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

May 2, 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 January 1, 2022 through March 31, 2022 (Q1). 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 provided by OEIS ("2022Q1 QDR Non-Spatial Data 05 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_2022_Q1.gdb.zip") based on version 2.2 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 2022 Q1.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.
- The "SDGE_InitiativePhotoLog_2022_Q1 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: Non-Spatial

When providing Q4 2021 data in February, SDG&E utilized preliminary (unaudited) reliability data. For this submission, the fully audited data was used leading to a decrease in wire downs reported in Q4 2021. SDG&E continues to improve the logic for automating the collection of risk event data, including the removal of duplicate outages, and as such some other minor changes are made to historical 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).

SDG&E's Quarterly Data Report: Spatial

SDG&E has identified improvements on associating required fields to SDG&E's dataset while working through the schema requirements. SDG&E shares the following suggested improvements:

- SDG&E has added the following columns to Initiative Point feature classes (added to the end of
 the feature class as per the guidance from the OEIS Compliance Team to enhance the
 understanding of the data reported):
 - Asset Type This is populated to define which asset relates to the provided AssetID. In Grid Hardening the AssetID represents various Asset Types, so SDG&E provided this field to clarify what type of asset the initiative record was being mapped to.
 - Business ID/Facility ID- This is populated with the identifier used by SDG&E to refer to the asset. For example, all Structures are identified using the FacilityID which is the PoleID. For Customer meter, this is the ElectricMeterNumber of the customer. This was performed after receiving feedback from the OEIS Compliance Team and should assist with future inspection activities.
 - Business Name This is an extra field used when the Business ID is an internal code to
 provide the full name of the asset. For example, Substations/Step-Downs are identified
 using the FacilityID which is a shorthand code that will be populated in the Business ID
 field. The Business Name is the full name of the Substation.
- SDG&E has added the above Asset Type and FacilityID of the Isolation Device to the Risk Event Asset Log table to ensure the business level details were available after changing all IDs to align with the primary keys in the Asset Point feature classes.
- SDG&E has made the following corrections in the OEIS Schema for alignment:
 - Other Initiative Point added AssetID and HFTDClass for consistency across the other Initiative Point feature classes.
 - Modified the DomainInitiativeCategory1 as it is missing "Vegetation management and inspections"

SDG&E has implemented 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 7 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.

SDG&E's focus is on continuous improvement and therefore would like to highlight the areas that have been identified and will be a focus for future submissions:

SDG&E continues to validate QDR data against the QIU and non-spatial Table 12 data. After
reviewing the 2021 year-end actuals, it 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 actions SDG&E has taken in the 2022-Q1
submission:

- SDG&E is now reporting Initiatives where the Units are Miles/Circuit to utilize the Line feature class per OEIS recommendation.
- Per the advice of OEIS, the QuarterlyProgress field is now being utilized to identify the number of units (Point feature classes) and mileage of each individual line segment.
 This column can be summed by Initiative and Status and compared to the QIU.
- Vegetation Management QDR logic has been revised to align with the methodology used to generate the QIU and Table 12 metrics.
- To help with aligning the Isolation and Damage DeviceIDs in the Risk Event Asset Log,
 SDG&E has expanded the scope of the Switchgear feature class to include:
 - Distribution Switch
 - Transmission Switch
 - Dynamic Protective Device (New)
 - Disconnect Switch (New)
 - Circuit Breaker Distribution Feeder Only (New)
- Transmission Patrol inspections have now been corrected to remove the duplicate structures when converting the data from line to structures.

SDG&E provides an Appendix to this cover letter. Appendix A (Appendix A - Energy Safety QIU-QDR Comparison SDGE 2022 Q1.xlsx) provides a comparison between QDR and QIU units, with explanations for discrepancies where necessary.

WMPInitiativeCategory	WMPInitiativeActivity	InitiativeActivityID	QuantTargetUnits	QIUQuantActualProgressQ1	QDRQuarterlyProgressQ1 (QIUtoQDRDeltaQ1 QIUtoQ	DRDeltaPercentQ1 QIUtoQDRDeltaCommentsQ1
Situational Awareness & Forecasting	Advanced weather monitoring and weather stations (7.3.2.1)	WMP.447	Weather station upgrades	4	4	-	0%
Situational Awareness & Forecasting	Air Quality Index (7.3.2.2.1)	WMP.544	Sensors	1	1	-	0%
Situational Awareness & Forecasting	Satellite-based remote sensing (7.3.2.2.2)	WMP.545	Cameras	6	6	-	0%
Situational Awareness & Forecasting	Fault indicators for detecting faults on electric lines and equipment - Wireless Fault Indicators (7.3.2.3)	WMP.449	Wireless fault indicators	12	12	-	0%
Grid Design & System Hardening	Capacitor maintenance and replacement program - SCADA Capacitors (7.3.3.1)	WMP.453	SCADA capacitors	5	5	-	0%
Grid Design & System Hardening	Covered conductor installation - Distribution OH Hardening - Covered Conductor (7.3.3.3)	WMP.455	Miles	3	3.95 -	1	-32% Currently working on a standardized proces: The delta is a difference in the methodology of how the mileage is calculated in the QIU to QDR
Grid Design & System Hardening	Expulsion fuse replacement (7.3.3.7)	WMP.459	Expulsion fuses	98	98	-	0%
Grid Design & System Hardening	PSPS sectionalizing enhancements (7.3.3.8.1)	WMP.461	Switches	3	3	-	0%
Grid Design & System Hardening	Maintenance, repair, and replacement of connectors, including hotline clamps - Hotline Clamps (7.3.3.10)	WMP.464 e	Hotline clamps	576	576	-	0%
Grid Design & System Hardening	Generator Grant Programs (7.3.3.11.1)	WMP.466	Generators	8	8	-	0%
Grid Design & System Hardening	Standby Power Programs (7.3.3.11.2)	WMP.467	Generators	46	46	-	0%
Grid Design & System Hardening	Undergrounding of electric lines and/or equipment (7.3.3.16)	WMP.473	Miles	9.91	9.24	1	7% No explanation required < 10%
Grid Design & System Hardening	Traditional Hardening - Distribution overhead system hardening (7.3.3.17.1)	d WMP.475	Miles	12.65	7.06	6	44% Currently working on a standardized proces: The delta is a difference in the methodology of how the mileage is calculated in the QIU to QDR
Grid Design & System Hardening	Overhead transmission fire hardening (7.3.3.17.2.1)	WMP.476	Miles	1.45	1.45	0	0%
Grid Design & System Hardening	Distribution Communications Reliability Improvements (7.3.3.18.1)	WMP.537	Base stations	2	2	-	0%
Grid Design & System Hardening	Lightning arrestor removal and replacement (7.3.3.18.2)	WMP.548	Lightning arrestors	341	341	-	0%
Grid Design & System Hardening	Avian Mitigation (7.3.3.18.3)	WMP.549	Poles	205	205	-	0%
Asset Management & Inspections	Detailed inspections of distribution electric lines and equipment (7.3.4.1)	WMP.478	Inspections	9639	8,754	885	9% No explanation required < 10%
Asset Management & Inspections	Detailed inspections of transmission electric lines and equipment (7.3.4.2)	WMP.479	Inspections	531	529	2	0%
Asset Management & Inspections	Infrared inspections of distribution electric lines and equipment (7.3.4.4)	WMP.481	Inspections	3820	3,820	-	0%
Asset Management & Inspections	Intrusive pole inspections (7.3.4.6)	WMP.483	Inspections	135	135	-	0%
Asset Management & Inspections	HFTD Tier 3 distribution pole inspections (7.3.4.9.1)	WMP.538	Inspections	12404	12,404	-	0%
Asset Management & Inspections	Drone assessments of distribution infrastructure (7.3.4.9.2)	WMP.539	Inspections	11441	11,441	-	0%
Asset Management & Inspections	Drone assessment of transmission (7.3.4.10.1)	WMP.540	Inspections	468	468	-	0%
Asset Management & Inspections	Patrol inspections of distribution electric line and equipment (7.3.4.11)		Inspections	37567	37,546	21	0%
Asset Management & Inspections	Patrol inspections of transmission electric lines and equipment (7.3.4.12)	WMP.489	Inspections	1962	1,962	-	0%
Asset Management & Inspections	Substation inspections (7.3.4.15)	WMP.492	Inspections	91	91	-	0%
Vegetation Management & Inspections	Detailed inspections of vegetation around distribution electric lines and equipment (7.3.5.2)	WMP.494	trees inspected	123917	123,917	-	0%
Vegetation Management & Inspections	Fuels management and reduction of "slash" from vegetation management activities (7.3.5.5)	WMP.497	poles cleared	90	90	-	0%
Vegetation Management & Inspections	LiDAR inspections of vegetation around	WMP.499	Circuit line mile	56.2	56.45	0	0%

Vegetation Management & Inspections	Other discretionary inspection of vegetation WMP.501 around distribution electric lines and equipment, beyond inspections mandated by rules and regulations (7.3.5.9)	Trees trimmed/removed	2110	2,110		0%
Vegetation Management & Inspections	Vegetation management to achieve WMP.512 clearances around electric lines and equipment (7.3.5.20)	poles brushed	13317	13,317	-	0%