## Date Received: February 07, 2023 Date Submitted: February 22, 2023

## **GENERAL OBJECTIONS**

1. SDG&E objects generally to each request to the extent that it seeks information protected by the attorney-client privilege, the attorney work product doctrine, or any other applicable privilege or evidentiary doctrine. No information protected by such privileges will be knowingly disclosed.

2. SDG&E objects generally to each request that is overly broad and unduly burdensome. As part of this objection, SDG&E objects to discovery requests that seek "all documents" or "each and every document" and similarly worded requests on the grounds that such requests are unreasonably cumulative and duplicative, fail to identify with specificity the information or material sought, and create an unreasonable burden compared to the likelihood of such requests leading to the discovery of admissible evidence. Notwithstanding this objection, SDG&E will produce all relevant, non-privileged information not otherwise objected to that it is able to locate after reasonable inquiry.

3. SDG&E objects generally to each request to the extent that the request is vague, unintelligible, or fails to identify with sufficient particularity the information or documents requested and, thus, is not susceptible to response at this time.

4. SDG&E objects generally to each request that: (1) asks for a legal conclusion to be drawn or legal research to be conducted on the grounds that such requests are not designed to elicit facts and, thus, violate the principles underlying discovery; (2) requires SDG&E to do legal research or perform additional analyses to respond to the request; or (3) seeks access to counsel's legal research, analyses or theories.

5. SDG&E objects generally to each request to the extent it seeks information or documents that are not reasonably calculated to lead to the discovery of admissible evidence.

6. SDG&E objects generally to each request to the extent that it is unreasonably duplicative or cumulative of other requests.

7. SDG&E objects generally to each request to the extent that it would require SDG&E to search its files for matters of public record such as filings, testimony, transcripts, decisions, orders, reports or other information, whether available in the public domain or through FERC or CPUC sources.

8. SDG&E objects generally to each request to the extent that it seeks information or documents that are not in the possession, custody or control of SDG&E.

9. SDG&E objects generally to each request to the extent that the request would impose an

#### Date Received: February 07, 2023 Date Submitted: February 22, 2023

undue burden on SDG&E by requiring it to perform studies, analyses or calculations or to create documents that do not currently exist.

10. SDG&E objects generally to each request that calls for information that contains trade secrets, is privileged or otherwise entitled to confidential protection by reference to statutory protection. SDG&E objects to providing such information absent an appropriate protective order.

## **II. EXPRESS RESERVATIONS**

1. No response, objection, limitation or lack thereof, set forth in these responses and objections shall be deemed an admission or representation by SDG&E as to the existence or nonexistence of the requested information or that any such information is relevant or admissible.

2. SDG&E reserves the right to modify or supplement its responses and objections to each request, and the provision of any information pursuant to any request is not a waiver of that right.

3. SDG&E reserves the right to rely, at any time, upon subsequently discovered information.

4. These responses are made solely for the purpose of this proceeding and for no other purpose.

## Date Received: February 07, 2023 Date Submitted: February 22, 2023

The following questions relate to your 2023-2025 WMP submission. If a full response to a given question will be included in your WMP submission, your response to that question of this data request may consist of a citation to the specific page(s) or table(s) of the WMP where the information may be found, a written response to the question, or both.

## **QUESTION 1**

Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports conducted by internal entities that were completed since January 1, 2022 and that examined any programs, initiatives, or strategies described in your 2022 WMP Update.

## **RESPONSE 1**

SDG&E objects to the request on the grounds set forth in General Objections Nos. 1, 2, 3, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows:

## **Emergency Management**

SDG&E did not activate our PSPS protocols in 2022 therefore there are no QA/QC reports for actual events. In 2022 Emergency Management did conduct After-Action Reviews (AAR) for the following PSPS exercises:

- PSPS Functional Exercise Aug 2022
- PSPS Tabletop with External Partners Jun 2022
- PSPS Notification Functional Exercise May 2022

Where external partners participated in the exercises, they were also included in development of the AAR report. Opportunities for input varied between in-person AAR workshops and online surveys. Each AAR also includes an Improvement Plan (IP) to capture items where corrective actions have been identified and assigned. AAR's are completed in accordance with FEMA Homeland Security Exercise and Evaluation Program (HSEEP) guidelines.

#### **Electric Distribution Operations**

Electric Distribution Operations records emergency outage data for the entire service territory. We perform an internal two-stage review of all emergency outage data to ensure customer impact and restoration steps are accurate, but there are no QA/QC reports generated by Electric Distribution Operations as part of our review. The outage data we gather is audited internally by the Electric Reliability department.

#### Date Received: February 07, 2023 Date Submitted: February 22, 2023

#### Vegetation Management

Vegetation Management Quality Assurance team has several documents attached. They are summaries of pole brush audits, pre-inspection audits and post tree trimming work audits. Vegetation management QA team audits Wood Pole Inspection (WPI) These audits are performed on a monthly basis of completed pole inspections.

#### **Construction**

The SDG&E Portfolio & Project Management (PPM) Quality Assurance & Quality Control (QA/QC) department, in collaboration with WMP program and project leaders, examines WMP projects to verify compliance of project designs and construction to applicable SDG&E standards, specifications, and industry codes. Throughout 2022, thousands of facilities' design packages were reviewed and, after construction, field inspected, assessed, and/or audited. After performing pre- and post-construction reviews and inspections, observations are presented to the project leads for resolution. PPM QA/QC completed assessments for approximately 5,000 work packages (3,500 work packages comprise WMP efforts), which identified approximately 46,000 pre-construction observations (Figure 1) and 6,000 post-construction findings. The figure below shows the estimated composition of findings identified in 2022 for all projects, including WMP projects, which comprise a subset of these data.

Figure 1 depicts the most common pre-construction review observations related to material selection and general design errors. These observations are provided to the responsible Designer or Engineer for consideration and resolution, prior to issuance to construction.

## Date Received: February 07, 2023 Date Submitted: February 22, 2023

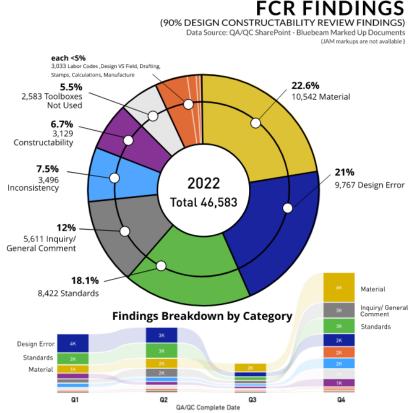


Figure 1: Composition of Pre-construction Review Observations

The composition of observations identified during post-construction inspections are: (1) as-built condition conflicts with current SDG&E Standards, (2) field conditions do not match design, (3) missing or incorrect hardware or pole tag markings, and (4) communication (Communication Infrastructure Provider (CIP), i.e. third party communication providers) line is not transferred to new facility. Over 2022, the average findings per structure totaled 1.31. These efforts fulfill one of several components of quality assurance and quality control due diligence for WMP programs and projects.

## Safety Management System

SDG&E submits the attached Audit Advisory Memorandum issued March 2, 2022 ("21-204 – SDG&E Safety Management System Program Assessment"). Sempra's Audit Services performed an advisory review of SDG&E's Safety Management System (SMS). The scope of this Audit Services advisory included a documentation review of SMS governance framework and processes with a primary objective to support a successful launch, including areas where

#### Date Received: February 07, 2023 Date Submitted: February 22, 2023

investments maybe necessary to ensure enduring success of the program, such as additional resources and technology.

#### Transmission and Substation Ops

SDG&E submits its Transmission Construction and Maintenance Quality Control Verification Report. The attached report ("*Transmission Construction and Maintenance Quality Control Verification Report 2022"*) describes audits performed in 2022, including only structures in the HFTD

#### Meteorology

#### SDG&E network of weather stations

• SDG&E operates a dense network of surface weather network, currently made of 222 weather stations, and it is foundational to SDG&E's ability to understand and predict the potential of elevated fire weather events and their impacts on local communities in its service territory. It is imperative that this weather network remains operational at all costs as it allows us to have a real-time monitoring of weather conditions that could be crucial in accurately determining the precise timing and location of powerline de-energizations required during the Public Safety Power Shutoff (PSPS) events. During the course of the year in 2022, SDG&E performs maintenance work to its weather stations by calibrating its sensors and replacing its batteries that are not in their optical states. 221 weather stations were calibrated in 2022.

# SDG&E supercomputing clusters in support of performing high-resolution numerical weather prediction forecast simulations that are tailored to the SDG&E service territory

• To stay informed on future weather conditions that could lead to increased wildfire risk and other hazardous conditions, SDG&E performs ensembles of the state-of-the-art numerical weather prediction model forecast simulations on its in-house supercomputers every day. This allows SDG&E to monitor and to predict the wildfire risk by calculating its Fire Potential Index (FPI), which is a planning and decision-supporting tool designed to reduce the wildfire risk by examining the susceptibility of the environment to fire and its daily calculations are shared broadly with the community. Therefore, ensuring that the in-house supercomputing clusters remain in healthy mode is critical. Noting that the currently in-production computing infrastructures were reaching the end of expective lifetime, SDG&E have taken a proactive action and purchased new supercomputing clusters in 2022. Purchasing the new supercomputing clusters means setting up the latest version of the numerical weather prediction model and optimizing its configuration that will be running operationally, so SDG&E have performed the model validation simulations for a selection of high-impact weather conditions ranging from Santa Ana winds, winter storms/atmospheric rivers, and monsoonal thunderstorms

## Date Received: February 07, 2023 Date Submitted: February 22, 2023

## Advancing the science of fire spread modeling

• To increase the accuracy of predicting the rate of fire spread, SDG&E has collaborated with an academic partner (SJSU: San Jose State University) to further advance the science of fire spread modeling. The SJSU fire spread model is an improvement over the popularly used fire spread model by incorporating the effects of two-way coupling between the atmosphere and fire-induced heat fluxes into the model. SJSU has also been developing the new live fuel moisture model that can be used in their coupled weather-fire model.

## ML-based model of predicting vegetation-related outages

• SDG&E have established an external collaborative partnership with San Diego Supercomputer Center (SDSC) to construct a ML-based model of predicting vegetation-related outages by examining previous vegetation-related outages and weather conditions that were associated with them. The daily output from the model will be useful in safe and reliable operations of the grid system.

#### Running a large ensemble of weather forecasts to improve the prediction of Santa Ana winds

• Given intrinsic uncertainty associated with numerical weather prediction, it is imperative to measure and quantify the uncertainty in the forecasted weather conditions, especially if high-impact weather conditions, such as gusty Santa Ana winds, are expected over the service territory. For this reasons, SDG&E have partnered with UC San Diego CW3E (Center for Western Weather and Water Extreme) to perform a large ensemble (200 members) of the weather forecasts for uncertainty quantification and use the 200-member ensemble to derive an index (Santa Ana Index) that characterizes the potential impact of predicted gusty offshore winds.

#### Customer Programs

Within SDG&E, the Customer Programs department facilitates the operation of the Generator Assistance Program (GAP), which offers point-of-sale rebates (via instant rebate coupons) and downstream rebates (via post-purchase application) for portable generator and battery units to qualifying customers in HFTD Tiers 2 and 3. This program is managed by a third-party and the QA/QC processes includes the following. It should be noted that no formal QA/QC reports are generated, but the third-party utilizes this structure to notify SDG&E of any QA/QC updates that are needed:

- Fraud QA: Run weekly reports to prevent ineligible or fraudulent reservations using bogus email accounts (example: fred@fakemail.xyz)
- Coupon Participation limit QA: A weekly verification that checks coupon reservations against each program's past participation rules and logic (e.g. 1 coupon limit per eligible customer per year). An automated workflow uses these rules and compares them against the coupons that have been reserved to make sure everything is working properly. The

## Date Received: February 07, 2023 Date Submitted: February 22, 2023

process checks against duplicate addresses, account numbers, IP addresses, customer names, phone numbers, email addresses, etc., to make sure that each customer is participating per the GAP program's participation limit rules.

- Coupon/Rebate Application QA: Run weekly reports to verify all coupons and rebate applications are correctly filled out (no missing data, all naming conventions, product URLs, amounts are correct, etc.), all program specific information is being populated and that statuses are correct.
- Portal QA: Monthly review of the program portal to verify accurate data, system performance, and product availability

## Asset Management

SDG&E submits the attached 20 files which document QA/QC audits performed by our districts that perform our electric distribution asset inspections. These audits are performed by SDG&E's Electric Construction Supervisors on a quarterly basis. These files consist of a summary document that outlines the number of audits required for the overhead detailed inspections (1.5% of the inspections completed), a detailed listing of those audits requiring to be performed, and audits for our overhead repairs (typically 1%).

#### Drone Inspection Program

SDG&E performs quality assurance reviews on all inspections completed as part of its Drone Investigation Assessment and Repair (DIAR) Program. After the Inspector completes the inspection, a Supervisor reviews the assessment and images before approving the inspection results. If any discrepancies are identified, the Supervisor will provide feedback to the Inspector during regular team meetings and the inspection findings will be updated prior to finalization. The images and findings are then processed through the machine learning models in production. Similarly, if there are any variations between the results of the machine learning model findings and the Inspector's findings, that information will be reviewed and validated by the Supervisor. Information will be sent back to the Supervisor and the missed issues will be included in the inspection findings prior to finalization.

## Access and Functional Needs

## PSPS 112221 After Action Review\_PSPS Partners 120621

After a PSPS event, 211 prepares and submits a detailed summary of actions completed and services provided to SDG&E medical baseline and/or access and functional needs customers that call in during a PSPS event. Details summarized in the report includes: calls intake, referral services such as, hotel stays, transportation, and back-up power unit if needed.

#### Date Received: February 07, 2023 Date Submitted: February 22, 2023

## AudioEye Issue Report sdge.com-02\_16\_2023

Effective real-time communications with customer affected by PSPS and other power outages is critical for the health and safety of all customers. One of our most important customer communication channels is the SDGE.com website and the PSPS preparedness and event information within the site.

The Audio Eye Issue Report is run every week and constant improvements and accessibility enhancements are being made to address issues identified within the report. Accessibility of the website, to the WCAG 2.1 AA success criteria, is a constant focus and high importance for SDG&E. AudioEye monitors SDGE.com and SDGEnews.com for accessibility issues and provides technical reports and remediation solutions with our Web Team.

#### AE-STAR-sdge.com-2023-02-16

The AudioEye Sustainable Testing and Remediation (STAR) Plan provides SDG&E's Web Team with a road map of corrective measures each week to enhance and comply with accessibility guidelines (WCAG 2.1 AA)

## Date Received: February 07, 2023 Date Submitted: February 22, 2023

# **QUESTION 2**

Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports conducted by external entities that were completed since January 1, 2022 and that examined any programs, initiatives, or strategies described in your 2022 WMP Update. External entities include, but are not limited to, consultants, contractors, auditors, court-appointed monitors, and Independent Evaluators.

# **RESPONSE 2**

SDG&E objects to the request on the grounds set forth in General Objections Nos. 1, 2, 3, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows:

Transmission and Substation Operations

In 2022, the CPUC ESRB conducted 4 audits as follows:

- June 13-17 Orange County District Substation Audit
- December 5-9 Northeast District Substation Audit
- December 12-16 Metro District Substation Audit
- December 12-16 Mountain/Inland/Coastal Transmission Audit

Copies of the CPUC audit reports for the three substation audits are provided as part of this data request response. The audit for the December Mountain/Inlad/Coastl Transmission area has not yet been received from the CPUC.

SDG&E references the "2022 California Independent System Operator Corporation (ISO) Maintenance Review – Final Report" attached hereto. The report published November 2022 documents the ISO 2022 annual maintenance review of SDG&E's filed maintenance practices for transmission facilities placed under the ISO operational control.

## Electric Regional Operations

In 2022, the CPUC ESRB conducted one audit associated with distribution operations and maintenance as follows:

• August 1-5 – Beach Cities District Audit

A copy of the CPUC audit report for Beach Cities District is provided as part of this data request response.

## Emergency Management

## Date Received: February 07, 2023 Date Submitted: February 22, 2023

Emergency Management activities are typically audited by external entities the year following the activities, for example, 2022 activities will be audited in 2023. Therefore, there are no QA/QC reports conducted by external entities in 2022 for 2022 WMP activities.

## Date Received: February 07, 2023 Date Submitted: February 22, 2023

# **QUESTION 3**

Provide an Excel table of all defects in the year 2022 found by Energy Safety's Compliance Branch (as rows) that includes the following information in separate columns.

a) Associated circuit name

b) Defect type

c) Description of defect

d) WMP initiative (from your 2022 WMP update) associated with defect

e) Date that the defect was identified

f) Date that the defect was corrected

g) If the defect has not yet been corrected as of the issuance date of this data request, a brief explanation

h) Priority level of corresponding corrective tag

i) Geographic latitude of defect in decimal degrees, truncated to seven decimal places

j) Geographic longitude of defect in decimal degrees, truncated to seven decimal places

# **RESPONSE 3**

SDG&E objects to the request on the grounds set forth in General Objections Nos. 5 and 8. Subject to the foregoing objections, SDG&E responds as follows:

N/A

Date Received: February 07, 2023 Date Submitted: February 22, 2023

**END OF REQUEST**