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VIA E-MAIL

Caroline Thomas Jacobs
Director, Office of Energy Infrastructure Safety
715 P Street, 20th Floor
Sacramento, CA 95814

RE: SDG&E Comments to Energy Safety GIS Data Reporting Standard Version 2.2 Draft Guidelines
Docket #2022-GIS-DRS

Dear Director Thomas Jacobs:

SDG&E hereby provides comments to Energy Safety's GIS data reporting standard version 2.2 draft guidelines released by Energy Safety on May 9. SDG&E's comments ask Energy Safety for greater clarification on schema requirements and specifics within the draft guidelines v2.2

I. SUMMARY OF COMMENTS AND GENERAL RECOMMENDATIONS

SDG&E appreciates the time to comment on Energy Safety's GIS data reporting standard version 2.2. SDG&E addresses comments to the draft guidelines in the narrative below, and includes an appendix with additional detail in the attached.

II. COMMENTS TO SPECIFIC DRAFT GUIDELINES

The Photo Requirements May Pose an Undue Burden and Require Clarification

SDG&E asks that Energy Safety provide more details in its GIS reporting standard v2.2 regarding the volume and nature of photos to be provided from utilities, and how these photos should be organized and delivered in a database to be better positioned to meet the needs of the OEIS request for photos. The photos requested represent a substantial number of photos and include photos that SDG&E does not currently take as part of regular business. In certain cases, such as vegetation management projects, it is not clear the extent of the photographs requested. To the extent Energy Safety is seeking a sampling of vegetation management photos, the extent

of that sample should be clarified. But if the expectation is to receive a before and after image of nearly all trees that are trimmed in the HFTD, requiring that volume of photographs is unnecessary and burdensome on SDG&E and its contractors. SDG&E has hundreds of thousands of inventory trees in its vegetation database, and it is simply unreasonable to request photos on the volume that could be required by the new GIS standard. SDG&E is open to providing photos of selected projects and seeks more discussion or clarification regarding how vegetation photos can be scoped to provide helpful data.

The timing of this requirement should also be clarified. In the case of certain grid hardening initiatives, post-construction photos may not be taken until after the reporting period for the quarterly data report. Additionally, photos are currently stored in various repositories and providing these photos in a GIS fashion is currently a significant manual effort. Putting processes and systems in place to automate the collection of these photos will be a long process and SDG&E requests collaboration with Energy Safety and the other utilities to put together a roadmap and prioritization for providing these photos.

Suggested Areas of Improvement to Align the QIU and QDR

SDG&E has been working with Energy Safety's spatial data standard for almost two years, and has a team dedicated to facilitate completion each quarter. Since the QIU data standard was operational before the spatial QDR, the SDG&E teams who work to complete the QIU have come across areas for improvement to better align the tabular and spatial data. It is important that the units of inspection, such as poles (point) versus conductor miles inspected or hardened, match the units and processes of the inspection program of interest. For example, some programs are better suited to report poles as a unit of inspection, while some SDG&E grid hardening projects are better suited to report calculated linear miles hardened as a unit of inspection.

SDG&E's GIS database is considered an "as-built" database, while SDG&E's outage management system (OMS) is the "as-switched" model. SDG&E's GIS "as-built" database means that the GIS system is digitized to reflect the "as-built" state of the grid. Because GIS is an "as-built" system, some facilities that have been modified in the field in a previous quarter may not be represented in the GIS "as-built" system, and may only be represented in OMS as "as-switched." This inconsistency between the "as-built" and "as-switched" databases has caused difficulty in matching up the quantitative data across the spatial QDR and the tabular QIU. SDG&E asks that in the final guidelines to the GIS reporting standard Energy Safety explain in greater detail how it plans to utilize the spatial data, so that SDG&E may develop more accurate ways to spatially represent circuits and structures on a map.

Energy Safety Should Allow At Least 60-Days of Notice Before Requiring Data Standard Changes.

To deliver the quarterly QDR, inclusive of the geodatabase, the SDG&E project teams work on a schedule for the next quarter's reporting starting at the previous quarter's due date. Since the teams are 100% dedicated to the pertinent data collection activities of that current quarter, it is not feasible for the teams to include new schema changes and/or data standard

changes within a one-month timeframe. SDG&E suggests that Energy Safety allow the utilities at least 60 days to implement new schema changes. This would allow SDG&E enough lead time to gather, process and submit required data in the updated format requested.

Energy Safety Should Re-Examine the Need for Customer Meters to be Mapped Spatially[1]

SDG&E appreciates Energy Safety's willingness to receive and accept feedback regarding the geodatabase schema. Because of data limitations, as well as the privacy implications with sharing customer addresses, SDG&E requests that Energy Safety reexamine the need for customer meters to be mapped spatially. One important fact about SDG&E's GIS data model to consider is that SDG&E maps to the transformer, and not to the meter. Therefore, there is no "customer location" or "meter location" in SDG&E's GIS, and meters are not mapped and are not part of the SDG&E digitization process. SDG&E meters do have an address location in the customer information system which is stored as a weekly updated table in the GIS network. These addresses are then mapped as a point layer which represents an estimated location. SDG&E has been providing this data for the "Customer Meter" feature class, but these accuracy limitations need to be considered when utilizing this data and when attributes such as assessor parcel number (APN) are on the schema such as initiatives and point and asset feature classes.

Energy Safety has requested SDG&E provide a "Critical Facility" feature class that includes attributes such as whether the facility has back-up power and certain capacity information of the back-up power.[2] There are limitations regarding this data that impact both its accuracy and its usefulness. This type of information is provided by the customer as an optional survey and is not fully populated. Thus, any data provided on a voluntary basis is not owned by SDG&E and dependent upon whether the customer has shared it. Ultimately the limitations on accuracy because of these issues may render the data less useful or convey an inaccurate picture of facilities in the HFTD. The data that SDG&E does collect on backup power information from Critical Facilities is for the purpose of how to prioritize support in the event of an outage. SDG&E requests that Energy Safety provide more information about importance, purpose, and how the data is being used as well as clarification of the domains provided.

Energy Safety Should Minimize Minor Adjustments to the GIS Schema

Like Energy Safety, SDG&E has developed and continues to develop automation techniques to process required data inputs from Energy Safety. Even minor errors or updates with schema, such as a typographical change, domain value change, or case change can impact these automation techniques at SGD&E. Some of these schema errors are captured in Appendix A attached at the end of this document, and is also further defined in the quarterly SDG&E Status Report. SDG&E asks that Energy Safety minimize its adjustments to the GIS schema in

[1] GIS Data Reporting Standard Guidelines v2.2 at 23 asks for unique ID for a specific meter, and that it should be a traceable stable ID within the utility's operations/process.
[2] GIS Data Reporting Standard Guidelines v2.2 at 135.

order to minimize the process updates that SDG&E must make to address these seemingly minimal updates to schema.

Energy Safety Should Integrate SDG&E's Asset Relate Table in the Next Data Standard

SDG&E has created an "Asset Relate" table to be able to associate the one-to-many relationships needed to complete the OEIS data standard. For example, this table includes items like a structure which can have multiple circuits. SDG&E has delivered an asset relate table to Energy Safety on a quarterly basis starting in 2021 in its QDR reports. This table has better connected the data model, has made the data processing much easier, and is utilized to make the requested relationship classes from Energy Safety work. SDG&E hopes to keep improving this relate table by adding pertinent information, like asset feature, that will enable tracing back to the actual SDG&E GIS feature class used to create a specific OEIS feature class. SDG&E requests that Energy Safety integrate the asset relate table within the GIS data reporting standard v2.2.

SDG&E Requests the Addition of a Business Identifier to the Schema

SDG&E has requested the addition of a useful business identifier to the Energy Safety geodatabase schema that will have an impact on the feature classes. To properly relate features and tables the SDG&E GIS database, SDG&E uses the GUID identifier. This identifier has no business value, but only is used to join related tables together via a unique key. SDG&E would like to add company facility IDs to all pertinent feature classes and tables so users of the data can navigate and properly identify SDG&E facilities. Adding these company facility IDs will also give value in being able to fully distinguish and identify from a business perspective the individual assets within the GIS dataset. Additionally, including this information helps to respond to auditors/inspectors when qualifying SDG&E data within the OEIS format. SDG&E requests that Energy Safety add the business identifier attributes across pertinent feature classes and tables in its GIS reporting standard v2.2.

Conclusion

SDG&E thanks Energy Safety for this opportunity to comment on the GIS data reporting standard, and respectfully requests that Energy Safety take these recommendations into account when finalizing the GIS data reporting standard guidelines v2.2.

Respectfully submitted,

/s/ Laura M. Fulton
Attorney for
San Diego Gas and Electric Company