

**PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans Discovery 2023
Data Response**

PG&E Data Request No.:	OEIS_003-Q010		
PG&E File Name:	WMP-Discovery2023_DR_OEIS_003-Q010		
Request Date:	April 21, 2023	Requester DR No.:	P-WMP_2023-PG&E-003
Date Sent:	May 10, 2023	Requesting Party:	Office of Energy Infrastructure Safety
DRU Index #:		Requester:	Colin Lang

SUBJECT: REGARDING PG&E’S ASSET INVENTORY

QUESTION 010

- a. Provide a list of all fields that PG&E’s asset inventory captures (i.e., equipment, equipment type, age, installation date).
- b. Provide a list of all types of equipment captured within PG&E’s asset inventory.
- c. Provide a percentage in which PG&E is missing data for each data field listed in part (a) within its asset inventory.
- d. Provide an estimated percentage for the amount of assets missing from PG&E’s asset inventory.

ANSWER 010

- a. As outlined in Section 8.1.5 *Asset Management and Inspection Enterprise System(s)* of PG&E’s 2023-2025 WMP, PG&E uses several asset inventory databases. Geographic Information System (GIS) is the primary system of record for electric asset inventory (Asset Registry), spatial location, electrical connectivity, and attribute data. Asset Registry data is generally stored in GIS databases that are specific to Electric Distribution and Electric Transmission, also known as Electric Distribution Geographic Information System (EDGIS), and Electric Transmission Geographic Information System (ETGIS). The asset inventory attributes captured as fields in the Asset Registry systems vary by asset type. Not all fields are considered critical or mandatory.

In Q4 of 2021, PG&E initiated an Asset Registry Data Quality (ARDQ) program with the objective of identifying all Critical Data Elements (CDEs, generally aligned with attributes) for all asset types that are managed in the Asset Registry systems. The initial focus of the ARDQ program was in support of nine Transmission Overhead and Distribution Overhead asset types that represent approximately 86% of asset failure risk, including wildfire. PG&E is providing attachment “*WMP-Discovery2023_DR_OEIS_003-Q010Atch01.xlsx*” which contains a list of the 669 Critical Data Elements (CDEs) that have been identified and are being tracked as of May 9, 2023 under the ARDQ Program, organized by Asset Family, Asset Type, Asset Component, and Attribute (CDE). Column E indicates alignment with Energy

Safety GIS Spatial Quarterly Data Report class (if applicable), and Column F identifies if there is a mapping to an attribute in the OEIS GIS reports.

Should the requestor be interested in reviewing our complete definition of all Electric asset inventory attributes, we would be happy to meet and confer to better understand the request and timing.

- b. PG&E currently manages the following primary equipment types (asset types) within its Electric asset inventory (Asset Registry) systems. Please note that there may be multiple sub-types (sub-components) under any one primary Asset Type. The asset types highlighted in AMBER are included in the ARDQ program and represented in the data tables provided in response to questions a. and c.

Asset Family	Asset Type (Equipment Type)
Distribution Network	Network Protector
Distribution Network	Primary Cable
Distribution Network	Secondary Cable
Distribution Network	Network Switch
Distribution Network	Network Transformer
Distribution Overhead	Voltage Regulating Equipment
Distribution Overhead	Primary Overhead Conductor
Distribution Overhead	Protection Device
Distribution Overhead	Secondary Conductor
Distribution Overhead	Support Structure
Distribution Overhead	Switching Equipment
Distribution Overhead	Transformer
Distribution Underground	Line Equipment
Distribution Underground	Underground Cables Secondary
Distribution Underground	Underground Cables Primary
Distribution Underground	Subsurface and Pad-Mount Transformers
Substation	Bus System
Substation	Transformer
Substation	Voltage Regulator
Substation	Circuit Breaker
Substation	Circuit Switcher
Substation	Disconnect Air Switch
Substation	Motor Operated Air Switcher (MOAS)
Substation	Batteries (Station)
Substation	Switchgear
Substation	Ground Grid
Substation	Civil Structure
Substation	Insulator
Substation	Reactive Equipment
Transmission Overhead	Conductor
Transmission Overhead	Insulator
Transmission Overhead	Non-Steel Structure

Transmission Overhead	Steel Structure
Transmission Overhead	Switch
Transmission Underground	Conductor

- c. As described in the response to subpart (a) above, PG&E developed the ARDQ Program to identify and manage Critical Data Elements for critical assets across multiple data quality dimensions, including completeness. PG&E is providing “WMP-Discovery2023_DR_OEIS_003-Q010Atch02.xlsx” that aligns to the asset component and attribute list in the response to subpart (a), and provides the corresponding completeness (Fillrate) as a percentage. It is important to note that for some attributes, there is not an expectation that record attributes have a 100% fill rate due to the nature of the attribute. For example, not all Primary Overhead Conductors are expected to have a jacket type.
- d. PG&E is not presently able to quantify the number of assets missing from the asset inventory. When missing assets are identified the assets are added to the inventory. We have multiple efforts to identify missing assets as well as to create new asset registry inventories where needed.

PG&E’s asset registry program prioritizes asset inventory completeness (missing asset) improvements in the following ways:

- Timely processing of as-built documents associated with completed construction work into the asset registry;
- Asset data inventory corrections provided by field inspections; and
- Asset data projects designed to assess and improve the completeness of records and attribute data for critical assets.