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Via Electronic Filing

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Subject: Comments of the Public Advocates Office on the Draft GIS Data Reporting Standard version 2.2, Docket #2021-GIS-DRS

Director Thomas Jacobs,

The Public Advocates Office at the California Public Utilities Commission ("Cal Advocates") respectfully submits the following comments on the *DRAFT Energy Safety GIS*[1] *Data Reporting Standard [DRS] version 2.2 update ("GIS DRS v2.2").*

Cal Advocates submits these comments in accordance with the instructions provided in the Office of Energy Infrastructure Safety's ("Energy Safety")[2] letter published on December 17, 2021.[3] We respectfully urge Energy Safety to consider our comments and adopt the recommendations discussed herein.

[1] Geographic Information System.

[2] On July 1, 2021, the Wildfire Safety Division of the CPUC moved to the California Natural Resources Agency and became the Office of Energy Infrastructure Safety pursuant to Assembly Bill 111, which was signed by the Governor on July 12, 2019 (Chapter 81, Statutes of 2019).

[3] *Cover Letter from Stephen P. Lai, Draft GIS Data Reporting Standard Version 2.2.*, Office of Energy Infrastructure Safety, December 17, 2021.

I. INTRODUCTION

On December 17, 2021, Energy Safety issued its *GIS DRS v2.2*. This document includes revisions and additions to the previous GIS DRS guidelines and geospatial data schema, as well as instructions for submitting comments. The main change requires the entry of both the common name and scientific name of vegetation species as part the data standard for vegetation management, vegetation inspection, unplanned outages, and ignitions events.

Cal Advocates understands the need to modify the way in which tree names are recorded. However, we have concerns regarding the rules and instructions given to the electrical corporations ("utilities"). The new schema should allow utilities to record uncertainties when identifying trees, as well as leave room to explain why technicians did or did not identify the tree down to the species level.

II. RECOMMENDATIONS

A. To Avoid Confusion that Could Lead to Data Errors, Energy Safety Should Clarify Requirements in this Data Standard.

Beginning in section 2.3.8 of Energy Safety's GIS DRS v2.2, Energy Safety outlines how three existing fields will be replaced with three similar fields in each of six feature classes.[4] Energy Safety will require utilities to use these fields to report the scientific names of vegetation. Cal Advocates agrees that including scientific nomenclature is necessary. However, the complexity of the exceptions and rules in the document surrounding common and scientific names for the recoding of species may lead to confusion in the field and reduced data accuracy. The following should be addressed to reduce potential reporting errors:

A. Under Section 2.3.8, Items #3 and #4 are seemingly contradictory.[5] In #3 the directions state the utility must identify genus and species and "an unknown sp. designation is not acceptable."[6] In #4, the directions state "instead of simply 'Quercus,' use 'Quercus sp.'" The wording of these two requirements needs clarification to make sure there is no contradiction or room for mistakes.

[4] *Draft GIS DRS Version 2.2*, Office of Energy Infrastructure Safety, December 17, 2021, pp. 10-11.

[5] *Draft GIS DRS Version 2.2*, Office of Energy Infrastructure Safety, December 17, 2021, pp. 10-11.

[6] *Draft GIS DRS Version 2.2*, Office of Energy Infrastructure Safety, December 17, 2021, pp. 10-11.

B. The requirements do not appear to account for the difficulty of identifying certain species. Asking for species in many cases requires extensive study of a specific tree or else risk inaccurate identification and data. Genus Quercus (true Oaks) is a good example. Many of the hundreds of species in this genus – with at least two dozen of them occurring naturally in California – are notoriously difficult to correctly identify down to species level, especially if it is the first time the individual tree is being observed. Diagnostics for oak species identification include the structure of catkins (flowers), the timing and abundance of acorns, and varying levels of deciduousness.[7] Another source of identification error is that some scientists consider a majority of oaks to be hybrids – in that view, most are not truly distinct species. Accurate identification of a tree may require multiple visits by an arborist or botanist; without this information the final identification could be much less accurate. It almost goes without saying that difficulties are compounded if the observation is in a burn area.[8] Energy Safety should take a more cautious approach to identification, by providing a free text field that allows the utility to record the degree of certainty associated with a given tree or vegetation.

Potentially useful information about the functional differences between species in the same genus may be lost for palms (of which there are only five species in state)[9] and a further 19 genera of trees for which the data standard only requires identification down to the level of genus.[10] At the very least Energy Safety needs to explain why it is only requiring some trees to be identified to genus, but still requires others to be identified by species. Such an explanation should include the reasoning behind the aggregation of species to the general level

[7] Key to Quercus, Jepson Flora Project (eds.) 2021. Jepson eFlora, https://ucjeps.berkeley.edu/eflora/eflora_keys.php?key=10394 [accessed on 21 December 2021].

[8] Some issues regarding oak identification are highlighted in this article originally published in *Fremontia,* the journal of the California Native Plant Society: Intl Oaks #3 - pp.4-14 - Hybridization in California Oaks.pdf (internationaloaksociety.org).

[9] Key to Arecaceae, Jepson Flora Project (eds.) 2021. Jepson eFlora, https://ucjeps.berkeley.edu/eflora/eflora_keys.php?key=55 [accessed on 21 December 2021].

[10] *Draft GIS DRS Version 2.2*, Office of Energy Infrastructure Safety, December 17, 2021, p. 11.

and explain why such aggregation does not result in loss of information that is useful in assessing ignition risks.

C. Finally, utilities have decades-long established ways to record scientific names of trees[11]. If Energy Safety has not already consulted the utilities, it would be beneficial for Energy Safety to further examine how each utility is already recording those data in order to streamline any changes.

Cal Advocates supports the recording of as much information as is feasible, while leaving room to express any uncertainty in identification. As such Energy Safety should:

a) Include a text field in which issues with the identification can be explained. This field could also be used to note infrageneric differences or other clades such as the commonly accepted groupings of black and white oaks.

b) Explain the disparity in the requirements for identifying some trees down to the species level while others only need to be identified at the genus level.

c) Demonstrate how Energy Safety have been working and consulting with the utilities in developing the guidance for recording trees and vegetation species.

B. Energy Safety Should be Consistent in its Categorizations of High Fire Threat Districts (HFTD).

Energy Safety uses different reporting criteria for HFTD across different documents. In its draft GIS Data Reporting Standards, Energy Safety requires several feature classes to include a field called "HFTDClass".[12] For that field, Energy Safety states that "anything outside Tiers 2 and 3 must be categorized as 'Non-HFTD.' Do not record any Zone 1 or Tier 1 values." Energy Safety further elaborates that the only possible values that the utilities should report are Tier 2, Tier 3, and Non-HFTD.[13] Therefore, any data related to Zone 1 are included in the other HFTD designations (including Non-HFTD).

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[11] News - Western Tree Failure Database/California Tree Failure Report Program (ucanr.edu)

[12] *Draft GIS DRS Version 2.2*, Office of Energy Infrastructure Safety, December 17, 2021, p. 23.

[13] *Draft GIS DRS Version 2.2*, Office of Energy Infrastructure Safety, December 17, 2021, p. 23.

However, Energy Safety includes Zone 1 as a distinct, reportable category in its Non-Spatial Metrics Data.[14] For example, in Table 12 of the Non-Spatial Metrics Data, Energy Safety uses the following categories for wildfire mitigation risk spend efficiencies (RSE):[15]

Estimated RSE in non-HFTD region	Estimated RSE in HFTD Zone 1	Estimated RSE in HFTD Tier 2	Estimated RSE in HFTD Tier 3

These categories are not in line with the categories that Energy Safety uses in its GIS Data Reporting Standard. Additionally, the term "Zone 1" is not mutually exclusive of HFTD Tiers 2 and 3. The California Public Utilities Commission's (CPUC's) website on HFTD explicitly states that "Tier 3 and Tier 3 fire-threat areas on the CPUC Fire-Threat Map may overlap Tier 1 High Hazard Zones on the Tree Mortality HHZ Map."[16] Furthermore, the CPUC's online HFTD Map shows that Zone 1 areas do overlap with Tier 2 and Tier 3.[17]

The above discrepancies lead to multiple points of possible ambiguity in written reports and in verbal discussions regarding HFTD. When utilities or Energy Safety discuss Zone 1, one must clarify if the term "Zone 1" refers only to those Zone 1 areas that are outside Tier 2 and 3, or if the term includes Zone 1 areas that overlap with Tiers 2 and 3. Additionally, when utilities or Energy Safety discuss Non-HFTD, one must clarify if the term "Non-HFTD" refers to all areas outside Tiers 2 and 3, or to all areas outside Tiers 2, 3 *and* Zone 1. Cal Advocates has no preference regarding which categorization is used. However, Energy Safety should choose one set of categorizations and definitions that is clearly defined and apply that standard to all data submissions from the utilities.

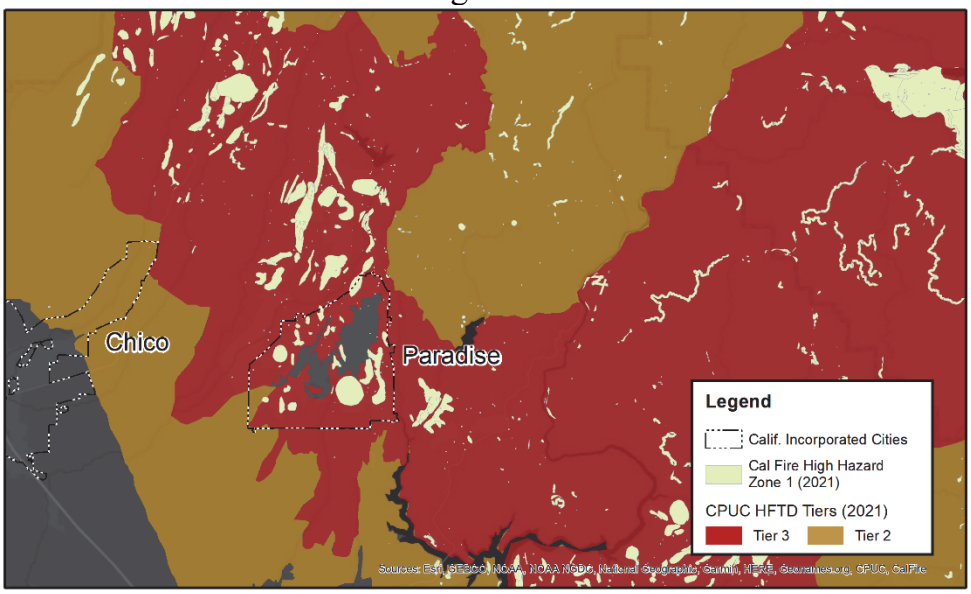
[14] "2022 WMP Guidelines_Attachment 3_DRAFT_R1.xlsx", Table 12.

[15] 2022 WMP Guidelines Attachment 3 Draft Revision 1, Table 12, cells J9 to M9.

[16] https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking

[17] CPUC High Fire Threat District Map. [Accessed 21 Dec 2021].

Figure 1:



This map image shows CPUC High Fire Threat District areas (continuous shapes in red and orange) overlaid with CalFire's High Hazard Zone 1 areas (irregular shapes in light green).

III. CONCLUSION

Cal Advocates respectfully requests that Energy Safety respond to the recommendations discussed herein.

Sincerely,

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