to safety and reliability standards is consistent with the opinion given by the Commissioners contemporary with the adoption of GO 95 in 1941:

The new order, like its predecessors, is a part of a long-range progressive program designed to eventually bring all lines up to the standards required in new construction. Completion of that program is not economically feasible within a short period and, in fact, the revision of the order at this time clearly indicates that no program may be considered complete and static. There is another phase to the adoption of rules such as these, in that the rules must not only be practical, from a physical point of view, but likewise they must be within reasonable economic limits; otherwise costs to serve and consumer rates may be adversely and unreasonably affected.⁵

Despite the evolving threats of climate change and wildfire, it remains the case that utility activities must remain within “reasonable economic limits” and any changes to the guidance should continue to reflect these limits.

3. Changes to the GOs Should Be Grounded in Requirements that the Utilities Know and Understand their Service Territory and Facilities and Pursue Mitigations Based on Unique Local Conditions.

Key to successful and cost-effective mitigation of utility risks is accurate and comprehensive knowledge of their system. The need for quality information has been evidenced repeatedly by utility asset failures across gas and electric lines of business; gas transmission and distribution lines, gas storage facilities, and electric transmission distribution lines with stale, incomplete or no information have experienced asset failures with catastrophic results. Better record-keeping may have prevented some of these disasters. In the wake of these catastrophes, the growing base of asset knowledge combined with improved situational awareness should be used to ensure that risk of future utility caused catastrophes is minimized.

Any GO changes should make it abundantly clear that the utility is required to maintain current registries of all assets in operation as well as the conditions local to the asset. Additionally, tree information, including species and any concerning conditions, should be collected for trees within the strike zone. This information can be used to target vegetation management and prioritize inspections and repairs to ensure that the resources are targeted where the risk of asset failure is greatest.

Asset and location information can and should inform the risk assessment and modeling efforts of the utilities, discussed further below; accurate, quality information will inform these efforts and improve their outputs. In addition to prioritizing inspections and remediations, location conditions and asset information should inform the development of the alternative remediations for a given location. For example, Energy Safety should require the utility to incorporate knowledge of the potential failure modes for a given location and/or asset to identify the slate of alternative mitigations and the most cost-effective response.

If Energy Safety determines that it is appropriate to recommend increased investment in situational awareness assets, the GOs should direct that local condition information be relied on to ensure that these assets are prioritized in locations with the greatest wildfire risk. Strategic placement of situational awareness allows higher risk locations to be subject to increased surveillance. The information learned from the situational awareness tools on weather patterns can be also used to help prioritize the vegetation management of trees in the strike zones of lines.

4. Risk Assessment and Modeling

Any update to the GOs should highlight the key role of risk assessment and modeling in ensuring that the utilities meet their obligation to provide safe and reliable service consistent with just and reasonable rates. Risk assessment and modeling, done correctly, will help the utility identify its highest risk assets and locations, the potential impacts of a range of potential mitigations as well as the most cost-effective path forward. Further risk assessment and modeling can be used to model the relative success or failure of existing requirements to determine how well these requirements are serving the goals of Energy Safety and the Commission.

As Energy Safety is well aware, there are ongoing efforts on risk assessment and modeling at both the Commission and Energy Safety. Any risk analysis that is recommended pursuant to the present effort should be coordinated with these other efforts. Primed for consideration in the Commission's Risk-Based Decision-Making Framework Rulemaking, R. 20-07-013, is the adoption of the risk-attitude to be relied on by the utilities. TURN has argued that a risk-neutral attitude should be adopted by the Commission as best reflecting the varied risk preferences of utility ratepayers.

Further, TURN highlights the importance of ensuring transparency of utility risk assessment and modeling as key to the ability of the regulating agencies and interested intervenors to test the utility decision making. To the extent that GOs allow increased flexibility for compliance with the requirements, this must be paired with requirements that the utilities transparently justify asset management decisions. Successful transparency of utility assessment and modeling should allow third parties to repeat and test the utility calculations. This will allow the independent verification of the results and allow Energy Safety and the Commission to see that the ratepayer interest in cost-effective work is reflected in the final risk mitigation strategy.

5. The GOs Must Require that System Hardening Investments Be Cost- Effective and Prioritized Based on the Risk Profile of the Location.

Any recommended change to the general orders should not specify the installation of a specific asset or technology by the utility. Instead, there should be a requirement for the installation of the most cost-effective mitigation or combination of mitigations in each individual location. This requires the utility to employ not only the informed view on local conditions highlighted above but also a realistic view of the cost and potential operations of any proposed assets. As updated the GOs should require the utility to adopt the most cost-effective mitigation(s) based on the unique characteristics of the location.

The large California IOUs have all requested budgets in their ongoing General Rate Cases (GRCs) based on significantly increasing reliance on undergrounding as a wildfire mitigation for their electric assets. The appropriateness of the scope of the proposed utility programs is an open issue for the Commission in all three GRCs. Rather than exhaustively repeat TURN's concerns in the instant case, TURN directs Energy Safety to its comments in the 2023-2025 Wildfire Mitigation Plan. In short, it is TURN's position that in the majority of locations identified for undergrounding, overhead hardening centered on covered conductor will provide similar risk reduction benefits much faster than undergrounding, at a fraction of the cost.

Rather than choosing a single, winning technology in this ongoing debate, the GOs should provide the utility the flexibility to choose the most cost-effective mitigation for a location. That said, there should be some additional guidance provided to ensure that the comparison of alternatives is comprehensive and fair. Requirements to consider include at a minimum:

- Identification of all data points required to inform the cost effectiveness, including a requirement that the utility identify and justify the conversion factor for

overhead to underground lines. The conversion factor is necessary to ensure that the utility is properly accounting for the fact that typically more than one mile of underground assets will be required to replace one mile of overhead lines.

- A demonstration that the area identified for undergrounding is not subject to seismic or land subsidence risks that will impact the ability of the underground line to operate safely or reliably.
- The continued application of all other requirements of the GOs until the hardened asset is put in service. A utility should not be permitted to delay remediation of any identified hazard simply because the line is slated for a hardening in the future if such remediation is required to provide safe and reliable service.
- Direction that the utility lines run through conduit that is buried and identification of requirements for the construction that will allow the utility to address any future outage on the line safely and expediently.

6. Conclusion

TURN appreciates this opportunity to comment on Energy Safety's potential recommendations for changes to the Commission GOs. TURN looks forward to participating further in these efforts both at Energy Safety and later at the Commission.

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