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January 16, 2020

**ADVICE LETTER 3496-E
(U902-E)**

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

**SUBJECT: QUARTERLY ADVICE LETTER RELATED TO PUBLIC UTILITIES CODE
SECTION 8389(e)(7)**

Per Public Utilities Code Section 8389(e)(7), San Diego Gas & Electric Company (SDG&E or Company) hereby submits to the California Public Utilities Commission (Commission) this Tier 1 Advice Letter (AL) that details the implementation of both its approved Wildfire Mitigation Plan and recommendations of the most recent safety culture assessment; a statement of recommendations of the Board of Directors Safety Committee (Safety Committee) meetings that occurred during the quarter;¹ and a summary of the implementation of the Safety Committee recommendations from SDG&E's previous advice letter.²

PURPOSE

The purpose of this AL is to comply with the requirements of Section 8389(e)(7), which were added to the Public Utilities Code by Assembly Bill (AB) 1054 on July 12, 2019. That statutory provision requires that SDG&E file a Tier 1 AL "on a quarterly basis that details the implementation of both its approved wildfire mitigation plan and recommendations of the most recent safety culture assessment, and a statement of recommendations of the board of directors safety committee meetings that occurred during the quarter." Section 8389(e)(7) also requires that the AL "shall summarize the implementation of safety committee recommendations from the electrical corporation's previous advice letter filing."

BACKGROUND

Governor Newsom signed AB 1054 into law on July 12, 2019. AB 1054 contains numerous statutory provisions and amendments designed to enhance the mitigation and prevention of catastrophic wildfires – including wildfires linked to utility equipment – in California. AB 1054 added Section 8389 to the Public Utilities Code. Section 8389(e) establishes the requirements for annual safety certifications³ and, *inter alia*, requires electrical corporations to establish a safety committee of its board of directors composed of members with relevant safety experience,

¹ This AL includes information relating to activities and events that occurred in the fourth quarter of 2019.

² SDG&E AL 3461-E (November 5, 2019).

³ SDG&E received its initial safety certification from the Commission via a letter from the Executive Director dated July 26, 2019.

establish board-of-director-level reporting to the Commission on safety issues, and file quarterly Tier 1 ALs as described above.

DISCUSSION

Implementation of SDG&E's Approved Wildfire Mitigation Plan

SDG&E tracks the progress of the 54 different mitigations proposed in its 2019 Wildfire Mitigation Plan.⁴ These mitigations involve a wide-array of topic areas such as: inspection and maintenance programs, infrastructure replacement programs, and vegetation management programs which all mitigate the risk of ignitions due to a fault on the electric system, as well as situational awareness, which informs SDG&E's risk models and helps prioritize infrastructure replacement; and strategies and tools for real time decision making during emergency response or Power Safety Power Shutoff events. SDG&E also has mitigations that reduce the impact of a wildfire once an ignition has occurred, including high definition cameras, ground and aerial fire suppression resources, and a fuels management program. In addition, SDG&E has implemented mitigations to the customer impacts associated with Power Safety Power Shutoff events including the installation of remote switches to limit the customers exposed to Power Safety Power Shutoff, the establishment of customer resource centers during Power Safety Power Shutoff events, and SDG&E's customer outreach programs.

In Attachment A hereto, SDGE provides a detailed breakdown of the 2019 year-end progress on all these individual mitigations. In summary, SDG&E has fire hardened 160 miles of its electric system and replaced over 3,600 structures within the high fire threat district from January 1, 2019 through December 31, 2019.

Implementation of SDG&E's Most Recent Safety Culture Assessment

SDG&E has not yet undergone a Commission-initiated safety culture assessment. Accordingly, SDG&E has no information to report regarding implementation. Once SDG&E's safety culture assessment is completed, SDG&E will include implementation information in future advice letters.

January 10, 2020 Safety Committee Meeting

The SDG&E Board Safety Committee⁵ advises and assists the Board of Directors in the oversight of safely providing electric and natural gas services to the Company's customers. The Safety Committee held a meeting on January 10, 2020 in which it received presentations from SDG&E management and employees. In the course of the meeting, the Safety Committee asked questions and engaged with SDG&E management and employees regarding the subjects of their presentations.

At the January 10 meeting, the Safety Committee received presentations from SDG&E management and employees regarding safety issues.

Caroline Winn, SDG&E's Chief Operating Officer, presented an update on the implementation status of SDG&E's 2019 Wildfire Mitigation Plan. Ms. Winn also discussed SDG&E's preparation of its 2020 Wildfire Mitigation Plan, pursuant to the December 16, 2019 Administrative Law Judge's ruling establishing a plan template and related evaluative materials. As discussed below,

⁴ SDG&E's 2019 Wildfire Mitigation Plan was approved in D.19-05-039.

⁵ The Safety Committee members include Erbin B. Keith, Chairman; Robert J. Borthwick; and Trevor I. Mihalik.

Ms. Winn also explained SDG&E's follow-up to the recommendations issued by the Safety Committee at its previous meeting. Next, along with John Jenkins, SDG&E's Vice President for Electric System Operations, Ms. Winn provided an After Action Report on the 2019 Red Flag Warning events in SDG&E's service territory.

Mr. Jenkins then provided a review of the Safety and Enforcement Division's November 26, 2019 Incident Investigation Report for the 2018 Camp Fire. Mr. Jenkins summarized the report and explained SDG&E's transmission inspection procedures, as well as salient differences in the equipment SDG&E uses on its transmission facilities.

Will Speer, SDG&E's Vice President of Electric Engineering and Construction, made a presentation to the Safety Committee on SDG&E's Serious Injury and Fatality Prevention Assessment Initiative. This initiative seeks to reduce and mitigate the potential for serious injuries.

Kirstie Raagas, Business Manager in SDG&E's Regulatory Affairs department, then provided an overview of Public Safety Power Shutoffs in California, discussing SDG&E's experience from the aftermath of the 2007 fires through the present, as well as the recent de-energization events in the fall of 2019 and related regulatory proceedings.

Ms. Winn and Mike Schneider, SDG&E's Vice President of Risk Management and Compliance, explained SDG&E's recent accountability reporting concerning spending and safety performance metrics.

Lastly, Mr. Keith provided the following Safety Committee recommendations to SDG&E:

1. The Safety Committee should meet with one or more outside consultants on safety issues in 2020.
2. SDG&E should study whether there are improvements that can be made to its processes and procedures regarding Public Safety Power Shutoff events to further leverage technology to enhance the Company's internal and external distribution of information.

Implementation of Recommendations of the Board of Directors Safety Committee in the Prior Quarter

As noted in AL 3461-E, SDG&E's Safety Committee provided the following recommendations to the Company at the November 4, 2019 meeting:

1. SDG&E should inform the Safety Committee Members of any significant safety event affecting SDG&E's customers or its workforce.
2. SDG&E should establish regular reporting from its executives with safety-related responsibilities or oversight to the Safety Committee.
3. SDG&E should study, to the extent possible based on available information, the causes of the recent catastrophic wildfire ignitions linked to PG&E or SCE equipment for purposes of developing "lessons learned."
4. SDG&E should continue its practice of holding a series of Emergency Operations drills simulating major catastrophic events, including a wildfire ignition.

At the January 10 meeting, Ms. Winn provided an update on SDG&E's progress regarding these recommendations. Specifically, Ms. Winn reported as follows:

1. SDG&E will provide updates to the Safety Committee on any significant safety events affecting SDG&E's customers or its workforce. In the fourth quarter of 2019, there were no such events to report.
2. SDG&E executives with safety responsibilities will report to the Safety Committee at each Safety Committee meeting. At the January 10 meeting, Ms. Winn described some of the important safety meetings and briefings in which she participated over the past 6 months as the Company's chief safety officer.

First, SDG&E's executives regularly discuss and receive briefings on safety matters within the context of the Company's Executive Safety Council. The Safety Council meets on an approximately monthly basis.

Second, SDG&E's executives and various subject matter experts regularly discuss and receive briefings on wildfire-related issues affecting the Company within the context of SDG&E's Wildfire Council. The Wildfire Council also meets on an approximately monthly basis.

Third, SDG&E holds numerous exercises and preparedness events. Recent examples include: (1) Sempra Energy's 2019 Emergency Preparedness Stand Down; (2) Annual Contractor Safety Summit; (3) Public Safety Power Shutoff exercise; (4) Operation Fire Safe Day kick off; (5) the 2019 Safety Congress; and (6) the Sempra Energy Safety Summit.

Fourth, SDG&E developed the Wildfire Safety Community Advisory Council to solicit input from various community leaders on wildfire issues.

3. As noted, at the January 10 meeting, SDG&E reviewed a recent report issued by the Safety and Enforcement Division on the 2018 Camp Fire with the Safety Committee. SDG&E will continue to review additional information as it becomes available.
4. SDG&E has scheduled four major drills for its Emergency Operations Center personnel in 2020, involving wildfire events (two drills), an earthquake event, and a cybersecurity event. SDG&E also continues to plan and perform training events for safety officers on an approximately quarterly basis.

EFFECTIVE DATE

SDG&E believes this submittal is subject to Energy Division disposition and should be classified as Tier 1 (effective pending disposition) pursuant to GO 96-B. SDG&E respectfully requests that this AL become effective on January 16, 2020, which is the date of submittal.

PROTEST

Anyone may protest this Advice Letter to the California Public Utilities Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and must be received no later than February 5, 2020, which is within 20 days of the date this Advice Letter was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of Energy Division at EDTariffUnit@cpuc.ca.gov of the Energy Division. A copy of the protest should also be sent via e-mail to the address shown below on the same date it is mailed or delivered to the Commission.

Attn: Megan Caulson
Regulatory Tariff Manager
E-mail: MCaulson@sdge.com

NOTICE

A copy of this filing has been served on the utilities and interested parties shown on the attached list, including interested parties to service lists R.18-10-007 and R.18-12-005, by either providing them a copy electronically or by mailing them a copy hereof, properly stamped and addressed.

Address changes should be directed to SDG&E Tariffs by e-mail at SDG&ETariffs@sdge.com.

CLAY FABER
Director – Federal & CA Regulatory



ADVICE LETTER SUMMARY

ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.:

Utility type:

ELC GAS WATER
 PLC HEAT

Contact Person:

Phone #:

E-mail:

E-mail Disposition Notice to:

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #:

Tier Designation:

Subject of AL:

Keywords (choose from CPUC listing):

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date:

No. of tariff sheets:

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed¹:

Pending advice letters that revise the same tariff sheets:

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name:
Title:
Utility Name:
Address:
City:
State: Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Name:
Title:
Utility Name:
Address:
City:
State: Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

General Order No. 96-B
ADVICE LETTER SUBMITTAL MAILING LIST

cc: (w/enclosures)

<u>Public Utilities Commission</u> <u>Office of Ratepayer Advocates (ORA)</u> R. Pocta <u>Energy Division</u> M. Ghadessi M. Salinas L. Tan R. Ciupagea Tariff Unit	<u>Clean Power Research</u> T. Schmid G. Novotny <u>Davis Wright Tremaine LLP</u> J. Pau <u>Douglass & Liddell</u> D. Douglass D. Liddell <u>Ellison Schneider Harris & Donlan LLP</u> E. Janssen C. Kappel <u>Energy Policy Initiatives Center (USD)</u> S. Anders <u>Energy Regulatory Solutions Consultants</u> L. Medina <u>Energy Strategies, Inc.</u> K. Campbell <u>EQ Research</u> General <u>Goodin, MacBride, Squeri, & Day LLP</u> B. Cragg J. Squeri <u>Green Charge</u> K. Lucas <u>Hanna and Morton LLP</u> N. Pedersen <u>JBS Energy</u> J. Nahigian <u>Keyes & Fox, LLP</u> B. Elder <u>Manatt, Phelps & Phillips LLP</u> D. Huard R. Keen <u>McKenna, Long & Aldridge LLP</u> J. Leslie <u>Morrison & Foerster LLP</u> P. Hanschen <u>MRW & Associates LLC</u> General	<u>NLine Energy</u> M. Swindle <u>NRG Energy</u> D. Fellman <u>Pacific Gas & Electric Co.</u> M. Lawson M. Huffman Tariff Unit <u>RTO Advisors</u> S. Mara <u>SCD Energy Solutions</u> P. Muller <u>Shute, Mihaly & Weinberger LLP</u> O. Armi <u>Solar Turbines</u> C. Frank <u>SPURR</u> M. Rochman <u>Southern California Edison Co.</u> K. Gansecki <u>TerraVerde Renewable Partners LLC</u> F. Lee <u>TURN</u> M. Hawiger <u>UCAN</u> D. Kelly <u>US Dept. of the Navy</u> K. Davoodi <u>US General Services Administration</u> D. Bogni <u>Valley Center Municipal Water Distr</u> G. Broomell <u>Western Manufactured Housing Communities Association</u> S. Dey <u>Interested Parties</u> R.18-10-007 R.18-12-005
<u>CA Energy Commission</u> B. Penning B. Helft <u>Advantage Energy</u> C. Farrell <u>Alcantar & Kahl LLP</u> M. Cade K. Harteloo <u>AT&T</u> Regulatory <u>Barkovich & Yap, Inc.</u> B. Barkovich <u>Braun & Blaising, P.C.</u> S. Blaising D. Griffiths <u>CA Dept. of General Services</u> H. Nanjo <u>California Energy Markets</u> General <u>California Farm Bureau Federation</u> K. Mills <u>California Wind Energy</u> N. Rader <u>City of Poway</u> Poway City Hall <u>City of San Diego</u> F. Ortlieb B. Henry L. Azar Y. Lu D. Heard <u>Clean Energy Renewable Fuels, LLC</u> P. DeVille		

SDG&E Advice Letter 3496-E
January 16, 2020

ATTACHMENT A

SDG&E'S 2019 WILDFIRE MITIGATION PLAN PROGRESS UPDATE

SDG&E's 2019 Wildfire Mitigation Plan (WMP) Progress Update

(All data is as of December 31st, 2019)

Wildfire Mitigation Plan Activities Summary



Operational Practices			Vegetation Management			Situational Awareness			
4.1.1 – Operate based on normal, elevated, and extreme conditions	4.1.2 – Disable reclosing during elevated or higher conditions	4.1.3 – Restrict high risk work during elevated or higher conditions	4.4.1 – Create a tree database for analysis	4.4.2 – Increase inspections within the HFTD	4.4.3 – Increase post trim clearance to 25’ within the HFTD	4.5.1 – Creates a Fire Science and Climate Adaptation department	4.5.2 – Perform analysis of weather data to inform circuit risk	4.5.3 – Publish Fire Potential Index to inform Operations	
4.1.4.1 – Send fire suppression crews to support electric crews	4.1.4.2 – Aerial resources available for CalFire Dispatch year round	4.1.4.3 – Ground fire suppression resources available for dispatch year round	4.4.4 – Utilize technology to prioritize trimming and hardening efforts	4.4.5 – Audit the trimming to ensure quality and compliance	4.4.6 – Inspect and remove “hazard trees” that could fall into lines	4.5.4 – Utilize SAWTI to gauge severity of Santa Ana Wind events	4.5.5 – Utilize wildfire simulation model to understand the impacts of ignitions	4.5.6 – Utilize camera networks to improve response times to fires	
4.1.4.5 – Create ignition database and perform root cause analysis	4.1.4.6 – Clear fuels on BLM land and 13 priority circuits		4.4.7 – Clear vegetation at the base of poles with equipment	4.4.8 – Electric Equipment Training through joint inspections with CalFire	4.4.9 – Perform inspections in high risk areas prior to red flag events	4.6.1 – Collaborate with stakeholders to better understand the impacts of climate change	4.6.2 – SDG&E will install 500 wireless fault indicators	4.6.3 – Add 13 weather stations to SDG&E’s weather network	
Plans for Inspection				Public Safety Power Shutoff					
4.2.1 – Complete distribution Inspections	4.2.2 – Complete substation inspections	4.2.3 – Complete transmission inspections	4.2.3 – Complete GIS portal to share data	4.7.1 – SDG&E utilizes PSPS as a last resort mitigation	4.7.2 – SDG&E patrols lines before re-energizing after PSPS events	4.7.4 – SDG&E notifies its customers in five languages of impeding PSPS events	4.7.5 – SDG&E continues to collaborate with key community stakeholders		
System Hardening									
4.3.1 – Leverage design and construction standards	4.3.2 – SDG&E looks to apply new technologies to mitigate wildfire risk	4.3.3 – SDG&E performs facility analysis to inform risk models and prioritization	4.3.4 – SDG&E has created a formal wildfire mitigation strategy and governance team	4.3.5 – SDG&E has formed a centralized asset management group	4.3.6 – SDG&E plans to harden 10 miles of transmission lines (outside of CNF)	4.3.7 – SDG&E plans to underground 1.25 miles of overhead in 2019	4.3.8 – SDG&E plans to harden 68 miles of overhead lines within the CNF	4.3.9 – SDG&E plans to harden 80 miles of distribution lines within the HFTD	4.3.10 – SDG&E plans to replace 700 wood pole structures within the HFTD
4.3.11 – SDG&E plans to replace 2250 fuses within the HFTD	4.3.12 – SDG&E plans to replace 500 hot line clamps within the HFTD	4.3.13 – SDG&E plans to harden 5.7 miles of distribution lines in the wildland urban interface	4.3.14 – SDG&E will develop standards and work methods for covered conductor	4.3.15 – SDG&E will enable falling conductor protection on 8 circuits	4.3.16 – SDG&E will install LTE equipment and fiber backhaul within the HFTD	4.3.17 – SDG&E has installed over 200 remote switching devices within the HFTD	4.3.18 – SDG&E will install seven additional remote switching devices	4.3.19 – SDG&E replaces poles as part of its inspections and maintenance program	4.3.20 – SDG&E installs back up generation to mitigate the impacts of PSPS

Complete
 Ahead of Plan
 On Track
 Off Track

Q4 Activity Status vs 2019 Goals

Operational Practices

Operating Conditions

137 days

Operated in elevated or higher condition

Operating Conditions (4.1.1)

Volume vs 2019 Goal: SDG&E has operated in elevated or higher condition 137 days in 2019.

Key Actions: SDG&E continues to define and change its operating procedures based on its conditions which are defined by SDG&E's fire potential index. These are defined as normal, elevated, and extreme.

Other Special Work Procedures

Complete

Other Special Work Procedures (4.1.3)

Volume vs 2019 Goal: 100% of days elevated or higher, SDG&E has implemented special work procedures.

Key Actions: SDG&E ensures that on elevated days, electric crews are accompanied by fire suppression crews to ensure safety. On extreme days, certain activities are stopped altogether within the HFTD.

Aviation Firefighting Program

3

Aerial fire suppression resources available

Aviation Firefighting Program (4.1.4.2)

Volume vs 2019 Goal: SDG&E has three aerial fire suppression resources available year-round in 2019.

Key Actions: These assets have made a combined 279 drops including 220,453 gallons of water.

Ignition Management Program

Complete

Ignition Management Program (4.1.4.5)

Volume vs 2019 Goal: SDG&E has secured a resource for this role in June and the database has been developed.

Key Actions: The ignition management program lead has begun to collect data and perform root cause analysis on ignitions.

Recloser Protocols

Complete

Recloser Protocols (4.1.2)

Volume vs 2019 Goal: 100% of days elevated or higher, SDG&E has disabled reclosing and enabled sensitive protections on its reclosers within the HFTD in an effort to mitigate the risk of wildfire.

Wildfire Infrastructure Protection Teams

Complete

Wildfire Infrastructure Protection Teams (4.1.4.1)

Volume vs 2019 Goal: 100% of days elevated or higher, wildfire infrastructure teams join SDG&E electric crews to provide fire suppression capabilities during high risk work. These crews are also there to support re-energization during PSPS events.

Industrial Fire Brigade

Complete

Industrial Fire Brigade (4.1.4.3)

Volume vs 2019 Goal: Industrial fire brigade resource has been secured and is available year-round in 2019.

Key Actions: This fire suppression resource responds to active fire events caused by SDG&E equipment. They are equipped with a liquid foam truck which can extinguish oil fires caused by transformers.

Fuels Management Program

808

Poles surveyed

511

Poles treated

Fuel Management (4.1.4.6)

Volume vs 2019 Goal: Baseline surveys were completed for 808 poles including BLM, Priority 13, Tier 3, and CNF poles. 511 of the surveyed poles were treated. The remaining poles did not meet the habitat requirements for fuel work, or the landowner denied access.

Key Actions: SDG&E has completed fuels management on 100% of the poles surveyed that met the program criteria and were able to be accessed.

Q4 Activity Status vs 2019 Goals

Plans for Inspection

Distribution System Inspection

100% QA/QC
100% Detailed

Distribution System Inspection (4.2.1)

Volume vs 2019 Goal: 10,000 of 10,000 poles completed QA/QC inspection (100%), 47,813 of 47,850 poles completed for detailed inspection (100%)

Key Actions: SDG&E completes remediations within 6 months in tier 3 HFTD per general orders, and within 12 months in the tier 2 HFTD

Transmission System Inspection

100%

Structures inspected

Transmission System Inspection (4.2.3)

Volume vs 2019 Goal: 6,730 of 6,730 OH Structures inspected (100%)

Key Actions: Transmission inspections and remediations are completed in accordance with general orders and the filed maintenance plan with the California ISO.

Substation System Inspection

100%

Substations inspected

Substation System Inspection (4.2.2)

Volume vs 2019 Goal: 301 of 300 substation inspected (100%)

Key Actions: SDG&E completes substation inspections and remediations in accordance with general order 174

Geographic Information Data System

Complete

Geographic Information System Data (4.2.4)

Volume vs 2019 Goal: The GIS portal to share information with CALOES during emergency and PSPS events has been implemented.

Key Actions: SDG&E has successfully shared GIS information through the portal on multiple activations in 2019

Q4 Activity Status vs 2019 Goals



System Hardening (1 of 3)

Design and Construction Standards

Complete

Design and Construction Standards (4.3.1)

Key Actions: SDG&E designs and constructs its transmission and distribution system in accordance with its standards.

Testing and Deploying Emerging Technologies

Complete

Testing and Deploying Emerging Technologies (4.3.2)

Key Actions: SDG&E continues to evaluate and implement emerging technologies. Examples this year include the installation of falling conductor protection, the installation of the Cal Fire approved fuses, and the completion of vendor selection and standards for covered conductor.

Facility Analysis

Complete

Facility Analysis (4.3.3)

Key Actions: SDG&E has completed the actions performed in the facilities analysis section of the WMP. This information informs SDG&E's risk models and helps with the prioritization of wildfire mitigation

Oversight of Activities in the Rural Areas

Complete

Oversight of Activities in the Rural Areas (4.3.4)

Key Actions: This governance and strategy role has evolved in 2019 with the creation of the Wildfire Mitigation Department.

Asset Management

Complete

Asset Management (4.3.5)

Key Actions: The asset management group has been stood up, and they are in the process of publishing asset strategies and are developing asset health index tools.

Overhead Trans. and Dist. Fire Hardening

Trans.	Dist.
100%	98%
Hardened	

Overhead Transmission and Distribution Fire Hardening (4.3.6)

Volume vs 2019 Goal: 10 of 10 miles of transmission hardened (100%); 83 of 85 miles of distribution hardened (98%)

Key Actions: SDG&E continues the hardening of its 69kV transmission system and is on track to finish all transmission circuits within the HFTD by 2025.

Undergrounding Circuit Line Segments

208%

Undergrounded

Underground Circuit Line Segments (4.3.7)

Volume vs 2019 Goal: 2.6 of 1.25 miles undergrounded (208%)

Key Actions: This program has exceeded its goal for 2019.

Cleveland National Forest Fire Hardening

90%

Hardened

Cleveland National Forest Fire Hardening (4.3.8)

Volume vs 2019 Goal: 61 of 68 miles hardened (90%)

Key Actions: Includes both transmission and distribution fire hardening of lines within the Cleveland National Forest

Q4 Activity Status vs 2019 Goals

System Hardening (2 of 3)

Fire Risk Mitigation

96%

Complete

Fire Risk Mitigation (4.3.9)

Volume vs 2019 Goal: 82 of 85 miles complete (96%)
Key Actions: FiRM continues to replace small high-risk conductor with high tensile strength conductor, it's replaced 403 miles program to date.

Expulsion Fuse Replacement

111%

Fuses replaced

Expulsion Fuse Replacement (4.3.11)

Volume vs 2019 Goal: 2490 of 2250 fuses replaced (111%)
Key Actions: Program has exceeded its goal for 2019.

Wire Safety Enhancement

100%

Enhanced

Wire Safety Enhancement (4.3.13)

Volume vs 2019 Goal: 5.7 of 5.7 miles enhanced (100%)
Key Actions: Installation have been completed in the wild land urban interface in Rancho Santa Fe, and in the costal canyons of La Jolla.

Fire Threat Zone Advanced Protection

100%

Enabled

Fire Threat Zone Advanced Protection (4.3.15)

Volume vs 2019 Goal: 8 of 8 circuits enabled with falling conductor protection (100%)

Pole Risk Mitigation and Engineering

99%

Hardened

Pole Risk Mitigation and Engineering (4.3.10)

Volume vs 2019 Goal: 695 of 700 poles hardened (99%)

Hotline Clamps

132%

Hotline clamps removed

Hotline Clamps (4.3.12)

Volume vs 2019 Goal: 660 of 500 hotline clamps removed (132%)
Key Actions: Program has exceeded its goal for 2019.

Covered Conductor

Substantially Complete

Covered Conductor (4.3.14)

Key Actions: Distribution Standards have selected covered conductor vendors, installed the conductor at a controlled test site, attached new hardware to SDG&E, and are in route to publish standards in January of 2020.

LTE Communication Network

Complete

LTE Communication Network (4.3.16)

Key Actions: LTE equipment and fiber back haul installations have begun in 2019.

Q4 Activity Status vs 2019 Goals



System Hardening (3 of 3)

Automated Reclosers

200

Installed

Automated Reclosers (4.3.17)

Key Actions: SDG&E has over 200 remote reclosers installed within the HFTD and continues to install more in an effort to be more targeted in PSPS events

PSPS Engineering Enhancements

100%

Installed

Public Safety Power Shutoff Engineering Enhancements (4.3.18)

Volume vs 2019 Goal: 7 of 7 switches installed (100%)

Key Actions: SDG&E completed its 2019 goal to expand switch installations within the HFTD to mitigate the impacts of PSPS

Pole Replacement and Reinforcement

725

Poles replaced

Pole Replacement and Reinforcement (4.3.19)

Volume vs 2019 Goal: SDG&E has replaced 725 poles found through the GO165 visual and intrusive inspections within the HFTD.

Backup Power for Resilience

Complete

Backup Power for Resilience (4.3.20)

Key Actions: All Community Resource Centers requiring a transfer switch to facilitate backup generation were fitted with manual transfer switches by year end. 79 medical baseline customers were identified and offered generators. 65 of 79 received the generator, were trained on its use, and are considered complete. The remaining 14 customers did not participate in the program: 3 were unresponsive to outreach efforts, 8 refused to participate, and 3 had relocated. All targeted HPWREN system upgrades were completed by December 31, 2019.

Q4 Activity Status vs 2019 Goals

Vegetation Management (1 of 2)

Tree Database

455,000

Trees inventoried

Tree Database (4.4.1)

Volume vs 2019 Goal: YTD 455,000 trees in inventory

Patrol and Pruning

Complete

Patrol and Pruning (4.4.2)

Key Actions: Bamboo and Century Plant off cycle Patrols are Complete

Enhanced Inspections, Patrols, and Trimming

Complete

Enhanced Inspections, Patrols, and Trimming (4.4.3)

Volume vs 2019 Goal: 81,000 trees targeted for enhanced 25-foot post prune clearance or complete removal. Post Red flag Warning patrols in specified HFTD Circuits.

Key Actions: 28 of 28 circuits completed off cycle patrols and trimming (100%)

Technology

Complete

Technology (4.4.4)

Key Actions: Utilized Meteorological data to complete first phase of Vegetation Risk Index (VRI).

Quality Assurance

80%

HFTD audits complete

Quality Assurance (4.4.5)

Key Actions: Slight impact to schedule as a result of Red Flag Warning and fires keeping crews safe and outside the affected areas. Completed 80% of HFTD audits by year end.

Hazard Tree Removal and Right Tree-Right Place

9884	260
Removed	Replaced

Hazard Tree Removal and Right Tree-Right Place (4.4.6)

Key Actions: YTD completed 9,884 tree removals and replacing 260* trees.

**Replacement trees revised downward due to recalculation.*

Pole Brushing

100% **100%**

Mech. brushing & chem app. Re-clear cycle complete

Pole Brushing (4.4.7)

Key Actions: 100% Mechanical brushing and Chem applications are complete. Currently 100% Complete in re-clear cycle. Notification process for the next cycle is 80% complete.

Electrical Equipment Training

Off Track

Electric Equipment Training (4.4.8)

Key Actions: Cal Fire was not available for training or joint inspections in 2019. Cal Fire did commit to scheduling training in 2020.

Q4 Activity Status vs 2019 Goals

Vegetation Management (2 of 2)

Red Flag Operations

Complete

Red Flag Operations (4.4.9)

Key Actions: Tree Trim Crews have been staged during each Red flag Warning event at the request of the EDO.

Q4 Activity Status vs 2019 Goals

Situational Awareness (1 of 2)

Fire Science and Climate Adaptation Department
Complete

Fire Science and Climate Adaptation Department (4.5.1)
Volume vs 2019 Goal: This department was formed in 2018
Key Actions: This department forms the foundation for situational awareness, emergency response, and hardening prioritization

Meteorological Cap. and Tech.
Complete

Meteorological Capabilities and Technologies (4.5.2)
Volume vs 2019 Goal: SDG&E's weather network has grown from 178 to 191 in 2019.
Key Actions: Leveraging SDG&E's dense weather network, SDG&E performs statistical analysis to model risk on individual electric circuits

Fire Potential Index
Complete

Fire Potential Index (4.5.3)
Volume vs 2019 Goal: SDG&E has published an FPI every business day in elevated or higher conditions 137/137 days (100%)
Key Actions: SDG&E leverages the FPI to inform it's operating conditions and procedures

Santa Ana Wildfire Threat Index
Complete

Santa Ana Wildfire Threat Index (4.5.4)
Volume vs 2019 Goal: SDG&E developed in conjunction with US Forest Service and UCLA, and it's published every business day
Key Actions: This tool allows SDG&E to gauge the severity of Santa Ana wind events

WRRM - Operational System
29
Simulations published

Wildfire Risk Reduction Model – Operational System (4.5.5)
Key Actions: SDG&E has published 29 fire simulations which inform impact analysis of fires without suppression to get an idea of the structures, customers, and SDG&E infrastructure that is at risk due to an ignition. This tool is used to prioritize hardening efforts.

Camera Networks and Fire Detection
107
Cameras

Camera Networks and Fire Detection (4.5.6)
Volume vs 2019 Goal: SDG&E has a total of 107 cameras across the service territory
Key Actions: The primary use to improve fire suppression response time by triangulating locations of ignitions as soon as they occur

Climate Change Adaptation
Complete

Climate Change Adaptation (4.6)
Key Actions: SDG&E collaborates with the San Diego Association of Governments(SANDAG) and educational institutions to better understand the impacts of climate change, and how to best mitigate these impacts. SDG&E has an internal climate advisory group that advices on climate-based decisions.

Wireless Fault Indicators
119%
Complete

Wireless Fault Indicators (4.6.2)
Volume vs 2019 Goal: 594 of 500 wireless fault indicators (119%)
Key Actions: This program exceeded its goal for 2019.

Q4 Activity Status vs 2019 Goals

Situational Awareness (2 of 2)

Advanced Weather
Station Integration
and Forecast

Complete

Advanced Weather Station Integration and Forecast (4.6.3)

Volume vs 2019 Goal: Added 13 of 13 weather stations (100%)

Key Actions: This year, SDG&E has installed a software enhancement on 105 of it's 190 weather stations which allows for reads every 30 seconds, a significant improvement from reads every 10 minutes. This enables better real time decision making.

Q4 Activity Status vs 2019 Goals

Public Safety Power Shutoff

Strategy for
Minimizing Public
Safety Risk

Complete

Strategy for Minimizing Public Safety Risk (4.7.1)

Key Actions: SDG&E continues to use Power Safety Power Shutoff as a last resort mitigation during the most extreme weather events of the year. In 2019, SDG&E activated PSPS protocols on three events and utilized PPS all three times. One of the PPS protocol activations included three separate Red Flag Warnings, of which PPS was only utilized for two of the three RFWs.

Communication
Practices

Complete

Communication Practices (4.7.4)

Key Actions: SDG&E has implemented notification procedures in five languages to keep our customers informed of potential and impending PPS events utilizing multiple channels of communication as outlined in SDG&E's wildfire mitigation plan.

Public Safety Power
Shutoff Protocols

Complete

Public Safety Power Shutoff Protocols (4.7.2)

Key Actions: Before re-energizing customers after a PPS event, SDG&E confirms with meteorology that the peak winds have passed, and 100% of the circuit is patrolled by ground or helicopter to ensure no damage occurred during the event.

Mitigating the Public
Safety Impact of
PPS Protocols

Complete

Mitigating the Public Safety Impact of PPS Protocols (4.7.5)

Key Actions: SDG&E has and continues to communicate with key stakeholders as outlined in SDG&E's Wildfire Mitigation Plan

Appendix

Off Track Activity Details

2019 WMP Off Track Activities – Details



(4.4.8) – Electric Equipment Training

Summary: This program was initiated as a collaboration with CalFire. Both SDG&E and CalFire are required to perform inspections in compliance with PRC 4292 and 4293. SDG&E and CalFire jointly perform these inspections so that CalFire better understands the electrical equipment and so that SDG&E better understands the wildfire risk of the area.

Progress/Challenges: SDG&E offered to train CalFire employees on electrical equipment at the beginning of 2019, but they didn't have resources available to complete the training. CalFire confirmed there was a county staffing issue, and that the county will provide additional staffing in 2020. They have plans to resume joint inspections with SDG&E in 2020.