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A.08-12-021 REG 10-12

February 9, 2018

Ms. Elizaveta Malashenko Director, Safety and Enforcement Division California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

SUBJECT: SAN DIEGO GAS & ELECTRIC COMPANY (SDG&E) DE-ENERGIZATION REPORT

Dear Ms. Malashenko:

In accordance with Ordering Paragraph (OP) 2 of Decision 12-04-024, SDG&E is submitting this report in response to the De-Energization Events that occurred in SDG&E's service territory on January 27-29, 2018. As noted in the reporting requirements, this report has been verified by an SDG&E officer in accordance with Rule 1.11 of the Commission's Rules of Practice and Procedure.

If you have any questions regarding this report, please contact Tim Lyons at (858) 654-6403, or at <u>TLyons@semprautilities.com</u>.

Sincerely,

/s/ Clay Faber

Clay Faber Director — Regulatory Affairs The following report is submitted in response to the De-Energization Events that occurred in SDG&E's service territory on January 27-29, 2018. SDG&E hereby submits this report to the Director of Safety and Enforcement Division (SED) and includes the following information pursuant to Decision (D.)12-04-024.

1. Explanation of SDG&E's decision to de-energize

Response:

The decisions to de-energize for public safety were made at SDG&E's Emergency Operations Center (EOC), which was fully staffed by a cross-functional team of electric operations, customer service, safety, engineering, external affairs, communications and other personnel, as well as a designated Officer-In-Charge (OIC). The EOC was activated at 11:00 p.m. on Saturday, January 27, 2018 in response to a Red Flag Warning (RFW) weather event declared effective at 7:00 p.m. on Saturday, January 27, 2018 by the National Weather Service (NWS). SDG&E activates the EOC to respond to qualified RFWs and other events to provide response coordination, ensure that an OIC receives operational updates, coordinate customer communications and regulatory and governmental notifications, and coordinate as-needed logistical support.

Official NWS forecasts indicated widespread wind gusts up to 55 mph with isolated gusts up to 75 mph. SDG&E's meteorologists' forecasts were similar, predicting widespread wind gusts 40-60 mph across the backcountry with isolated gusts up to 85 mph. The RFW, in combination with available data and real-time observations showing dire fuel-moisture content, strong winds, and extremely low relative humidity, indicated an elevated threat of large and destructive wildfires with rapid rates of spread and long-range spotting should an ignition occur. SDG&E determined that conditions warranted de-energizing certain facilities which might otherwise provide a source of ignition of a fire.

2. All factors considered by SDG&E in its decision to de-energize, including visual observations by pre-positioned and mobile field personnel where possible, wind speed, temperature, humidity, and vegetation moisture content in the vicinity of the de-energized circuits.

Response:

The decisions for SDG&E to de-energize circuits and tie lines were made due to extremely high winds and associated fire danger given the extremely low humidity and dry fuel conditions at the time, among other factors. In each of these events, SDG&E carefully reviewed the situation and ultimately decided to de-energize to protect public safety and longer-term system reliability. Key bases for these decisions included:

- The RFW issued by the NWS indicated that the combination of strong winds, low relative humidity, and warm temperatures would result in critical fire weather conditions with the potential for extreme fire behavior;
- The 7-Day Significant Fire Potential product issued by the Fire Weather Unit at the Southern California Geographic Coordination Center indicated a "High Risk" event with the potential for large fires, rapid rates of spread, and long-range spotting;
- The Santa Ana Wildfire Threat Index (SAWTI) was at Moderate ("Upon ignition, fires will grow rapidly and will be difficult to control.");
- The Storm Prediction Center's Fire Weather Outlook indicated critical fire weather conditions for portions of the SDG&E service territory;
- The Fire Potential Index (FPI) was at the highest end of elevated, indicating the potential for large fires should an ignition occur;
- The High Wind Warning issued by the NWS indicated the potential for damaging wind gusts up to 75 mph;
- Live Fuel Moisture values were below average (~65%) and Dead Fuel Moisture values were at or near record lows for late January;
- Critical fire weather conditions were occurring throughout the SDG&E service territory, including high winds, extremely low humidity and critically dry fuels;
- Recorded wind gusts around the de-energized circuits were in the high 50s, 60s, and/or 70s for several consecutive reads with some isolated gusts in excess of 80 MPH;
- Input from mobile field observers;
- Surrounding areas were forecast to and did see winds gusts exceeding 50 MPH;
- Fire-suppression-air resources could be unavailable due to high winds and time of day;
- The outages could be targeted to minimize impacts to customers; and
- A review of active outages on SDG&E's system.

3. The time, place, and duration of the event.

Response:

Please see below for each separate De-Energization Event. Circuits marked with an asterisk (*) were not initially de-energized by SDG&E, but remained out of service due to fire risk.

	Start Date /		Final
Circuit	Time	Communities	Restoration
79	1/27/18 19:06	DESCANSO, MT LAGUNA, VIEJAS	1/29/2018 12:52
79	1/28/18 9:21	DESCANSO, MT LAGUNA, VIEJAS	1/29/2018 10:02
79*	1/28/18 9:59	DESCANSO, MT LAGUNA, VIEJAS	1/29/2018 10:14
	1/28/2018		
79	20:53	DESCANSO, MT LAGUNA, VIEJAS	1/29/2018 12:48
		HIGHLAND VALLEY, POWAY N, POWAY S, RAMONA S,	
176*	1/29/2018 0:22	SAN VICENTE	1/29/2018 10:23

		HIGHLAND VALLEY, POWAY N, POWAY S, RAMONA S,	
176*	1/29/2018 0:43	SAN VICENTE	1/29/2018 6:16
		MESA GRANDE, PALOMAR MTN, VALLEYCTR, VALLEYCTR	
214	1/28/18 9:02	E	1/29/2018 14:58
217	1/28/18 8:18	PALA, PALOMAR MTN, PAUMA VALLEY, VALLEYCTR	1/29/2018 13:58
220*	1/29/2018 7:58	MESA GRANDE, WYNOLA, WYNOLA N	1/29/2018 16:19
		BANNER, HARRISON PARK, MESA GRANDE, RAMONA E,	
222	1/28/18 8:28	SDCOUNTRY ESTATES, WYNOLA, WYNOLA N	1/29/2018 16:09
238	1/27/18 20:06	WYNOLA	1/29/2017 14:53
358	1/27/18 21:34	ALPINE W, DEHESA, VIEJAS	1/28/2016 16:33
	1/28/2018		
358	20:57	ALPINE W, DEHESA, VIEJAS	1/29/2018 12:38
440*	1/29/2018 2:47	JAPATUL, MT LAGUNA	1/29/2018 16:53
441	1/28/18 1:43	BOULEVARD, JAPATUL	1/29/2018 13:13
445	1/28/18 10:09	BOULEVARD	1/29/2018 15:36
1030*	1/28/18 10:18	LAKE WOHLFORD, VALLEYCTR, VALLEYCTR E	1/29/2018 14:30
1030	1/28/18 10:45	LAKE WOHLFORD, VALLEYCTR, VALLEYCTR E	1/29/2018 12:14
	1/28/2018		
1030	16:00	LAKE WOHLFORD, VALLEYCTR, VALLEYCTR E	1/29/2018 12:14
1215	1/28/18 10:11	BOULEVARD, JAPATUL	1/29/2018 16:06
1215	1/28/18 10:12	BOULEVARD, JAPATUL	1/29/2018 16:07
SCE-TM1-			
Sub	1/28/18 8:25	PALA	1/28/2018 16:12

4. The number of affected customers, broken down by residential, medical baseline, commercial/industrial, and other.

Response:

Circuit	Start Date / Time	Total # Out	Residential	Commercial / Industrial	Life Support
79	1/27/18 19:06	87	61	26	4
79	1/28/18 9:21	5	2	3	
79	1/28/18 9:59	672	527	145	14
	1/28/2018				
79	20:53	95	83	12	0
176	1/29/2018 0:22	780	643	137	26
176	1/29/2018 0:43	18	15	3	

214	1/28/18 9:02	362	289	73	7
217	1/28/18 8:18	160	89	71	2
220	1/29/2018 7:58	315	219	96	4
222	1/28/18 8:28	387	226	161	5
238	1/27/18 20:06	2	1	1	
358	1/27/18 21:34	252	168	84	5
	1/28/2018				
358	20:57	186	167	19	5
440	1/29/2018 2:47	262	208	54	2
441	1/28/18 1:43	92	51	41	3
445	1/28/18 10:09	350	293	57	11
1030	1/28/18 10:18	495	420	75	18
1030	1/28/18 10:45	818	607	211	29
	1/28/2018				
1030	16:00	294	179	115	8
1215	1/28/18 10:11	11	0	11	0
1215	1/28/18 10:12	133	103	30	5
SCE-TM1-					
Sub	1/28/18 8:25	34	29	5	1

SDG&E's De-Energization Events affected approximately 5,800 customers.

5. Describe any wind-related damage to SDG&E's overhead power-line facilities in the areas where power is shut off.

Response:

SDG&E crews patrolled the de-energized lines to ensure safe operating conditions prior to re-energization. Crews found no wind-related damage.

6. Provide a description of the customer notice and any other mitigation provided by SDG&E.

Response:

- a) SDG&E proactively reached out to customers who were affected by the event. Outreach was made via outbound dialer, email, mobile email/text messaging and personal phone calls.
- b) Nine custom messages and one standard message were used to communicate with customers who were de-energized. Different messages were developed to help customers understand the unique circumstances, and several customers received more

than one call. Please see Attachment 1.

- c) Several general customer communications were launched via SDG&E's website and social media.
- d) At the beginning of the event, an SDG&E representative went door-to-door to contact a total of seventy-six medical baseline and life support customers in all affected areas that were not reached by phone after multiple contact attempts once the Red Flag Warning was declared.
- e) SDG&E set up and staffed customer outreach sites in Julian and Campo. SDG&E provided customers with the following at the customer outreach sites: water and other beverages, ice, snacks, electronics charging stations, Wifi connectivity, and air-conditioned trailers.

7. Include any other matters that SDG&E believes are relevant to the Commission's assessment of the reasonableness of SDG&E's decision to de-energize.

Response:

- 35 SDG&E weather stations measured wind gusts equal to or greater than 50 mph;
- 11 SDG&E weather stations measured wind gusts equal to or greater than 60 mph;
- 2 SDG&E weather stations measured wind gusts equal to or greater than 80 mph, including a peak gust of 89 mph at Sill Hill;
- A 79-mph wind gust was measured by a UCSD/HPWREN weather station on top of Black Mountain before the metal structure it was on collapsed;
- The Sill Hill weather station measured wind gusts at or above 60 mph for 40 hours, and at or above 70 mph for 20 hours, and at or above 80 mph for 3 hours;
- A federally owned and maintained weather station in Viejas (Alpine RAWS) measured 9 hours of wind gusts at or above 60 mph including a peak wind gust of 68 mph;
- Broadcast media aired footage from Alpine, CA, of a gazebo that had been lifted by the wind from the ground and onto the roof of a house;
- Relative humidity as low as 1% was observed at the beginning of the Red Flag Warning;
- Numerous high temperature records were set during the Red Flag Warning, with some locations reporting temperatures in excess of 90 degrees;
- Incredibly, there have only been 2 days since March 1st (11 months ago) in which San Diego Airport has measured more than 0.25" of rain;
- It was the second warmest January on record in San Diego and likely the warmest March through January on record for the region.

VERIFICATION

I am an officer of the applicant corporation herein, and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing document are true.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 9th day of February 2018, at San Diego, California.

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Katherine M. Speirs Vice President, Electric System Operations SAN DIEGO GAS & ELECTRIC COMPANY

8330 Century Park Court San Diego, CA 92123 Attachment 1

Communication Dates, Times, and Type

OUTBOUND MESSAGES					
Date	Time	Total # of Customers Notified	<i># of Medical Baseline/Fire Essential Customers</i>	Message Code or Custom	Message - If Custom
1/26/2018	5:00pm	28294	1258	Custom	This is SDG&E calling with an important message. The National Weather Service has issued a Red Flag Warning from 7pm Saturday through 4pm Monday. High winds forecasted during the Red Flag Warning could cause power outages. If outages do occur, the power will stay off until it can be restored safely. Please be prepared to activate your personal emergency plan. For more information, visit sdge.com or call SDG&E at 1-800-411-7343.

4/07/00/0	0.00	4700	405		
1/27/2018	8:00pm	4700	135	Custom	This is SDG&E calling with an important message. The National Weather Service has declared a Red Flag Warning. The extremely strong winds expected in your area overnight could likely cause outages or require us to turn off the power for public safety. If this is necessary, the power will remain off until our crews can assess any damage to the electrical system and determine when power can be turned on safely. Please be prepared to activate your personal emergency plan. Beginning Sunday morning at 10am, SDG&E will have mobile command trailers with water, wireless internet, and charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com or call SDG&E at 1-800-411-7343.
1/28/2018	8am	203	3	Custom	This is SDG&E calling
				within the	with an important
				hour	message. The extremely
					strong winds expected in
					your area within the next
					hour will likely cause outages or require
					SDG&E to turn off the
					power for public safety. If
					there is an outage, the
					power will remain off for

					as long as it takes our crews to assess any damage to the electrical system and determine when power can be turned on safely. It won't be turned back on until it's safe. Please be prepared to activate your personal emergency plan. Beginning Sunday morning at 10am, SDG&E will have mobile command trailers with water, wireless internet, and charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com/WindUpdate or call SDG&E at 1-800- 411-7343.
1/28/2018	8:45am	500	22	Custom imminent	This is SDG&E calling with an important message. Due to current conditions affecting our overhead electrical system, we expect we will have to turn off the power in your area soon for public safety. Power will be off for as long as these conditions last and will not be turned back on until it is safe. Please be prepared to activate your personal emergency plan. Beginning this morning at 10am, SDG&E will have mobile command trailers with water, wireless internet, and

					charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com or call SDG&E at 1-800-411-7343.
28-Jan	8:50am	359	11	Custom imminent	This is SDG&E calling with an important message. Due to current conditions affecting our overhead electrical system, we expect we will have to turn off the power in your area soon for public safety. Power will be off for as long as these conditions last and will not be turned back on until it is safe. Please be prepared to activate your personal emergency plan. Beginning this morning at 10am, SDG&E will have mobile customer care centers with water, wireless internet, and charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com or call SDG&E at 1-800-411-7343.

1/28/2018	9:00am	1143	47	Custom within the hour	This is SDG&E calling with an important message. The extremely strong winds expected in your area within the next hour will likely cause outages or require SDG&E to turn off the power for public safety. If there is an outage, the power will remain off for as long as it takes our crews to assess any damage to the electrical system and determine when power can be turned on safely. It won't be turned back on until it's safe. Please be prepared to activate your personal emergency plan. Beginning Sunday morning at 10am, SDG&E will have mobile
					with water, wireless internet, and charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com/WindUpdate or call SDG&E at 1-800- 411-7343.
1/28/2018	9:03am	171	1	Custom within the hour	This is SDG&E calling with an important message. The extremely strong winds expected in your area within the next hour will likely cause outages or require SDG&E to turn off the power for public safety. If

					there is an outage, the power will remain off for as long as it takes our crews to assess any damage to the electrical system and determine when power can be turned on safely. It won't be turned back on until it's safe. Please be prepared to activate your personal emergency plan. Beginning this morning at 10am, SDG&E will have mobile customer care centers with water, wireless internet, and charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com/WindUpdate or call SDG&E at 1-800- 411-7343.
1/28/2018	10:45am	1992	75	Custom imminent	This is SDG&E calling with an important message. Due to current conditions affecting our overhead electrical system, we expect we will have to turn off the power in your area soon for public safety. Power will be off for as long as these conditions last and will not be turned back on until it is safe. Please be prepared to activate your personal emergency plan. Beginning this morning at 10am, SDG&E will

					have mobile customer care centers with water and charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com or call SDG&E at 1-800-411-7343.
1/28/2018	11:30am	1294	66	Custom power already out	This is SDG&E calling with an update. The current conditions have resulted in a power outage in your area. Right now, our crews are assessing the damage to the electrical system to determine how quickly power can be restored safely. We apologize for the inconvenience. SDG&E has mobile customer care centers with water and charging stations at Jess Martin Park, 2955 Highway 79 in Julian and Lake Morena County Park, 2550 Lake Morena Drive in Campo. For more information, visit sdge.com/WindUpdate or call SDG&E at 1-800- 411-7343.
1/28/2018	4:00 PM	172	14	Custom restoration	This is SDG&E calling with an important message. Some areas of the county have experienced strong winds and potentially hazardous conditions. As a result, electrical outages have occurred. We appreciate your

					patience during this time. Right now, your power should be back on, but there is the potential it could be turned off again if conditions worsen. You can get updates by visiting sdge.com/WindUpdate If your power is still out right now, please call 1- 800-411-7343.
1/28/2018	4:20 PM	34	1	Custom restoration	This is SDG&E calling with an important message. Some areas of the county have experienced strong winds and potentially hazardous conditions. As a result, electrical outages have occurred. We appreciate your patience during this time. Right now, your power should be back on, but there is the potential it could be turned off again if conditions worsen. You can get updates by visiting sdge.com/WindUpdate If your power is still out right now, please call 1- 800-411-7343.
1/28/2018	5:10 PM	186	13	Custom restoration	This is SDG&E calling with an important message. Some areas of the county have experienced strong winds and potentially hazardous conditions. As a result, electrical outages have occurred. We appreciate your patience during this time. Right now, your power

					should be back on, but there is the potential it could be turned off again if conditions worsen. You can get updates by visiting sdge.com/WindUpdate If your power is still out right now, please call 1- 800-411-7343.
1/28/2018	5:47 PM	215	11	Custom restoration	This is SDG&E calling with an important message. Some areas of the county have experienced strong winds and potentially hazardous conditions. As a result, electrical outages have occurred. We appreciate your patience during this time. Right now, your power should be back on, but there is the potential it could be turned off again if conditions worsen. You can get updates by visiting sdge.com/WindUpdate If your power is still out right now, please call 1- 800-411-7343.
1/28/2018	7:37 PM	181	2	Custom restoration	This is SDG&E calling with an important message. Some areas of the county have experienced strong winds and potentially hazardous conditions. As a result, electrical outages have occurred. We appreciate your patience during this time. Right now, your power should be back on, but there is the

					potential it could be turned off again if conditions worsen. You can get updates by visiting sdge.com/WindUpdate If your power is still out right now, please call 1- 800-411-7343.
1/28/2018	8:07 PM	251	13	3b	3b - Imminent Shut Off Notice This is SDG&E calling with an emergency message. Due to current conditions affecting our overhead electrical system, we expect we will have to turn off the power in your area soon for public safety. Power will be off for as long as these conditions last and will not be turned back on until it is safe. Please be prepared to activate your personal emergency plan. For more information, visist sdge.com or call SDG&E at 1-800-411-7343.
1/28/2018	8:28 PM	2070	69	custom - overnight outage	This is SDG&E calling with an important message. The National Weather Service has declared a Red Flag Warning. The extremely strong winds expected in your area overnight could likely cause outages or require us to turn off the power for public safety. If this is necessary, the power will remain off until our crews can assess any damage to the electrical system

					and determine when power can be turned on safely. Please be prepared to activate your personal emergency plan. To support this power outage, there is a mobile customer care center at two locations in eastern San Diego County. They are located at Lake Morena County Park, 2550 Lake Morena Drive, Campo, California 91906 and Jess Martin County Park, 2955 Highway 79, Julian, California, 92036. Both locations will be open on Monday, January 29 from 10am to 5pm. You can get outage updates by visiting sdge.com/outagemap.
1/28/2018	8:30 PM	136	2	Custom - overnight outage	This is SDG&E calling with an update on your power outage. Strong winds continue to bring an elevated wildfire risk. This means your power will remain off overnight. Please continue to follow your personal emergency plan. We are monitoring the situation closely and will call again with an update or when your power is restored. To support this power outage, there is a mobile customer care center at two locations in eastern San Diego County. They are located at Lake Morena County Park, 2550 Lake Morena Drive,

					Campo, California 91906 and Jess Martin County Park, 2955 Highway 79, Julian, California, 92036. Both locations will be open on Monday, January 29 from 10am to 5pm. You can get outage updates by visiting sdge.com/outagemap.
1/28/2018	8:41 PM	1530	38	Custom - overnight outage	This is SDG&E calling with an update on your power outage. Strong winds continue to bring an elevated wildfire risk. This means your power will remain off overnight. Please continue to follow your personal emergency plan. We are monitoring the situation closely and will call again with an update or when your power is restored. To support this power outage, there is a mobile customer care center at two locations in eastern San Diego County. They are located at Lake Morena County Park, 2550 Lake Morena Drive, Campo, California 91906 and Jess Martin County Park, 2955 Highway 79, Julian, California, 92036. Both locations will be open on Monday, January 29 from 10am to 5pm. You can get outage updates by visiting sdge.com/outagemap

1/29/2018	10:00 AM	5	0	Custom - restoration	This is SDG&E calling with an important message. We understand the inconvenience of power outages and we appreciate your patience during this time. We have patrolled the electric grid in your area to ensure it is safe and your power should be back on. If your power is still out, please call us at 1-800-411-7343. You can get updates by visiting sdge.com/WindUpdate.
1/29/2018	10:30 AM	201	4	Custom - restoration	This is SDG&E calling with an important message. We understand the inconvenience of power outages and we appreciate your patience during this time. We have patrolled the electric grid in your area to ensure it is safe and your power should be back on. If your power is still out, please call us at 1-800-411-7343. You can get updates by visiting sdge.com/WindUpdate.
1/29/2018	1:00 PM	186	8	Custom - restoration	This is SDG&E calling with an important message. We understand the inconvenience of power outages and we appreciate your patience during this time. We have patrolled the electric grid in your area

					to ensure it is safe and your power should be back on. If your power is still out, please call us at 1-800-411-7343. You can get updates by visiting sdge.com/WindUpdate.
1/29/2018	1:15 PM	108	6	Custom - restoration	This is SDG&E calling with an important message. We understand the inconvenience of power outages and we appreciate your patience during this time. We have patrolled the electric grid in your area to ensure it is safe and your power should be back on. If your power is still out, please call us at 1-800-411-7343. You can get updates by visiting sdge.com/WindUpdate.
1/29/2018	1:50 PM	264	4	Custom - restoration	This is SDG&E calling with an important message. We understand the inconvenience of power outages and we appreciate your patience during this time. We have patrolled the electric grid in your area to ensure it is safe and your power should be back on. If your power is still out, please call us at 1-800-411-7343. You can get updates by visiting sdge.com/WindUpdate.

1/29/2018	3:00 PM	2094	45	Custom - restoration	This is SDG&E calling with an important message. We understand the inconvenience of power outages and we appreciate your patience during this time. We have patrolled the electric grid in your area to ensure it is safe and your power should be back on. If your power is still out, please call us at 1-800-411-7343. You can get updates by visiting sdge.com/WindUpdate.
1/29/2018	4:15 PM	348	11	Custom - restoration	This is SDG&E calling with an important message. We understand the inconvenience of power outages and we appreciate your patience during this time. We have patrolled the electric grid in your area to ensure it is safe and your power should be back on. If your power is still out, please call us at 1-800-411-7343. You can get updates by visiting sdge.com/WindUpdate.