Application No.:17-06-006
Exhibit No.:
Witness: Carl S. LaPeter
Date: October 24, 2017

SAN DIEGO GAS & ELECTRIC COMPANY
PREPARED REBUTTAL TESTIMONY OF
CARL S. LAPETER

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

October 24, 2017

#317482

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PREPARED REBUTTAL TESTIMONY OF
CARL S. LAPETER
ON BEHALF OF SDG&E

I. INTRODUCTION

This testimony addresses the September 28, 2017 testimony of Mr. Michael Yeo of the Commission's Office of Ratepayer Advocates (ORA) who sponsored ORA's Chapter 3: Utility-Owned Generation (Fossil). Mr. Yeo's testimony responds to the June 1, 2017 Direct Pre-filed Testimony of Carl S. LaPeter in the subject proceeding that addressed the utility-owned generation (UOG) operations and activities of SDG&E's fossil facilities, including certain specified outages, during the 2016 Record Year.

Based on SDG&E's required showing, ORA selected for further review and analysis two forced outages that were reported on by SDG&E in its direct testimony: the January 26, 2016 outage at SDG&E's 566 megawatt (MW) Palomar Energy Center (Palomar) and the August 16, 2016 at SDG&E's 490 MW Desert Star Energy Center (Desert Star).[1] Each of the referenced outages lasted slightly more than 3 days in duration.

With regard to each outage, ORA issued discovery to which SDG&E timely responded.[2] Based on its review, ORA recommended no disallowances associated with either outage; however, ORA did recommend that, for SDG&E's 2017 Record Year proceeding, SDG&E

[1] ORA's Testimony indicates no concerns or recommendations with respect to any other generator referenced in SDG&E's direct testimony.

[2] SDG&E found many of ORA's discovery questions to be very unclear, overreaching, and objectionable on several grounds, including that ORA asked questions that elicited legal opinions; other questions elicited information well outside of the record year and thus outside the scope of this proceeding. While SDG&E objected to these questions, SDG&E also reached out to ORA to discuss and try to clarify its questions to provide relevant information. SDG&E initiated a meeting with ORA at its offices in San Francisco to try to resolve some of these issues. *See* Attachment 1: ORA Data Request; ORA-SDG&E DR06 Q4.d; *see also* Attachment 2: ORA Data Request; ORA-SDG&E DR09 DSEC; *see also* Attachment 3: ORA Data Request; ORA-SDG&E DR10 PEC.

submit certain information responsive to each of its recommendations. This testimony addresses each of ORA's recommendations.

II. DISCUSSION OF ORA'S RECOMMENDATIONS

A. SDG&E Opposes ORA's Recommendation that SDG&E Provide the Operation and Maintenance Procedure for the New Sealing System Used at Palomar Energy Center (Palomar) in the Next Energy Resource Recovery Account (ERRA) Compliance Filing for the 2017 Record Period.

SDG&E disagrees with this recommendation because there are no operation and maintenance procedures for the new sealing system, because the design and construction of the new sealing system does not require any operation or maintenance procedures. Further, ORA provides no explanation for this recommendation. The Commission should not adopt this recommendation.

B. SDG&E Agrees to Report the Effectiveness of the New Sealing System Used at Palomar in its Annual ERRA Compliance Filing, Commencing with the Next ERRA Compliance Filing for the 2017 Record Period.

SDG&E agrees to provide a brief report on the effectiveness of the new sealing system used at Palomar in its ERRA Compliance filing for the 2017 record period and the subsequent two record years. If the seals performed satisfactorily, meaning no observable anomalies indicative of seal failure in the Record Year, SDG&E will simply note that fact in its testimony. If, at the end of the 2018 Record Year, the seals performed as indicated above, in that period of time, SDG&E will cease reporting on this sealing system in subsequent annual ERRA compliance filings.

C. Provide a Comprehensive Program Review of its Facility Procedures (Operation and Maintenance) at Desert Star Energy Center (Desert Star). SDG&E is to Provide the Comprehensive Facility Program's Documents in the Next ERRA Compliance Filing for the 2017 Record Period. The Documents Should Include a Comparison Between the Existing Facility Program and Any Changes.

While SDG&E does not object to reviewing all of its Desert Star "facility procedures (operation and maintenance)," SDG&E finds unclear ORA's request that SDG&E "provide the comprehensive facility program's documents."[3] SDG&E can agree to a review of each of Desert Star's existing operations and maintenance procedures for the purpose of determining if any of such procedures would potentially enable foreign material to enter the facility's system or components. SDG&E also is willing to carefully inspect and evaluate the performance of the valve at issue in this outage and report on its performance in its next ERRA compliance filing if there are any abnormal findings.

Additionally, SDG&E will look into the development of a Foreign Material Exclusion FME Zone procedure, that will put additional focus on areas and events that may have a high risk of foreign material entering components or systems. It should be noted that any change in procedure or new procedure, will not remove the damage potential from entrained foreign material that may already exist from original construction or other activities.

Generally, however, SDG&E is unfamiliar with the term "comprehensive facility program documents" as it is unclear what "program" and "documents" are being referred to and therefore does not agree with this vague and unworkable recommendation. Further, SDG&E sees no benefit either to ORA or SDG&E and its ratepayers for SDG&E to develop either a new report or compile and submit existing operations and maintenance documents, as neither of these

[3] Testimony on SDG&E's Application for Compliance Review of Utility Owned Generation Operations, ERRA Entries, Contract Administration… for the Period January 1 Through December 31, 2016, A.17-06-006 (September 28, 2017)("ORA Testimony") at 3-28, lines 8-15.

types of "documents" would avoid or eliminate the very unlikely recurrence of a similar issue in the future.

III. CONCLUSION

SDG&E appreciates ORA's review of SDG&E's UOG outages. SDG&E can agree, in part to the latter two of ORA recommendations, as noted above, which would have potential value given the very short duration of these outages.

This concludes my prepared rebuttal testimony.

Attachment 1

ORA Data Request; ORA-SDG&E DR06 Q4

ORA DATA REQUEST
ORA-SDG&E DR-06
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E PARTIAL RESPONSE
DATE RECEIVED: July 21, 2017
DATE RESPONDED: August 8, 2017

Request 4:

Please give a brief background and description of DSEC. Your response should include also:

a. the location of DSEC;
b. the type of generation – fuel, peaker, nuclear, combined cycle, hydro or other;
c. the number of units;
d. upgrades to DSEC since the original construction.

Response to Request 4:

Desert Star Energy Center is a natural gas-powered electric generation facility located in Boulder City, Nevada, about 40 miles southwest of Las Vegas. SDG&E took over ownership of the plant in October 2011, and it became part of SDG&E's generation assets.

SDG&E operates the plant and bids the generation into the California Independent System Operator (CAISO) market to help meet the energy needs of SDG&E's customers. Electricity from the facility is transported to San Diego County over existing transmission lines linking Southern California to southern Nevada. Electricity generated at Desert Star Energy Center helps meet the energy and reliability needs of SDG&E customers.

a. Boulder City, Nevada
b. Natural gas fired combined cycle facility
c. 2 combustion turbines and one steam turbine
d. While SDG&E continues to find this question unduly vague and confusing, including with the suggested "clarification" to the question to include "modifications to improve the performance of the facility," SDG&E hereby provides a list of the capital upgrades to Desert Star since SDG&E acquired the facility in 2011. Please see attached file entitled **ERRA Compl DR06 Q4d.pdf**

DSEC CAPITAL PROJECTS 2011-2016
Note: this list does not include gas turbine modifications and upgrades

2011

- Plant Security Upgrade
- Additional Site Paving
- DCS Wireless Instrumentation Capability
- Purchase of Maintenance Vehicle
- Fall Protection Systems
- Install R.O. Tank Fill Line
- Cell Phone Amplifies
- Finalize Install of CT2 Air Inlet Enclosure

2012

- Upgrade HVAC Units
- Repave Eldorado Valley Drive
- Ovation Operator Work Station
- Control System Upgrade
- AMS Machinery Manager Software & Vibration Monitoring Transmitter
- Fire Protection Equipment Purchase
- Automate Air Ejector Hogger
- Upgrade HRSG Seals
- Modify CT1 Air Inlet
- Ovation Upgrade
- Replace obsolete positioners
- Carbon filters for RO
- ACC Fan Blade Change out
- Chemistry monitoring equipment
- Spare contactor set for ACC motors
- Install additional HRSG temp/press instrumentation
- Automate BFP HP/IP and condensate Discharge Valves
- Awning - Bulk Oil Storage
- Upgrade power receptacles for 2013 outage
- Three sided storage building

2013

- Platforms for HRSG Doors
- New Racks and Ladders in NW Warehouse
- Purchase & Install Chemistry Metering
- Upgrade Obsolete Valve Positioners
- Automate BFP IP/HP & Condensate Pump Discharge Valves
- Install Additional HRSG Temp/Pressure Monitoring
- Steam Header Attemperator Upgrade
- ACC MCC Package Handrails
- CT Generator Access Platforms
- CT Rotor Air Cooler Piping Flange Access Platforms
- Upgrade Emergency Fixtures
- Spring-hang HRSG Reheater #2 Coils
- Upgrade Shop Welding Exhaust Ventilation System
- Nitrogen Generator System

(2013 Projects Continued):

- Duct Burner Flame Detection Equipment Upgrade
- CT Emission Monitoring Systems
- Ovation Controls Evergreen Program Extension
- Build Transformer Pedestal and Move MPT1A
- ACC Fan Motor Local Electrical Disconnects
- High Capacity Power Receptacles
- Motor and Equipment Storage Building
- Sample Lab Refurbishment
- Preheater Drain Piping Upgrade
- Gas Heater Valve Automation
- Condition Based Monitors for MPT & Aux Transformers
- Conex Work Area Metal Roof
- MPT#1 Removal and Install MPT#1A &1B
- Spare 250MVA GSU Transformer
- Upgrade to the plants water chemical injection system
- Plant Asphalt Paving
- Paint CT #2 Inlet Filter Housing
- HRSG LP Evaporator Lower Header Restraints
- Emergency Shower/Eyewash Supply Piping Upgrade
- CT2 Evaporative Cooler Flowmeter Upgrade
- HRSG Gas-Side Temperature/Pressure Monitoring
- Fire System Upgrades

2014

- ST L-0R Blade Upgrade
- HP Start Up Vent Valve Upgrade
- BOP Desuperheater Upgrade
- CT Gas Control Valve Calibration Interface
- Valve Motor Operator Upgrades
- CT#2 Inlet Air Filter/Media Upgrade
- Ammonia Dilution Blower Upgrade
- Vibration Monitoring System Upgrade

2015

- CT Insulation System Upgrade
- Valve Motor Operator Upgrades
- Equipment Access Platforms
- HRSG LP Evap FAC Inspection Ports

2016

- Valve Motor Operator Upgrades
- HRSG LP Evap FAC Inspection Ports
- Equipment Access Platforms
- Performance Improvement Evaluation
- IP/LP SUV Upgrade
- HRSG SH/RH Condensate Detection
- CT1 Air Inlet Personnel Access Improvements

Attachment 2

ORA Data Request; ORA-SDG&E DR09 DSEC

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Desert Star Energy Center Outage –August 16, 2016 through August 19, 2016 - 3.26 Days

Reasonable Manager Standard
In D.10-07-049, the Commission states, "Briefly, by the 'reasonable manager standard, utilities are held to a standard of reasonableness based upon the facts that are known or should have been known at the time. The act of the utility should comport with what a reasonable manager of sufficient education, training, experience, and skills using the tools and knowledge at his or her disposal would do when faced with a need to make a decision and act.'"

Request 1:

Before the outage, what were SDG&E's actions and practices that comply with the Reasonable Manager Standard? Please enumerate and explain.

SDG&E Response to Request 1:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. Based on the discussion, SDG&E understands that, as for the terms "before the outage," ORA means the time near subject outage. Additionally, by "actions" and "practices," SDG&E understands that ORA means those actions directly related to the outage in question and specifically those related to the failed bypass valve in question. Furthermore, by referencing the "Reasonable Manager Standard," ORA is not seeking a legal conclusion or analysis but facts directly related to the outage in question.

Without waiving its objections, SDG&E states the following:

SDG&E's actions and practices immediately prior to the outage include, but are not limited to, all of the actions and practices that are indicated in the June 1, 2017 Prepared Direct Testimony of Carl S. LaPeter, particularly at Sections II and III and inclusive of his extensive qualifications noted in that testimony at CSL-6. Before the subject outage, SDG&E personnel had no reason to know that the subject outage was to occur and acted reasonably based on information available before the outage, as indicated in CSL-A-2.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 2:

During the outage, what were SDG&E's actions and practices that comply with the Reasonable Manager Standard? Please enumerate and explain.

SDG&E Response to Request 2:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. Based on the discussion, SDG&E understands that, as for the terms "during the outage," ORA means the time specified in the testimony of Carl S. LaPeter. Additionally, by "actions" and "practices," SDG&E understands that ORA means those actions directly related to the outage in question and as related to the bypass valve in question. Furthermore, by referencing the "Reasonable Manager Standard," ORA is not seeking a legal conclusion or analysis but facts directly related to the outage in question related to the bypass value at issue.

Without waiving its objections, SDG&E states the following:

SDG&E's actions and practices during the outage include, but are not limited to, all of the actions and practices that are indicated in the June 1, 2017 Prepared Direct Testimony of Carl S. LaPeter, particularly at Sections II and III and inclusive of his extensive qualifications noted in that testimony at CSL-6 and inclusive of testimony at CSL-A-2.

During the subject outage, on August 16, 2016, during plant startup, plant operators were unable to open the #1 Intermediate Pressure bypass valve to the condenser. SDG&E declared an outage on unit #1 due to the stuck valve, but continued to operate the steam turbine and unit #2 in order to support the day-ahead power schedule. SDG&E operations staff depressurized unit #1 steam and water systems, and contacted a repair team to gather tools and equipment and mobilize to DSEC site from TRS shop in Ontario, CA. On August 17, 2016, SDG&E declared a full plant forced outage at 12:30 AM, to allow for cooling and depressurizing all common steam systems in order to safely open, inspect, and repair the #1 intermediate pressure bypass valve, which is needed to complete startup of unit #1. During the outage on August 17 & 18, the bypass valve was disassembled, and technicians determined that the valve plug and stem, and valve seat were damaged. The valve plug and stem were promptly replaced, the valve seat was repaired in place, and the valve operator was promptly rebuilt. While the valve repair was in progress, DSEC operations staff conducted borescope examination upstream of the bypass valve and located an unidentified 3" by ¼" piece of metal, 3 – 4 feet down the steam bypass valve. Plant operators were able to extract the metal and match it with marks on the damaged plug, identifying the object as the definite cause of the stuck valve. On August 19, 2016, valve re-assembly as completed, the rebuilt actuator was installed. Once all valve repair activities were completed, the valve was tested for proper operation. DSEC was declared available for dispatch on August 19,

2016 at 2:00 PM. SDG&E took these primary steps as would a reasonable manager during the outage to return the plant to operational status in under four days.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 3:

After the outage, what were SDG&E's actions and practices that comply with the Reasonable Manager Standard? Please enumerate and explain.

SDG&E Response to Request 3:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. Based on the discussion, SDG&E understands that, as for the terms "after the outage," ORA means the time period just after the time period specified in the testimony of Carl S. LaPeter. Additionally, by "actions" and "practices," SDG&E understands that ORA means those actions directly related to the outage in question and, specifically, as related to the bypass valve at issue. Furthermore, by referencing the "Reasonable Manager Standard," ORA is not seeking a legal conclusion or analysis but facts directly related to the outage in question related to the bypass valve.

Without waiving its objections, SDG&E states the following:

SDG&E's actions and practices after the outage include, but are not limited to, all of the actions and practices that are indicated in the June 1, 2017 Prepared Direct Testimony of Carl S. LaPeter, particularly at Sections II and III and inclusive of his extensive qualifications noted in that testimony at CSL-6 and inclusive of testimony at CSL-A-2.

After the subject outage, SDG&E continued to monitor the valve to ensure its continued operation. Since this subject outage, SDG&E has disassembled the #1 IP bypass valve in December 2016 and again in January of 2017, as preemptive measures due to minor sticking issues. No other objects were found in the valve or connecting piping. The minor sticking issue is further described as follows; during unit 2 start up the bypass would stick in the partial open position. Plant operators would take the valve to manual control locally, and open the valve slightly. They would then place the valve back in automatic remote control, and the valve would function normally. No debris was found during either of the subsequent outages.

Clearance space between the plug and stem assembly, and the plug guide were increased to reduce the possibly of additional sticking issues in the future. Furthermore, as stated in data request 06, question 43, DSEC will be upgrading to a new style of valve internal components that is designed to allow material of similar size to be trapped before entering the valve, preventing all damage. Upgraded internal components are being installed in November 2017.

SDG&E undertook all the actions noted in this set of data requests promptly and on its own initiative, and the corrective actions have proven to sufficient to prevent recurrence of this issue. In taking these actions, SDG&E acted consistently with the reasonable manager standard.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 4:

Was the outage unavoidable? Please enumerate and explain.

SDG&E Response to Request 4:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. SDG&E explained that, due to the phraseology and other unclear aspects of this question, SDG&E would have to continue to object to this question, and ORA concurred with SDG&E's position. SDG&E handled this outage in a manner that fully meets the Commission's Reasonable Manager Standard, as expressed above and in associated testimony.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 5:

Was the outage reasonable? Please enumerate and explain.

SDG&E Response to Request 5:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 6:

Was the outage avoidable? Please enumerate and explain.

SDG&E Response to Request 6:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 7:

Was the outage unreasonable? Please enumerate and explain.

SDG&E Response to Request 7:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 8:

Were SDG&E's actions and practices with regards to the outage prudent? Please enumerate and explain.

SDG&E Response to Request 8:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-09
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 9:

Were SDG&E's actions and practices with regards to the outage imprudent? Please enumerate and explain.

SDG&E Response to Request 9:

See response to Question 4.

Attachment 3

ORA Data Request; ORA-SDG&E DR10 PEC

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Palomar Energy Center Outage –January 26, 2016 through January 29, 2016 - 3.64 Days

Reasonable Manager Standard
In D.10-07-049, the Commission states, "Briefly, by the 'reasonable manager standard, utilities are held to a standard of reasonableness based upon the facts that are known or should have been known at the time. The act of the utility should comport with what a reasonable manager of sufficient education, training, experience, and skills using the tools and knowledge at his or her disposal would do when faced with a need to make a decision and act.'"

Request 1:

Before the outage, what were SDG&E's actions and practices that comply with the Reasonable Manager Standard? Please enumerate and explain.

SDG&E Response to Request 1:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. Based on the discussion, SDG&E understands that, as for the terms "before the outage," ORA means the time near subject outage. Additionally, by "actions" and "practices," SDG&E understands that ORA means those actions directly related to the outage in question and specifically those related to failed seals. Furthermore, by referencing the "Reasonable Manager Standard," ORA is not seeking a legal conclusion or analysis but facts directly related to the outage in question.

Without waiving its objections, SDG&E states the following:

SDG&E's actions and practices immediately prior to the outage include, but are not limited to, all of the actions and practices that are indicated in the June 1, 2017 Prepared Direct Testimony of Carl S. LaPeter, particularly at Sections II and III and inclusive of his extensive qualifications noted in that testimony at CSL-6. Before the subject outage, SDG&E personnel had no reason to know that the subject outage was to occur and acted reasonably based on information available before the outage, as indicated in CSL-A-1 through A-2.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 2:

During the outage, what were SDG&E's actions and practices that comply with the Reasonable Manager Standard? Please enumerate and explain.

SDG&E Response to Request 2:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. Based on the discussion, SDG&E understands that, as for the terms "during the outage," ORA means the time specified in the testimony of Carl S. LaPeter. Additionally, by "actions" and "practices," SDG&E understands that ORA means those actions directly related to the outage in question and as related to the seal leak in question. Furthermore, by referencing the "Reasonable Manager Standard," ORA is not seeking a legal conclusion or analysis but facts directly related to the outage in question related to the seal leak.

Without waiving its objections, SDG&E states the following:

SDG&E's actions and practices during the outage include, but are not limited to, all of the actions and practices that are indicated in the June 1, 2017 Prepared Direct Testimony of Carl S. LaPeter, particularly at Sections II and III and inclusive of his extensive qualifications noted in that testimony at CSL-6 and inclusive of testimony at CSL-A-1 through A-2. On January 26, 2016 SDG&E personnel noticed that high pressure drum pH was low. Personnel attempted to recover and control pH. When recovery attempts were unsuccessful SDG&E personnel shut the plant down. SDG&E initiated flushing to remove the low pH water, and continued extensive flushing to remove unknown contamination that caused the low pH excursion. While flushing was in progress, personnel investigated potential sources of contamination leakage into the system, starting with the condenser, which supplies water to the feed-water system. Personnel determined there was no source of leakage into the condenser. Investigation then focused on potential leakage from the feed-water pump cooling system into the feed-water system. SDG&E determined that failed seals in the feed-water pump allowed coolant, as the source of contamination, to leak into the boiler feed-water system during plant shutdown. Then SDG&E was able to restart the plant using an alternate feed-water pump, which did not have a failed seal; the feed-water pumps were also flushed with clean water prior to startup to help remove potential contamination.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 3:

After the outage, what were SDG&E's actions and practices that comply with the Reasonable Manager Standard? Please enumerate and explain.

SDG&E Response to Request 3:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. Based on the discussion, SDG&E understands that, as for the terms "after the outage," ORA means the time period just after the time period specified in the testimony of Carl S. LaPeter. Additionally, by "actions" and "practices," SDG&E understands that ORA means those actions directly related to the outage in question and, specifically, as related to the seal leak in question. Furthermore, by referencing the "Reasonable Manager Standard," ORA is not seeking a legal conclusion or analysis but facts directly related to the outage in question related to the seal leak.

Without waiving its objections, SDG&E states the following:

SDG&E's actions and practices after the outage include, but are not limited to, all of the actions and practices that are indicated in the June 1, 2017 Prepared Direct Testimony of Carl S. LaPeter, particularly at Sections II and III and inclusive of his extensive qualifications noted in that testimony at CSL-6 and inclusive of testimony at CSL-A-1 through A-2. After the subject outage, on January 29, 2016, SDG&E took actions to attempt to avoid this type of outage in the future by modifying the seal system with an improved design. SDG&E initiated this modification to all the feed-water pumps in the 2016 outage. To continue plant operation from January 29, 2016 to the annual 2016 outage in May, SDG&E flushed the boiler feed-water pumps prior to unit or plant startups. The pre-startup flushing removed potential seal leakage contaminants from the system avoiding low pH excursions. In so doing, SDG&E acted consistently with the reasonable manager standard in determining a course of improved design and implementing that improved design to all of its feed-water pumps at the plant.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 4:

Was the outage unavoidable? Please enumerate and explain.

SDG&E Response to Request 4:

SDG&E objected to this question on August 8, 2017 on several grounds. SDG&E further spoke with ORA on August 15, 2017 to attempt to clarify this question. SDG&E explained that, due to the phraseology and other unclear aspects of this question, SDG&E would have to continue to object to this question, and ORA concurred with SDG&E's position. SDG&E handled this outage in a manner that fully meets the Commission's Reasonable Manager Standard, as expressed above and in associated testimony.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 5:

Was the outage reasonable? Please enumerate and explain.

SDG&E Response to Request 5:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 6:

Was the outage avoidable? Please enumerate and explain.

SDG&E Response to Request 6:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 7:

Was the outage unreasonable? Please enumerate and explain.

SDG&E Response to Request 7:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 8:

Were SDG&E's actions and practices with regards to the outage prudent? Please enumerate and explain.

SDG&E Response to Request 8:

See response to Question 4.

ORA DATA REQUEST
ORA-SDG&E DR-10
SDG&E ERRA COMPLIANCE - A.17-06-006
SDG&E RESPONSE
DATE RECEIVED: August 03, 2017
DATE RESPONDED: August 21, 2017

Request 9:

Were SDG&E's actions and practices with regards to the outage imprudent? Please enumerate and explain.

SDG&E Response to Request 9:

See response to Question 4.