

San Diego Gas & Electric Company's
Quarterly Data Report on WMP
Spatial and Non-Spatial Data (QDR)

February 1, 2022



Pursuant to the California Public Utilities Commission (Commission or CPUC) Resolution WSD-011, and Wildfire Safety Division’s Compliance Operational Protocols, issued February 16, 2021, SDG&E hereby submits its Quarterly Data Report (QDR) for the period October 1, 2021 through December 31, 2021 (Q4). A copy of this report is being provided to the California Office of Energy Infrastructure Safety (OEIS) docket and the service list of Rulemaking (R.) 18-10-007.

Specifically, this QDR provides the following:

- Non-Spatial Data Tables in the format previously provided by WSD (“2021Q4 QDR – Non-Spatial Data 02 01 2022.xlsx”)¹
- A geodatabase file containing SDG&E’s currently available WMP reportable data in the schema provided by WSD (confidential file “SDGE_2021_Q4.gdb.zip”) based on version 2.1 of the OEIS GIS schema. SDG&E is also providing an accompanying confidentiality declaration.
- The QDR Status Report, which in accordance with previously provided guidance, is an excel spreadsheet “Energy Safety QDR Spatial Data Status Report SDGE 2021 Q4.xlsx” which provides line by line accounting of the data included within this QDR, as well as an explanation of data gaps and timelines for gathering data not currently included in the confidential geodatabase file. This file is based on version 2.2 of the OEIS GIS Status Report due to the missing attributes in version 2.1.
- The “SDGE_InitiativePhotoLog_20220201 Feature Class” contains an additional field called Hyperlink that contains a URL to the photos that relate to the compliance findings in the Asset Inspection Point for the DIAR Program. SDG&E will provide access to OEIS staff that will be reviewing the photos.

As directed by OEIS, SDG&E is submitting its complete QDR, including all confidential information and supporting declarations via SharePoint.² SDG&E also includes two appendices that explain updates to the data.

SDG&E’s Quarterly Data Report: Spatial

In its previous QDR submissions, SDG&E has sought clarification of various issues related to the design of the geodatabase template and looks forward to an opportunity to work with OEIS and stakeholders on potential refinements. In the meantime, SDG&E has invested in a technical data solution to aggregate data from multiple sources for reporting from a single database. This solution is evolving each submission as we work towards automation of the deliverables.

To provide insight to OEIS related to SDG&E’s quarterly data reporting capabilities, SDG&E has continued to use the status report to indicate if data is available to be reported. This applies to data fields not included in this specific deliverable because no events occurred during the reporting timeframe, for which SDG&E marked “yes” that data was included and provided clarification in the data

¹ SDG&E notes that certain items have been clarified in response to data requests since the 2021 WMP Update was filed. Specifically, SDG&E stated, “SDG&E has identified approximately 390,000 accounts that may have customers with access or functional needs, of which approximately 185,000 reside in the HFTD, utilizing programs or services.” (p.99). The correct number of AFN customers that reside in the HFTD is 40,000. Additionally, SDG&E clarified the number of tree-trimming activities performed in 2020 in response to a Substation Vegetation Management data request to the Wildfire Safety Division.

² California Office of Energy Infrastructure Safety – Data Submission Procedures (July 27, 2021).

availability field that there was “No reportable data for this quarterly report.” SDG&E’s rationale is to provide a clear picture of the current reporting capabilities, regardless of the number of reportable events during a given reporting period.

While working through the schema requirements and how to associate with SDG&E’s dataset, we have the following suggested improvements:

- Included in Appendix B is a list of discrepancies/observations regarding the OEIS GIS Reporting Standard. The majority of these discrepancies were brought up in the October 2021 meeting with Energy Safety, led by Stephen Lai. These suggested schema changes have not yet been addressed by Energy Safety, but will make the OEIS Geodatabase more usable.
- Grid Hardening programs continue to be challenging to accurately represent in the OEIS GIS Schema. Removals are currently not included in the schema as there is no attribute in the GridHardeningPoint/Line feature classes to differentiate the removal of equipment from the installation of new equipment for a given initiative. If both were plotted on a map, it would provide misleading information; however, this is needed to properly align to Tables 9 and 10. Ideally, a flag to align with Tables 9 and 10: New, Removal, Upgrade would help validate the data represented in the spatial database.

In SDG&E’s 2021 Q4 submission, SDG&E made several improvements to the logic that supports the data within the file geodatabase. The improvements include:

- Tabular automation of 8 out of the 12 Asset Inspection Programs from the source system.
- Tabular automation of 5 out of 14 Asset Point/Line Feature Classes/Relate Table utilizing SDG&E’s central repository increasing the accuracy and attribute completeness of the schema requirements.
- The OEIS GIS Reporting Standard states in section 2.3.6 of the Version 2.2 document, “Electrical corporations are encouraged to provide additional related tables beyond those provided by Energy Safety, if available.” SDG&E continues to enhance the AssetRelate table to ensure all foreign key relationships are valid and the electric model is accurately represented and supports the one-to-many relationship between support structures, conductor spans, and substations.
- Enhancement to the Support Structure feature class to include underground and surface structures. This allows the related assets i.e. Switchgear to be related to a support structure and ensures the relationship between the asset point feature classes is valid. This also allows the grid hardening programs to be associated to a support structure when performing undergrounding work.

SDG&E’s focus is on continuous improvement and therefore, would like to highlight the areas in which have been identified and will be a focus for the upcoming submissions:

- SDG&E continues to validate all QDR data against the QIU/Table 12. Looking at the 2021 year end actuals provided a clear picture of the discrepancies in the logic applied between the different reports as there was a larger dataset to analyze as opposed to quarter by quarter. The following are some of the programs where the discrepancies exist:

- All asset replacement programs – the QIU is reporting by unit while the QDR is reporting by structure. Because there can be multiple units per structure, there is a misalignment between the record count in the QDR and the QuarterlyProgress attribute.
- Vegetation Management (except Fuels Management Section 7.3.5.5) follows different methodologies for the QIU/Table 12 and the QDR that will be aligned in 2022-Q1.
- The Distribution asset inspections in Q1 and Q2 of the QDR included all of SDG&E’s service territory, including non-HFTD work unrelated to WMP initiatives. This was corrected in Q3 going forward.
- The Transmission asset inspections in the QDR are reported by tie line and structure, resulting in double counting of structures. The QIU is tied to the completion of a workorder where the QDR is tied to the completion at a structure level. This will be corrected in the 2022-Q1 submission.
- The Risk Event Asset Log does not currently align the following identifiers due to the way the data is stored in the source systems. This will be reviewed and SDG&E will continue to work with the various groups to properly align the data
 - FromDeviceID
 - ToDeviceID
 - IsolationDeviceID
 - DamageDeviceID
 - CircuitID

SDG&E has provided two Appendices to this cover letter. Appendix A addresses specific room for improvement and issues raised by Energy Safety in *Action Statement on 2021 Wildfire Mitigation Plan Update – San Diego Gas & Electric*. In section 5.7 of the Action Statement, Energy safety discusses the data governance section of the WMP Guidelines, and the associated room for improvement and issues and remedies for SDG&E’s spatial data. These items are addressed one by one in the document. Appendix B provides more detail for specific items that SDG&E has had difficulty addressing in the schema, along with suggestions on how these items can be resolved for SDG&E’s source systems.