Docket	:	A.23-02-018
Exhibit Number	:	
Commissioner	:	J. Reynolds
Admin. Law Judge	:	M. LeQuang
Public Advocates Office	:	Karl Stellrecht
Project Mgr.	:	
Public Advocates Office Witnesses		Various

PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

APPENDIX B

SUPPORTING ATTACHMENTS

TO THE PREPARED TESTIMONY ON PACIFIC GAS AND ELECTRIC COMPANY APPLICATION FOR COMPLIANCE REVIEW OF UTILITY OWNED GENERATION OPERATIONS, ELECTRIC ENERGY RESOURCE RECOVERY ACCOUNT ENTRIES, CONTRACT ADMINISTRATION, ECONOMIC DISPATCH OF ELECTRIC RESOURCES, UTILITY OWNED GENERATION FUEL PROCUREMENT, AND OTHER ACTIVITIES FOR THE PERIOD JANUARY 1 THROUGH DECEMBER 31, 2022 (U 39 E)

(PUBLIC VERSION)

San Francisco, California
September 22, 2023

LIST OF ATTACHMENTS FOR CHAPTER 2

#	Attachment	Description
1	Attachment 2.1 (Confidential)	A.23-02-018 - PG&E Chapter 1 Workpapers, 2022_LCD_ LCD_6_Highest_Energy_Value_Days_and_Price_Forecast_Summary_CONF.
2	Attachment 2.2 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022_LCD_Workpaper_6_HighestEnergyValueDays_CONF. (Available via e-mail)
3	Attachment 2.3 (Confidential)	A.22-02-015, Chapter 1 Workpapers, 2021_LCD_Workpaper_6_HighestEnergyValueDays_CONF, Table 6.1. (Available via e-mail)
4	Attachment 2.4 (Confidential)	A.21-03-008, Chapter 1 Workpapers, 2020_LCD_Workpaper_6_HighestEnergyValueDays_CONF, Table 6.2. (Available via e-mail)
5	Attachment 2.5 (Confidential)	A.20-02-009, Chapter 1 Workpapers, 2019_LCD_Workpaper_6_HighestEnergyValueDays_CONF, Table 6.2. (Available via e-mail)
6	Attachment 2.6 (Confidential)	Cal Advocates Workpapers, 2022_LCD_Workpaper_7_Load_Bid_CONF. (Available via e-mail)
7	Attachment 2.7 (Confidential)	Cal Advocates Workpapers, 2022-LCD_Workpaper_6_HighestEnergyValueDays_CONF, Table 6.2. (Available via e-mail)
8	Attachment 2.8 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022 LCD _7_Load_Bid_CONF.xlsx. (Available via e-mail)
9	Attachment 2.9 (Confidential)	A.22-02-015, Chapter 1 Workpapers, 2021_LCD_Workpaper_7_Load_Bid_CONF.xlsx. (Available via e-mail)
10	Attachment 2.10 (Confidential)	Data Request ERRA-2022-PGE-Compliance_DR_CalAdvocates_019-Q001CONF.
11	Attachment 2.11	Chapter 1 Workpapers, 2022_LCD_Workpaper_1_CommitmentCostDecisions, Table 1.1. (Available via e-mail)
12	Attachment 2.12	A.22-05-015, Chapter 1 Workpapers, 2021_LCD_2_Bid_Cost_Calculation_Summary. CONFIDENTIAL
13	Attachment 2.13 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022_LCD_2_Bid_Cost_Calculation_Summary_CONF.

#	Attachment	Description
14	Attachment 2.14 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022_LCD_Workpaper_2_BidCostCalculation_CONF_Table 2.2-Annual Non-Award. (Available via e-mail)
15	Attachment 2.15 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022_LCD_Workpaper_2_BidCostCalculation_CONF, "Table 2.5 – Annual Non-Bid" tab. (Available via e-mail)
16	Attachment 2.16 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022_LCD_3_SelfCommitment_Summary_CONF. (Available via e-mail)
17	Attachment 2.17 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022_LCD_4_Hydro_Resources_Summary_CONF.
18	Attachment 2.18 (Confidential)	A.23-02-018, Chapter 1 Workpapers, 2022_LCD_4_Hydro_Top_500_CONF, "Table 4.3 Hydro Stat" tab. (Available via e-mail)
19	Attachment 2.19 (Confidential)	Data Request ERRA-2022-PGE-Compliance_DR_CalAdvocates_021-Q002CONF

ATTACHMENT 2.1

A.23-02-018 - PG&E Chapter 1 Workpapers, 2022_LCD_ LCD_6_Highest_Energy_Value_Days_and_Price_Forecast_ Summary_CONF.

(Confidential)

ATTACHMENT 2.2

A.23-02-018, Chapter 1 Workpapers, 2022_LCD_Workpaper_6_HighestEnergyValueDays_CONF

.

(Confidential)

(Available via E-mail)

ATTACHMENT 2.3

A.22-02-015, Chapter 1 Workpapers, 2021_LCD_Workpaper_6_HighestEnergyValueDays_CONF Table 6.1.

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(Available via E-mail)

ATTACHMENT 2.4

A.21-03-008, Chapter 1 Workpapers, 2020_LCD_Workpaper_6_HighestEnergyValueDays_CONF Table 6.2.

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ATTACHMENT 2.5

A.20-02-009, Chapter 1 Workpapers, 2019_LCD_Workpaper_6_HighestEnergyValueDays_CONF Table 6.2.

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ATTACHMENT 2.6

Cal Advocates Workpapers, 2022_LCD_Workpaper_7_Load_Bid_CONF

(Confidential)

(Available via E-mail)

ATTACHMENT 2.7

Cal Advocates Workpapers, 2022-LCD_Workpaper_6_HighestEnergyValueDays_CONF, Table 6.2.

(Confidential)

(Available via E-mail)

ATTACHMENT 2.8

A.23-02-018, Chapter 1 Workpapers, 2022 LCD _7_Load_Bid_CONF.xlsx.

(Confidential)

(Available via E-mail)

ATTACHMENT 2.9

A.22-02-015, Chapter 1 Workpapers, 2021_LCD_Workpaper_7_Load_Bid_CONF.xlsx

(Confidential)

(Available via E-mail)

ATTACHMENT 2.10

Data Request ERRA-2022-PGE-Compliance_DR_CalAdvocates_019-Q001CONF.

(Confidential)

ATTACHMENT 2.11

Chapter 1 Workpapers, 2022_LCD_Workpaper_1_CommitmentCostDecisions, Table 1.1.

(Available via E-mail)

ATTACHMENT 2.12

A.22-05-015, Chapter 1 Workpapers, 2021_LCD_2_Bid_Cost_Calculation_Summary

CONFIDENTIAL

Chapter 1 – Least Cost Dispatch
Workpaper 2 – Bid Cost Calculation Summary

❖ Background

Pursuant to California Public Utilities Commission ("CPUC") Decision (D.") 15-12-015, this workpaper provides summary reporting of incremental bid cost calculations for dispatchable thermal resources in the 2021 record period. This includes the following: detailed supporting data of incremental bid cost calculations, variances between the calculated bids and actual submitted bids, cost impacts of variances, number of times resources were not bid into the California Independent System Operator ("CAISO") market when available, and percentage of times incremental energy was not awarded when expected. All evaluations of variances between the calculated bids and actual submitted bids are based on a variance greater than $0.10.

❖ Highlights

Variances & Impact:
Overall, there were variances in approximately 0.28% of total bid hours for dispatchable thermal resources during the record period. There was a $976 estimated cost impact associated with these variances.

Resources Not Awarded When Expected:
PG&E provides an explanation for all instances during the record period in which a dispatchable thermal resource did not receive an award for incremental energy when the incremental bid cost was lower than the locational marginal price ("LMP").

Resources Not Bid When Available:
PG&E submitted bids for dispatchable thermal resources during all hours when available.

❖ Details

PG&E submitted 582,648 day-ahead thermal bids during the 2021 record period. Of these thermal bids, there was one event (totaling 1,632 bid hours) that reflected variances of over $0.10 between PG&E's correctly calculated bids and the submitted bids. The 1,632 incorrect bids translate to an error rate of 0.28%. This error percentage is the same as the 2020 error rate of 0.28% but higher than the 2019 error rate of 0.00%.

The one event is described in detail below.

[redacted]

Resources Not Awarded When Expected
(See Tables 2.2, 2.4, and "Non-Award Details" tab)

PG&E provides an explanation for all instances in which a dispatchable thermal resource did not receive incremental energy awards when the incremental bid cost at the awarded MW level was lower than the LMP at the applicable node. For all cases during the record period, these instances corresponded to defined categories, such as the resource receiving Ancillary Services spin awards in lieu of additional energy awards. The defined categories are described in greater detail in tables 2.2 and 2.4.

Resources That Were Not Bid When Available
(See Table 2.5)

During the record period, PG&E submitted bids for dispatchable thermal resources during all hours when available. [redacted]

❖ **Contents in '2 - Bid Cost Calculation' Folder**

'2021_LCD_Workpaper_2_BidCostCalculation_CONF.xlsx' – Tab Descriptions

- Table 2.1.1 - Annual Summary: Annual table depicting number of significant (greater than $0.10) variances between calculated and actual submitted bids, along with any potential cost impacts.
- Table 2.1.2 – Annual Comparison: Annual variance table from the 2020 record period is included for comparative purposes, pursuant to CPUC D. 15-12-015.
- Table 2.2 - Annual Non-Award: Annual table depicting percentage of times incremental energy was not awarded when incremental bid cost at the awarded MW level was lower than the LMP at the applicable node.
- Table 2.3.1 - Monthly Summary: Monthly table depicting number of significant (greater than $0.10) variances between calculated and actual submitted bids. (See Table 2.1.1 for Annual Summary).
- Table 2.3.2 - Monthly Summary: Monthly table depicting cost impacts of significant (greater than $0.10) variances between calculated and actual submitted bids. (See Table 2.1.1 for Annual Summary).

- Table 2.4 - Monthly Non-Award: Monthly table depicting percentage of times incremental energy was not awarded when incremental bid cost at the awarded MW level was lower than the LMP at the applicable node. (See Table 2.2 for Annual Summary).
- Table 2.5 - Annual Non-Bid: Annual table depicting number of times resources were not bid into the CAISO market when available.
- Non-Award Details: Detailed information on instances in which incremental energy was not awarded when incremental bid cost at the awarded MW level was lower than the LMP at the applicable node.
- 2021 Clean vs Calc Details: Detailed information on the significant (greater than $0.10) variances between calculated and actual submitted bids.

‘2021_Fuel_Price_VOM_IHR_GHG.xlsx’ – Supporting Documentation Tab Descriptions*

This file contains the fuel prices, variable operation and maintenance (“VOM”) costs, greenhouse gas (“GHG”) costs, and incremental heat rate (“IHR”) segments for all dispatchable thermal resources that PG&E bid into the CAISO market during the record period.

- Tab ‘FP_VOM’ contains the fuel cost in $/MMBtu and VOM cost in $/MWh with daily granularity, sorted by resource ID (RESOURCE_ID), bid date (BID_DT), fuel price (FUEL_PRICE), VOM (O_AND_M_ADDER), transportation cost (TRANSPORT), other adders (OTHER_ADDER), GHG cost (CARBON_PRICE) and GHG emission factor (CARBON_EMISSION_FACTOR) . The same set of values is used for all hours of the corresponding day.
- Tab ‘HEAT_RATE_SHIFT_FINAL’ lists the heat rate segments of all dispatchable thermal resources. The data is sorted by resource ID (RESOURCE_ID), bid date (BID_DT), bid hour (BID_HR), and then by the heat rate curve’s MW output level followed by the incremental heat rate.

ATTACHMENT 2.13

A.23-02-018, Chapter 1 Workpapers, 2022_LCD_2_Bid_Cost_Calculation_Summary_CONF.

(Confidential)

ATTACHMENT 2.14

A.23-02-018, Chapter 1 Workpapers, 2022_LCD_Workpaper_2_BidCostCalculation_CONF _Table 2.2-Annual Non-Award.

(Confidential)

(Available via E-mail)

ATTACHMENT 2.15

A.23-02-018, Chapter 1 Workpapers, 2022_LCD_Workpaper_2_BidCostCalculation_CONF, "Table 2.5 – Annual Non-Bid" tab.

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ATTACHMENT 2.16

A.23-02-018, Chapter 1 Workpapers, 2022_LCD_3_SelfCommitment_Summary_CONF

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ATTACHMENT 2.17

A.23-02-018, Chapter 1 Workpapers, 2022_LCD_4_Hydro_Resources_Summary_CONF.

(Confidential)

ATTACHMENT 2.18

A.23-02-018, Chapter 1 Workpapers, 2022_LCD_4_Hydro_Top_500_CONF, "Table 4.3 Hydro Stat" tab.

(Confidential)

(Available via E-mail)

ATTACHMENT 2.19

Data Request ERRA-2022-PGE-Compliance_DR_CalAdvocates_021-Q002CONF

(Confidential)

LIST OF ATTACHMENTS FOR CHAPTER 3

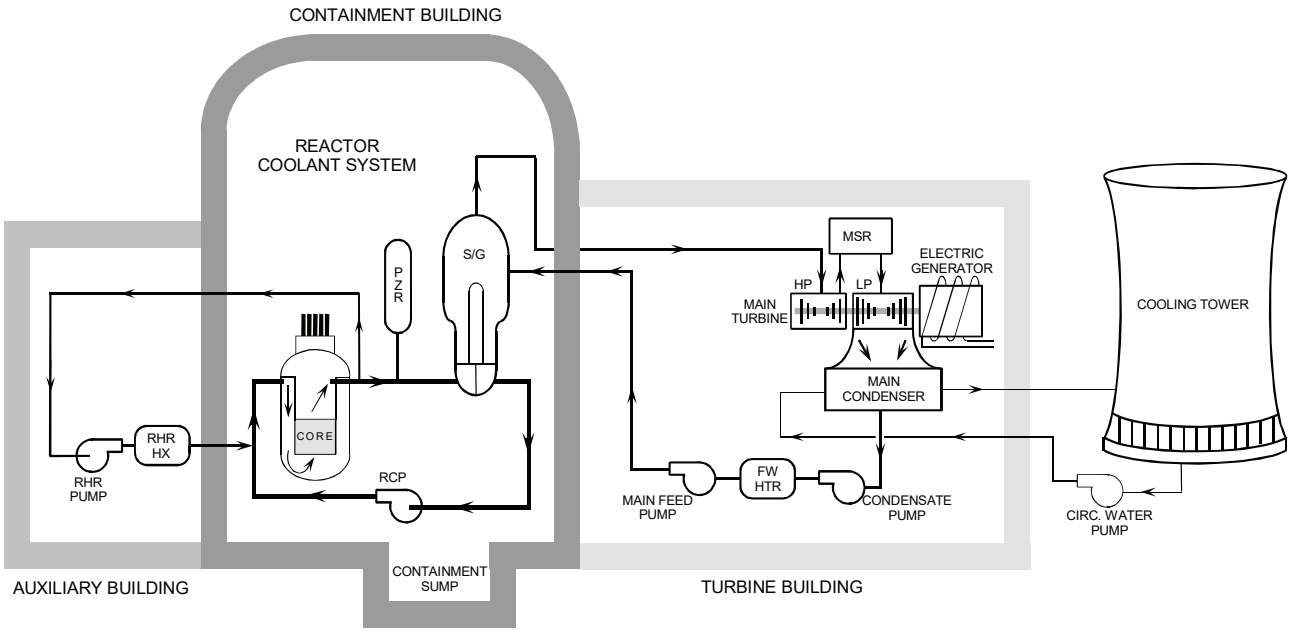
#	Attachment	Description
1	Attachment 3.1	PG&E Response to Cal Advocates Data Request 9, Question 1 to 60. inclusive (Non-Confidential)
2	Attachment 3.2 (Confidential)	PG&E Response to Cal Advocates Data Request 9, Question 16, 18, 50, 52.
3	Attachment 3.3 (Confidential Info for U.S. Citizens Only)	PG&E Response to Cal Advocates Data Request 9, Question 52.
4	Attachment 3.4	PG&E Response to Cal Advocates Data Request 13, Question 1 to 136. inclusive (Non-Confidential)
5	Attachment 3.5 (Confidential)	PG&E Response to Cal Advocates Data Request 13, Question 84, 93, 94, 97, 118, 128, 129, 132, 134, 137, 138.
6	Attachment 3.6 (Confidential Info for U.S. Citizens Only)	PG&E Response to Cal Advocates Data Request 13, Question 84, 85, 86, 88, 92, 94, 97, 118, 128, , 132.

ATTACHMENT 3.1

PG&E Response to Cal Advocates Data Request 9, Question 1 to 60. inclusive (Non-Confidential)

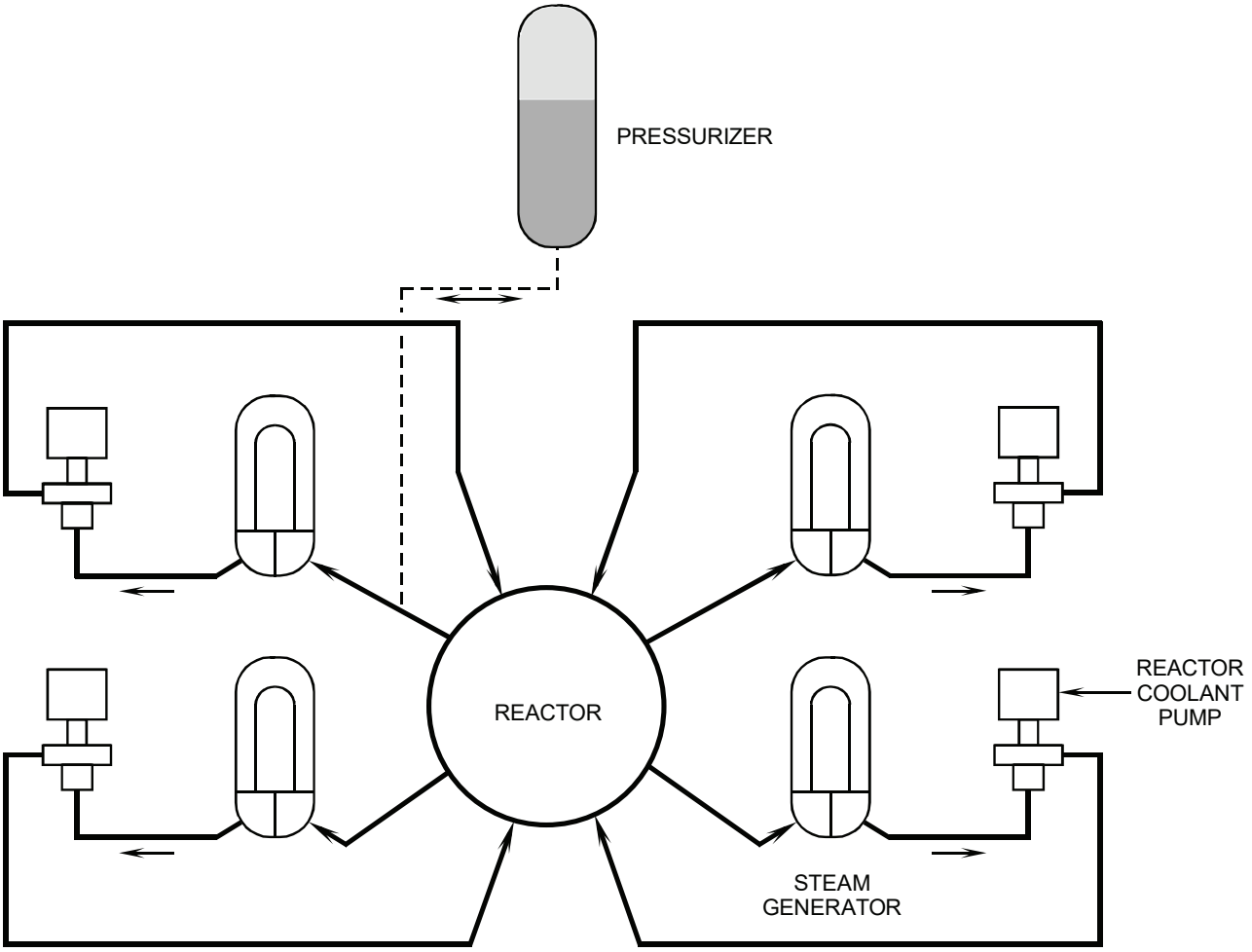
Pressurized Water Reactor (PWR) Systems

For a nuclear power plant to perform the function of generating electricity, many different systems must perform their functions. These functions may range from the monitoring of a plant parameter to the controlling of the main turbine or the reactor. This chapter will discuss the purposes of some of the major systems and components associated with a pressurized water reactor.



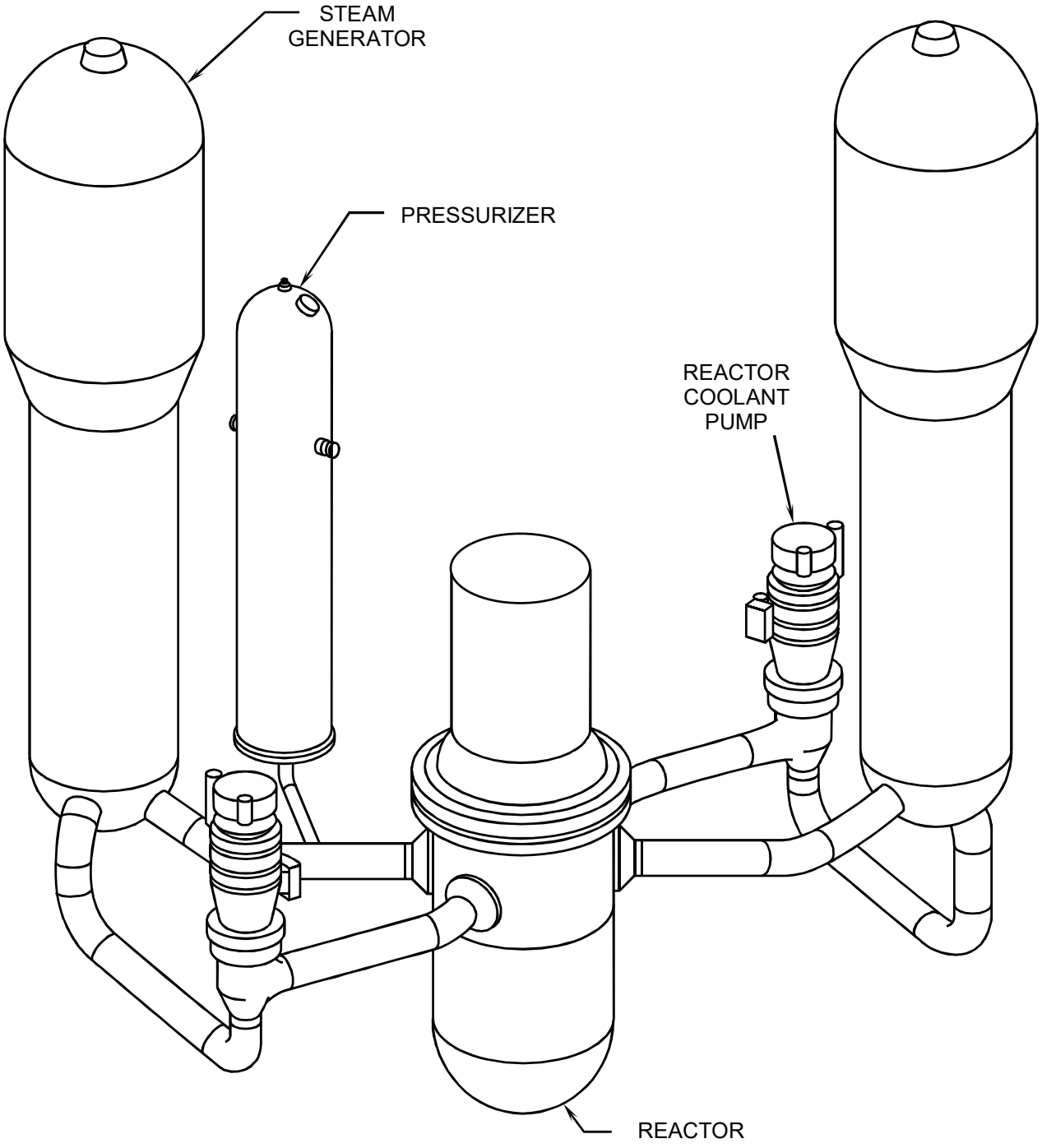
There are two major systems utilized to convert the heat generated in the fuel into electrical power for industrial and residential use. The primary system transfers the heat from the fuel to the steam generator, where the secondary system begins. The steam formed in the steam generator is transferred by the secondary system to the main turbine generator, where it is converted into electricity. After passing through the low pressure turbine, the steam is routed to the main condenser. Cool water, flowing through the tubes in the condenser, removes excess heat from the steam, which allows the steam to condense. The water is then pumped back to the steam generator for reuse.

In order for the primary and secondary systems to perform their functions, there are approximately one hundred support systems. In addition, for emergencies, there are dedicated systems to mitigate the consequences of accidents.

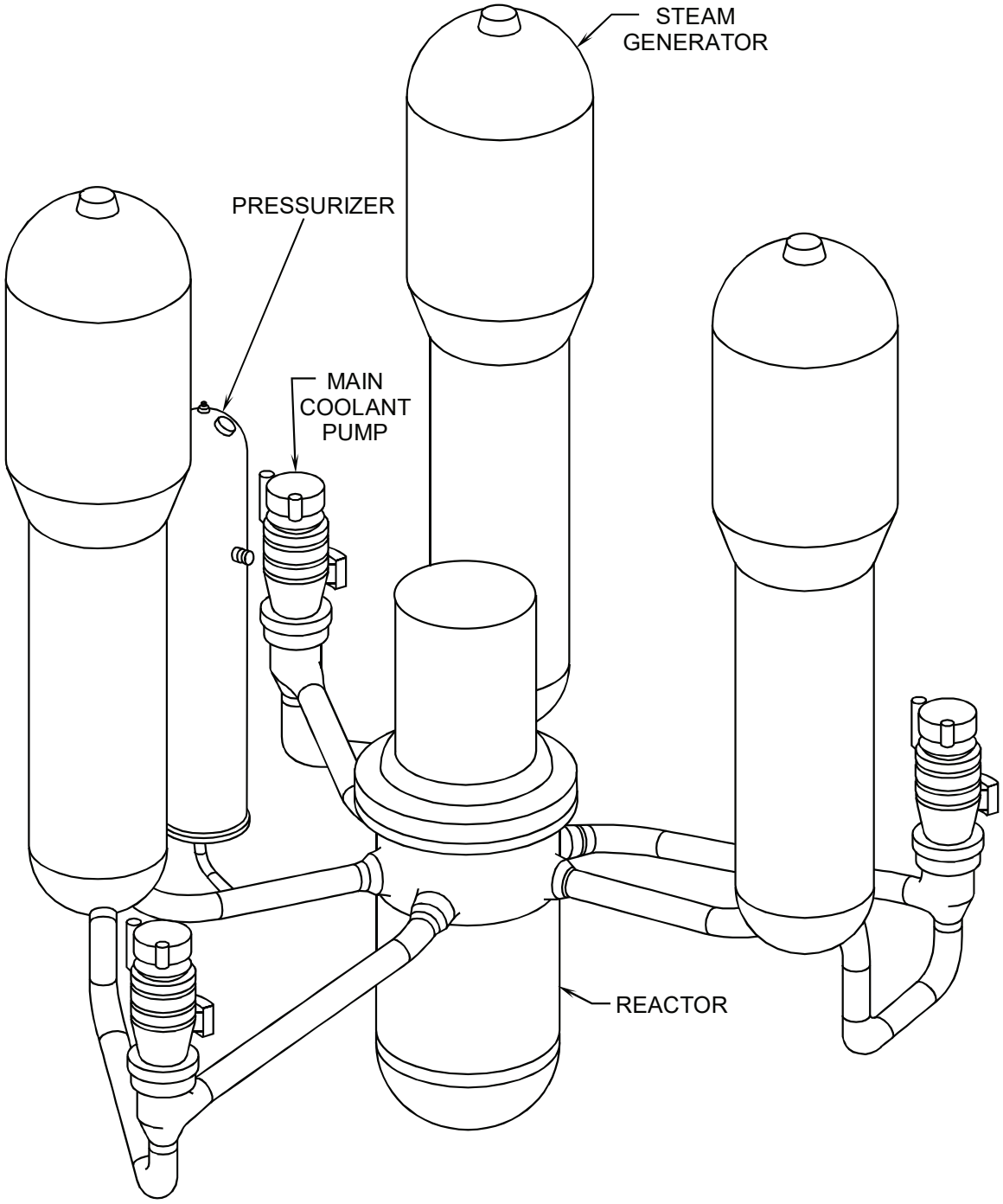


The primary system (also called the Reactor Coolant System) consists of the reactor vessel, the steam generators, the reactor coolant pumps, a pressurizer, and the connecting piping. A reactor coolant loop is a reactor coolant pump, a steam generator, and the piping that connects these components to the reactor vessel. The primary function of the reactor coolant system is to transfer the heat from the fuel to the steam generators. A second function is to contain any fission products that escape the fuel.

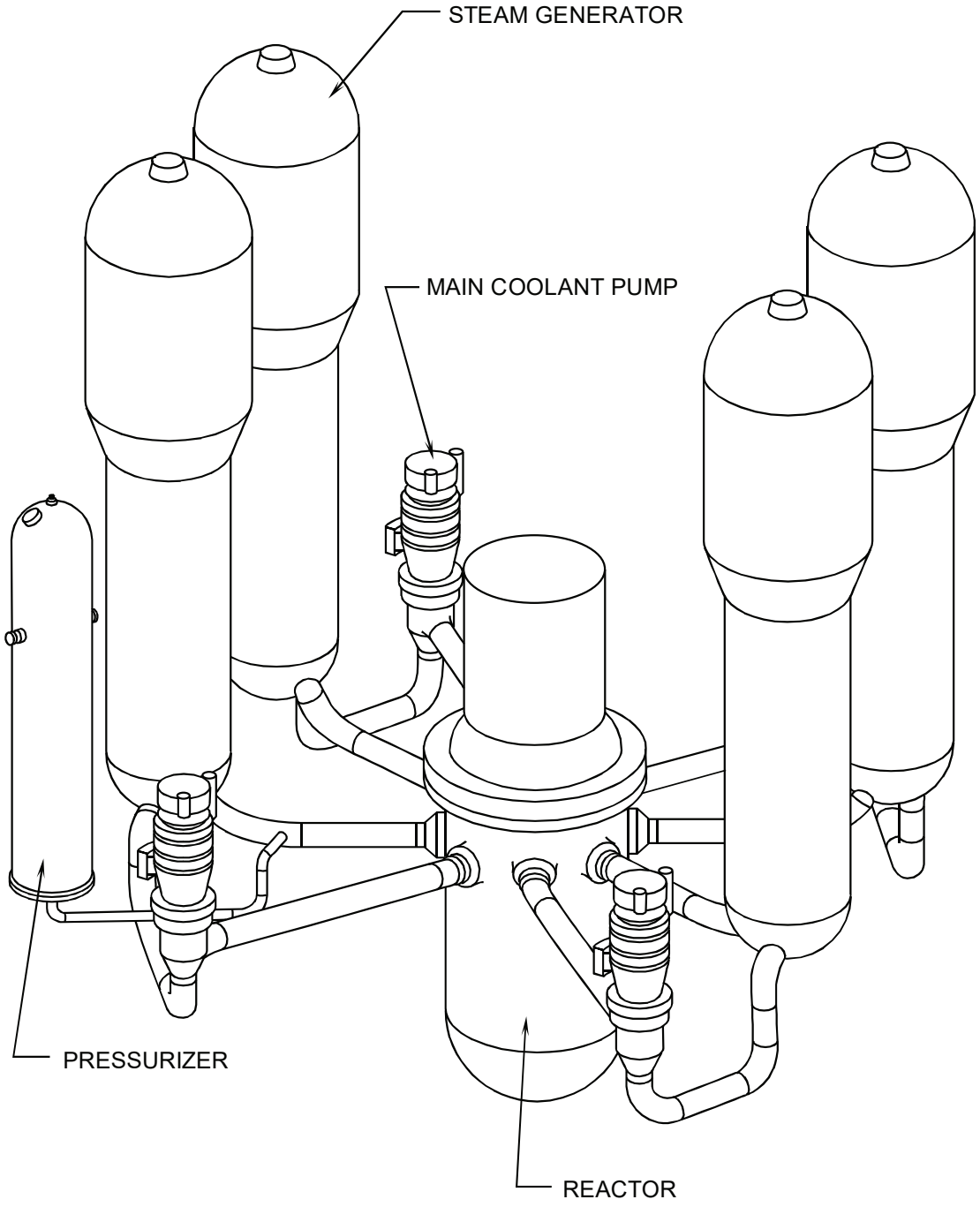
The following drawings show the layout of the reactor coolant systems for three pressurized water reactor vendors. All of the systems consist of the same major components, but they are arranged in slightly different ways. For example, Westinghouse has built plant with two, three, or four loops, depending upon the power output of the plant. The Combustion Engineering plants and the Babcock & Wilcox plants only have two steam generators, but they have four reactor coolant pumps.



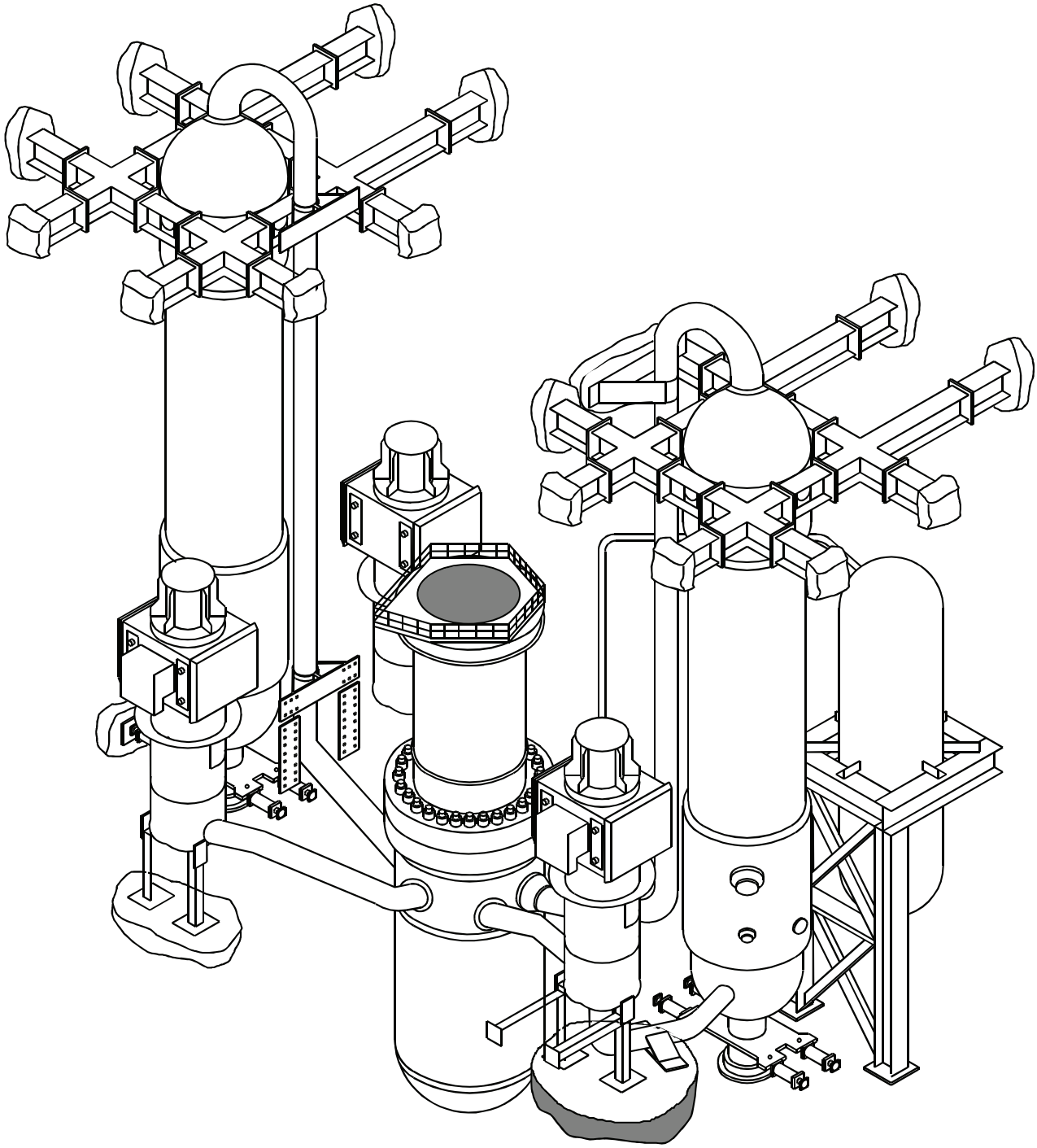
A two-loop Westinghouse plant has two steam generators, two reactor coolant pumps, and a pressurizer. The two-loop units in the United States are Ginna, Kewaunee, Point Beach 1 and 2, and Prairie Island 1 and 2. Each of these plants has 121, 14 x 14 fuel assemblies arranged inside a reactor vessel that has an internal diameter of 132 inches. The electrical output of these plants is approximately 500 megawatts.



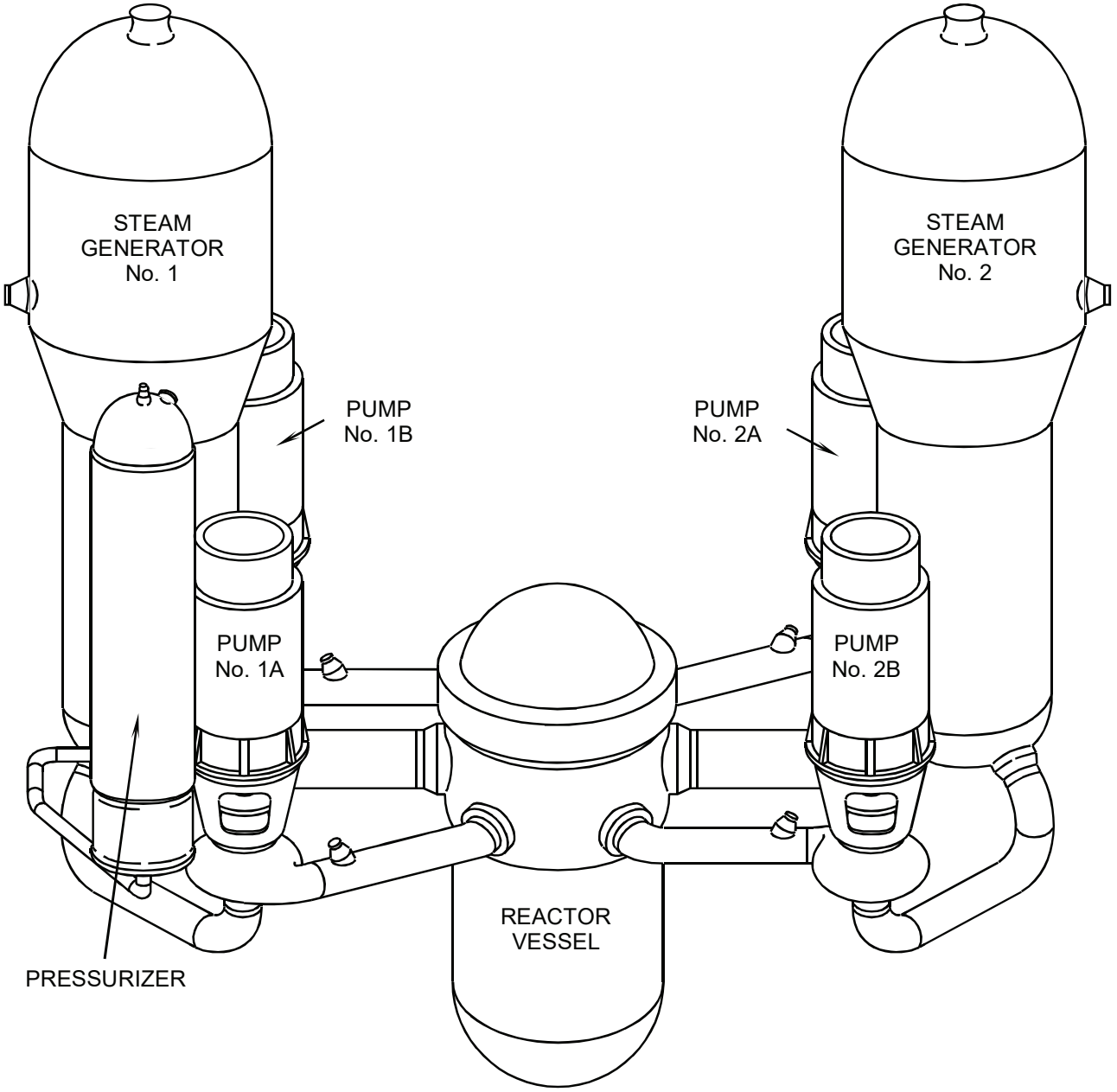
A three-loop Westinghouse plant has three steam generators, three reactor coolant pumps, and a pressurizer. The three-loop units in the United States are Beaver Valley 1 and 2, Farley 1 and 2, H. B. Robinson 2, North Anna 1 and 2, Shearon Harris 1, V. C. Summer, Surry 1 and 2, and Turkey Point 3 and 4. Each of these plants has 157 fuel assemblies. Some units use 15 x 15 fuel assemblies while others use 17 x 17 arrays. The reactor vessels have internal diameters of 156 to 159 inches, except Summer and Turkey Point, which have 172-inch reactor vessels. The electrical output of these plants varies from almost 700 to more than 900 megawatts.



A four-loop Westinghouse plant has four steam generators, four reactor coolant pumps, and a pressurizer. The four-loop units in the United States are Braidwood 1 and 2, Byron 1 and 2, Callaway, Catawba 1 and 2, Comanche Peak 1 and 2, D. C. Cook 1 and 2, Diablo Canyon 1 and 2, Indian Point 2 and 3, McGuire 1 and 2, Millstone 3, Salem 1 and 2, Seabrook, Sequoyah 1 and 2, South Texas Project 1 and 2, Vogtle 1 and 2, Watts Bar 1, and Wolf Creek. Each of these plants has 193 fuel assemblies arranged inside a reactor vessel that has an internal diameter of 173 inches (except South Texas has an internal diameter of 167 inches). The fuel assemblies are arranged in 17 x 17 array except for Cook and Indian Point, which have 15 x 15 fuel. The electrical output of these plants ranges from 950 to 1250 megawatts.



A Babcock & Wilcox plant has two once through steam generators, four reactor coolant pumps, and a pressurizer. The Babcock & Wilcox units in the United States are Arkansas 1, Crystal River 3, Davis Besse, Oconee 1, 2, and 3, and Three Mile Island 1. Each of these plants has 177 fuel assemblies. The electrical output of these plants is approximately 850 megawatts.



A Combustion Engineering plant has two steam generators, four reactor coolant pumps, and a pressurizer. The Combustion Engineering units in the United States are Arkansas 2, Calvert Cliffs 1 and 2, Fort Calhoun, Millstone 2, Palisades, Palo Verde 1, 2, and 3, San Onofre 2 and 3, Saint Lucie 1 and 2, and Waterford 3. The electrical output of these plants varies from less than 500 to more than 1200 megawatts.

Reactor Vessel

The reactor core, and all associated support and alignment devices, are housed within the reactor vessel (cutaway view on page 4-10). The major components are the reactor vessel, the core barrel, the reactor core, and the upper internals package.

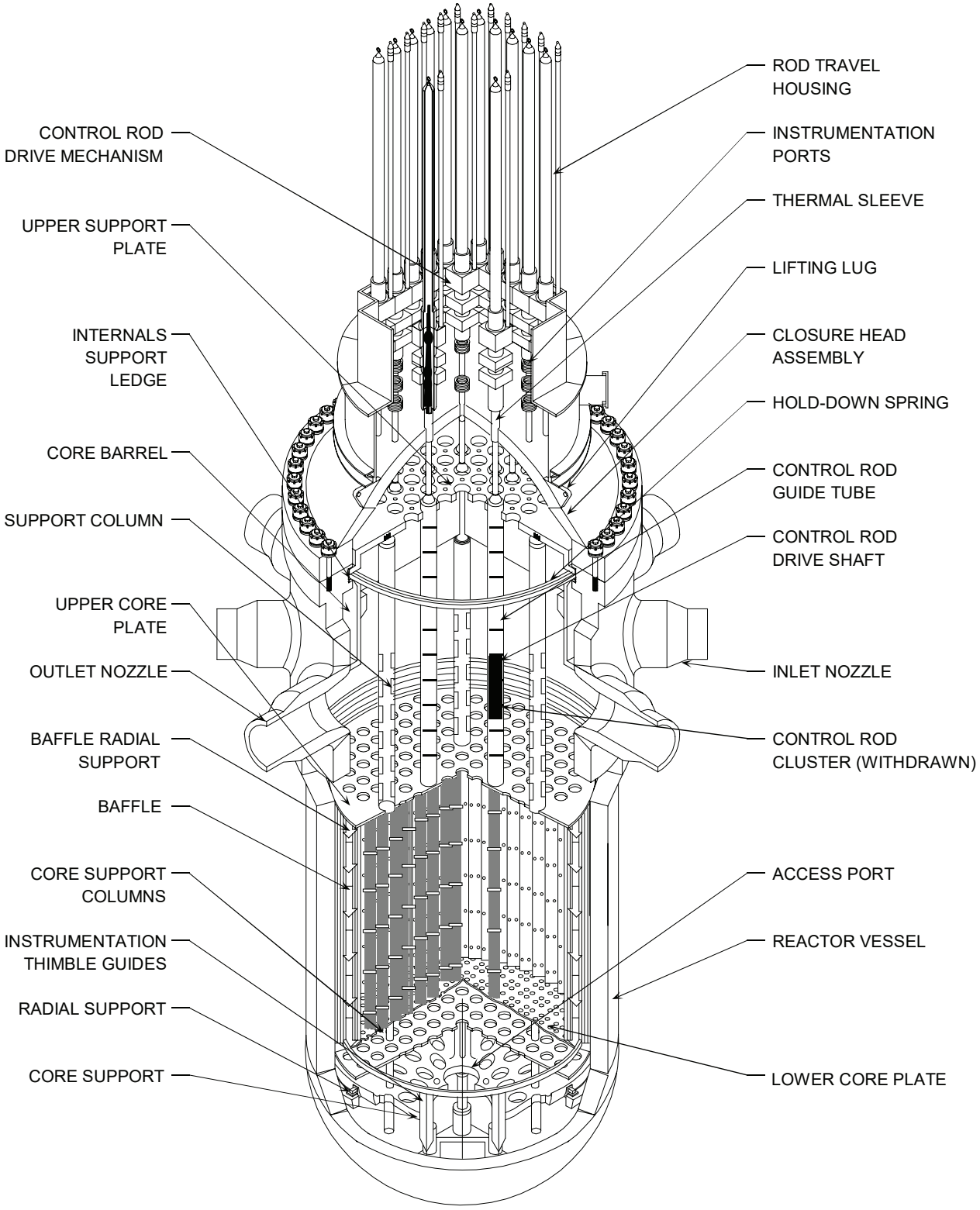
The reactor vessel is a cylindrical vessel with a hemispherical bottom head and a removable hemispherical top head. The top head is removable to allow for the refueling of the reactor. There will be one inlet (or cold leg) nozzle and one outlet (or hot leg) nozzle for each reactor coolant system loop. The reactor vessel is constructed of a manganese molybdenum steel, and all surfaces that come into contact with reactor coolant are clad with stainless steel to increase corrosion resistance.

The core barrel slides down inside of the reactor vessel and houses the fuel. Toward the bottom of the core barrel, there is a lower core support plate on which the fuel assemblies sit. The core barrel and all of the lower internals actually hang inside the reactor vessel from the internals support ledge. On the outside of the core barrel will be irradiation specimen holders in which samples of the material used to manufacture the vessel will be placed. At periodic time intervals, some of these samples will be removed and tested to see how the radiation from the fuel has affected the strength of the material.

The upper internals package sits on top of the fuel. It contains the guide columns to guide the control rods when they are pulled from the fuel. The upper internals package prevents the core from trying to move up during operation due to the force from the coolant flowing through the assemblies.

The flow path for the reactor coolant through the reactor vessel would be:

- The coolant enters the reactor vessel at the inlet nozzle and hits against the core barrel.
- The core barrel forces the water to flow downward in the space between the reactor vessel wall and the core barrel.
- After reaching the bottom of the reactor vessel, the flow is turned upward to pass through the fuel assemblies.
- The coolant flows all around and through the fuel assemblies, removing the heat produced by the fission process.
- The now hotter water enters the upper internals region, where it is routed out the outlet nozzle and goes on to the steam generator.



Cutaway View of Reactor Vessel

Steam Generators

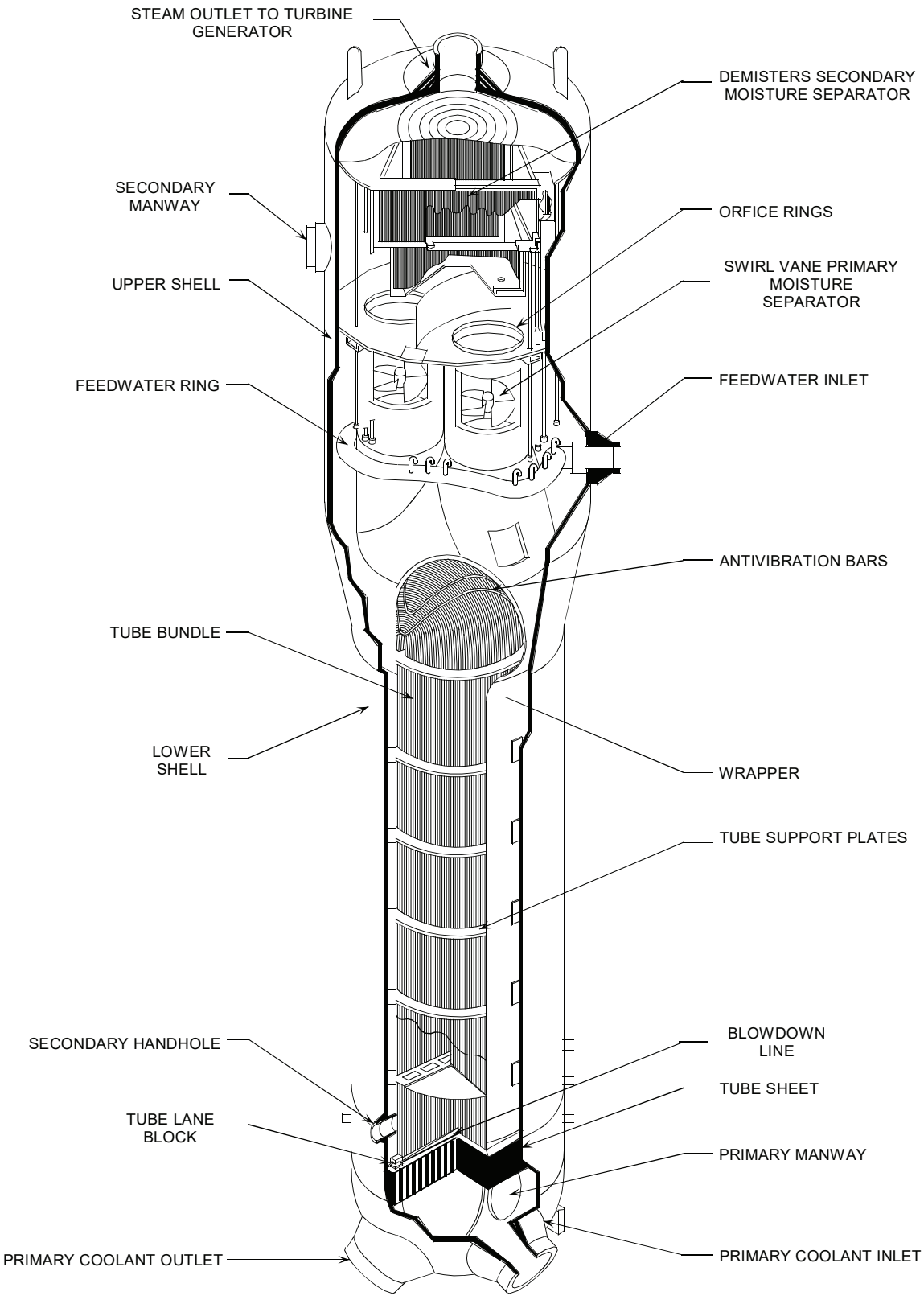
The reactor coolant flows from the reactor to the steam generator. Inside of the steam generator, the hot reactor coolant flows inside of the many tubes. The secondary coolant, or feedwater, flows around the outside of the tubes, where it picks up heat from the primary coolant. When the feedwater absorbs sufficient heat, it starts to boil and form steam. At this point, the steam generators used by the three Pressurized Water Reactor vendors differ slightly in their designs and operations.

In the Westinghouse (page 4-12) and Combustion Engineering (page 4-13) designs, the steam/water mixture passes through multiple stages of moisture separation. One stage causes the mixture to spin, which slings the water to the outside. The water is then drained back to be used to make more steam. The drier steam is routed to the second stage of separation. In this stage, the mixture is forced to make rapid changes in direction. Because of the steam's ability to change direction and the water's inability to change, the steam exits the steam generator, and the water is drained back for reuse. The two stage process of moisture removal is so efficient at removing the water that for every 100 pounds of steam that exits the steam generator, the water content is less than 0.25 pounds. It is important to maintain the moisture content of the steam as low as possible to prevent damage to the turbine blading.

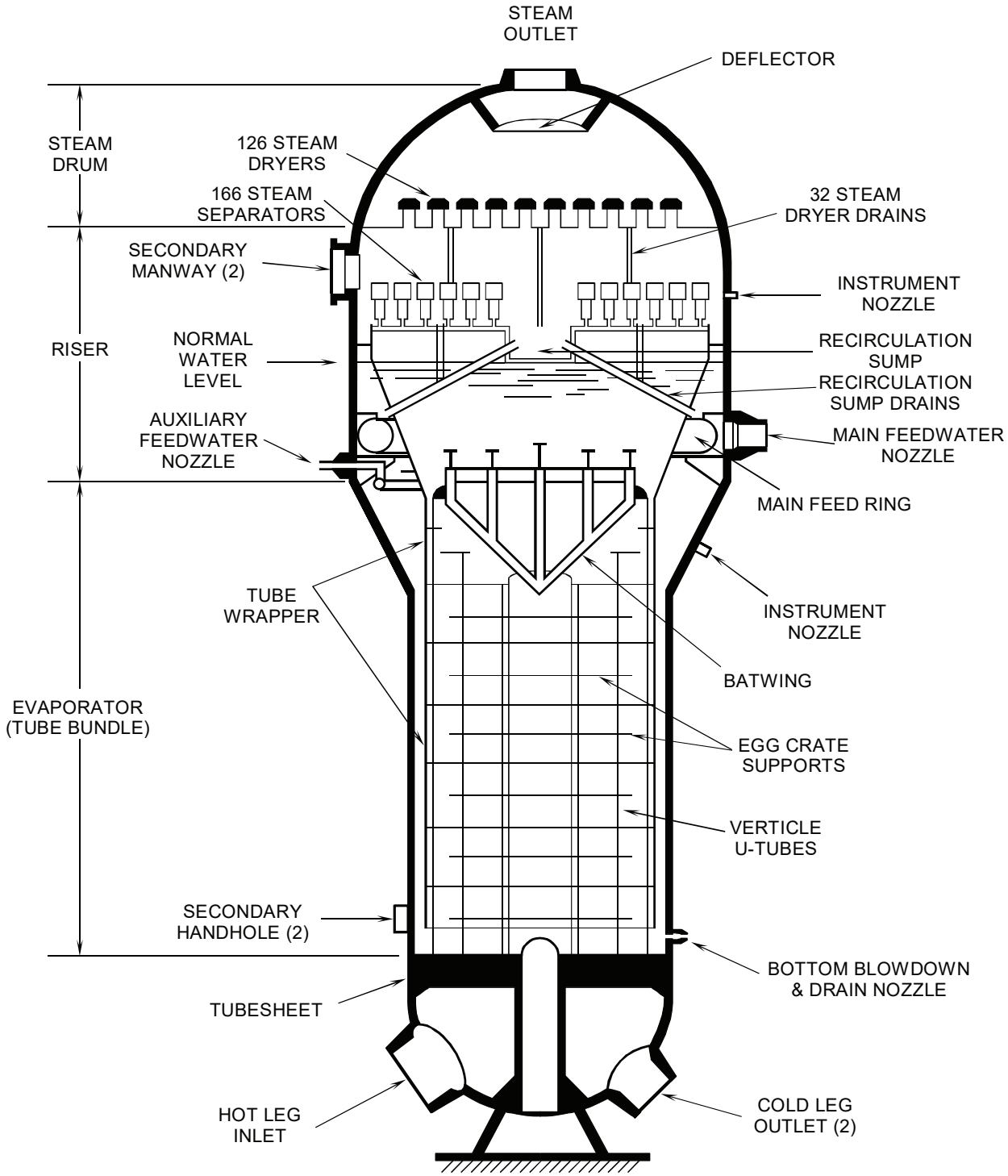
The Babcock & Wilcox design uses a once through steam generator (OTSG, page 4-14). In this design, the flow of primary coolant is from the top of the steam generator to the bottom, instead of through U-shaped tubes as in the Westinghouse and Combustion Engineering designs. Because of the heat transfer achieved by this design, the steam that exits the once through steam generator contains no moisture. This is done by heating the steam above the boiling point, or superheating.

Other differences in design include the ways in which the steam and the cooler primary coolant exit the steam generators. In a Westinghouse steam generator, there is a single outlet for the steam and a single outlet for the primary coolant. For both the Babcock & Wilcox design and the Combustion Engineering design there are two steam outlets and two primary coolant outlets.

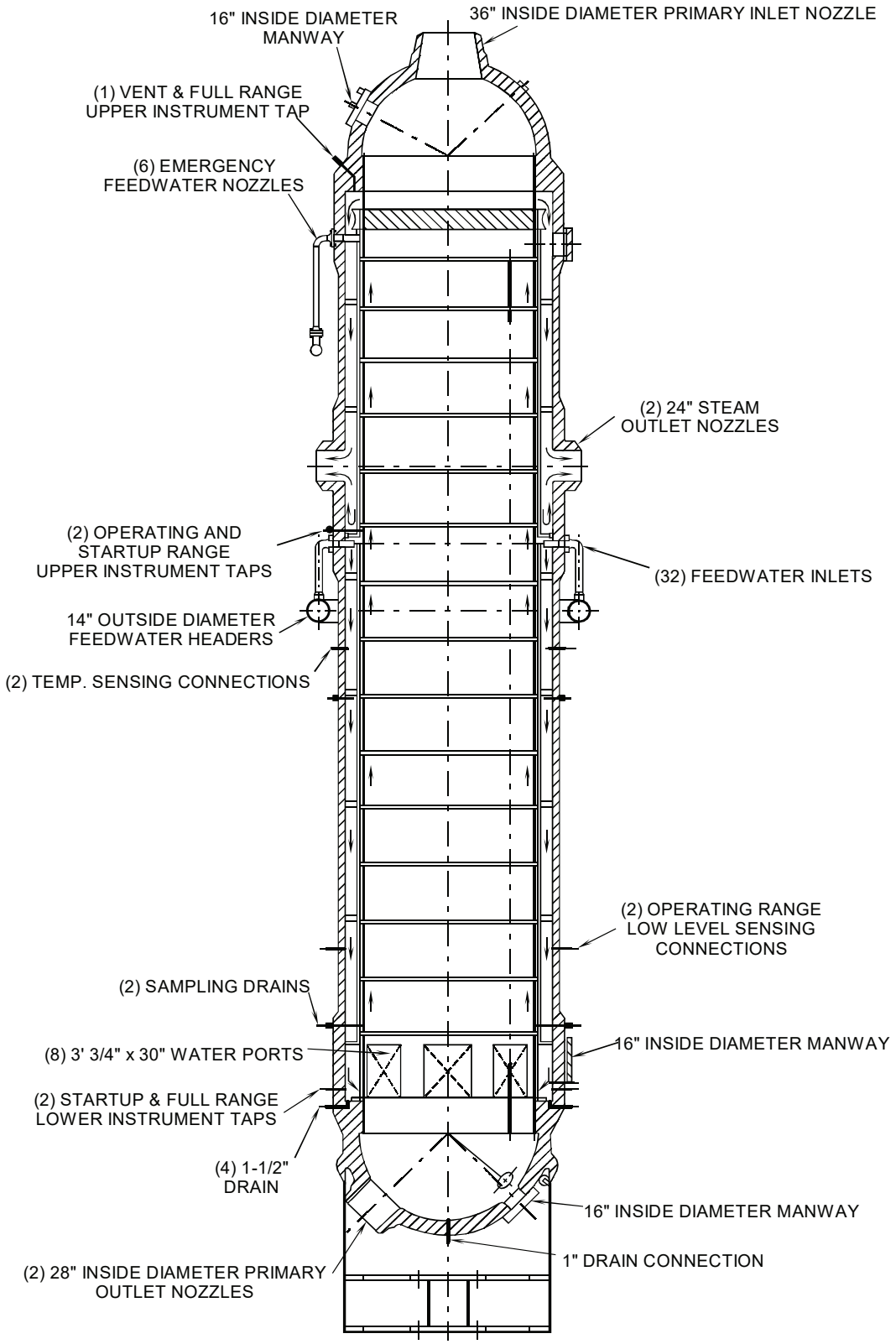
For all of the steam generator designs, the steam is piped to the main turbine, and the coolant is routed to the suction of the reactor coolant pumps.



Cutaway View of A Westinghouse Steam Generator



Cutaway View of a Combustion Engineering Steam Generator



Cutaway View of a Babcock & Wilcox Once Through Steam Generator

Reactor Coolant Pump

The purpose of the reactor coolant pump is to provide forced primary coolant flow to remove the amount of heat being generated by the fission process. Even without a pump, there would be natural circulation flow through the reactor. However, this flow is not sufficient to remove the heat being generated when the reactor is at power. Natural circulation flow is sufficient for heat removal when the plant is shutdown (not critical).

The reactor coolant enters the suction side of the pump from the outlet of the steam generator. The water is increased in velocity by the pump impeller. This increase in velocity is converted to pressure in the discharge volute. At the discharge of the reactor coolant pump, the reactor coolant pressure will be approximately 90 psi higher than the inlet pressure.

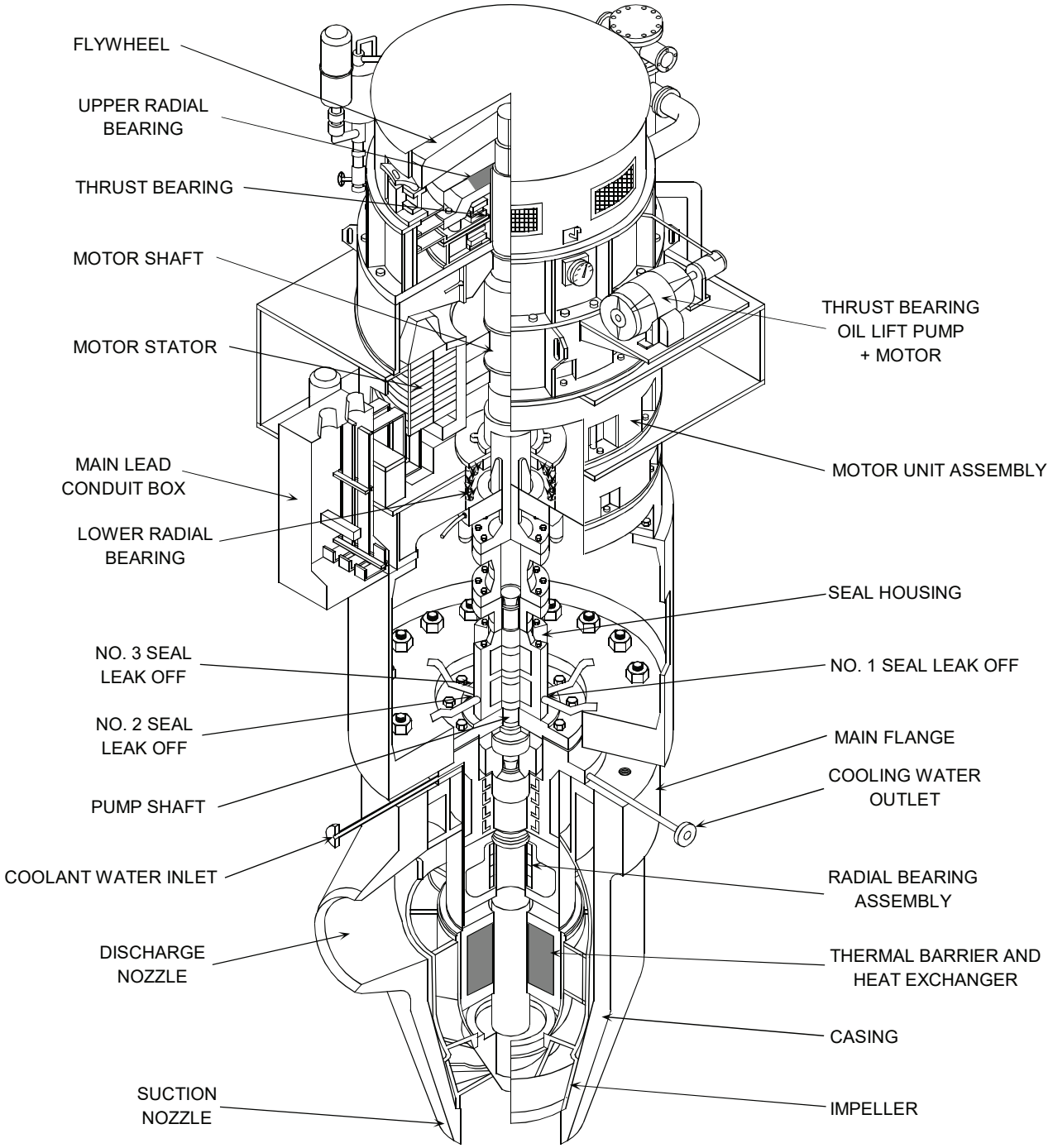
After the coolant leaves the discharge side of the pump, it will enter the inlet or cold leg side of the reactor vessel. The coolant will then pass through the fuel to collect more heat and is sent back to the steam generators.

The major components of a reactor coolant pump (page 4-16) are the motor, the hydraulic section, and the seal package.

The motor is a large, air cooled, electric motor. The horsepower rating of the motor will be from 6,000 to 10,000 horsepower. This large amount of power is needed in order to provide the necessary flow of coolant for heat removal (approximately 100,000 gallons per minute per pump).

The hydraulic section of the pump is the impeller and the discharge volute. The impeller of the pump is attached to the motor by a long shaft.

The seal package is located between the motor and the hydraulic section and prevents any water from leaking up the shaft into the containment atmosphere. Any water that does leak up the shaft is collected and routed to the seal leakoff system for collection in various systems.



Cutaway View of a Reactor Coolant Pump

Pressurizer

The pressurizer (page 4-18) is the component in the reactor coolant system which provides a means of controlling the system pressure. Pressure is controlled by the use of electrical heaters, pressurizer spray, power operated relief valves, and safety valves.

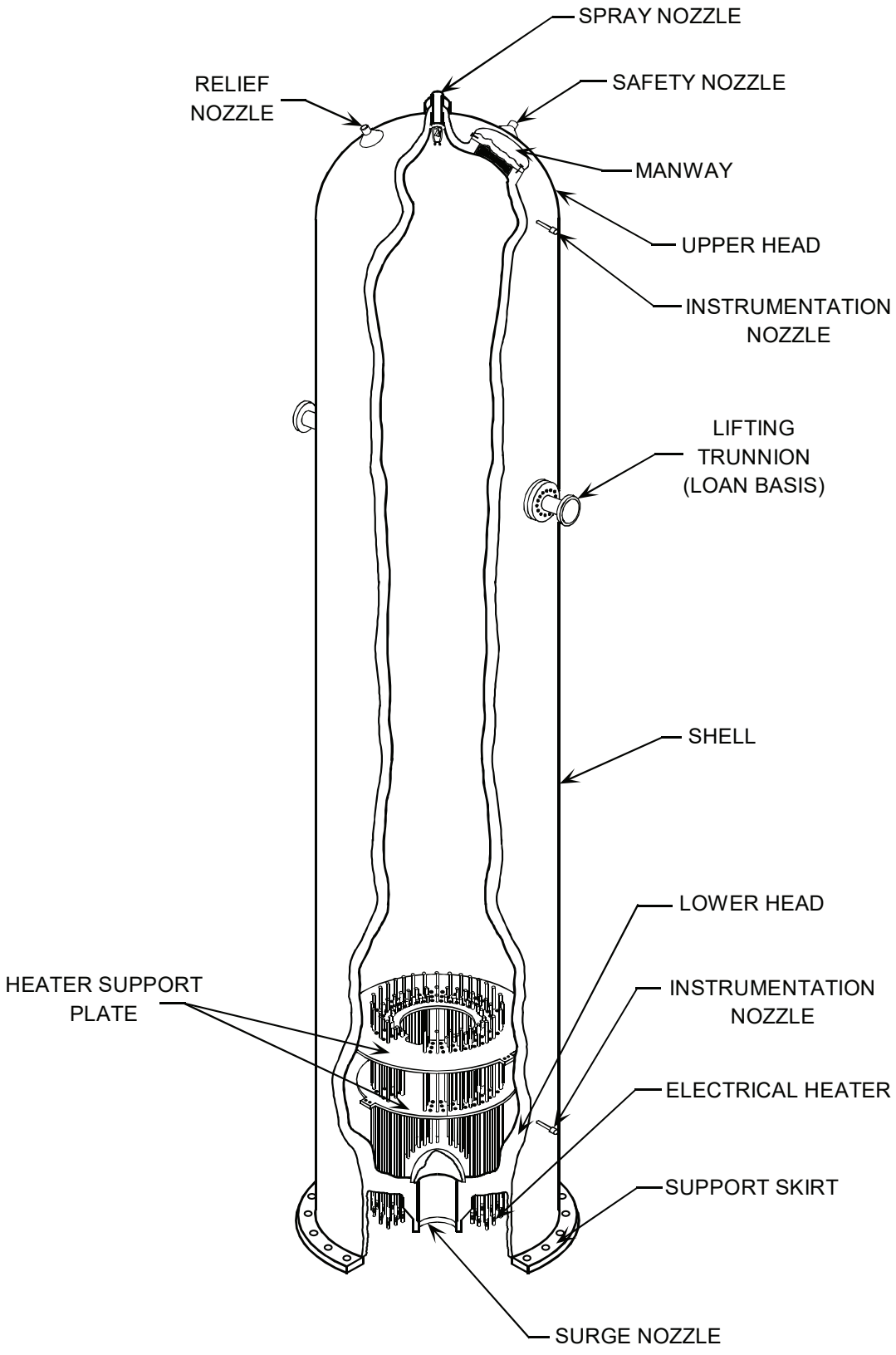
The pressurizer operates with a mixture of steam and water in equilibrium. If pressure starts to deviate from the desired value, the various components will actuate to bring pressure back to the normal operating point. The cause of the pressure deviation is normally associated with a change in the temperature of the reactor coolant system. If reactor coolant system temperature starts to increase, the density of the reactor coolant will decrease, and the water will take up more space. Since the pressurizer is connected to the reactor coolant system via the surge line, the water will expand up into the pressurizer. This will cause the steam in the top of the pressurizer to be compressed, and therefore, the pressure to increase.

The opposite effect will occur if the reactor coolant system temperature decreases. The water will become more dense, and will occupy less space. The level in the pressurizer will decrease, which will cause a pressure decrease. For a pressure increase or decrease, the pressurizer will operate to bring pressure back to normal.

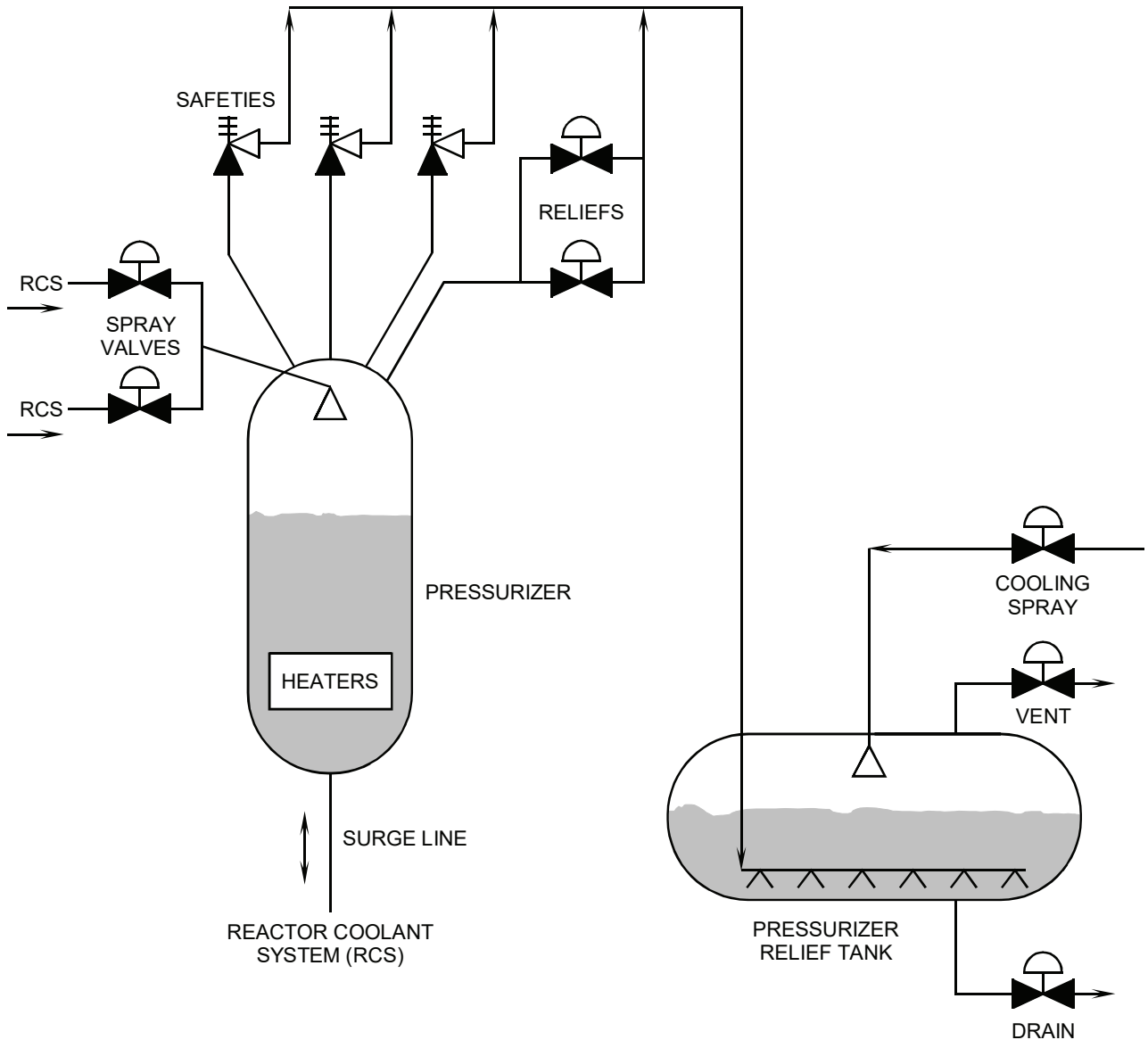
For example, if pressure starts to increase above the desired setpoint, the spray line will allow relatively cold water from the discharge of the reactor coolant pump to be sprayed into the steam space. The cold water will condense the steam into water, which will reduce pressure (due to the fact that steam takes up about six times more space than the same mass of water). If pressure continues to increase, the pressurizer relief valves will open and dump steam to the pressurizer relief tank. If this does not relieve pressure, the safety valves will lift, also discharging to the pressurizer relief tank.

If pressure starts to decrease, the electrical heaters will be energized to boil more water into steam, and therefore increase pressure. If pressure continues to decrease, and reaches a predetermined setpoint, the reactor protection system will trip the reactor.

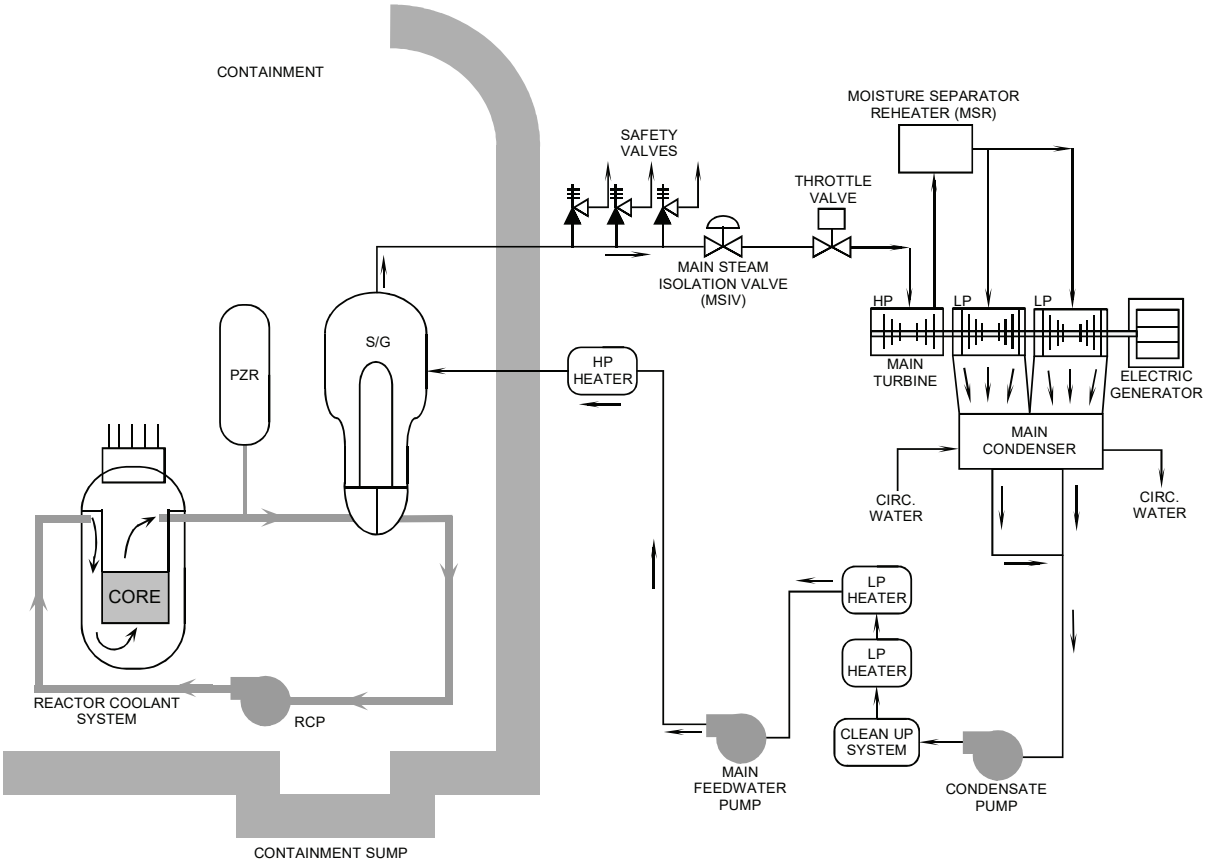
The pressurizer relief tank (page 4-19) is a large tank containing water with a nitrogen atmosphere. The water is there to condense any steam discharged by the safety or relief valves. Since the reactor coolant system contains hydrogen, the nitrogen atmosphere is used to prevent the hydrogen from existing in a potentially explosive environment.



Cutaway View of a Pressurizer



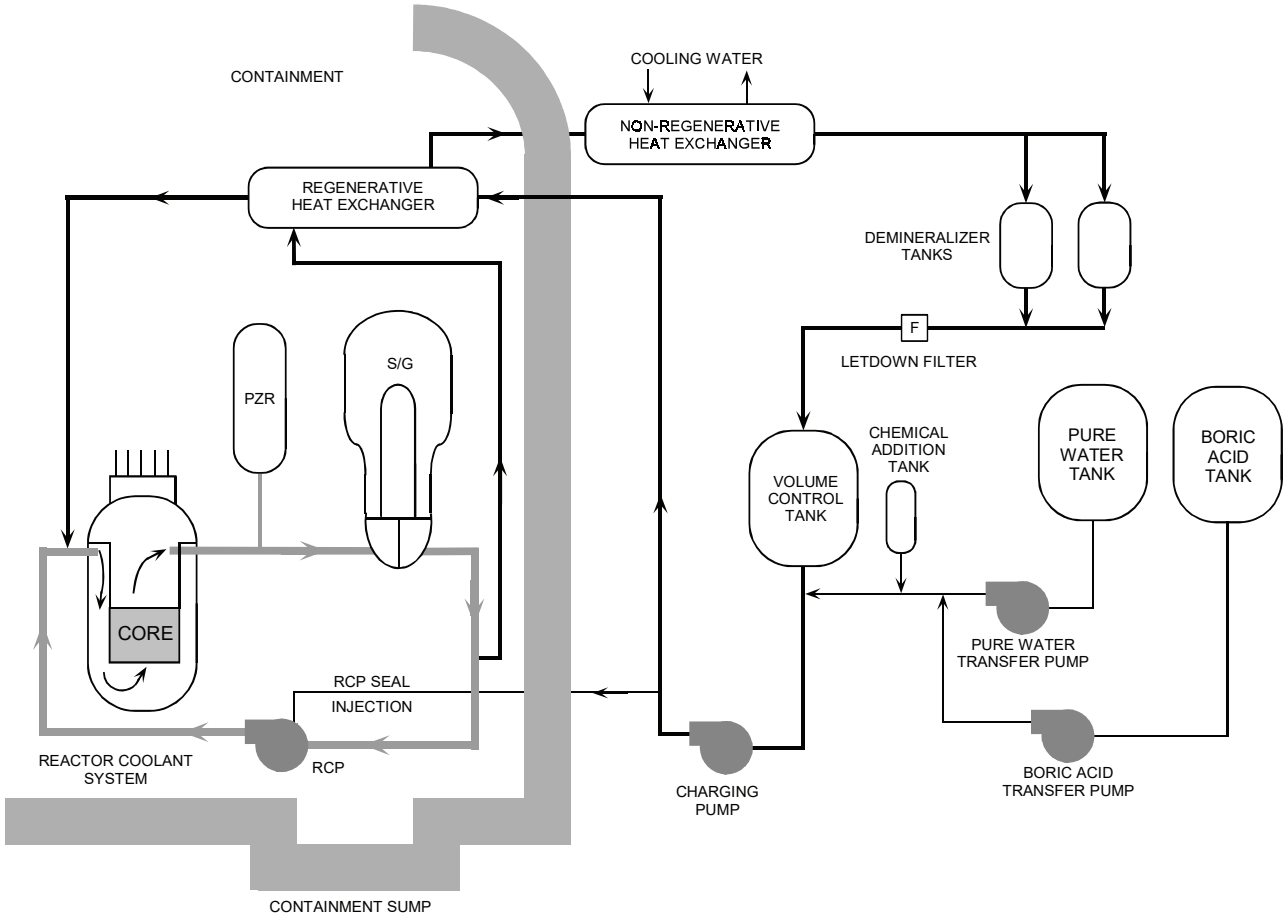
Pressurizer and Pressurizer Relief Tank



The major secondary systems of a pressurized water reactor are the main steam system and the condensate/feedwater system. Since the primary and secondary systems are physically separated from each other (by the steam generator tubes), the secondary system will contain little or no radioactive material.

The main steam system starts at the outlet of the steam generator. The steam is routed to the high pressure main turbine. After passing through the high pressure turbine, the steam is piped to the moisture separator/reheaters (MSRs). In the MSRs, the steam is dried with moisture separators and reheated using other steam as a heat source. From the MSRs, the steam goes to the low pressure turbines. After passing through the low pressure turbines, the steam goes to the main condenser, which is operated at a vacuum to allow for the greatest removal of energy by the low pressure turbines. The steam is condensed into water by the flow of circulating water through the condenser tubes.

At this point, the condensate/feedwater system starts. The condensed steam collects in the hotwell area of the main condenser. The condensate pumps take a suction on the hotwell to increase the pressure of the water. The condensate then passes through a cleanup system to remove any impurities in the water. This is necessary because the steam generator acts as a concentrator. If the impurities are not removed, they will be left in the steam generator after the steam forming process, and this could reduce the heat transfer capability of the steam generator and/or damage the steam generator tubes. The condensate then passes through some low pressure feedwater heaters. The temperature of the condensate is increased in the heaters by using steam from the low pressure turbine (extraction steam). The condensate flow then enters the suction of the main feedwater pumps, which increases the pressure of the water high enough to enter the steam generator. The feedwater now passes through a set of high pressure feedwater heaters, which are heated by extraction steam from the high pressure turbine (heating the feedwater helps to increase the efficiency of the plant). The flow rate of the feedwater is controlled as it enters the steam generators.



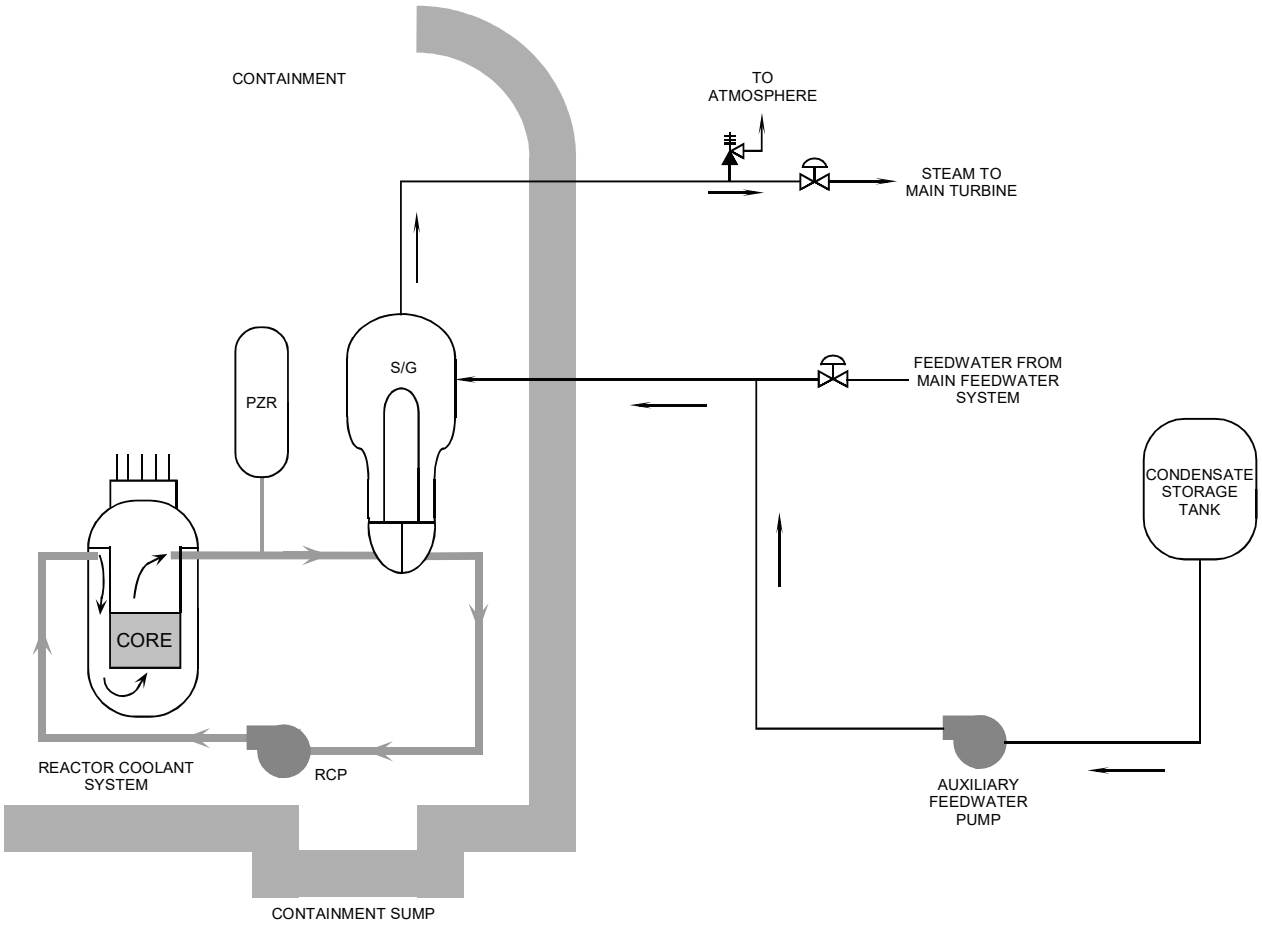
The chemical and volume control system (CVCS) is a major support system for the reactor coolant system. Some of the functions of the system are to:

- Purify the reactor coolant system using filters and demineralizers,
- Add and remove boron as necessary, and
- Maintain the level of the pressurizer at the desired setpoint.

A small amount of water (about 75 gpm) is continuously routed through the chemical and volume control system (called letdown). This provides a continuous cleanup of the reactor coolant system which maintains the purity of the coolant and helps to minimize the amount of radioactive material in the coolant.

The reactor coolant pump seals prevent the leakage of primary coolant to the containment atmosphere. The chemical and volume control system provides seal injection to keep the seals cool and provide lubrication for the seals. This water has been cooled by the heat exchangers and cleaned by the filters and demineralizers.

There is also a path (not shown) to route the letdown flow to the radioactive waste system for processing and/or disposal.



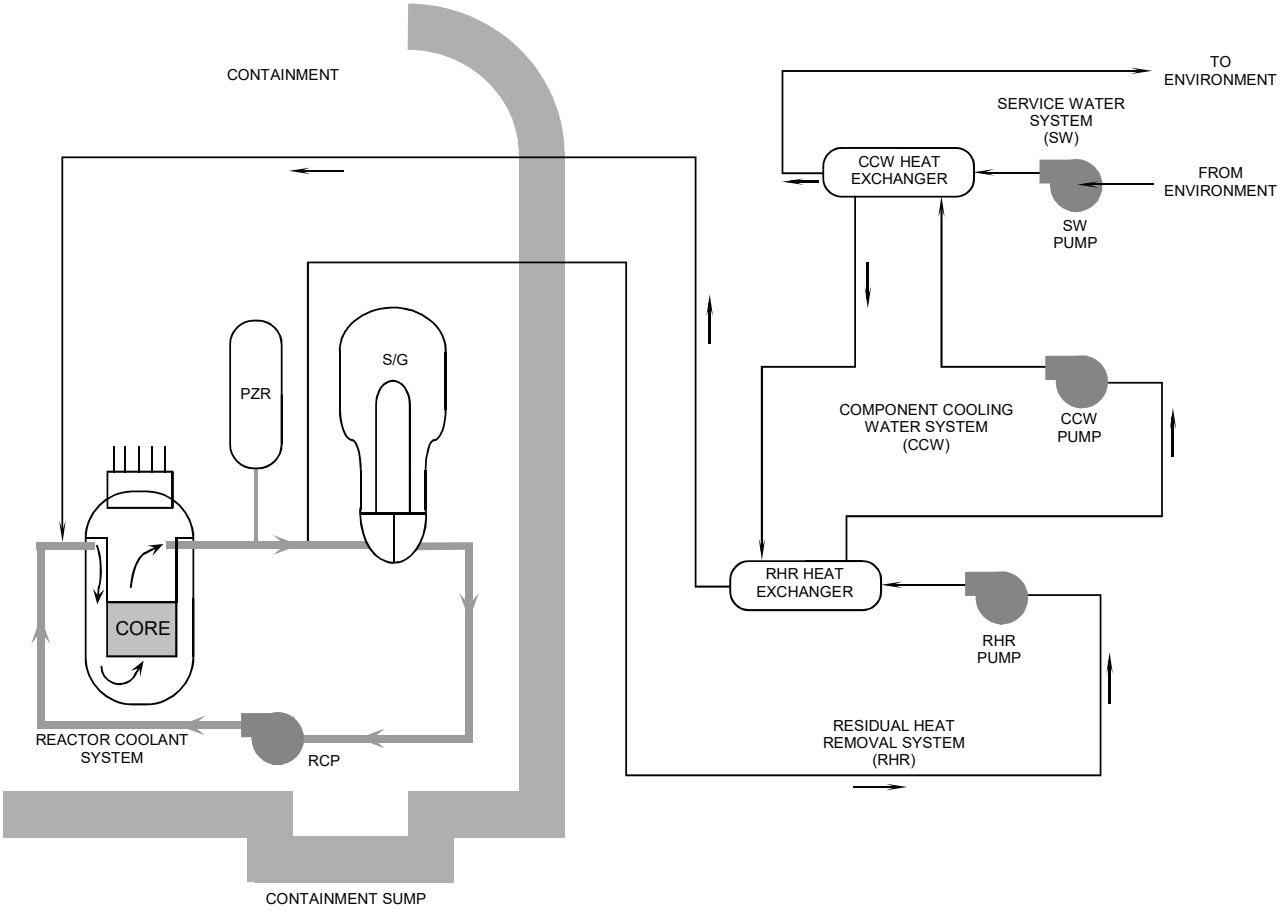
During normal operation, the heat produced by the fission process is removed by the reactor coolant and transferred to the secondary coolant in the steam generators. Here, the secondary coolant is boiled into steam and sent to the main turbine.

Even after the reactor has been shutdown, there is a significant amount of heat produced by the decay of fission products (decay heat). The amount of heat produced by decay heat is sufficient to cause fuel damage if not removed. Therefore, systems must be designed and installed in the plant to remove the decay from the core and transfer that heat to the environment, even in a shutdown plant condition. Also, if it is desired to perform maintenance on reactor coolant system components, the temperature and pressure of the reactor coolant system must be reduced low enough to allow personnel access to the equipment.

The auxiliary feedwater system and the steam dump system (turbine bypass valves) work together to allow the operators to remove the decay heat from the reactor. The auxiliary feedwater system pumps water from the condensate storage tank to the steam generators. This water is allowed to boil to make steam. The steam can then be dumped to the main condenser through the steam dump valves. The circulating water will then condense the steam and take the heat to the environment.

If the steam dump system is not available (for example, no circulating water for the main condenser), the steam can be dumped directly to the atmosphere through the atmospheric relief valves.

By using either method of steam removal, the heat is being removed from the reactor coolant system, and the temperature of the reactor coolant system can be reduced to the desired level.



At some point, the decay heat being produced will not be sufficient to generate enough steam in the steam generators to continue the cooldown. When the reactor coolant system pressure and temperature have been reduced to within the operational limits, the residual heat removal system (RHR) will be used to continue the cooldown by removing heat from the core and transferring it to the environment.

This is accomplished by routing some of the reactor coolant through the residual heat removal system heat exchanger, which is cooled by the component cooling water system (CCW). The heat removed by the component cooling water system is then transferred to the service water system in the component cooling water heat exchanger. The heat picked up by the service water system will be transferred directly to the environment from the service water system.

The residual heat removal system can be used to cool the plant down to a low enough temperature that personnel can perform any maintenance functions, including refueling.

Emergency Core Cooling Systems

There are two purposes of the emergency core cooling systems (ECCS). The first is to provide core cooling to minimize fuel damage following a loss of coolant accident. This is accomplished by the injection of large amounts of cool, borated water into the reactor coolant system. The second is to provide extra neutron poisons to ensure the reactor remains shutdown following the cooldown associated with a main steam line rupture, which is accomplished by the use of the same borated water source. This water source is called the refueling water storage tank (RWST).

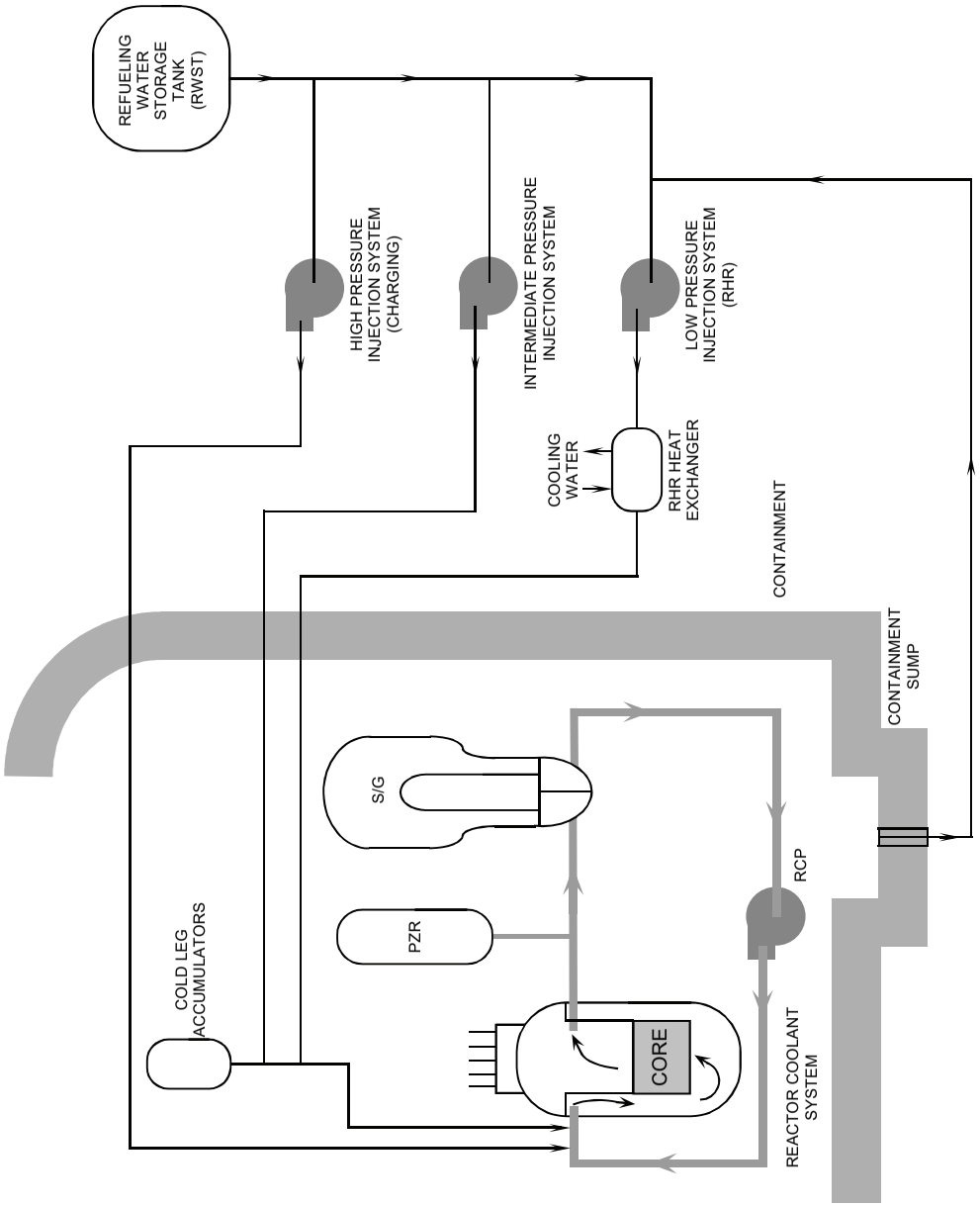
To perform this function of injection of large quantities of borated water, the emergency core cooling systems consist of four separate systems (page 4-25). In order of highest pressure to lowest pressure, these systems are: the high pressure injection (or charging) system, the intermediate pressure injection system, the cold leg accumulators, and the low pressure injection system (residual heat removal). Even though the diagram shows only one pump in each system, there are actually two, each of which is capable of providing sufficient flow. Also, these systems must be able to operate when the normal supply of power is lost to the plant. For this reason, these systems are powered from the plant emergency (diesel generators) power system.

The high pressure injection system uses the pumps in the chemical and volume control system. Upon receipt of an emergency actuation signal, the system will automatically realign to take water from the refueling water storage tank and pump it into the reactor coolant system. The high pressure injection system is designed to provide water to the core during emergencies in which reactor coolant system pressure remains relatively high (such as small break in the reactor coolant system, steam break accidents, and leaks of reactor coolant through a steam generator tube to the secondary side).

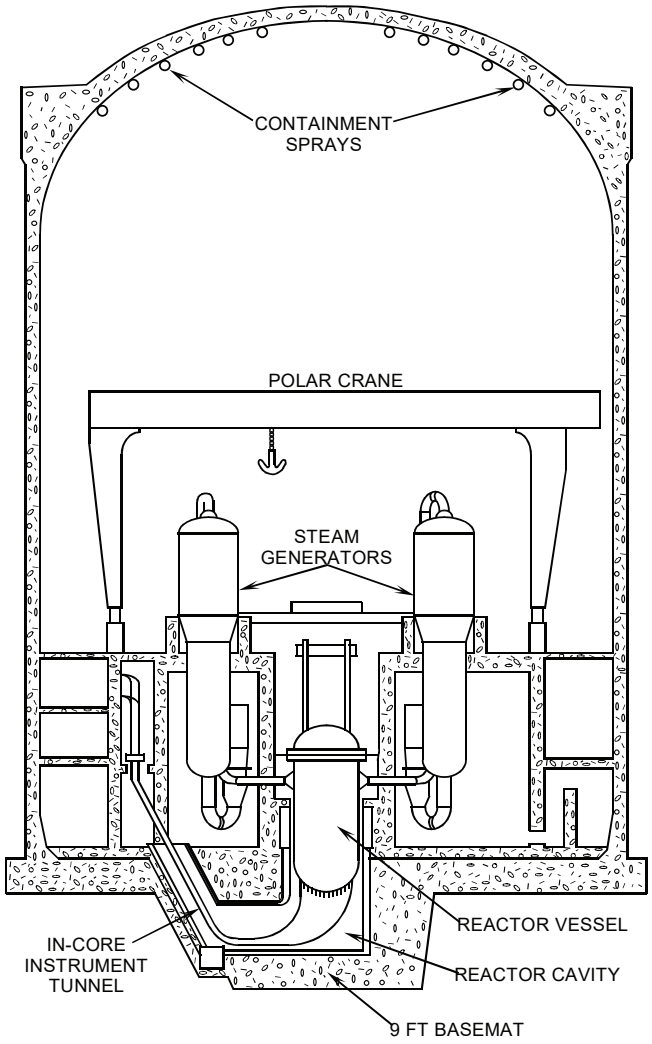
The intermediate pressure injection system is also designed for emergencies in which the primary pressure stays relatively high, such as small to intermediate size primary breaks. Upon an emergency start signal, the pumps will take water from the refueling water storage tank and pump it into the reactor coolant system.

The cold leg accumulators do not require electrical power to operate. These tanks contain large amounts of borated water with a pressurized nitrogen gas bubble in the top. If the pressure of the primary system drops below low enough, the nitrogen will force the borated water out of the tank and into the reactor coolant system. These tanks are designed to provide water to the reactor coolant system during emergencies in which the pressure of the primary drops very rapidly, such as large primary breaks.

The low pressure injection system (residual heat removal) is designed to inject water from the refueling water storage tank into the reactor coolant system during large breaks, which would cause a very low reactor coolant system pressure. In addition, the residual heat removal system has a feature that allows it to take water from the containment sump, pump it through the residual heat removal system heat exchanger for cooling, and then send the cooled water back to the reactor for core cooling. This is the method of cooling that will be used when the refueling water storage tank goes empty after a large primary system break. This is called the long term core cooling or recirculation mode.



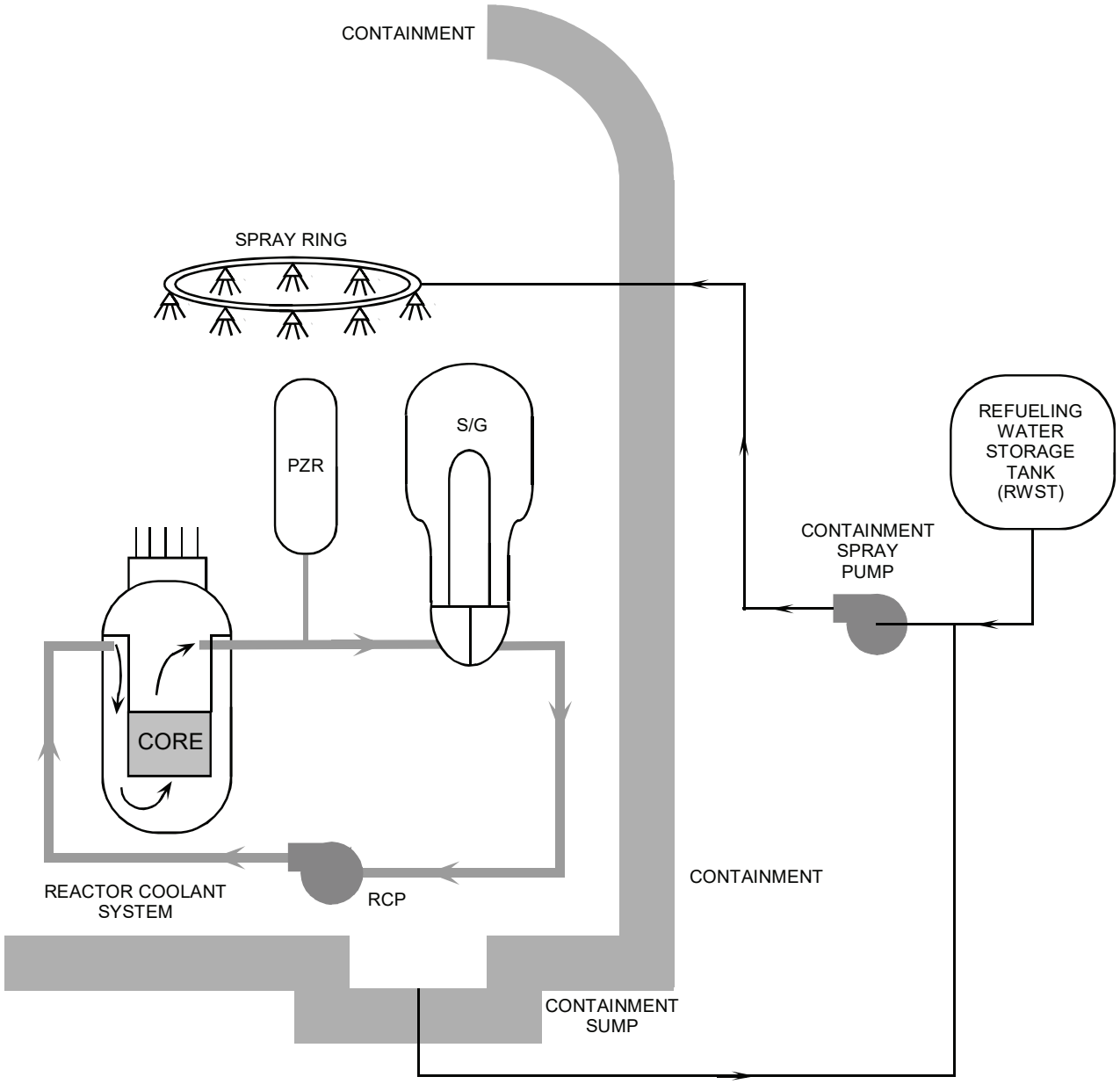
Emergency Core Cooling Systems



As discussed in previous chapters, the reactor coolant system is located inside the containment building. Containments are designed to withstand the pressures and temperatures that would accompany a high energy fluid (primary coolant, steam, or feedwater) release into the building, but exposure to high temperature and pressure over a long period of time would tend to degrade the concrete. If a break occurred in the primary system, the coolant that is released into the containment building would contain radioactive material (fission products). If the concrete developed any cracks, the high pressure in the containment would tend to force the radioactive material out of the containment and into the environment.

To limit the leakage out of containment following an accident, there is a steel liner that covers the inside surface of the containment building. This liner acts as a vapor proof membrane to prevent any gas from escaping through any cracks that may develop in the concrete.

There are also two systems designed with the purpose of reducing containment temperature and pressure after an accident in the containment building. The fan cooler system circulates the air through heat exchangers to accomplish the cooling. The second system is the containment spray system.



Upon the occurrence of either a secondary break or primary break inside the containment building, the containment atmosphere would become filled with steam. To reduce the pressure and temperature of the building, the containment spray system is automatically started. The containment spray pump will take a suction from the refueling water storage tank and pump the water into spray rings located in the upper part of the containment. The water droplets, being cooler than the steam, will remove heat from the steam, which will cause the steam to condense. This will cause a reduction in the pressure of the building and will also reduce the temperature of the containment atmosphere (similar to the operation of the pressurizer). Like the residual heat removal system, the containment spray system has the capability to take water from the containment sump if the refueling water storage tank goes empty.

Chemical and Volume Control System (W, CE) =
Makeup and Purification System (B&W)

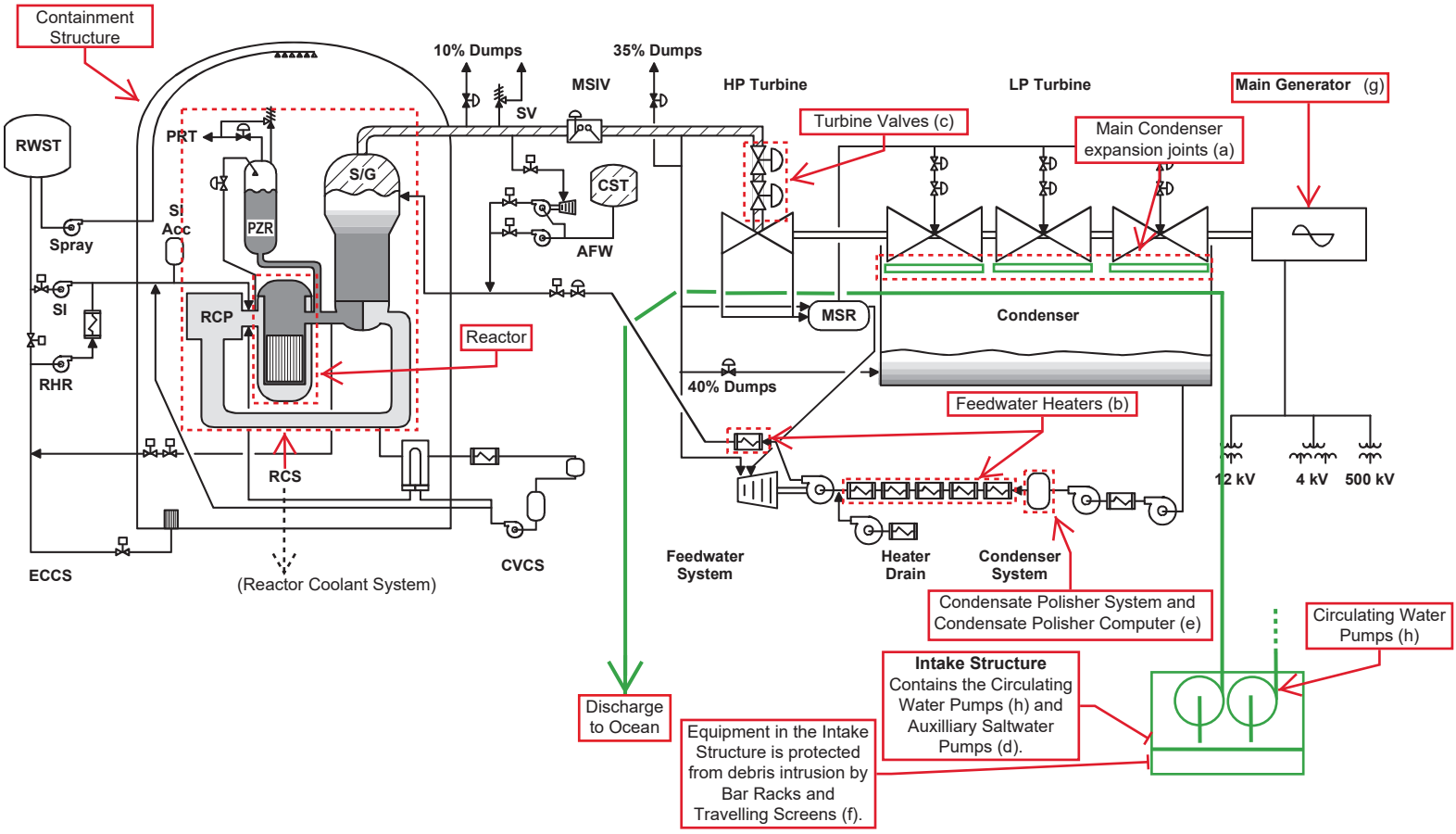
Cold Leg Accumulator (W) =
Core Flood Tanks (B&W) =
Safety Injection Tanks (CE)

Residual Heat Removal System (W) =
Decay Heat Removal System (B&W) =
Shutdown Cooling System (CE)

Auxiliary Feedwater System (W) =
Emergency Feedwater System (B&W, CE)

The three major vendors of pressurized water reactors all have similar systems in their plant designs. For example, all plants are required to have emergency core cooling systems, but not all have an intermediate pressure injection system. One major difference in the designs is that the vendors all call the systems and components by different names. The list above gives some examples of different names even though the function the same.


Unit 2 Containment
Contains Unit 2 Reactor and Reactor Coolant System
Unit 2 Turbine Building
Contains requested items: a, b, c, g, i
Unit 2 Polisher Buttress
Contains requested item: e
Unit 2 Intake Structure
Contains requested items: d, f, h
Google Earth
Imagery date: 2/27/21–newer
100 m
Camera: 1,364 m 35°12'36"N 120°51'19"W
26 m


Containment Structure
10% Dumps
35% Dumps
MSIV
HP Turbine
LP Turbine
Main Generator (g)
SV
Turbine Valves (c)
Main Condenser expansion joints (a)
RWST
PRT
S/G
CST
SI Acc
Spray
PZR
AFW
SI
RCP
Reactor
MSR
Condenser
RHR
40% Dumps
Feedwater Heaters (b)
RCS
12 kV
4 kV
500 kV
ECCS
(Reactor Coolant System)
CVCS
Feedwater System
Heater Drain
Condenser System
Condensate Polisher System and Condensate Polisher Computer (e)
Circulating Water Pumps (h)
Intake Structure
Contains the Circulating Water Pumps (h) and Auxilliary Saltwater Pumps (d).
Discharge to Ocean
Equipment in the Intake Structure is protected from debris intrusion by Bar Racks and Travelling Screens (f).

Section 2.2

Boric Acid System

Boric Acid System Piping & Overview

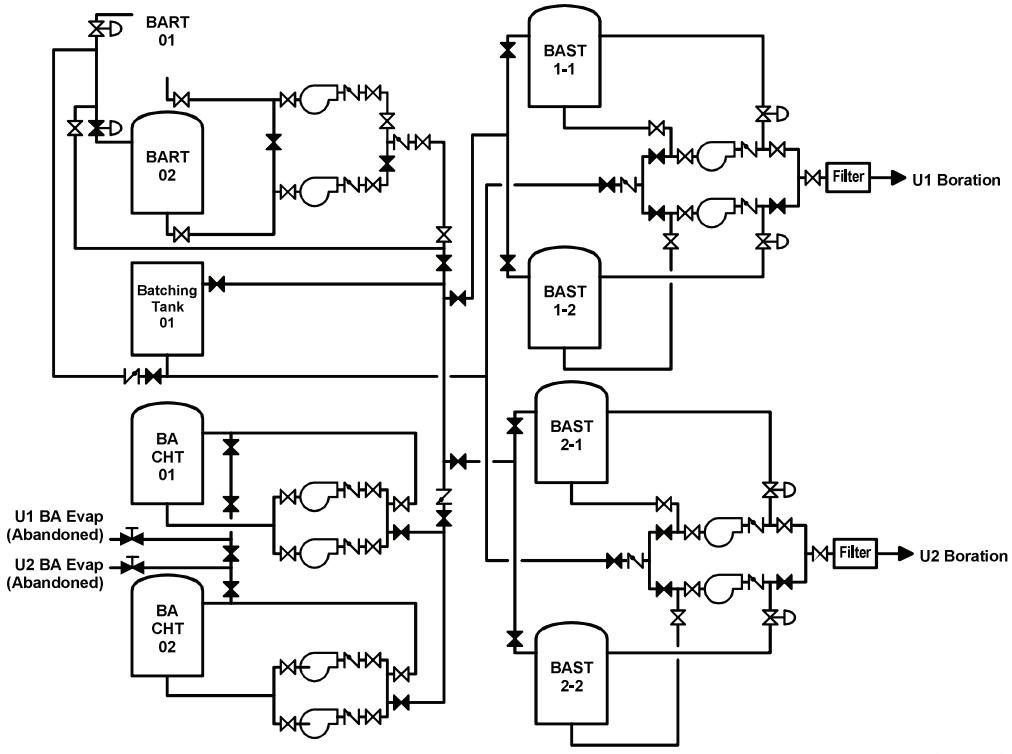
Purpose

The purpose of the Boric Acid system is to inject boric acid into the RCS for reactivity control. This can be done in either:

- High concentration (4% solution) for emergency shutdown considerations or
- Low concentrations (through the blender) in response to normal reactivity transients.

Diagram

The diagram below is an overview of the Boric Acid system and its connections with the CVCS system.



RMU-17 (Rev 3)

Continued on next page

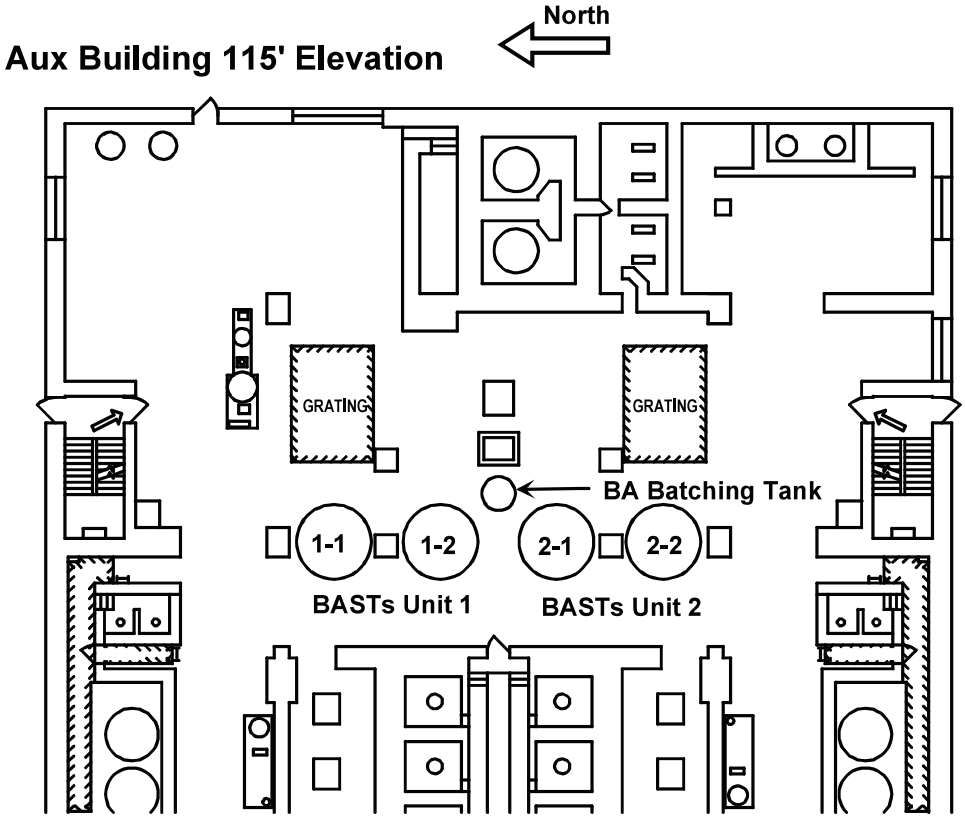
Boric Acid Batching Tank

Purpose

The purpose of the Boric Acid Batching Tank is to provide a means of preparing and supplying additional inventory of boric acid to Boric Acid Storage Tanks and the Boric Acid Reserve Tanks.

Location

The Boric Acid Batching Tank is located on the 115' elevation of the Auxiliary Building east of the demineralizers.



RMU-07 (rev 0)

Continued on next page

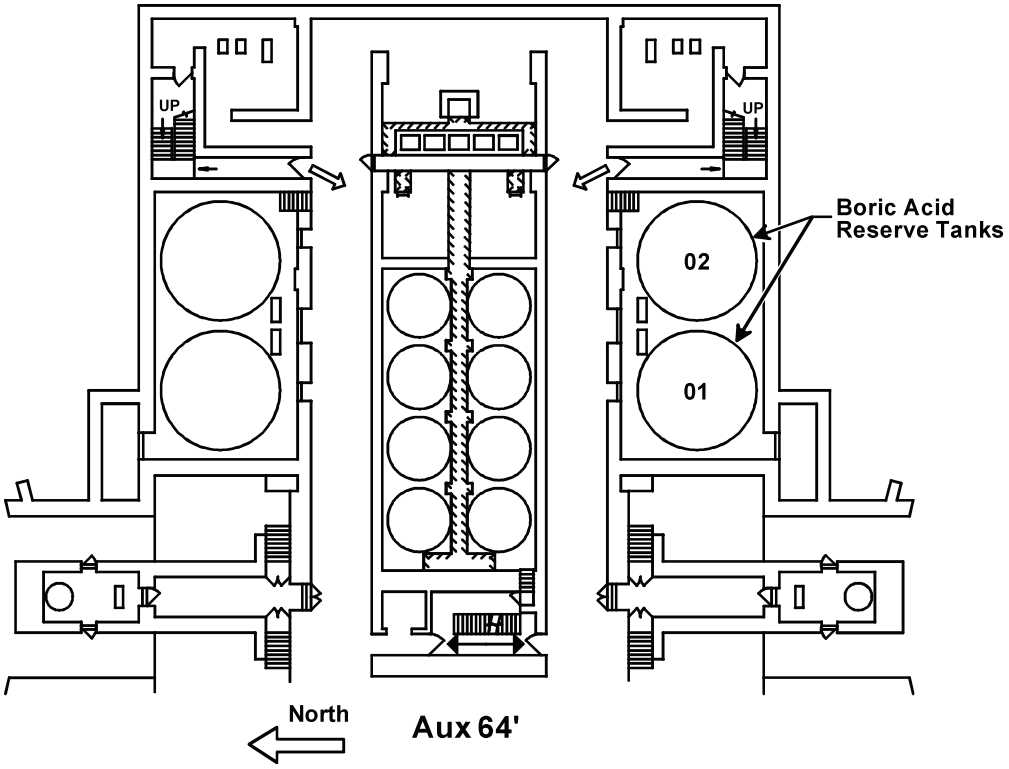
Boric Acid Reserve Tank

Purpose

The purpose of the Boric Acid Reserve Tanks (BARTs) is to serve as an additional storage reservoir for 4% boric acid in the event that the level in the boric acid storage tanks falls below the minimum level required by Tech Specs and they need to be filled rapidly.

Location

The BARTs are located on the 64′ elevation of the Auxiliary Building in their own room on Unit 2 side.



RMU-13 (rev 0)

Continued on next page

PACIFIC GAS AND ELECTRIC COMPANY
2022 ENERGY RESOURCE RECOVERY ACCOUNT (ERRA)
COMPLIANCE REVIEW APPLICATION
APPLICATION 23-02-018

DECLARATION OF THOMAS BALDWIN IN SUPPORT OF RESPONSES TO THE PUBLIC ADVOCATES OFFICE'S NINTH DATA REQUEST

I, Thomas Baldwin, declare:

1. I am a Director in PG&E's Nuclear Generation Business Operations department. In this position, I am responsible for the Nuclear Generation line of business strategic and integrated planning, General Rate Case activities, and matrixed organizations including business finance and supply chain.

2. Based on my knowledge and experience, and in accordance with the Decisions 06-06-066, 08-04-023, 14-10-033, and relevant Commission rules, I make this declaration seeking confidential treatment for certain data and information contained in the responsive documents that PG&E provided in response to the Public Advocates Office's Ninth Data Request in the 2022 ERRA Compliance Review proceeding filed on February 28, 2023.

3. Attached to this declaration is a matrix identifying the data and information for which PG&E is seeking confidential treatment. The matrix specifies that the material PG&E is seeking to protect constitutes confidential market sensitive data and information covered by Decisions 06-06-066, 08-04-023, 14-10-033, and/or relevant Commission rules. The matrix also specifies why confidential protection is justified. Further, the data and information: (1) is not already public; and (2) cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure. By this reference, I am incorporating into this declaration all of the explanatory text that is pertinent to my testimony in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct. Executed on May 9, 2023, at Avila Beach, California.

/s/ Thomas Baldwin

THOMAS BALDWIN

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)
2022 ENERGY RESOURCE RECOVERY ACCOUNT COMPLIANCE REVIEW
RESPONSE TO THE CAL ADVOCATES NINTH DATA REQUEST
MAY 10, 2023

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	Category from D.06-06-066, Appendix 1, or Separate Confidentiality Order That Data Corresponds To	Justification for Confidential Treatment	Length of Time Data To Be Kept Confidential
Data Request A4NR_002, Responses to Questions 1 and 2			
Confidential Attachments to CalAdvocates_009.zip folder	Public Utilities Code §454.5(g)	Proprietary company information that if publicly disclosed could put PG&E at an unfair business disadvantage.	3 years

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q001		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q001		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 20223	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

QUESTION 001

Please provide photos and diagrams of the above-mentioned equipment, showing their locations in relationship to the reactor, coolant system and other adjacent equipment components such as those listed above.

ANSWER 001

The attached document entitled “Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q001-Diablo Canyon Power Plant Overview.pdf” has been provided. Page one of the document shows relative positions of the equipment listed in this question. Page two is a general plant schematic that has been marked up to identify the functional location of equipment listed within the applicable plant processes.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q002		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q002		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

QUESTION 002

Please explain what ”2R23” stands for, and its meaning?

ANSWER 002

The “2” signifies Diablo Canyon Unit 2, “R” stands for a refueling outage, and “23” signifies this as the 23rd refueling outage since the unit was placed in operation.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q003		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q003		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

QUESTION 003

How often does PG&E perform planned refueling outages? Please explain the rationale for the frequency of such outages.

ANSWER 003

PG&E performs planned refueling outages every 18-20 months on each unit. See Utility Owned Generation Chapter 4 Testimony, 4-3 Line 6, Outage Planning and Scheduling Process section.

“The initial start time for future outages is developed years in advance of the outage start through a coordinated effort between Nuclear Work Management and Engineering Services. Outage start dates are typically in the spring or fall to support operation during the summer months and are coordinated with reactor fuel core cycle length (currently from 18-20 months on each unit). This planning minimizes fuel cost for the remaining operating years on both Units 1 and 2. The outage initial start date is then coordinated through PG&E’s Energy Policy and Procurement organization, in advance of the actual outage start date.”

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q004		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q004		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	My 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

QUESTION 004

Enumerate all the planned Unit 2 refueling outages in the last 5 years.

ANSWER 004

2R23 performed in 2022, 2R22 performed in 2021, 2R21 performed in 2019, 2R20 performed in 2018.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q005		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q005		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory Agencies

QUESTION 005

Identify all the regulatory agencies and authorities that have jurisdiction over PG&E nuclear operations.

ANSWER 005

PG&E objects to the request as over-broad and ambiguous. Subject to this objection and without waiver, PG&E responds as follows:

The Nuclear Regulatory Commission is the primary regulatory agency that oversees PG&E nuclear operations.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q006		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q006		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory Agencies

QUESTION 006

On what bases do those agencies and authorities have their jurisdictional rights?

ANSWER 006

PG&E objects to the request as over-broad and ambiguous. Subject to this objection and without waiver, PG&E responds as follows:

The Nuclear Regulatory Commission's jurisdiction is drawn from the Atomic Energy Act (AEA) of 1954, as amended, and the Energy Reorganization Act (ERA) of 1974, as amended.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q007		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q007		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory Agencies

QUESTION 007

Name the regulatory agencies and authorities to whom PG&E reports its nuclear operations.

ANSWER 007

PG&E objects to this request as over-broad and ambiguous. Subject to this objection and without waiver, PG&E responds as follows:

The primary agency PG&E reports its nuclear operations is the Nuclear Regulatory Commission.

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PG&E Data Request No.:	CalAdvocates_009-Q008		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q008		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory Agencies

QUESTION 008

List the reports that PG&E submits to those agencies and authorities, and provide the frequency of those reports.

ANSWER 008

PG&E objects to the request as over-broad and vague.

PG&E objects to the request as unduly burdensome.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Note that PG&E provided a summary of all Nuclear Regulatory Commission (NRC) filings for the 2022 Record Period, including a description of each filing, in response to Cal Advocates Master Data Request MDR001, question 1.1.23.

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PG&E Data Request No.:	CalAdvocates_009-Q009		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q009		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 009

In the above PG&E Letter DCL-22-093, please explain the following nomenclatures:

a. What does DCL-22-093 stand for?

b. What does "10 CFR 50.73" stand for?

c. What does "Docket No. 50-323, OL-DPR-82" stand for?

ANSWER 009

a. DCL-22-093 is a PG&E Diablo Canyon chronological outgoing correspondence designator – 22 indicating year 2022 and 093 being the 93rd letter of the year.

b. 10 CFR 50.73 stands for: Code of Federal Regulations, Title 10 (Energy), Chapter 1 (Nuclear Regulatory Commission), Part 50 (Domestic Licensing of Production and Utilization Facilities), Section 50.73 Licensee event report system.

c. "Docket No. 50-323" is the docket number assigned by the Nuclear Regulatory Commission (NRC) under which documents pertaining to Diablo Canyon Power Plant Unit 2 are filed by the NRC. Each nuclear power reactor licensed by the NRC has its own docket number. "OL-DPR-82" is the unique Operating License number assigned by the NRC for Diablo Canyon Power Plant Unit 2.

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PG&E Data Request No.:	CalAdvocates_009-Q010		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q010		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 010

Please describe the purpose and function of the Diablo Canyon Power Plant (DCPP) reactor coolant. Please provide photos and diagrams of the reactor coolant.

ANSWER 010

Reactor coolant removes thermal energy from the Reactor and delivers the energy to the Steam Generators for the purpose of generating steam. Reactor coolant is a liquid comprised of high purity water and traces of boric acid, that is contained by the pipes, pumps and steam generators of the Reactor Coolant System. See Cal Advocates MDR 009, question 001 Attach 1 "Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q001-Diablo Canyon Power Plant Overview.pdf" for the location of the reactor coolant system. For general schematics, diagrams and descriptions of the Reactor Coolant System, refer to the USNRC Reactor Concepts Manual: Pressurized Water Reactors (Diablo Canyon is a four-loop Westinghouse PWR). See Attachment 1 – "Attach 1 - ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - USNRC Reactor Concepts Manual.pdf"

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PG&E Data Request No.:	CalAdvocates_009-Q011		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q011		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 011

How many radiological/containment zones does DCPP have? Please list them and describe each zone and its radiation level.

ANSWER 011

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

DCPP has a main radiologically controlled area (RCA) which contains all the contaminated portions of the power plant. Within the RCA are the two containment structures, one for each of DCPP's reactors (Unit 1 and Unit 2). Radiation levels throughout the plant vary significantly depending on the systems and components in a specific area and on the specific plant conditions (e.g., operating or shutdown).

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PG&E Data Request No.:	CalAdvocates_009-Q012		
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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 012

In which radiological/containment zone was the LER incident located?

ANSWER 012

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

Location was inside the Unit 2 Reactor Containment Building.

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PG&E Data Request No.:	CalAdvocates_009-Q013		
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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 013

Explain what the reactor coolant boundary is. Is this boundary the barrier between contiguous radiological/containment zones?

ANSWER 013

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

The Reactor Coolant System pressure boundary is comprised of all piping system and components that contain reactor coolant at design pressure and temperature. This includes valves, pumps, steam generators, and the reactor vessel that contains the Reactor Coolant System process fluid. With the exception of the reactor coolant sampling lines, the entire Reactor Coolant System pressure boundary is located entirely within the containment structure. The reactor coolant pressure boundary is not a barrier between radiological zones because the entire reactor coolant system is contained within the main radiologically controlled area of the power plant.

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PG&E Data Request No.:	CalAdvocates_009-Q014		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q014		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 014

Please provide photos and diagrams of the reactor coolant boundary.

ANSWER 014

See Attachment - "Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q001-Diablo Canyon Power Plant Overview.pdf". Page two of this attachment is a general plant schematic that has been marked up to identify the functional location of the reactor coolant system. For general schematics and descriptions of the reactor coolant system, refer to the USNRC Reactor Concepts Manual: Pressurized Water Reactors (Diablo Canyon is a four-loop Westinghouse PWR). See Attachment 1 – "Attach 1 - ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - USNRC Reactor Concepts Manual.pdf"

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PG&E Data Request No.:	CalAdvocates_009-Q015		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q015		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 015

Explain what the reactor coolant boundary degradation is.

ANSWER 015

Degradation of the Reactor Coolant System boundary would be any flaw in piping, valves, steam generators, or the reactor vessel that is not acceptable to any Code or Standards.

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PG&E Data Request No.:	CalAdvocates_009-Q016		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 016

Please provide photos and diagrams of the reactor coolant systems boundary degradation showing its location in relationship to the reactor, coolant system and other adjacent equipment components such as those listed in the work items, “a” to “i”, mentioned in the preface to the above question 1.

ANSWER 016

For general location of equipment and the Reactor Coolant System Refer to Attachment *" Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q001-Diablo Canyon Power Plant Overview."– Cal Advocates MDR 009, Question 1*. The subject weld defect was in the Unit 2 Containment Structure, on a 2-inch pipe off the loop 1 reactor coolant system cold leg. For general schematics and descriptions of the reactor coolant system, refer to the USNRC Reactor Concepts Manual: Pressurized Water Reactors (Diablo Canyon is a four-loop Westinghouse PWR). See Attachment 1 – *“Attach 1 - ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - USNRC Reactor Concepts Manual.pdf”.*

For a photo of the weld defect general area, refer to Attachment *"Attach-2-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - Line 1140 Weld Defect General Area.jpg."*

For diagrams of the location of the weld defect in respect to the reactor coolant system and in relation to other components see Confidential Attachments *“CONF-Attach-3-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - Reactor Coolant System OIM - Loop Penetrations with location of weld defect.pdf”* and *“CONF-Attach-4-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 -ISOmetric Drawing with location of weld defect.pdf”*

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PG&E Data Request No.:	CalAdvocates_009-Q017		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q017		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf).

QUESTION 017

Which of the above-listed work items, “a” to “i”, pertain to the LER incident? If none of them pertain to the LER incident, please explain why the LER work was not included in the enumeration.

ANSWER 017

None of the above-listed work items, “a” to “i”, pertain to the LER incident. The planned Unit 2 outage work listed in the testimony are some of the major refueling outage preplanned activities. The listing is not a comprehensive listing of all planned work conducted during the refueling outage. The LER corrective action work was not included in the enumeration because it was not part of the refueling outage preplanned activities.

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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 018

How often does PG&E perform maintenance inspection to check for boundary degradation leaks? Please provide records of those inspections, and the corrective actions performed.

ANSWER 018

PG&E objects to the request to provide records of all inspections and corrective actions performed as over-broad and burdensome. PG&E provides the records for the Reactor Coolant Pressure boundary from the 2R23 and 2R22 refueling outages.

PG&E conducts the maintenance inspection to check for evidence of boric acid leakage approximately every 18 months, at the start of every refueling outage. PG&E established the containment boric acid walkdown program in 1989. The program was established to address an industry concern for potential corrosion of carbon steel reactor coolant pressure boundary components that could be caused by boric acid leakage if it were to contact carbon steel components. Confidential Attachments, "CONF-Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q018 - U2 STP R-8C 2R22 Outage.pdf" and "CONF-Attach-02-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q018 - U2 STP R-8C 2R23 Outage.pdf" provide the inspection records for refueling outages 2R22 and 2R23. The inspection findings and actions taken are provided in "CONF-Attach-03-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q018 2R22 STP R-8C Inspection Results & Repairs.pdf" and "CONF-Attach-04-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q018 2R23 STP R-8C Inspection Results & Repairs.pdf"

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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 019

Could the boundary degradation leak have been detected during normal operation when there is no outage, such as during routine maintenance inspection? Please explain.

ANSWER 019

No. The leak in the Reactor Coolant System pressure boundary was located inside the containment structure in an area not normally accessible during normal operation due to high radiation dose rates during normal operation. The leak rate was so small it was not detectable to online leakage monitoring.

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PG&E Data Request No.:	CalAdvocates_009-Q020		
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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

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Boundary Degradation Detection

QUESTION 020

In the previous planned or unplanned outages, did PG&E perform checks for boundary degradation leaks?

a. If yes, please explain why the LER boundary degradation leak was not previously detected.
b. If not, please explain why boundary degradation leak checks were not performed.

ANSWER 020

DCPP routinely performs inspections for evidence of boric acid leakage at the beginning of each refueling outage, and inspections for reactor coolant system leakage is performed at the end of each refueling outage. The same inspection that identified the leak at the beginning of the refueling outage 2R23 was the same inspection performed at the beginning of 2R22.

a. The 2R22 inspections for boric acid leakage at the beginning of the outage and for reactor coolant system leakage at the end of the outage did not report any leakage at this location.
b. Not applicable.

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PG&E Data Request No.:	CalAdvocates_009-Q021		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q021		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 021

Page 3, §E of the LER states, “There was no active leak from the weld observed at the time of discovery.” Does that mean that there was a leak before discovery? If so, how does PG&E know there was, what was leaked and what the radiation level was.

ANSWER 021

The inspection of the Reactor Coolant System pressure boundary at the beginning of the 2R23 refueling outage identified residual white boric acid at the leak location. The Reactor Coolant System was not at normal operating pressure at the time of discovery and was not actively leaking water. The residual boric acid at the leak location indicates a small leak existed prior to discovery, that the boric acid source was reactor coolant from the leak location, and based on that the radiation level was not detectable above the radiation level from the surroundings.

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PG&E Data Request No.:	CalAdvocates_009-Q022		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q022		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 022

What was the purpose of the weld? What parts did the weld join? Provide photos and diagrams of the weld, showing the parts joined and its location in relationship to the reactor, coolant system and other adjacent equipment components.

ANSWER 022

The degraded weld joined together piping sections that were part of a piping system that vented the reactor coolant system after maintenance.

See Figures, 1, 2 and 3 found in the confidential attachment “CONF-ATTACH-1-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050-Root Cause Through-wall weld defect on Unit 2 Line 1140.pdf” for photos of the weld. For diagrams of the location of the weld in relation to reactor coolant system and other components see Confidential Attachments “CONF-Attach-3-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - Reactor Coolant System OIM - Loop Penetrations with location of weld defect.pdf” and “CONF-Attach-4-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 -ISOmetric Drawing with location of weld defect.pdf”

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PG&E Data Request No.:	CalAdvocates_009-Q023		
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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 023

What could have leaked before discovery? Was it coolant, radiation or something else?

ANSWER 023

Reactor coolant water containing boric acid leaked out of the degraded weld during operation.

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PG&E Data Request No.:	CalAdvocates_009-Q024		
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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 024

Was there any leak after discovery? If so, please explain.

ANSWER 024

No. The inspection of the Reactor Coolant System pressure boundary at the beginning of the 2R23 outage occurred when the Reactor Coolant System was not at normal operating pressure. The only indicator of a leak was residual white boric acid on the weld. The leak was not actively leaking water at the time of discovery.

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PG&E Data Request No.:	CalAdvocates_009-Q025		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q025		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 025

How old was the weld? State the date when the weld was applied?

ANSWER 025

The weld was 29 years old. The weld was applied on October 3 and 4, 1994.

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PG&E Data Request No.:	CalAdvocates_009-Q026		
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Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 026

What was wrong with the weld? Was it cracked and broken off? Please explain and provide photos and diagrams of the weld in relation to the coolant system and other neighboring equipment.

ANSWER 026

The weld developed a fatigue crack that presented itself as a pin-hole leak. Except for the pin-hole leak location the remainder of the weld appeared to be intact (was not broken off).

The leak location on the subject weld is shown in Attachment 1 “Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q026 - Leak Location weld.png”. For diagrams of the location of the weld defect in respect to the reactor coolant system and in relation to other components see Confidential Attachments “CONF-Attach-3-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - Reactor Coolant System OIM - Loop Penetrations with location of weld defect.pdf” and “CONF-Attach-4-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 -ISOmetric Drawing with location of weld defect.pdf”

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PG&E Data Request No.:	CalAdvocates_009-Q027		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q027		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boundary Degradation Detection

QUESTION 027

How did PG&E discover the boundary degradation? Was there special equipment to detect such degradation? Please explain how PG&E knew which boundary to check for degradation.

ANSWER 027

PG&E discovered the reactor coolant system pressure boundary degradation during a refueling outage containment walkdown for evidence of boric acid leakage. This inspection is a visual exam of components inside the containment that could cause corrosion of carbon steel reactor coolant pressure boundary items. The inspection is conducted using flashlights and mirrors (no special equipment). The reactor coolant pressure boundary items are identified on drawings and a list of likely leakage sources and targets are provided in the plant manual.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q028		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q028		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boric Acid

QUESTION 028

What is the purpose and use of boric acid in DCPP? Show photos and diagrams of where the boric acid is located.

ANSWER 028

DCPP uses boric acid in the reactor coolant system to control reactor reactivity. Dry boric acid is mixed with water and stored in tanks until it is added to the reactor coolant system. The tanks are located in the auxiliary building which is the building between the Unit 1 and Unit 2 containments.

Diagrams where boric acid is located is shown in "Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q028-Boric Acid System & Components STG.pdf"

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q029		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q029		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boric Acid

QUESTION 029

What is the purpose of the boric acid corrosion control program?

ANSWER 029

The purpose of the Boric Acid Corrosion Control Program is the early identification of boric acid leaks that have the potential to cause corrosion of carbon steel and low-alloy steel components.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q030		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q030		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boric Acid

QUESTION 030

What equipment and components does the boric acid corrode?

ANSWER 030

Boric acid leaks have the potential to cause corrosion of plant equipment and components containing carbon and low-alloy steels.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q031		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q031		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boric Acid

QUESTION 031

How does boric acid make its ingression into equipment and components? Are there no screens or filters to prevent its ingression?

ANSWER 031

Boric acid is intentionally added to the reactor coolant water to control reactor reactivity. Boric acid is contained within the stainless-steel reactor coolant system pressure boundary. Inhibiting boric acid ingression would inhibit the intentional addition and is therefore not desirable.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q032		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q032		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Boric Acid

QUESTION 032

Was the boundary degradation the result of boric acid? If so, please explain how it happened, and provide photos and illustrations to support your response.

ANSWER 032

No

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q033		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q033		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 033

When there is no leak, what is the normal radiation level at the LER leak location area during full power operation?

ANSWER 033

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

Radiation levels are not normally measured at the LER leak location during normal operations. This is because radiation levels in the leak location during normal reactor operations are very high making entry to this area hazardous to personnel. Radiation levels would be measured for any emergency-required entry.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q034		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q034		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 034

When there is no leak, what is the normal radiation level at the LER leak location area during refueling operation?

ANSWER 034

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

During refueling operations at the floor below the leak location the radiation levels are 5-10 mrem/hr for the general area. The leak location is in the overhead and not normally accessible without scaffolding constructed. With scaffolding constructed, radiation levels on the scaffolding are 10-40 mrem/hr.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q035		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q035		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 035

What was the radiation level of the leak within the leak area? Please quantify the leak and explain the reasons for the radiation leak level.

ANSWER 035

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

The leak did not affect radiation levels. The radiation at the leak was not discernable from the general area radiation levels. The contamination levels at the leak were measured at 600 disintegrations per minute / 100cm2. The leak was not quantifiable. The radiation leak level was due radioactive particulates within the reactor coolant system that exited the piping system through the leak.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q036		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q036		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 036

What is the acceptable level of radiation leak within the leak area? Please cite the regulators/authorities that specify the safe and the unsafe radiation level.

ANSWER 036

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

During outages, the area is posted as a high radiation area and as a contaminated area. This means acceptable radiation levels are < 800 mrem/hr and acceptable contamination levels are < 100,000 disintegrations per minute / 100cm2. The Nuclear Regulatory Committee oversees radiation safety.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q037		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q037		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 037

What was the radiation level of the leak within DCPP outside the leak area? Please quantify the leak and explain the reasons for the radiation leak level.

ANSWER 037

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

The leak did not affect radiation levels. No contamination from this leak was detected outside the leak area as detectable contamination from this incident was limited to the pipe and surrounding insulation.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q038		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q038		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 038

What is the acceptable level of radiation leak within DCPP outside the leak area? Please cite the regulators/authorities that specify the safe and the unsafe radiation level.

ANSWER 038

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

During outages, the containment structure is posted as a radiation area, contaminated area, and it is not posted as an airborne area. This means acceptable radiation levels are < 80 mrem/hr, acceptable contamination levels are < 100,000 dpm/100cm2, and acceptable airborne levels <0.3 derived airborne concentration (DAC). The Nuclear Regulatory Committee oversees radiation safety.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q039		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q039		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 039

What is the acceptable level of radiation exposure to the plant personnel at any occurrence of exposure? Please cite the regulators/authorities that specify the safe and the unsafe radiation level.

ANSWER 039

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

Radiation exposure for a single entry or occurrence is limited by the specific radiation work permit (RWP) for the specific work being performed. RWP limits vary based on the work being performed. For the repair of the leak the RWP exposure limit was 250 mrem. The Nuclear Regulatory Committee oversees radiation safety.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q040		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q040		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 040

What is the acceptable annual level of radiation to the plant personnel? Please cite the regulators/authorities that specify the safe and the unsafe radiation level.

ANSWER 040

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

Plant personnel are limited to 5,000 mrem/year of plant-related radiation exposure. The Nuclear Regulatory Committee oversees radiation safety.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q041		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q041		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 041

Is the annual level of radiation exposure the same as the annual radiation body burden? Please explain the differences if any.

ANSWER 041

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

Yes. Diablo Canyon reports individual exposure as the Total Effective Dose Equivalent (TEDE). This is defined as: the sum of the effective dose equivalent (external exposure) and the committed effective dose equivalent (internal exposure). For the purpose of answering this question the term “Body Burden” is assumed to be equivalent to the term TEDE in that both external and internal radiation exposure is considered and reported as a total radiation dose to an individual.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q042		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q042		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

QUESTION 042

What is the acceptable accumulated level of radiation exposure to plant personnel? Please cite the regulators/authorities that specify the safe and the unsafe accumulated radiation level.

ANSWER 042

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

Plant personnel are limited to 25,000 mrem during a lifetime of plant related radiation exposure. The Nuclear Regulatory Committee oversees radiation safety.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q043		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q043		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 043

Have any PG&E personnel exceeded their allowable radiation body burden or annual or accumulated level of radiation exposure as a result of this LER incident? If so, please explain.

ANSWER 043

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

No personnel exceeded their allowable exposure limits because of this incident.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q044		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q044		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 044

What was the radiation level of the leak outside DCPP? Please quantify the leak and explain whether there is a difference, if any, between the leak zone and the remaining areas of DCPP.

ANSWER 044

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

The leak did not affect radiation levels outside DCPP. No contamination from this leak was detected outside the leak area. The leak area was limited to the pipe weld and insulation surrounding the weld. Radiation levels from the leak did not affect radiation levels in the area.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q045		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q045		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 045

What is the acceptable level of radiation exposure to the public? Please cite the regulators/authorities that specify the safe and the unsafe radiation level.

ANSWER 045

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

Members of the public are limited to 100 mrem/year of plant-related radiation exposure. The Nuclear Regulatory Committee oversees radiation safety.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_008-Q046		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q046		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 046

Did any PG&E employee require medical treatment as result of the LER incident? If so, please provide details of those medical treatments and explain why and how it happened.

ANSWER 046

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

No PG&E employees required medical treatment as a result of the LER incident.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q047		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q047		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Radiation and Safety

QUESTION 047

Did any non-PG&E employee require medical treatment as a result of the LER incident? If so, please provide details of those medical treatments and explain why and how it happened.

ANSWER 047

PG&E objects to this request on the grounds that the California Public Utilities Commission does not have jurisdiction over radiological safety of nuclear power plants. The regulation of nuclear power plant radiological safety is exclusive and field preempted to the Nuclear Regulatory Commission.

PG&E objects to the request as outside the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to this objection and without waiver, PG&E responds as follows:

No non-PG&E employees required medical treatment as a result of the LER incident.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q048		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q048		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Corrective Action

QUESTION 048

Did PG&E prepare any Root Cause Evaluation (RCE) Report, or any other post-mortem report? If not, please explain why not.

ANSWER 048

Yes, a root cause evaluation was prepared.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q049		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q049		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Corrective Action

QUESTION 049

List all items associated with the boundary degradation. Is the weld the only item associated with the boundary degradation?

ANSWER 049

The weld was the only item associated with pressure boundary degradation.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q050		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Corrective Action

QUESTION 050

What actually caused the boundary degradation? Please provide all documentations, including test reports, to support your response.

ANSWER 050

The leak was caused by vibration-induced fatigue that propagated at a weld defect. See confidential attachment: "CONF-ATTACH-1-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050-Root Cause Through-wall weld defect on Unit 2 Line 1140.pdf" and "CONF-ATTACH-2-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050 - Structural Integrity Analysis - 663220-32-1-1"

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q051		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q051		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Corrective Action

QUESTION 051

Which of the above-listed work items, "a" to "i", mentioned in the preface to question 1 pertains to the boundary degradation repair work of the LER incident leak? If none of them pertain to the LER incident repair work, please explain why the LER corrective action work was not included in the enumeration.

ANSWER 051

None of the major work items "a" to "l" mentioned in the preface to question 1 pertain to the boundary degradation repair work of the LER incident. The planned Unit 2 outage work listed in the testimony are some of the major refueling outage preplanned activities. The listing is not a comprehensive listing of all planned work conducted during the refueling outage. The LER corrective action work was not included in the enumeration because it was not part of the refueling outage preplanned activities.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q052		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q052		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Corrective Action

QUESTION 052

Please describe how PG&E repaired the boundary degradation. Provide all documentations of the repair work, including the testing and acceptance of the repair work.

ANSWER 052

Diablo Canyon Power Plant (DCPP) implemented the repair of field weld WIB975D utilizing the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Section XI : Rules for Inservice Inspection of Nuclear Power Plant Components) Code Case N 666-1: Weld Overlay of Class 1,2 and 3 Socket Welded Connections.

Provided in this response is the DCPP Quality Control Documents (Work Order 60148506 Operation 0010 and Operation 0130) governing the associated repair work instructions – these work instruction attachments are confidential and may be subject to non-disclosure to foreign nationals without prior notifications from PG&E per 10 CFR 810: "CONF-Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q052-60148506-Op 0010_RLOC 52022-5973.pdf" and "CONF-Attach-02-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q052-60148506-Op 0130_RLOC 52022-5953 pdf". This work order contains associated work steps to perform the weld overlay, the Non Destructive Examinations (NDE) conducted and the referenced ASME Code Case for the associated weld overlay.

Also included are the ASME Welder Performance Qualification (WPQ's) supporting this work – See confidential attachment: "CONF-Attach-03-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q052-Weld Overlay Welder WPQ with continuity verification Order 60148506 Op 0010.pdf"

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q053		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q053		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Corrective Action

QUESTION 053

If any non-PG&E personnel performed the work, please list the names and addresses of the contractors who performed the work. Also provide their qualifications attesting to their nuclear certification.

ANSWER 053

PG&E objects to the request as irrelevant to the scope of this proceeding, and not reasonably calculated to lead to the discovery of admissible evidence.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q054		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q054		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory and Procedural Compliance

QUESTION 054

Was the LER incident leak the result of PG&E's violation of any codes, standards, NRC, and other regulatory requirements? If so, please list them and explain why and how the violations happened.

ANSWER 054

The LER event was a failure to meet American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PVC) Section XI acceptance criteria for a 2-inch stainless steel socket weld. The violation occurred due to the vibration-induced fatigue that propagated at a weld defect resulting in a through-wall indication. The ASME B&PVC acceptance criteria does not allow for existence of a through-wall indication.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_009-Q055		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q055		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory and Procedural Compliance

QUESTION 055

Please provide copies of all correspondences between PG&E and the NRC and other regulatory authorities on this incident. **Consider this question as an on-going request until this proceeding is concluded.**

ANSWER 055

PG&E Letter DCL-23-093 remains the only correspondence between PG&E and the NRC on this incident.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q056		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q056		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory and Procedural Compliance

QUESTION 056

Hitherto, has the NRC or any other regulatory authorities cited PG&E in this incident? If so, please provide copies of all reports, and explain the infractions.

ANSWER 056

No.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q057		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q057		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

Regulatory and Procedural Compliance

QUESTION 057

Has the NRC completed its review of this LER incident?

a. If so, please provide copies of their reports.

b. If not, please provide when the NRC's review is expected to be completed.

ANSWER 057

No. The NRC is required to review and disposition all LER incidents. There are no regulations that specify the timeline for NRC review.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q058		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q058		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

PG&E Testimony and Workpapers

QUESTION 058

Is the LER incident included in Table 4.3, page 4-11, of PG&E Direct Testimony?

a. If yes, please explain which Line No. pertains to the LER incident.
b. If not, please explain why not.

ANSWER 058

No. The LER incident has not resulted in an NRC violation to date.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q059		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q059		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

PG&E Testimony and Workpapers

QUESTION 059

Please explain why there were no workpapers for Chapter 4.

ANSWER 059

The DCPP 2022 operational and outage history was clear and non-complex. With two planned refueling outages and one forced outage the dates, times and sequence of events did not require development of work papers.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_009-Q060		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q060		
Request Date:	April 17, 2023	Requester DR No.:	009
Date Sent:	May 10, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Tom Baldwin	Requester:	Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.22-02-018 PG&E – DR NO.09

PG&E Testimony and Workpapers

QUESTION 060

Please explain why the LER was not included as a workpaper for Chapter 4.

ANSWER 060

The weld indication was identified through inspections planned as part of the station's boric acid corrosion control program. The indication and repair were conducted without impact to the refueling outage duration.

ATTACHMENT 3.2

PG&E Response to Cal Advocates Data Request 9, Question 16, 18, 50, 52

(CONFIDENTIAL)

ATTACHMENT 3.3

PG&E Response to Cal Advocates Data Request 9, Question 52

(CONFIDENTIAL Info for U. S. Citizens only)

ATTACHMENT 3.4

PG&E Response to Cal Advocates Data Request 13, Question 1 to 136. inclusive (Non-Confidential)

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q001		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q001		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 001

Please provide a diagram showing the layout of the Diablo Canyon Power Plant (DCPP) showing all the major components, such as the reactor, containment structure and its interior equipment, the turbine, the coolant system, the coolant system boundary, the condenser, and the generator. The illustration should be similar in form to what is presented in the Nuclear Regulatory Commission (NRC) webpage showing a generic pressurized water reactor (PWR), or in the Marchwood Power Plant web page on its fossil facility. In the diagram, show other major generation components not mentioned in PG&E testimony.

ANSWER 001

This was answered by CalAdvocates DR 009 Q1. Prior Response to DR 009 Q01:

The attached document entitled “Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q001-Diablo Canyon Power Plant Overview.pdf” has been provided. Page one of the document shows relative positions of the equipment listed in this question. Page two is a general plant schematic that has been marked up to identify the functional location of equipment listed within the applicable plant processes.

Additionally, the Diablo Canyon Power Plant layout is shown in the Updated Final Safety Analysis Report, Figure 1.2-2. Refer to Attachment “Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q001_UFSAR Figure 1.2-2.pdf”

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q002		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q002		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 002

In the above diagram, show the different radiological/containment zones in DCPP. Provide a separate diagram as appropriate.

ANSWER 002

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The Radiologically Controlled Area (RCA) is depicted in attachment "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q002-Site Map RCA.pdf". Smaller control areas are posted within the RCA based on the level of radiological hazard that exist within the control areas. The area boundaries change over time based on changing operating conditions and activities within the RCA and are not fixed radiological/containment zones. The control areas are posted in accordance with federal regulations with compliance enforced by the Nuclear Regulatory Commission.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q003		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q003		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 003

What are the various designations of the nuclear class systems/components? Please describe them, and the radiological hazards associated with each nuclear class system/component designation.

ANSWER 003

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

Diablo Canyon Power Plant Updated Final Safety Analysis Report (UFSAR) Section 3.2 describes the classification of structures, systems, and components. Refer to "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q003 - UFSAR Section 3.2".

UFSAR Section 3.2 and other sections referenced therein can be found in the Nuclear Regulatory Commission document library:

Go to: https://adams.nrc.gov/wba/

In the "Folder View", select the Folder labelled "February 2022". Then select the subfolder labelled "February 08, 2022". The result for "Diablo Canyon Power Plant, Units 1 & 2, Revision 26 to Updated Final Safety Analysis Report" will appear to the right, among other files. (Other metadata: Accession Number ML21306A142. Date added 02/08/2022)

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q004		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q004		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 004

Show where the various nuclear class systems are located in the above diagram(s).

ANSWER 004

Nuclear systems and components of various quality classifications are located throughout the power plant, i.e. plant areas are not exclusive to systems and components of a certain quality classification.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q005		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q005		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 005

In which radiological/containment zones is each nuclear class system/component designation located? For example, are all nuclear class 1 systems/components located in a specific radiological/containment zone?

ANSWER 005

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

Nuclear systems and components of various quality classifications are located throughout the power plant, i.e. plant areas and radiological zones are not exclusive to systems and components of a certain quality classification.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q006		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q006		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 006

Is there a direct correlation between nuclear class designation and radiological/containment zone? Please explain.

ANSWER 006

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

There is no direct correlation between nuclear class of systems or components and radiological protection zones. Radiological zones are established based on regulatorily required controls corresponding to the radiological risk.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q007		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q007		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 007

Which radiological/containment zone is safe for employees for entry during DCPP operation, and at what power production. Please explain.

ANSWER 007

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The position of the nuclear industry, including DCPP, and the Nuclear Regulatory Commission (NRC) is that any exposure to radiation, no matter how small, carries some inherent risk. As such, radiological safety is the management of radiological risk. This principle is referred to as controlling radiation exposure "As Low As Reasonably Achievable" or ALARA.

From a radiological standpoint, most areas of the plant can be made accessible for employees to safely enter when the following conditions are met.

- There is a need to enter the area with a benefit that exceeds the risks.
- Reasonable efforts have been made to minimize the risk.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q008		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q008		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 008

Which radiological/containment zone is not safe for employees for entry during DCPP operation, and at what power production. Please explain.

ANSWER 008

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

Plant areas adjacent to the reactor vessel during reactor operation at power conditions should not be entered due to radiation levels which pose a normally unacceptable risk to health and safety (e.g., debilitating radiation exposure). These areas are directly affected by radiation produced during fission in the reactor core. These areas are not assigned to a particular radiological zone but are controlled by radiation protection for purposes of meeting regulatory criteria.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q009		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q009		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 009

Which radiological/containment zone is safe for employees for entry during DCPP shutdown. Please explain.

ANSWER 009

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The position of the nuclear industry, including DCPP, and the Nuclear Regulatory Commission (NRC) is that any exposure to radiation, no matter how small, carries some inherent risk. As such, radiological safety is the management of radiological risk. This principle is referred to as controlling radiation exposure "As Low As Reasonably Achievable" or ALARA.

From a radiological standpoint, most areas of the plant can be made accessible for employees to safely enter when the following conditions are met.

- There is a need to enter the area with a benefit than exceeds the risks.
- Reasonable efforts have been made to minimize the risk.

During shutdown the areas adjacent to the reactor vessel are at reduced radiation levels due to termination of fission in the reactor core when the units are shut down. However other areas experience increased levels of radiation during shutdown when nuclear fuel is being removed from the reactor core.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q010		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q010		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 010

Which radiological/containment zone is not safe for employees for entry during DCPP shutdown. Please explain.

ANSWER 010

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The position of the nuclear industry, including DCPP, and the Nuclear Regulatory Commission (NRC) is that any exposure to radiation, no matter how small, carries some inherent risk. As such, radiological safety is the management of radiological risk. This principle is referred to as controlling radiation exposure "As Low As Reasonably Achievable" or ALARA.

From a radiological standpoint, most areas of the plant can be made accessible for employees to safely enter when the following conditions are met.

- There is a need to enter the area with a benefit than exceeds the risks.
- Reasonable efforts have been made to minimize the risk.

During shutdown various areas at DCPP may experience increased levels of radiation due to movement of nuclear fuel from the reactor refueling process and other planned maintenance that make it unsafe for employees to enter. These areas are not assigned

to a particular radiological zone but are controlled by radiation protection for purposes of meeting regulatory criteria.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q011		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q011		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 011

Does Unit 2 share any equipment with Unit 1? If so, when Unit 2 is down for maintenance, how is Unit 1 operation affected? Please enumerate all shared equipment and the impact of each equipment when one unit is down.

ANSWER 011

PG&E objects to the portion of this question requesting PG&E to "enumerate all share equipment and the impact of each equipment when one unit is down," as ambiguous, overly broad, and burdensome. Nuclear power plans are larger, complex structures with may components. Absent more detailed instruction, it is unclear to what level of specificity "all equipment" entails, or if "all equipment" in intended to be a non-exhaustive list this is an overly burdensome request.

Subject to and without waiving this objection, PG&E responds and follows:

Separate facilities and equipment are provided for each unit, with few exceptions. A summary of shared facilities and equipment is provided in the Diablo Canyon Updated Final Safety Analysis Report, Section 1.2.2.10 and sections referenced therein.

Refer to Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q011 - UFSAR Section 1.2

UFSAR Section 1.2.2.10 and other sections referenced therein can be found in the Nuclear Regulatory Commission document library:

Go to: https://adams.nrc.gov/wba/

In the "Folder View", select the Folder labelled "February 2022". Then select the subfolder labelled "February 08, 2022". The result for "Diablo Canyon Power Plant, Units 1 & 2, Revision 26 to Updated Final Safety Analysis Report" will appear to the right, among other files. (Other metadata: Accession Number ML21306A142. Date added 02/08/2022)

When Unit 2 is down for maintenance Unit 1 operation is not significantly affected. Shared equipment will be realigned as directed by DCPP operating procedures to ensure Unit 1 operational and safety system functions are maintained when Unit 2 is shut down.

PACIFIC GAS AND ELECTRIC COMPANY
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q012		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q012		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 012

Please explain whether the Unit 2 shutdown impacts include Unit 1 power production level, loss of safety system redundancy, and other effects.

ANSWER 012

Unit 2 shutdown does not impact Unit 1 power production level nor does it impact the licensed level of safety system redundancy. Necessary Unit 1 operational and safety system functions are maintained through procedurally directed system realignments.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q013		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q013		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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QUESTION 013

If a shared equipment is out of service, does it mean both Unit 1 and Unit 2 have to shutdown? Please explain.

ANSWER 013

No. Shared equipment is designed such that it does not impair the ability of either unit's safety functions and sufficient redundancy of shared equipment is provided such that power operation will not be affected. Refer to 10 CFR 50 Appendix A General Design Criterion 5.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q014		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q014		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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QUESTION 014

Describe the process of ramping down during a planned shutdown and ramping up after a shutdown.

ANSWER 014

The process for ramping down a unit for a planned shutdown is scheduled and coordinated ahead of time with Short Term Energy Trading (STES). During all outages and curtailments, DCPP notifies STES of any schedule changes that alter parallel or load change start times.

The unit power reduction ramp rate is controlled per DCPP procedures, with an overall goal of maintaining reactor safety to protect the health and safety of the public.

Ramp times and outage durations vary depending on the reason for the ramp and any maintenance and testing that is required, both during the curtailment and during the return to full power.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q015		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q015		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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QUESTION 015

Is the ramping up the same after a planned shutdown the same as after an unexpected shutdown? Please explain.

ANSWER 015

The ramp up will typically be the same whether planned or unexpected shutdown. The ramping up is dependent on the degree of the unit cooldown and depressurization required to perform work, as well as the actual work performed. Testing is required on any startup and the greater the cooldown and depressurization the more testing that will be required, thereby requiring more time to return to full power operation. Similarly, post-Maintenance testing of equipment that had maintenance performed during the shutdown would be required, additionally requiring more time to return to full power operation.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q016		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q016		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

QUESTION 016

Describe how a unit shuts down after an unexpected trip. Identify the safety systems involved.

ANSWER 016

A reactor trip signal de-energizes the Control Rods causing them to gravity fall into the Reactor which safely terminates power production and maintains the Reactor shutdown.

Following a reactor trip from full power, the Auxiliary Feed Water system will automatically start to provide a backup source of water to the Steam Generators for continued heat removal.

If the reactor trip was generated due to a grid related event which affects the 230kV power supply to the site, then the Emergency Diesel Generators may automatically start as an anticipatory signal to ensure continuity of power to Vital Electrical Busses.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q017		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q017		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 017

What was the Application and the Commission Decision which approved the purchase/ construction of DCPP?

ANSWER 017

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The CPUC proceeding and resulting decision is final and non-appealable. The CPUC proceeding and resulting decision does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. Furthermore, PG&E objects to this question on the grounds it seeks information in the possession of, known to, or otherwise equally available to the CalAdvocates.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q018		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q018		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 018

What was the Application and the Commission Decision which approved the rate recovery of DCPP?

ANSWER 018

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The CPUC proceeding and resulting decision is final and non-appealable. The CPUC proceeding and resulting decision does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. Furthermore, PG&E objects to this question on the grounds it seeks information in the possession of, known to, or otherwise equally available to CalAdvocates.

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PG&E Data Request No.:	CalAdvocates_013-Q019		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q019		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 019

Why is there a difference between Unit 1 and Unit 2 nominal-rated production capacity of 1,122 MW and 1,118 MW respectively (ref: PG&E Testimony, page 4-1, line 12 to 13)? Were the capacities dictated by regulators? If not, by whom?

ANSWER 019

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The design of Unit 1 and Unit 2 were approved by the CPUC; that decision is final and non-appealable. Furthermore, the difference in Unit 1 and Unit 2 does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. Furthermore, PG&E objects to this question on the grounds that it calls for a legal conclusion on what was "dictated by regulators."

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PG&E Data Request No.:	CalAdvocates_013-Q020		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q020		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 020

Please explain why PG&E chose the PWR type, over the boiling water reactor (BWR) or the Canada Deuterium Uranium (CANDU) reactor type.

ANSWER 020

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The construction design decisions for Unit 1 and 2 decisions do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

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PG&E Data Request No.:	CalAdvocates_013-Q021		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q021		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 021

Did the regulator(s) impose or recommend the selection of reactor type? Please explain.

ANSWER 021

PG&E objects to this question on the grounds that it calls for a legal opinion.

PG&E further objects to this question on the grounds that it is irrelevant to the scope of the ERRA Compliance proceeding. Whether government regulators imposed or recommended reactor types is not related to the scope of this proceeding, which is focus on PG&E's prudent operations during the 2022 record period.

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PG&E Data Request No.:	CalAdvocates_013-Q022		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q022		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 022

What is DCPP used for – base load, ancillary, peakers or something else? Please explain its usage.

a. Is this usage mandated by regulators? Please explain.

ANSWER 022

DCPP is used for base load generation, operating at 100% power, curtailing generation as required for maintenance or testing.

PG&E objects to part "a." of this request on the grounds that it calls for a legal conclusion.

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PG&E Data Request No.:	CalAdvocates_013-Q023		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q023		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 023

Provide the percentage of PG&E's service area power that is supplied by DCPP in the last five years.

a. Is this percentage mandated by regulators? Please explain.

ANSWER 023

The DCPP-generated percentage of power supplied to PG&E customers over the past 5 years is:

- 2022 - 49% from DCPP
- 2021 - 39% from DCPP
- 2020 - 43% from DCPP
- 2019 - 44% from DCPP
- 2018 - 34% from DCPP

PG&E objects to part "a." of this request on the grounds that it calls for a legal conclusion. Subject to and without waiver, PG&E responds as follows:

The percentage is not mandated by regulators; the overall energy mix fluctuates year over year. DCPP generation supply is maximized to 100% baseload operation with reductions to perform necessary maintenance and refueling.

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PG&E Data Request No.:	CalAdvocates_013-Q024		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q024		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 024

What aspects of Decision (D.) 14-01-011 of Application (A.) 12-02-010 pertain to DCPP operations (ref: PG&E Testimony, page 4-1, line 5)? Please explain and cite the relevant pages and sections of D.14-01-011 on DCPP operation.

ANSWER 024

See page 10 of D.14-01-011, which states:

- **Showing Regarding UOG Outages:** PG&E will address UOG outages and associated fuel costs, if applicable, in PG&E's ERRA compliance application and prepared testimony in all future ERRA compliance proceedings.

Accordingly, PG&E's UOG Chapter 4 testimony describes the refueling, maintenance, and forced outages of Units 1 and 2 during the calendar year.

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PG&E Data Request No.:	CalAdvocates_013-Q025		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q025		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 025

How many NRC technical staff, full-time and part-time, are stationed at Diablo Canyon Power Plant (DCPP)? The term, technical staff, refers to non-administrative personnel.

ANSWER 025

PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

There are 2 full time NRC staff members (referred to as Resident Inspectors) stationed at DCPP.

Periodically, other NRC inspectors visit the DCPP site for the time required to perform planned inspections. The number of such part-time inspectors varies depending on the scope of the inspection. Refer to response to CalAdvocates DR 013 Q028 for NRC audit plan in the last 5 years.

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PG&E Data Request No.:	CalAdvocates_013-Q026		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q026		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 026

How many of those NRC staff are assigned to Unit 1 and to Unit 2?

ANSWER 026

PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The two Resident Inspectors are both assigned to Unit 1 and 2.

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PG&E Data Request No.:	CalAdvocates_013-Q027		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q027		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 027

Please enumerate and describe the activities that the NRC perform daily to oversee and regulate DCPP nuclear activities (ref: PG&E Testimony, page 4-1, line 17 to 19)?

ANSWER 027

PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The on-site NRC Resident Inspectors evaluate reactor operations through a combination of independent oversight, including inspections, and assessment of plant performance and operational experience.

Details of how the NRC inspectors conduct these activities are available on the NRC website and are publicly available.

Results of NRC inspection activities are documented in inspection reports, which are also publicly available.

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PG&E Data Request No.:	CalAdvocates_013-Q028		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q028		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 028

How often does the NRC audit DCPP? Please provide, in the last 5 years, the NRC audit plan on DCPP Unit 1 and Unit 2 and the actual audits performed.

ANSWER 028

PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The two full-time NRC Resident Inspectors conduct constant oversight and inspection of various DCPP activities throughout each year and issue quarterly inspection reports which document their conclusions.

Additionally, periodic focused inspections are conducted each year by NRC inspectors from the NRC's Regional office in Arlington, TX and/or Headquarters in Washington D.C.

The NRC's inspection schedules for DCPP were published in the following letters, which are publicly available via the NRC's Agencywide Document Access and Management System (ADAMS) (www.nrc.gov/reading-rm/adams):

- Annual Assessment Letter for Diablo Canyon Power Plant, Units 1 and 2 (Report 05000275/2017006 AND 05000323/2017006), Dated March 1, 2018
- Annual Assessment Letter for Diablo Canyon Power Plant, Units 1 and 2 (Report 05000275/2018006 AND 05000323/2018006), Dated March 4, 2019

- Annual Assessment Letter for Diablo Canyon Power Plant, Units 1 and 2 (Report 05000275/2019006 AND 05000323/2019006), Dated March 3, 2020
- Annual Assessment Letter for Diablo Canyon Power Plant, Units 1 and 2 (Report 05000275/2020006 AND 05000323/2020006), Dated March 3, 2021
- Annual Assessment Letter for Diablo Canyon Power Plant, Units 1 and 2 (Report 05000275/2021006 AND 05000323/2021006), Dated March 2, 2022
- Annual Assessment Letter for Diablo Canyon Power Plant, Units 1 and 2 (Report 05000275/2022006 AND 05000323/2022006), Dated March 1, 2023

The NRC's associated inspection reports for DCPP are also publicly available via the NRC's ADAMS website.

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PG&E Data Request No.:	CalAdvocates_013-Q029		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q029		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 029

What does the Diablo Canyon Independent Safety Committee (DCISC) do? Describe its origin and raison d'être.

ANSWER 029

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks information in the possession of, known to, or otherwise equally available to CalAdvocates.

Subject to and without waiving this objection, PG&E responds as follows:

The CPUC through Decision 88-12-083 in December 1988 established the Diablo Canyon Independent Safety Committee (DCISC) to monitor safety at the plant.

DCISC charter is on their website at https://www.dcisc.org/resources/second-restatement-of-the-charter/

The DCISC charter at the website above includes language from the Settlement Agreement approved in D. 88-12-083, describing the DCISC as follows: "An Independent Safety Committee shall be established consisting of three members, one each appointed by the Governor of the State of California, the Attorney General and the Chair of the California Energy Commission ("CEC"), respectively, serving staggered three-year terms. The Committee shall review Diablo Canyon operations for the

purpose of assessing the safety of operations and suggesting any recommendations for safe operation. Neither the Committee nor its members shall have any responsibility or authority for plant operations, and they shall have no authority to direct Pacific Gas & Electric Company personnel. The Committee shall conform in all respects to applicable federal laws, regulations and Nuclear Regulatory Commission ("NRC") policies."

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PG&E Data Request No.:	CalAdvocates_013-Q030		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q030		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 030

Does DCISC have any QA Auditors certified in accordance with the requirement of American National Standards Institute (ANSI) /American Society of Mechanical Engineers (ASME) N45.2.23? If so, how many do they have? If not, why not?

ANSWER 030

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks information from third parties and that is not within PG&E's possession, custody, control, or personal knowledge.

Subject to and without waiving this objection, PG&E responds as follows:

The DCISC is an independent state committee that is not accountable to PG&E. PG&E is unable to answer this question; the DCISC would have to answer this.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q031		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q031		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 031

How often does DCISC audit DCPP? Please provide, in the last 5 years, the DCISC audit plan on DCPP Unit 1 and Unit 2 and the actual audits performed.

ANSWER 031

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks information in the possession of, known to, or otherwise equally available to CalAdvocates.

Subject to and without waiving the objection, PG&E responds as follows:

DCISC performs monthly fact-finding visits for 9 months out of the year and have public meetings for the remaining 3 months out of the year.The DCISC annual reports with results of DCISC audits are publicly available on their website (https://www.dcisc.org). The DCISC audit plan is discussed and updated by the DCISC in the public meetings and the plan can be obtained from the DCISC on their website as part of the public meeting agenda packet.

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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q032		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q032		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 032

Enumerate the differences between the NRC functions and those of DCISC.

ANSWER 032

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The U.S. Nuclear Regulatory Commission (NRC) was created as an independent agency by Congress in 1974 to ensure the safe use of radioactive materials for beneficial civilian purposes while protecting people and the environment. The NRC regulates commercial nuclear power plants and other uses of nuclear materials, such as in nuclear medicine, through licensing, inspection and enforcement of its requirements. The roles, responsibilities, and functions of the NRC are described on their website at www.nrc.gov.

The Diablo Canyon Independent Safety Committee (DCISC) was created by the State of California's Public Utilities Commission (CPUC) per a Settlement Agreement approved in D.88-12-083. The DCISC is a three-person Committee charged with reviewing and making recommendations concerning the safety of operations at Pacific Gas and Electric Company's (PG&E) Diablo Canyon Nuclear Power Plant (DCPP). The roles, responsibilities, and functions of the Diablo Canyon Independent Safety Committee are described on their website at https://www.dcisc.org.

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PG&E Data Request No.:	CalAdvocates_013-Q033		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q033		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 033

For what activities and issues does PG&E need to consult with DCISC?

ANSWER 033

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The Diablo Canyon Independent Safety Committee (DCISC) performs an oversite role, and PG&E does not need to consult with DCISC. However, in response to DCISC fact-finding visits and observations made by the DCISC, PG&E may discuss the facts and observations with DCISC to ensure the DCISC information requests and observations are accurately understood and addressed.

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PG&E Data Request No.:	CalAdvocates_013-Q034		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q034		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 034

For what activities and issues does PG&E need to seek DCISC approval?

ANSWER 034

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

PG&E does not need to seek approval from the Diablo Canyon Independent Safety Committee (DCISC). The DCISC performs an oversite role.

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PG&E Data Request No.:	CalAdvocates_013-Q035		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q035		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 035

Has DCISC ever denied PG&E request? If so, please enumerate those requests, and their resolutions.

ANSWER 035

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

Matters of denial occasionally occur regarding logistic matters such as dates of DCISC fact finding visits and public meetings. Such matters are discussed in public forums.

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PG&E Data Request No.:	CalAdvocates_013-Q036		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q036		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 036

Has DCISC issued any report/correspondence on DCPP? If so,

a. List those reports/correspondences that pertain to DCPP incidents; and
b. Provide those copies.

ANSWER 036

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks information beyond the 2022 record period.

Subject to and without waiving this objection, PG&E responds as follows:

Refer to the attached DCISC annual reports "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q036 - DCISC-31st-Annual-Report.pdf" and "Attach-2-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q036 - DCISC-32nd-Annual-Report.pdf" covering the last 2 years DCISC reports. The DCISC annual reports are available on the DCISC website: https://www.dcisc.org or by contacting the DCISC via the DCISC website.

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PG&E Data Request No.:	CalAdvocates_013-Q037		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q037		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 037

What were PG&E responses/comments on the DCISC reports?

ANSWER 037

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

PG&E responses are typically included in the DCISC report. Please refer to DCISC.org for the DCISC annual reports. PG&E's latest response is attached here as "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q037 - DCISC 32nd Annual Report Response.pdf".

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PG&E Data Request No.:	CalAdvocates_013-Q038		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q038		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Regulatory Issues

QUESTION 038

Were the DCISC reports required to be prepared by certified QA auditors?

ANSWER 038

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks it seeks information from third parties and that is not within PG&E's possession, custody, control, or personal knowledge.

Subject to and without waiving this objection, PG&E responds as follows:

The DCISC is an independent state committee of which PG&E has no oversight or control. PG&E is unable to answer this question; the DCISC would have to answer this. Refer to the DCISC website at https://www.dcisc.org.

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PG&E Data Request No.:	CalAdvocates_013-Q039		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q039		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 039

To whom does DCISC report? Explain the accountability of DCISC work.

ANSWER 039

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks it seeks information from third parties and that is not within PG&E's possession, custody, control, or personal knowledge.

Subject to and without waiving this objection, PG&E responds as follows:

The DCISC is an independent state committee that is not subject to PG&E oversight or control. PG&E is unable to answer this question; the DCISC would have to answer this. Refer to the DCISC website at https://www.dcisc.org. Refer to DCISC charter at https://www.dcisc.org/resources/second-restatement-of-the-charter/.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q040		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q040		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 040

Describe the selection process of DCISC staff, and PG&E's involvement in the procedure and selection.

ANSWER 040

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks it seeks information from third parties and that is not within PG&E's possession, custody, control, or personal knowledge.

Subject to and without waiving this objection, PG&E responds as follows:

Please refer to DCISC's charter on their website https://www.dcisc.org. PG&E is not involved in the procedure or selection. Section of charter copied below.

B. Appointment of Committee Members

- *Candidates for Committee membership shall be selected from those persons responding to an open request for applications. The California Public Utilities Commission ("CPUC") shall provide for public comment on qualified applicants by posting on the CPUC's homepage (www.cpuc.ca.gov) a link to information concerning the name of each qualified applicant, along with a summary of his or her qualifications and a statement identifying any potential conflict of interest, an*

Applicant's Application for Nomination shall address those items enumerated in Section I.C. The President of the CPUC shall provide to the appropriate appointing authority a list of not more than three qualified candidates as alternatives to the reappointment of that authority's designated Committee member whose term is expiring. The incumbent member, if he or she consents, shall be deemed an additional candidate. Each subsequent appointment shall be for a three-year term.

- *Should a Committee member not complete the appointed term, the authority who appointed that member shall appoint a replacement to serve for the unexpired portion of the term from the most recent list of candidates selected by the President of the CPUC in accordance with the appointment procedures set forth herein (3) The President of the CPUC shall review each application to assess the applicant's qualifications, experience and background, including any conflict of interest and comment received from the public, and shall propose as candidates only persons with knowledge, background and experience in the field of nuclear power facilities and nuclear safety issues who demonstrate they have no conflict of interest as set forth in Section I.C. The CPUC Energy Division shall prepare, circulate for public comment and place on the CPUC's public agenda a resolution ratifying the President's selection of not more than three qualified candidates and an incumbent member*.

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PG&E Data Request No.:	CalAdvocates_013-Q041		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q041		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 041

What is the current status of PG&E's plan to phase out Diablo Canyon? Please provide the status of license renewal, the Diablo Canyon Joint Proposal agreement and any CPUC and NRC proposals and citing the relevant application numbers.

ANSWER 041

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The 2023 status of PG&E's plans for DCPP do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. Such current plans are therefore irrelevant to this proceeding.

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PG&E Data Request No.:	CalAdvocates_013-Q043		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q043		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 043

Please explain the rationale for the closure extension.

ANSWER 043

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The closure extension does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. The closure extension, in its entirety, is therefore irrelevant to this proceeding.

PG&E objects to this question to the extent it calls for privileged information within the attorney-client privilege.

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PG&E Data Request No.:	CalAdvocates_013-Q044		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q044		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Regulatory Issues

QUESTION 044

What is the current license renewal status? Provide copies of DCPP license renewal application(s).

ANSWER 044

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The license renewal does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. The license renewal and related applications are therefore irrelevant to this proceeding.

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PG&E Data Request No.:	CalAdvocates_013-Q045		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q045		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 045

Please provide PG&E Quality Assurance (QA) Program Manual.

ANSWER 045

The QA Program Manual is called the Diablo Canyon Quality Assurance Program Description. See attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q045 - QA Program Change Diablo Canyon Quality Assurance Program Description.pdf"

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PG&E Data Request No.:	CalAdvocates_013-Q046		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q046		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 046

Provide all the revisions in the last five years, and the reasons for those revisions.

ANSWER 046

Changes from 2018-2023 are shown with each revision in Attachments 1-10. The reason for each change is included in the change package provided.

- Attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change AA-17.1.pdf"
- Attachment 2 - "Attach-2-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CR AA-17.1.pdf"
- Attachment 3 - "Attach-3-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CR AA-17.2.pdf"
- Attachment 4 - "Attach-4-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CR AA-17.2.pdf"
- Attachment 5 - "Attach-5-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CR AA-17.18.pdf"
- Attachment 6 - "Attach-6-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CR Z-17.1.pdf"
- Attachment 7 - "Attach-7-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CR17.7.pdf"
- Attachment 8 - "Attach-8-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CRBB-17.1.pdf"
- Attachment 9 - "Attach-9-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 - QA Program Change CRBB-17.1.pdf"
- Attachment 10 - "Attach-10-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q046 – QAPD Relocation Record.pdf"

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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q047		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q047		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 047

To whom does PG&E seek approval for changes to its QA Program?

a. Please list all persons/organizations (external to PG&E) that receive the information.
b. Please list all persons/organizations (external to PG&E) that approve of the changes.

ANSWER 047

PG&E seeks Nuclear Regulatory Commission (NRC) approval for changes to the QA program if the change reduces commitments. Changes that do not reduce commitments are approved by PG&E. The NRC receives periodic updates for all changes to the QA program.

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PG&E Data Request No.:	CalAdvocates_013-Q048		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q048		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 048

Please identify the QA Program Manual sections that deal with

i. Organization
ii. Procurement Document Control;
iii. Instructions, Procedures, and Drawings;
iv. Document Control, including change control;
v. Identification and Control of Material, Parts, and Components;
vi. Control of Special Processes;
vii. Inspection;
viii. Test Control;
ix. Control of Measuring and Test Equipment;
x. Handling, Storage and Shipping;
xi. Inspection, Test and Operating Status;
xii. Nonconforming Materials, Parts, or Components;
xiii. Corrective Action;
xiv. QA Records; and
xv. Audits.

ANSWER 048

i. Organization – Section 1.0
ii. Procurement Document Control; . – Section 4.0
iii. Instructions, Procedures, and Drawings; . – Section 5.0

iv. Document Control, including change control; . – Section 6.0
v. Identification and Control of Material, Parts, and Components; . – Section 8.0
vi. Control of Special Processes; . – Section 9.0
vii. Inspection; . – Section 10.0
viii. Test Control; . – Section 11.0
ix. Control of Measuring and Test Equipment; . – Section 12.0
x. Handling, Storage and Shipping; . – Section 13.0
xi. Inspection, Test and Operating Status; . – Section 14.0
xii. Nonconforming Materials, Parts, or Components; . – Section 15.0
xiii. Corrective Action; . – Section 16.0
xiv. QA Records; and. – Section 17.0
xv. Audits. – Section 18.0

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q049		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q049		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 049

If PG&E QA Program Manual does not contain one or more of the above topics, please explain why its QA Program Manual is not in compliance with NRC Regulations, Title 10, Part 50, Appendix B.

ANSWER 049

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request on the grounds that it seeks a legal opinion.

Subject to and without waiving this objection, PG&E responds as follows:

The DCPP Quality Assurance Program Description contains each of the topics in question 48.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q050		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q050		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 050

Does PG&E have QA auditors certified in compliance with ANSI/ASME N45.2.23? If so, please provide the list of auditors and their certifications. If not, please explain why not.

ANSWER 050

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to listing the names of auditors on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The individual names of PG&E's QA auditors does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

Subject to and without waiving this objection, PG&E responds as follows:

QA auditors are certified in compliance with ANS N45.2.23. The Diablo Canyon "CERTIFIED QA AUDIT TEAM LEADER" qualification certifies auditors in accordance with ANSI N45.2.23.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q051		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q051		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 051

Identify which of the above QA Program Manual section discusses the qualification requirements of PG&E QA auditors.

ANSWER 051

Qualification requirements for QA auditors is discussed in the Diablo Canyon Quality Assurance Program Description, Appendix B.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q052		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q052		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 052

Does the QA Program Manual section on QA Records list the documents/records that need to be kept permanently or retained temporarily? If not, provide the quality control/desktop procedures that deal with the disposition of QA Records and their retention periods.

ANSWER 052

Section 17.0 of the Diablo Canyon Quality Assurance Program Description, provided in response to question 45, provides guidance for which documents need to be retained as records. Procedure AD10.ID1, "Storage and Control of Quality Assurance Records," is attached as "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q052-AD10ID1r21.pdf" and provides additional guidance.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q053		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q053		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 053

What items and systems are nuclear class and/or safety-related?

ANSWER 053

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

The terms of the question "nuclear class" is not a recognized term in the industry and cannot be answered.

"Safety related" is defined in 10 CFR 50.2 by:

> *Safety-related structures*, systems and components means those structures, systems and components that are relied upon to remain functional during and following design basis events to assure:
> (1) The integrity of the reactor coolant pressure boundary
> (2) The capability to shut down the reactor and maintain it in a safe shutdown condition; or
> (3) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to the applicable guideline exposures set forth in § 50.34(a)(1) or § 100.11 of this chapter, as applicable.

Equipment that meets the above criteria must meet the QA program requirements and is designated as QA class Q in Tables 1 and 2 of the Q-list. Please see attachment "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q053-Q-List.pdf" for the Q-List.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q054		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q054		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 054

List the items or systems that must comply with the QA Program requirements? Please enumerate, e.g., nuclear class 1, safety-related systems, etc.

ANSWER 054

This information is provided in the attached Diablo Canyon Q-List. Refer to attachment "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q053-Q-List.pdf".

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q055		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q055		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 055

Define and explain the various nuclear classes and safety-related systems that fall within the scope of the NRC QA Program.

ANSWER 055

Definitions are as follows:

Quality Related: Items and activities covered by the Quality Assurance Program as defined in the DC QAPD, DCPP FSAR Update, Chapter 17, and this Program Directive. This includes safety-related, important-to-safety, and graded QA items and activities.

Safety Related Items: Structures, systems, or components designed to remain functional during and following design basis events to assure:

- The capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the guideline exposures of 10 CFR 50.67.
- The capability to shutdown the reactor and maintain it in a safe shutdown condition.
- The integrity of the reactor coolant pressure boundary.

Graded Items and Activities: Non-safety related items and activities for which a formalized Quality Assurance Program is deemed appropriate.

Note: The program directive referenced in the definition of Quality Related is procedure OM5, “Quality Assurance Program.” OM5 is provided as attachment “Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q055 -OM5.pdf”.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q056		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q056		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 056

Does PG&E have a QA Program Manual for those items and activities that fall outside the scope of NRC jurisdiction. If so, please provide that non-NRC QA Program Manual.

ANSWER 056

PG&E does not have a QA manual for items and activities that fall outside of the scope of NRC jurisdiction.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q057		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q057		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 057

Why is the NRC-mandated QA Manual not included in the Chapter 4 Workpapers?

ANSWER 057

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request to the extent it seeks a legal opinion.

Subject to and without waiving this objection, PG&E responds as follows:

The QA Manual is not necessary to meet PG&E's burden of production to demonstrate prudent operation with respect to outages and generation output during the 2022 record year.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q058		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q058		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 058

Please provide PG&E Corrective Action (CA) Program Manual.

ANSWER 058

The PG&E Corrective Action program is defined through the governing program directive and associated implementing procedures. See Attachments:

- "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM15.ID10 - Performance Monitoring Program Rev 4A.pdf"
- "Attach-2-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM15 - Performance Improvement Monitoring Rev 6A.pdf"
- "Attach-3-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM7.ID4 - Cause Evaluations – Rev 43.pdf"
- "Attach-4-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM7.ID3 - Root Cause Evaluations – Rev 55.pdf"
- "Attach-5 -ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM7.ID1 - Problem Identification and Resolution – Rev 60.pdf"
- "Attach-6-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM7 – Corrective Action Program – Rev 9.pdf"
- "Attach-7-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM4.ID15 -Corrective Action Review Board (CARB) - Rev 30.pdf"
- "Attach-8-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q058 – OM4.ID14 - Notification Review Team (NRT) - Rev 37.pdf"
- "Attach-9-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q58 - XI1ID2 – Regulatory Reporting Requirements and Reporting Process - Rev 46.PDF"
- "Attach-10-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q58 - OM7ID6 - Supplier Quality Problems - Rev 4.PDF"

- "Attach-11-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q58 - OM7ID11 - 10 CFR 21 Reportability Review Process - Rev 5.PDF"
- "Attach-12-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q58 - OM7ID12 - Operability Determination - Rev 44.PDF"
- "Attach-13-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q58 - OM7ID13 - Technical Evaluations - Rev 10.PDF"
- "Attach-14-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q58 - OM7DC3 - Engineering Decision Making - Rev 2.PDF"
- "Attach-15-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q58 - OM7ID7 - Emerging Issue and Event Investigations - Rev 20.PDF"

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q059		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q059		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 059

Is the CA Program Manual the same as the Correction Action section of the QA Program Manual? If not, please explain and enumerate the differences between the two.

ANSWER 059

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

Subject to and without waiving this objection, PG&E responds as follows:

No. The QA Program establishes the requirements of the Corrective Action Program. The Corrective Action Program is the implementing instructions that fulfill the QA Program requirements.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q060		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q060		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 060

Provide all the revisions in the last five years on the NRC-mandated QA Program Manual, and the reasons for those revisions.

ANSWER 060

Revisions to the Diablo Canyon Quality Assurance Program Description from the last five years were provided in response to question 046.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q061		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q061		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 061

To whom does PG&E seek approval for changes to its Corrective Action Program?

a. Please list all persons/organizations (external to PG&E) that receive the information.

b. Please list all persons/organizations (external to PG&E) that approve the changes.

ANSWER 061

DCPP does not require external approval to change the Corrective Action Program. Various outside agencies periodically request Corrective Action program documents. Those agencies include the DCPP Nuclear Safety Oversight Committee (NSOC), Diablo Canyon Independent Safety Committee (DCISC), Nuclear Regulatory Commission (NRC) and Institute of Nuclear Power Operations (INPO).

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q062		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q062		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

PG&E Internal Controls (ref: PG&E Testimony, page 4-2, line 17 to page 4-5, line 29)

QUESTION 062

Why is the CA Manual not included in the Chapter 4 Workpapers?

ANSWER 062

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this data request to the extent it seeks a legal opinion.

Subject to and without waiving this objection, PG&E responds as follows:

The Corrective Action Program is not necessary to meet PG&E's burden of production to demonstrate prudent operation with respect to outages and generation output during the 2022 record year.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q063		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q063		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 063

Has DCISC started its investigation of the LER incident? If so, please provide any reports/correspondences between DCISC and PG&E.

ANSWER 063

PG&E objects to this data request on the grounds that it seeks it seeks information from third parties and that is not within PG&E's possession, custody, control, or personal knowledge.

Subject to and without waiving this objection, PG&E responds as follows:

The DCISC is an independent state committee that is not subject to PG&E oversight or control. PG&E is unable to state whether the DCISC has started an investigation of the LER incident; the DCISC would have to answer this.

The DCISC has received the root cause analysis and the LER as part of the monthly data submittals provided by PG&E to the DCISC. The DCISC identifies the records received from PG&E in their public meeting agenda packets. Refer to the DCISC website https://www.dcisc.org.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q064		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q064		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 064

If DCISC has not started its investigation, please explain why it has not done so or whether it intends to.

ANSWER 064

PG&E objects to this data request on the grounds that it seeks information from third parties and that is not within PG&E's possession, custody, control, or personal knowledge.

Subject to and without waiving this objection, PG&E responds as follows:

Note that DCISC is an independent committee. PG&E cannot speculate what the DCISC would do.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q065		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q065		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 065

Regarding the LER incident, PG&E spokesperson Suzanne Hosn was quoted in the *San Francisco Examiner* as saying,

> "We identified a pipe associated with a cooling system where a minute amount of dry boric acid crystals accumulated….I can't even characterize it as a crack."

ANSWER 065

PG&E objects to this question on the grounds that it does not provide a question for PG&E to respond to.

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PG&E Data Request No.:	CalAdvocates_013-Q066		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q066		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 066

Please provide the complete press release by PG&E Suzanne Hosn on the LER incident as reported in the San Francisco Examiner.

ANSWER 066

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. A press release does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds it seeks information in the possession of, known to, or otherwise equally available to the CalAdvocates.

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PG&E Data Request No.:	CalAdvocates_013-Q067		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q067		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 067

Was PG&E Suzanne Hosn's statement part of a response to a query from a certain press? If so, please provide the complete text of the query and PG&E Suzanne Hosn's complete response.

ANSWER 067

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. Communications between the press and PG&E do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. Statements made between PG&E and the press are irrelevant to whether PG&E prudently managed its utility-owned generation facilities and managed outages during 2022.

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PG&E Data Request No.:	CalAdvocates_013-Q068		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q068		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 068

What prompted PG&E Suzanne Hosn to make that statement to the press? Did PG&E voluntarily disclose the LER incident to the public? Please explain.

ANSWER 068

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. What 'prompts' statements to the press does not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

Subject to and without waiving this objection, PG&E responds as follows:

PG&E's Licensee Event Reports are submitted to the NRC in accordance with 10 CFR 50.73 and are expected to be public on submission. LERs are available to the public through the NRC website, with ability to search at the site: https://lersearch.inl.gov/LERSearchCriteria.aspx.

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PG&E Data Request No.:	CalAdvocates_013-Q069		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q069		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
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Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 069

Describe PG&E policy of voluntary disclosure of nuclear incidents to the public. Is there a regulatory requirement or PG&E policy? Please cite and explain.

ANSWER 069

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. PG&E's external communications policies do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

Subject to and without waiving this objection, PG&E responds as follows:

PG&E's Licensee Event Reports are submitted to the NRC in accordance with 10 CFR 50.73 and are expected to be public on submission. LERs are available to the public through the NRC website, with ability to search at the site: https://lersearch.inl.gov/LERSearchCriteria.aspx.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q070		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q070		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
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Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 070

Please provide PG&E operation/desktop procedures on nuclear incident press releases.

ANSWER 070

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. PG&E's external communications policies do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

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PG&E Data Request No.:	CalAdvocates_013-Q071		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q071		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
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QUESTION 071

What individuals and organizations are in the distribution of such nuclear incident press releases? Does PG&E use the Service List of an existing CPUC docket? If so, please cite and explain why PG&E uses that docket.

ANSWER 071

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. PG&E's external communication policies do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

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PG&E Data Request No.:	CalAdvocates_013-Q072		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q072		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

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QUESTION 072

Are the CPUC, DCISC and California Division of Occupation Safety and Health (CalOSHA) in the nuclear press release distribution? If not, please explain.

ANSWER 072

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. PG&E's external communications policies do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022.

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PG&E Data Request No.:	CalAdvocates_013-Q073		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q073		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 09
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QUESTION 073

Please provide all PG&E press releases and press correspondences on the LER incident.

ANSWER 073

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. Press releases and correspondence on the LER incident do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. Statements made between PG&E and the press regarding the LER incident are irrelevant to whether PG&E prudently managed its utility-owned generation facilities and managed outages during 2022.

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PG&E Data Request No.:	CalAdvocates_013-Q074		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q074		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

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QUESTION 074

In the LER Letter, PG&E Dennis B. Petersen states, in part, "..a reactor coolant system boundary degradation related to a through-wall leak in a socket weld." On the other hand, PG&E spokesperson Suzanne Hosn stated it was not a crack. Is a through-wall leak not a crack? Please explain the differences between what was stated in the LER Letter and the press release by PG&E Suzanne Hosn.

ANSWER 074

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. Statements to the press are not performed by PG&E's subject matter experts, and are intended to summarize an issue for public consumption, and do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. As such, the statement made to the press is irrelevant to the scope and facts of this proceeding.

Subject to and without waiving this objection, PG&E responds as follows:

No press release was issued by PG&E with respect to this event. A through-wall leak indicates a path exists through the piping system wall for fluid to pass. Such a through-wall leak path could be due to pin-hole flaw, a crack, erosion of material, or corrosion of material. The LER stated that the presumed cause of the degradation was vibration-induced fatigue propagation of a flaw initiated at a weld defect. While the presumed cause would indicate the leak-path is a crack, the material containing the through-wall leak has not been removed from the plant for destructive examination and characterization of the through-wall leak path.

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PG&E Data Request No.:	CalAdvocates_013-Q075		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q075		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

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QUESTION 075

Are there any other differences between the LER and PG&E Suzanne Hosn's press release statement and other PG&E press releases on this incident? If so, please enumerate them, and explain the differences.

ANSWER 075

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to this question on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. Statements to the press are not performed by PG&E's subject matter experts, and are intended to summarize an issue for public consumption, and do not pertain to the scope of the ERRA Compliance proceeding, which is focused on PG&E's prudent management of its utility-owned generation facilities related to its power production during the record period 2022. As such, the statement made to the press is irrelevant to the scope and facts of this proceeding.

Subject to and without waiving this objection, PG&E responds as follows:

No press release was issued by Suzanne Hosn or PG&E. The statement was in response to a press inquiry. The LER is PG&E's statement of record.

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PG&E Data Request No.:	CalAdvocates_013-Q076		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q076		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

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QUESTION 076

What is the coolant system as used in DCPP? Please explain its function, and provide a diagram and color photos of the coolant system location and its physical relation to the reactor, steam generator and other parts of DCPP. Label the diagram and photos as appropriate.

ANSWER 076

The coolant system used at DCPP is a pressurized water reactor (PWR) – the reactor coolant system is considered a high temperature and pressure system. Reactor coolant removes thermal energy from the reactor and delivers the energy to the Steam Generators for the purpose of generating steam. Reactor coolant is a liquid comprised of high purity water and traces of boric acid and is contained by the pipes, pumps and steam generators of the Reactor Coolant System.

The diagrams and photos were previously provided in response to CalAdvocates DR 009 Q001. See Cal Advocates DR 009, question 001 Attachment 1 “Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q001-Diablo Canyon Power Plant Overview.pdf” for the location of the reactor coolant system. For general schematics, diagrams and descriptions of the Reactor Coolant System, refer to the USNRC Reactor Concepts Manual: Pressurized Water Reactors (Diablo Canyon is a four-loop Westinghouse PWR). See Attachment 1 – “Attach 1 - ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - USNRC Reactor Concepts Manual.pdf”

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PG&E Data Request No.:	CalAdvocates_013-Q077		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q077		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

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QUESTION 077

What is the coolant system boundary as used in DCPP? Please explain its function, and provide a diagram and color photos of the coolant system boundary location and its physical relation to the reactor, steam generator and other parts of DCPP. Label the diagram and photos as appropriate.

ANSWER 077

This is a duplicate question from CalAdvocates DR 009 Q10. Prior response to DR 009 Q10:

The coolant system boundary is the Reactor Coolant System, this system is comprised of the pipes, valves, pumps and steam generators that contain the reactor coolant fluid.

See Cal Advocates DR 009, question 001 Attachment 1 “Attach-01-ERRA-2022-PGE-Compliance-DR-CalAdvocates_009-Q001-Diablo Canyon Power Plant Overview.pdf” for the location of the reactor coolant system. For general schematics, diagrams and descriptions of the Reactor Coolant System, refer to the USNRC Reactor Concepts Manual: Pressurized Water Reactors (Diablo Canyon is a four-loop Westinghouse PWR). See Attachment 1 – “Attach 1 - ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - USNRC Reactor Concepts Manual.pdf”

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PG&E Data Request No.:	CalAdvocates_013-Q078		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q078		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

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QUESTION 078

What is the socket weld in the LER? Please explain its purpose and function, and provide a diagram and color photos of the socket weld location and its physical relation to the coolant system, reactor, steam generator and other parts of DCPP. Label the diagram and photos as appropriate.

ANSWER 078

Attachments to this response are confidential as described in the attached confidentiality declaration dated June 2, 2023.

This is a duplicate question from CalAdvocates DR 009 Q22. Prior response for DR 009 Q22:

The degraded weld joined together piping sections that were part of a piping system that vented the reactor coolant system after maintenance.

See Figures, 1, 2 and 3 found in the confidential attachment "CONF-Attach-1-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050-Root Cause Through-wall weld defect on Unit 2 Line 1140.pdf" for photos of the weld. For diagrams of the location of the weld in relation to reactor coolant system and other components see Confidential Attachments "CONF-Attach-3-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 - Reactor Coolant System OIM - Loop Penetrations with location of weld defect.pdf" and "CONF-Attach-4-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q016 -ISOmetric Drawing with location of weld defect.pdf"

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PG&E Data Request No.:	CalAdvocates_013-Q079		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q079		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

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Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 079

What are the differences between a socket weld versus other types of welds, such as, fillet, butt, bevel, etc. Please provide illustrations to support your response.

ANSWER 079

In regards to the differences between socket welds, groove welds and the many other types of weld designs, a socket is pressure fitting used to join piping. Groove welds join pipe to pipe without the application of a fitting.

Socket welds are a method of joining pipe and fittings where the pipe is inserted into a socket in the fitting. A circumferential fillet weld is deposited to complete the connection. See Attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q079-Weld Standard.pdf".

In regards to the referenced fillet weld, the American Welding Society (AWS) Standard Welding Terms and Definitions (AWS 3.0) defines a fillet weld as a weld of approximately triangular cross section joining two surfaces approximately at right angles to each other.

In contrast, the American Welding Society (AWS) Standard Welding Terms and Definitions (AWS 3.0) defines, a groove weld as a weld in a weld groove on a work piece surface between workpiece edges, between work piece surfaces, or between workpiece edges and workpiece surfaces. See example in Attachment 2 "Attach-2-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q079-Weld Standard Fillet.pdf".

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PG&E Data Request No.:	CalAdvocates_013-Q080		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q080		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 080

Provide the physical dimensions of the parts that were socket welded.

ANSWER 080

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

The materials for the socket weld identified in the December 21, 2022 LER (WIB975D) are in accordance with (IAW) American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section II-Materials-Part A-Ferrous Materials Specifications. The socket weld connection was constructed from SA-376, Type 304, Schedule 160 pipe connected to an SA-182, Type 304, 6000-pound socket coupling.

Nominal pipe wall thickness for the piping is 0.343 inches. The socket fitting dimensions can be found in the above referenced specification. In addition, the specified fillet weld size for this weld joint is 3/8 inch.

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PG&E Data Request No.:	CalAdvocates_013-Q081		
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Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

QUESTION 081

Before the LER Incident, when was the socket welding performed? If there were several dates, please list all of them and explain why the socket welding was performed on those dates.

ANSWER 081

The socket weld identified in the December 21, 2022 LER (WIB975D) was installed as part of a replacement design to implement the elimination of a reactor coolant RTD bypass (DCP DC2-M-44425) on October 3 and 4 of 1994.

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PG&E Data Request No.:	CalAdvocates_013-Q082		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q082		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Socket Weld Before the LER Incident

QUESTION 082

When was the last time that the parts mentioned in the LER were socket welded?

ANSWER 082

Prior to the LER incident, WIB975D (the socket weld identified in the December 21, 2022 LER) was not modified since October of 1994 original socket weld installation.

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PG&E Data Request No.:	CalAdvocates_013-Q083		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q083		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:		Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Socket Weld Before the LER Incident

QUESTION 083

How many times have the parts been socket welded. Please provide all the past dates and explanations for the weld failures.

ANSWER 083

Prior to the LER incident, WIB975D (the socket weld identified in the December 21, 2022 LER) was not modified since October of 1994 installation of the socket weld.

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PG&E Data Request No.:	CalAdvocates_013-Q087		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q087		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 087

Who specified the technical, quality and quality assurance requirements of the parts that were socket welded.

ANSWER 087

All welds related to WIB975D (the socket weld identified in the December 21, 2022 LER) were specified by DCPP design engineering and controlled under the DCPP QA program.

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PG&E Data Request No.:	CalAdvocates_013-Q089		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q089		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Socket Weld Before the LER Incident

QUESTION 089

What are the technical, quality and quality assurance requirements of the weld used in the socket weld?

ANSWER 089

The overall Quality Assurance (QA) Controls were IAW Diablo Canyon Power Plant (DCPP) QA program.

Fabrication and inspection of piping and socket fitting for WIB975D (the socket weld identified in the December 21, 2022 LER) was performed using the rules of ASME III, Subsection NB, “Rules for Construction of Nuclear Facility Components, Class 1 Components,” 1989 Edition.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q090		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q090		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Socket Weld Before the LER Incident

QUESTION 090

Who specified the technical, quality and quality assurance requirements of the weld used in the socket weld?

ANSWER 090

All welds related to WIB975D (the socket weld identified in the December 21, 2022 LER) were specified by DCPP design engineering and controlled under the DCPP QA program.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q091		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q091		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 091

What is the NDE for the socket weld?

ANSWER 091

Fabrication and inspection of piping and socket fitting for WIB975D (the socket weld identified in the December 21, 2022 LER) was performed using the rules of ASME III, Subsection NB, “Rules for Construction of Nuclear Facility Components, Class 1 Components,” 1989 Edition. This code requires Visual Testing (VT) and Dye Penetrant Testing (PT).

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PG&E Data Request No.:	CalAdvocates_013-Q095		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q095		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 095

Define and describe the different welding positions.

ANSWER 095

Reference Attachment 1 for general welding fixed positions in pipe. Attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q095-Weld Positions.pdf"

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PG&E Data Request No.:	CalAdvocates_013-Q096		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q096		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 096

What was the welding position used in the socket weld?

ANSWER 096

WIB975D (the socket weld identified in the December 21, 2022 LER) was welded in the 5F position. This socket weld was welded with the pipe axis horizontal, and the weld would be flat, vertical, and overhead. Reference Attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q095-Weld Positions.pdf"

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PG&E Data Request No.:	CalAdvocates_013-Q098		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q098		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 098

Who approved the welding procedure? Name the organizations and the regulatory agencies.

ANSWER 098

First part of this question, regarding welding procedure is a duplicate to DR 013 Q97, see response to Q97. PG&E approver of the welding procedure is shown on Attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q097-Socket Welding Procedure.pdf"

PG&E qualified the welding procedures in accordance with ASME BPVC Section IX-Welding, Brazing, and Fusing Qualifications, ASME III.

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PG&E Data Request No.:	CalAdvocates_013-Q099		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q099		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 099

What weld position was used in the socket weld?

ANSWER 099

This is a duplicate question to DR 013 Q96. Reference Q96 response.

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PG&E Data Request No.:	CalAdvocates_013-Q100		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q100		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 100

Provide the qualification of the welder used in the socket welding to show that the welder was qualified to perform the socket weld.

ANSWER 100

For the Welder performance qualifications (WPQs) for WIB975D (the socket weld identified in the December 21, 2022 LER), see Attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q100 -Welder Qualification report.pdf"

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PG&E Data Request No.:	CalAdvocates_013-Q101		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q101		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 101

How does PG&E maintain separation of bulk items used for nuclear and safety-related items and systems from those bulk items used for non NRC-jurisdictional systems and items?

ANSWER 101

PG&E uses unique locations associated with each item stock code. Each item has unique item # and unique location number to prevent mix-up. In addition, the unique stock code # tend to be D9X-XXXX for safety related material and D7X-XXXX for non-NRC jurisdictional items.

All warehouses use specific warehouse location (WH, aisle, shelf or height# off floor) along with the description and unique SAP Material Master code number (a.k.a. stock code #). In this way, nuclear material is segregated from non NRC-jurisdictional items.

PG&E / DCPP maintains material in accordance with ANSI standard N45.2.2 (attached). Our modern warehouses are temperature controlled within level B storage (indoors, 40 – 140 Deg F) with a designated room for Level A (temperature and humidity controlled, similar to office space). Given location close to ocean, temperature range of 40-90 degrees is typical range.

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PG&E Data Request No.:	CalAdvocates_013-Q102		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q102		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

Socket Weld Before the LER Incident

QUESTION 102

Were there any changes/deviations from all the original technical, quality and quality assurance requirements in the socket welding and associated items? If so, explain what the changes/deviations were and the approvals sought to accept those changes/deviations.

ANSWER 102

There were not any changes or deviations from the original technical, quality and quality assurance requirements in the socket welding.

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PG&E Data Request No.:	CalAdvocates_013-Q103		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q103		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 103

Who needs to approve those changes/deviations? Name the appropriate PG&E personnel and the regulatory agencies.

ANSWER 103

Depending on the deviation, different or multiple personnel or agencies may be involved in the approval process. In this case there were not any deviations, and no approval was required.

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PG&E Data Request No.:	CalAdvocates_013-Q104		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q104		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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QUESTION 104

Provide proofs that those changes/deviations were approved by the appropriate PG&E personnel, the NRC and other regulatory agencies.

ANSWER 104

There were not any changes or deviations for PG&E, the NRC or other regulatory agencies to approve on WIB975D (the socket weld identified in the December 21, 2022 LER).

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PG&E Data Request No.:	CalAdvocates_013-Q105		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q105		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 105

Provide the list of audits performed by PG&E QA Auditors in the last 5 years, the names of the QA Auditors, and proofs of their qualifications.

ANSWER 105

To the extent that this data request is intended to regulate nuclear safety, PG&E objects to this data request on grounds that it is irrelevant and outside the scope of this proceeding. The federal government has exclusive jurisdiction over nuclear safety. The CPUC's retained jurisdiction over nuclear power plant operations is limited to cost, reliability, and land use matters. Accordingly, data requests for information related to the safety of design, construction, and operations of Diablo Canyon Power Plant (DCPP) are irrelevant and inherently out of scope of the ERRA Compliance proceeding, as the CPUC has no jurisdiction over nuclear safety.

PG&E objects to the portion of this question seeking the names of auditors, on the grounds that it is out of scope of the ERRA Compliance proceeding, is irrelevant, and not reasonable calculated to lead to the discovery of admissible evidence. The names of the auditors is not necessary to determine PG&E prudent administration of its UOG resources.

Subject to and without waiving the objection, PG&E responds as follows:

Audits performed from 2018-2023 relevant to the LER incident:

- 2018 Maintenance Audit
- 2019 Special Processes & Inservice Inspection/Inservice Testing Audit
- 2020 Maintenance Services Audit
- 2021 Special Processes and ISI/IST Audit
- 2022 Maintenance Audit
- 2023 Special Processes, Inservice Inspection, and Inservice Testing Audit

Please see response to CalAdvocates DR 13, Q 50 for Auditor Qualifications.

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PG&E Data Request No.:	CalAdvocates_013-Q106		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q106		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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Socket Weld Before the LER Incident

QUESTION 106

Provide the last inspection and the QA Audit report on the socket weld.

ANSWER 106

The inspection record was provided in file "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q094-Weld NDE.pdf". Audits are not performed for individual welds.

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PG&E Data Request No.:	CalAdvocates_013-Q107		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q107		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 107

Did the LER incident violate any in-house PG&E procedures and operating instructions, and any other requirements, such as those of the CalOSHA, NRC, ASME codes and standards? If so, please

a. provide reports and correspondences regarding those violations;

b. enumerate the violations; and

c. explain why they happened.

ANSWER 107

The subject through-wall leak of the reactor coolant (RCS) pressure boundary was not in compliance with DCPP Technical Specification (T.S.) Limiting Condition of Operation (LCO) 3.4.13 a. which specifies “No pressure boundary leakage” in operating Modes 1 through 4. The LCO was not applicable when discovered with the unit shut down and could not be returned to power operation until the condition was repaired. The condition also did not meet American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PVC) Section XI acceptance criteria for a 2-inch stainless steel socket weld.

a. See Licensee Event Report (LER) submitted to the Nuclear Regulatory Commission (NRC) by PG&E on December 21, 2022 on the reactor coolant system boundary degradation in Unit 2 (reference: https://www.nrc.gov/docs/ML2235/ML22355A081.pdf)

b. The LER event was a failure to meet American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PVC) Section XI acceptance criteria for a 2-inch stainless steel socket weld. The ASME B&PVC acceptance criteria does not allow for existence of a through-wall indication. The event also precluded return to power operation by T.S. LCO 3.4.13 a. as described above until repaired.

c. The presumed cause of the event was degradation caused by vibration-induced fatigue that propagated at a weld defect resulting in a through-wall defect. The cause analysis information was previously submitted in response to CalAdvocates DR 009 Q050. See confidential attachment: “CONF-ATTACH-1-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050-Root Cause Through-wall weld defect on Unit 2 Line 1140.pdf” and “CONF-ATTACH-2-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050 - Structural Integrity Analysis - 663220-32-1-1”.

PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	CalAdvocates_013-Q108		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q108		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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The LER Incident – Post Mortem

QUESTION 108

Please provide all inspection/postmortem records for the incident and any other inspection/postmortem reports prepared by PG&E or any other party/organization. If there are no inspection/postmortem documents, please explain why.

ANSWER 108

Metallurgical failure analysis of the weld will be performed after the weld is removed in the 2R24 outage in 2024. Pictures were taken of the weld condition prior to repair.

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PG&E Data Request No.:	CalAdvocates_013-Q109		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q109		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
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The LER Incident – Post Mortem

QUESTION 109

Please provide any other Root Cause Analysis Report (RCA)/Root Cause Evaluation Report (RCE) for the incident and any other postmortem reports (such as, inspection reports) prepared by SDG&E and/or others (e.g., contractor and external technical consultant). If there are no other reports for each of the afore-mentioned documents, please explain why.

ANSWER 109

Attachments to this response are confidential as described in the attached confidentiality declaration dated June 2, 2023.

PG&E objects to this data request on the grounds that it seeks it seeks information from third parties and that is not within PG&E's possession, custody, control, or personal knowledge.

Subject to and without waiving this objection, PG&E responds as follows:

The information pertaining to PG&E's the socket weld identified in the December 21, 2022 LER was previously submitted in response to CalAdvocates DR 009 Q050. See confidential attachment: "CONF-ATTACH-1-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050-Root Cause Through-wall weld defect on Unit 2 Line 1140.pdf" and "CONF-ATTACH-2-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050 - Structural Integrity Analysis - 663220-32-1-1".

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q110		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q110		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 110

Has PG&E or any other party/organization performed any analyses to determine why the LER incident occurred? If so, please provide all such reports and documents.

ANSWER 110

Attachments to this response are confidential as described in the attached confidentiality declaration dated June 2, 2023.

Yes. This information was previously submitted in response to CalAdvocates DR 009 Q050. See confidential attachment: "CONF-ATTACH-1-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050-Root Cause Through-wall weld defect on Unit 2 Line 1140.pdf" and "CONF-ATTACH-2-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050 - Structural Integrity Analysis - 663220-32-1-1".

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q111		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q111		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 111

Please enumerate all the parts that failed, were damaged and/or replaced.

i. Provide pictures of the damaged/replaced parts.
ii. Show where the parts are located in relation to each other.
iii. How old were the damaged/replaced parts?
iv. Please describe how each part failed.
v. Please describe the functions of each of the damaged/replaced parts.
vi. Were any of the above listed parts directly related to the outage?

ANSWER 111

Attachments to this response are confidential as described in the attached confidentiality declaration dated June 2, 2023.

The only failure was the weld connecting piping pieces at a socket joint.

i. Photos of the damaged part were previously provided in response to CalAdvocates DR 009, Q050. Reference Figure 2 of attachment "CONF-ATTACH-2-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050 - Structural Integrity Analysis - 663220-32-1-1".

ii. The relationship of the parts was previously provided in response to CalAdvocates DR 009 Q050. Reference Figure 1 of attachment "CONF-ATTACH-2-ERRA-2022-PGE-Compliance_DR_CalAdvocates_009-Q050 - Structural Integrity Analysis - 663220-32-1-1".

iii. The weld was installed in 1994, making it 28 years old on discovery in 2022.

iv. The only failure was Weld No. WIB-975D. The presumed cause of the weld degradation was vibration-induced fatigue propagation of a flaw initiated at a weld defect.

v. This response was previously provided in response to CalAdvocates DR 009 Q022. The degraded weld joined together piping sections that were part of a piping system that vented the reactor coolant system after maintenance.

vi. The failed weld was not directly related to the refueling outage.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q112		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q112		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 112

Was the corrective action work performed considered as rework or repair work? Please describe the differences between rework and repair work.

ANSWER 112

DCPP implemented the repair of field weld WIB975D utilizing the ASME BPVC (Section XI Rules for Inservice Inspection of Nuclear Power Components) Code Case N-666-1 : Weld Overlay of Class 1, 2, and 3 Socket Weld Connections.

Rework is the unexpected and unplanned repeat performance of work to repair or maintain a component or system. The performance of maintenance to repair an original construction deficiency would not be considered rework.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q113		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q113		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 113

What were the factors which contributed to the failure of the various parts and components?

ANSWER 113

Normal operational vibrational stresses propagated an existing weld defect.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q114		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q114		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 114

Prior to the LER incident, were there regularly-scheduled inspection and maintenance requirements for the failed/damaged items as enumerated in your response to question #111. As a result of the LER incident, are there plans to change those inspection and maintenance requirements presently or in the future? Please explain.

ANSWER 114

This weld obtains a visual inspection for leakage each refueling outage using procedures STP R-8C, “Containment Walkdown for Evidence of Boric Acid Leakage” at the start of each outage and STP R-8A, “Reactor Coolant System Leakage Test” at the end of each outage. Inspection requirements for this weld are specified by the ASME Section XI Code "Rules For Inservice Inspection of Nuclear Plant Components", which defines the frequency of the visual exam, which is every refueling outage. These inspections will continue on an outage frequency. Additionally in the next Unit 1 and Unit 2 refueling outage socket welds that were made or inspected by the individuals that performed the weld and inspection in 1994 will be visually inspected. Refer to the root cause evaluation previously provided in response to CalAdvocates DR 009 Q050.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q115		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q115		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 115

For comparison, please provide color photos of the failed items provided in your response to question #111 before usage, and at failure. Please label the parts.

ANSWER 115

See Attachment 1: "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q115-Weld Defect Photo.pdf". These photos were taken in 2022 prior to repair of the weld. Photos of the weld from 1994 do not exist.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q116		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q116		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 116

Were there any regularly-scheduled inspection and maintenance requirements for the above items in Unit 2? Are they the same as Unit 1? Please explain.

ANSWER 116

The Unit 2 weld and the equivalent Unit 1 weld obtain a visual inspection for leakage each refueling outage using procedures STP R-8C, “Containment Walkdown for Evidence of Boric Acid Leakage” at the start of each outage and STP R-8A, “Reactor Coolant System Leakage Test” at the end of each outage. Inspection requirements for the reactor coolant system leakage test are specified by the ASME Section XI Code "Rules For Inservice Inspection of Nuclear Plant Components", which defines the frequency of the visual exam, which is every refueling outage. This requirement applies to both Unit 1 and Unit 2. The containment walkdown for evidence of boric acid leakage is required by a regulatory commitment to the NRC applicable to Unit 1 and Unit 2 to be performed every refueling outage.

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PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q117		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q117		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 117

Did PG&E have a similar type of LER incident previously? Please describe and explain.

ANSWER 117

There have been no other LERs submitted by DCPP associated with a through-wall leak of the reactor coolant pressure boundary.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q119		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q119		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 119

Specify the materials and material specification of the parts and weld electrodes that were used in the socket weld.

ANSWER 119

For the ASME Code Case N-666-1: Weld Overlay.

Welding filler material is IAW ASME BPVC Section II, Part C, ASME III, Subsection NB.

Weld filler material utilized is ASME SFA 5.9, Type ER308.

All parts remain the same as those in 1994 – none were replaced.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q120		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q120		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 120

Are those parts and weld materials identical to those used before the LER incident? If not, please explain the reasons for the change.

ANSWER 120

The socket weld coupling and associated piping are from the initial installation.

The welding filler materials utilized for the welding overlay meet the same requirements of the original installation. However the filler metal is from a current material heat.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q121		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q121		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 121

What were the technical, quality and quality assurance requirements of the parts that were socket welded?

ANSWER 121

DCPP implemented the repair of field weld WIB975D utilizing the ASME BPVC (Section XI Rules for Inservice Inspection of Nuclear Power Components) Code Case N-666-1 : Weld Overlay of Class 1, 2, and 3 Socket Weld Connections.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q122		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q122		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 122

Who specified the technical, quality and quality assurance requirements of the parts that were socket welded.

ANSWER 122

All welds related to Code Case N-666-1 Overlay were specified by DCPP design engineering and controlled under the DCPP QA program.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q123		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q123		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 123

Specify the material and material specification of the weld used in the socket weld.

ANSWER 123

This was answered by Q119 of this data request. See response in Q119.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q124		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q124		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 124

What are the technical, quality and quality assurance requirements of the weld used in the socket weld?

ANSWER 124

Welding filler material is IAW ASME BPVC Section II, Part C, ASME Section III-NB, 2007 Edition with 2008 Addenda.

Weld filler material utilized is ASME SFA 5.9, Type ER308.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q125		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q125		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 125

Who specified the technical, quality and quality assurance requirements of the weld used in the socket weld?

ANSWER 125

All welds related to the Code Case N-666-1 Overlay were specified by DCPP design engineering and controlled under the DCPP QA program.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q126		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q126		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 126

What is the NDE for the socket weld?

ANSWER 126

Fabrication and inspection of piping and socket fitting for the Code Case N-666-1 was performed using the rules of ASME Section III-NB, 2007 Edition with 2008 Addenda. This code requires Visual Testing (VT) and Dye Penetrant Testing (PT).

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q127		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q127		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 127

Provide the source inspection records of all the materials (pipe and weld) used in the socket weld.

ANSWER 127

Receipt inspections included in Attachments below for filler metal. Reference files:

- "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q127 Receipt Inspection Lot 18380 - D423910 ER308 Receipt Inspection.pdf"
- "Attach-2-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q127 Receipt Inspection Lot 18381 - D423911 ER308 Receipt Inspection.pdf"

See attachments to Question 92 for receipt inspections for the piping and coupling. The piping and coupling were not replaced by the repair performed in 2022. Note that source inspection is not required for purchases from qualified suppliers – only receipt inspections.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q130		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q130		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 130

For the corrective action work, define and describe the different welding positions.

ANSWER 130

Reference Attachment 1 for general welding fixed positions in pipe. Attachment 1 - "Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q095-Weld Positions.pdf"

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q131		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q131		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 131

For the corrective action work, what was the welding position used in the socket weld?

ANSWER 131

For The Code Case N 666-1 Overlay was welded in the 5F position. This socket weld was welded with the pipe axis horizontal, and the weld would be flat, vertical, and overhead. Reference Attachment 1, Q95 - “Attach-1-ERRA-2022-PGE-Compliance-DR-CalAdvocates_013-Q095-Weld Positions.pdf”

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
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Data Response

PG&E Data Request No.:	CalAdvocates_013-Q133		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q133		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 133

Who approved the welding procedure? Name the organizations and the regulatory agencies.

ANSWER 133

PG&E approved the welding procedure after qualifying the welding procedures in accordance with ASME BPVC Section IX-Welding, Brazing, and Fusing Qualifications, ASME III. External organization and regulatory agency approvals are not required.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q135		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q135		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 135

For the corrective action work, were there any changes/deviations from all the original technical, quality and quality assurance requirements in the socket welding? If so, explain what the changes/deviations were, and the approvals sought to accept those changes/deviations.

ANSWER 135

There were not any changes or deviations from the original technical, quality and quality assurance requirements for the N-666-1 Overlay.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_013-Q136		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_013-Q136		
Request Date:	May 15, 2023	Requester DR No.:	013
Date Sent:	June 2, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Thomas Baldwin	Requester:	Karl Stellrecht

SUBJECT: 2022 ERRA COMPLIANCE APPLICATION: DATA REQUEST 013
CHAPTER 4 – UTILITY-OWNED GENERATION: NUCLEAR

The LER Incident – Post Mortem

QUESTION 136

Provide proofs (documentations) that those changes/deviations were approved by the appropriate PG&E personnel, the NRC and other regulators.

ANSWER 136

There was no documentation as there were not any deviations that required approval.

ATTACHMENT 3.5

PG&E Response to Cal Advocates Data Request 13, Question 84, 93, 94, 97, 118, 128, 129, 132, 134, 137, 138

(CONFIDENTIAL)

ATTACHMENT 3.6

PG&E Response to Cal Advocates Data Request 13, Question 84, 93, 94, 97, 118, 128, 129, 132, 134, 137, 138

(CONFIDENTIAL Info for U.S. Citizens Only)

LIST OF ATTACHMENTS FOR CHAPTER 5

#	Attachment	Description
1	Attachment 5.1 Data Request (Confidential)	Abridged collection of PG&E responses to Cal Advocates data requests sited in testimony. Confidential.
2	Attachment 5.2 MDR (Confidential)	PG&E's responses to Master Data Request question 37, Attachment 1 and question 39. Confidential.

ATTACHMENT 5.1 -DATA REQUEST

Abridged collection of PG&E responses to Cal Advocates data requests sited in testimony.

(Confidential)

ERRA-2022-PGE-Compliance_DR_CalAdvocates_020-Q001Atch01CONF

(Available via Email)

ATTACHMENT 5.2 MDR

PG&E's responses to Master Data Request question 37, Attachment 1 and question 39

(Confidential)

ERRA-2022-PGE-Compliance_DR_CalAdvocates_MDR001-Q037Atch01-CONF

(Available via Email)

LIST OF ATTACHMENTS FOR CHAPTER 6

#	Attachment	Description
1	Attachment 6.1	PG&E Response to Cal Advocates Data Request 23-Q001
2	Attachment 6.2 (Confidential)	PG&E Summary of end-of-record period RA positions, from PG&E AL 6844-E, *Procurement Transaction Quarterly Compliance Submittal (Q4, 2022)*, Attachment E, January 30, 2023 – ERRA-2022-PGE-Compliance_DR_CalAdvocates_023-Q001_Attach1CONF (Available via Email)

ATTACHMENT 6.1

ERRA-2022-PGE-Compliance_DR_CalAdvocates_023-Q001

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_023-Q001		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_023-Q001		
Request Date:	August 10, 2023	Requester DR No.:	023
Date Sent:	August 21, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Robert Gomez	Requester:	Nicholas Hwang/ Karl Stellrecht

QUESTION 001

Fill out the attached Excel workbook with the values that applies to each month's month-ahead showing compliance for 2022 of the following items.

a. System RA tab:
   i. PG&E's CPUC System RA Requirement in megawatts (MWs)
   ii. PG&E's CAISO System RA Requirement in MWs
   iii. The System RA Minimum Available Capacity in MWs, as presented in Line 14 of the RA Portfolio Breakdown of Attachment E (Other Transactions) in PG&E's Quarterly Compliance Reports
   iv. PG&E's Portfolio Reserves in MWs, as presented in Line 16 of the RA Portfolio Breakdown of Attachment E (Other Transactions) in PG&E's Quarterly Compliance Reports
   v. PG&E's Operational Constraints in MWs, as presented in Line 17 of the RA Portfolio Breakdown of Attachment E (Other Transactions) in PG&E's Quarterly Compliance Reports
   vi. PG&E's System RA Sales in MWs
   vii. Capacity procured by PG&E for summer emergency reliability purposes pursuant to D.21-03-056 and D.21-12-015
   viii. Import capacity contracts that were reimbursed by the California Department of Water Resources pursuant to Assembly Bill 205
b. Local RA tab: PG&E's local RA position used for CPUC compliance for the Greater Bay Area, Humboldt, North Coast/North Bay, Sierra, Stockton, Greater Fresno, Kern, and the Aggregated PG&E-Other Areas.

ANSWER 001

a. System RA tab:

i. PG&E objects to this request on the grounds that it is cumulative and duplicative and requires preparation of spreadsheets or compilations of information that is already made available through other means. PG&E has already made this data available through the Master Data Request. Notwithstanding this objection and without waiver, PG&E provides the specific location for where this information has already been provided: RA Portfolio Breakdown of Attachment E.

ii. PG&E objects to this request on the grounds that it is cumulative and duplicative and requires preparation of spreadsheets or compilations of information that is already made available through other means. PG&E has already made this data available through the Master Data Request. Notwithstanding this objection and without waiver, PG&E provides the specific location for where this information has already been provided: RA Portfolio Breakdown of Attachment E.

iii. PG&E objects to this request on the grounds that it is cumulative and duplicative and requires preparation of spreadsheets or compilations of information that is already made available through other means. PG&E has already made this data available through the Master Data Request. Moreso, this data request already acknowledges that such information has already been provided by citing to specific line items from PG&E's previous responses.

iv. PG&E objects to this request on the grounds that it is cumulative and duplicative and requires preparation of spreadsheets or compilations of information that is already made available through other means. PG&E has already made this data available through the Master Data Request. Moreso, this data request already acknowledges that such information has already been provided by citing to specific line items from PG&E's previous responses.

v. PG&E objects to this request on the grounds that it is cumulative and duplicative and requires preparation of spreadsheets or compilations of information that is already made available through other means. PG&E has already made this data available through the Master Data Request. Moreso, this data request already acknowledges that such information has already been provided by citing to specific line items from PG&E's previous responses.

vi. PG&E objects to this request on the grounds that it is cumulative and duplicative and requires preparation of spreadsheets or compilations of information that is already made available through other means. PG&E has already made this data available through the Master Data Request. Notwithstanding this objection and without waiver, PG&E provides the specific location for where this information has already been provided: RA Portfolio Breakdown of Attachment E.

vii. PG&E objects to this request on the grounds that it is cumulative and duplicative and requires preparation of spreadsheets or compilations of information that is already made available through other means. PG&E has already made this data available through the Master Data Request. Notwithstanding this objection and without waiver, PG&E provides the specific location for where this information has already been provided ERRA-2022-PGE-Compliance_DR_CalCCA_002-Q017_Atch01_CONF.xlsx.

viii. Please refer to Table 1 below for a list of import capacity contracts that were reimbursed in 2022 by the California Department of Water Resources pursuant to Assembly Bill 205.

Table 1: 2022 list of Import capacity contracts that were reimbursed by the California Department of Water Resources

Import Capacity Contract No.	Counterparty	Schedule	Delivery Location	Term (Year)	Term (Month)	Volume (MW)	Price ($/MWh)	Price Type	Execution Date
5966195	TransAlta	6 x 16	California-Oregon Border (COB)	2022	July - October	50	$174.00	Fixed	5/18/2022
5966279	ConocoPhillips Company	6 x 16	California-Oregon Border (COB)	2022	August	25	$235.00	Fixed	5/20/2022
5967677	Powerex	7 x 16	California-Oregon Border (COB)	2022	June - September	200	$200.00	Fixed	5/25/2022
6080190	Morgan Stanley	6 x 16	California-Oregon Border (COB)	2022	September	41	$172.00	Fixed	7/11/2022
6080387	ConocoPhillips Company	6 x 16	California-Oregon Border (COB)	2022	September	25	$167.50	Fixed	7/13/2022
6083279	Guzman Energy LLC	6 x 16	Palo Verde (PV)	2022	September	25	$180.00	Fixed	7/26/2022
6126394	Dynasty Power Inc.	6 x 16	California-Oregon Border (COB)	2022	September	25	$165.00	Fixed	8/1/2022
6128160	BPA	6 x 16	Nevada-Oregon Border (NOB)	2022	September	50	$155.00	Fixed	8/15/2022
6128166	BPA	6 x 16	Nevada-Oregon Border (NOB)	2022	September	50	$155.00	Fixed	8/15/2022

b. See ERRA-2022-PGE-Compliance_DR_CalAdvocates_023-Q001_Attach1.xlsx

ATTACHMENT 6.2

ERRA-2022-PGE-Compliance_DR_CalAdvocates_023-Q001_ Attach1_CONF

PG&E Summary of end-of-record period RA positions, from PG&E AL 6844-E, *Procurement Transaction Quarterly Compliance Submittal (Q4, 2022)*, Attachment E, January 30, 2023

(CONFIDENTIAL)

(Available via Email)

LIST OF ATTACHMENTS FOR CHAPTER 8

#	Attachment	Description
1	Attachment 8.1	A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q005
2	Attachment 8.2	A.23-02-018, Chapter 1 Workpapers, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q006
3	Attachment 8.3	A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q006-Atch01 (Available via Email)

ATTACHMENT 8.1

A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q005

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates 024-Q005		
PG&E File Name:	ERRA-2022-PGE-Compliance DR CalAdvocates 024-Q005		
Request Date:	August 18, 2023	Requester DR No.:	024
Date Sent:	August 25, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Larsen Plano Jennifer Nicholsen	Requester:	Nicholas Hwang/ Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.23-02-018 PG&E – DR NO. 24

Regarding the GTSRMA, in particular charges recorded in tab [I14] of "ERRA-2022-PGE-Compliance-CalAdvocates-DR-008-Q002_Atch01-CONF" and explained in "I14 sheet 8157041 information" attached to this DR:

QUESTION 005

PG&E has stated that it shall make adjusting entries accounting for a net charge of [redacted] related to Standard Cost Variance Assessments (SCVA) accidentally allocated to the GTSRMA from the EE EM&V cost center in the 2023 record period. Please notify Cal Advocates within one month of when these adjustments are made (if not already made).

ANSWER 005

PG&E made the accounting adjustments for a net charge of $(5,597.93) related to Standard Cost Variance Assessments (SCVA) accidentally allocated to the GTSRMA from the EE EM&V cost center on July 31, 2023.

ATTACHMENT 8.2

A.23-02-018, Chapter 1 Workpapers,
ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q006

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_024-Q006		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q006		
Request Date:	August 18, 2023	Requester DR No.:	024
Date Sent:	August 25, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Larsen Plano Jennifer Nicholsen	Requester:	Nicholas Hwang/ Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.23-02-018 PG&E – DR NO. 24

Regarding the GTSRMA, in particular charges recorded in tab [I14] of "ERRA-2022-PGE-Compliance-CalAdvocates-DR-008-Q002_Atch01-CONF" and explained in "I14 sheet 8157041 information" attached to this DR:

QUESTION 006

Within one month of the adjusting entry (if not already made), provide documentation supporting the referenced adjustments including the record month, cost center, and amount of the individual SCVA charges included in the adjustment.

ANSWER 006

Please see the attached Excel document titled "ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q006-Atch01" for the details of the journal entry, including the record month, cost center (i.e. order numbers and cost element/general ledger numbers), and amount of the individual SCVA charges included in the adjustment.

ATTACHMENT 8.3

A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q006-Atch01

(Available via Email)

LIST OF ATTACHMENTS FOR CHAPTER 10

#	Attachment	Description
1	Attachment 10.1	AL 6407-E
2	Attachment 10.2	A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q002.
3	Attachment 10.3	A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q003-Atch01. (Available via Email)
4	Attachment 10.4	A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q004.
5	Attachment 10.5 (Confidential)	A.23-02-018 - PG&E Data Request 10, ERRA-2022-PGE-Compliance_DR_CalAdvocates_010-Q001_F42-CONF. (Available via email)
6	Attachment 10.6	A.23-02-018 - PG&E Data Request 22, ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q001.
7	Attachment 10.7	A.23-02-018 - PG&E Data Request 22, ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q002Supp001.
8	Attachment 10.8	A.23-02-018 - PG&E Data Request 22, ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q004Supp001.
9	Attachment 10.9 (Confidential)	A.23-02-018 - PG&E Data Request 22, ERRA-2022-PGE-Compliance_DR_CalAdvocates_010-Q001_F17_Pt02-CONF. (Available via email)

ATTACHMENT 10.1

ELEC_6407-E

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298

Pacific Gas & Electric Company
ELC (Corp ID39)
Status of Advice Letter 4529G/6407E
As of December 13, 2021

Subject: Implementation of WEMA Revenue Requirement and Customer Credit

Division Assigned: Energy

Date Filed: 11-12-2021

Date to Calendar: 11-17-2021

Authorizing Documents: D2110022

Disposition:	**Accepted**
Effective Date:	**12-12-2021**

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Stuart Rubio
415-973-4587
PGETariffs@pge.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298

To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

Advice Letter Number
Name of Filer
CPUC Corporate ID number of Filer
Subject of Filing
Date Filed
Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
Effective Date of Filing
Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov

Pacific Gas and Electric Company®

Sidney Bob Dietz II
Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-3582

November 12, 2021

Advice 4529-G/6407-E
(Pacific Gas and Electric Company U 39 M)

Public Utilities Commission of the State of California

Subject: **Implementation of WEMA Revenue Requirement and Customer Credit**

Purpose

Pacific Gas and Electric Company (PG&E) submits this advice letter as directed by D.21-10-022 related to Application 20-02-004 to: (1) describe how PG&E will implement recovery of the $445.4 million revenue requirement to recover wildfire insurance related costs from July 26, 2017 through December 31, 2019; and (2) propose its plan to implement a customer credit to refund insurance payments for excess liability insurance coverage for the period covered by Application 20-02-004.

Background

Decision (D.) 18-06-029 authorized PG&E to establish a Wildfire Expense Memorandum Account (WEMA) to record costs associated with wildfire-related expenses that are not otherwise already authorized to be recovered in rates, including wildfire insurance premium costs. PG&E established its WEMA pursuant to D.18-06-029, with an effective date of July 26, 2017, to record any excess costs associated with wildfire-related liabilities, including incremental insurance premiums. On February 7, 2020, PG&E filed A.20-02-004 seeking authority to recover wildfire-related incremental insurance costs of $498.7 million tracked in its WEMA for the period July 26, 2017 through December 31, 2019.

On June 30, 2021, PG&E, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) and The Utility Reform Network (TURN) (collectively referred to as the Joint Settling Parties) filed a motion for the adoption of a settlement agreement proposing that PG&E recover $445.4 million in rates related to the insurance costs tracked in its WEMA over a 12-month period from its various rate classes, based on the functional cost allocations adopted in its 2017 GRC (D.17-05-013). The Joint Settling Parties also identified a refund of insurance payments for excess liability insurance coverage for the period covered by the application that would result in a net

credit to customers totaling approximately $500,000.[1] D.21-10-022 directed PG&E to file a Tier 2 implementation advice letter describing how it will implement recovery of the authorized revenue requirement over a 12-month period and to propose a mechanism to provide the customer credit.[2]

Recovery of Revenue Requirement

The $445.4 million revenue requirement shall be recovered over a 12-month period through the Annual Electric True-Up (AET) and Annual Gas True-Up (AGT) advice letters, or next available rate change.

PG&E will recover the approved revenue requirement as follows:

1. The Electric Distribution portion of the WEMA amounts shall be recovered through the Distribution Revenue Adjustment Mechanism (DRAM);
2. The Electric Generation portion of the WEMA amounts shall be recovered through the Portfolio Allocation Balancing Account;
3. The Gas Distribution portion of the WEMA amounts shall be recovered via the Core Fixed Cost Account (CFCA)/Noncore Customer Class Charge Account (NCA) distribution subaccount using the Distribution Level Based Revenue allocation factor adopted in D.17-05-013;
4. The Gas Transmission and Storage portion of the WEMA amounts shall be recovered via the CFCA/NCA customer class subaccount using the adopted equal cents per therm methodology for all customer classes; and
5. The Nuclear Decommissioning Cost Triennial Proceeding – Safe Storage portion of the WEMA amounts shall be recovered via the Nuclear Decommissioning Adjustment Mechanism.

Refer to Attachment 1, page 1 for summary of recovery amounts by each mechanism.

Customer Credit

PG&E's application addressed excess liability insurance costs incurred from July 26, 2017 to December 31, 2019.[3] A relatively small amount of 2019 excess liability insurance premiums were paid by the company or refunded to the company after that time and were not included in the application.

Attachment 1, page 2 shows the calculation of the net credit due to customers. As shown in the attachment, the late payments and refunds associated with 2019 coverage were: (1) fees paid totaling approximately $600,000; and (2) reimbursements received totaling approximately $1,174,490. The total net reimbursement received by PG&E was

[1] D.21-10-022, p. 16.
[2] D.21-10-022, OP 1.
[3] A.20-02-004, Application of Pacific Gas and Electric Company (U 39 M) to Recover Insurance Costs Recorded in the Wildfire Expense Memorandum Account, p. 2.

$574,190. The CPUC jurisdictional portion of the net reimbursement received it is $522,388.

PG&E proposes to refund the entire $522,388 CPUC jurisdictional portion of the net reimbursement to customers in rates through the process described in this Advice Letter. To do so, PG&E proposes to refund the customer credit over a 12-month period and through the same process as described for collection of the revenue requirement above. The non-CPUC jurisdictional portion of the net reimbursement will be addressed through the appropriate Federal Energy Regulatory Commission ratemaking processes.

Protests

*****Due to the COVID-19 pandemic, PG&E is currently unable to receive protests or comments to this advice letter via U.S. mail or fax. Please submit protests or comments to this advice letter to EDTariffUnit@cpuc.ca.gov and PGETariffs@pge.com*****

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than **December 2, 2021**, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Sidney Bob Dietz II
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

PG&E requests that this **Tier 2** advice submittal become effective on regular notice, **December 12, 2021,** which is 30 calendar days after the date of submittal in order for the revenue requirement to be in rates by **January 1, 2022**.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for **A.20-02-004**. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: http://www.pge.com/tariffs/.

/S/
Sidney Bob Dietz II
Director, Regulatory Relations

Attachments

cc: Service List A.20-02-004

California Public Utilities Commission

ADVICE LETTER SUMMARY

ENERGY UTILITY

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

Company name/CPUC Utility No.: Pacific Gas and Electric Company (U 39 M)

Utility type:
☑ ELC ☑ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Stuart Rubio
Phone #: (415) 973-4587
E-mail: PGETariffs@pge.com
E-mail Disposition Notice to: SHR8@pge.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 4529-G/6407-E

Tier Designation: 2

Subject of AL: Implementation of WEMA Revenue Requirement and Customer Credit

Keywords (choose from CPUC listing): Compliance

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:
D.21-10-022

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

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: 12/12/21

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

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: N/A

Service affected and changes proposed[1]: N/A

Pending advice letters that revise the same tariff sheets: N/A

[1]Discuss in AL if more space is needed.

Clear Form

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: Sidney Bob Dietz II, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

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

Clear Form

Advice 4529-G/6407-E
November 12, 2021

Attachment 1

WEMA Revenue Requirement by Funding Source
July 26, 2017 - December 31, 2019

Line No.	Funding Source	(a) Requested Revenue Requirement	(b) Adjustment for updated cost allocation factor	(c) = (a) + (b) Adjusted Requested Revenue Requirement	(d) Negotiated Reduction in Revenue Requirement	(e) = (c) + (d) Adopted Settlement Revenue Requirement
1						
2	**Incremental Expense-related Revenue**					
3	Electric Generation	126,031,890	(1,630,450)	124,401,440	(11,796,292)	112,605,148
4	Electric Distribution	185,037,497	(2,388,127)	182,649,370	(17,319,080)	165,330,290
5	Gas Distribution	121,485,138	(1,569,038)	119,916,100	(11,370,727)	108,545,373
6	Gas Transmission and Storage	45,876,221	(594,269)	45,281,953	(4,293,908)	40,988,045
7	Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) - SAFSTOR	613,045	(14,212)	598,834	(57,380)	541,454
8		479,043,791	(6,196,095)	472,847,696	(44,837,385)	428,010,311
9						
10	**Interest**					
11	Electric Generation	3,585,996	(81,553)	3,504,443	(335,641)	3,168,802
12	Electric Distribution	5,264,887	(119,450)	5,145,436	(492,781)	4,652,655
13	Gas Distribution	3,456,627	(78,482)	3,378,145	(323,532)	3,054,613
14	Gas Transmission and Storage	1,305,320	(29,725)	1,275,595	(122,175)	1,153,420
15	Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) - SAFSTOR	17,443	(711)	16,732	(1,633)	15,099
16		13,630,273	(309,921)	13,320,353	(1,275,762)	12,044,591
17						
18						
19	**Revenue Fees and Uncollectibles (RF&U)**					
20	Electric Generation	1,473,690	(19,429)	1,454,261	(137,934)	1,316,327
21	Electric Distribution	2,163,642	(28,458)	2,135,184	(202,512)	1,932,672
22	Gas Distribution	1,707,271	(22,027)	1,685,244	(159,797)	1,525,447
23	Gas Transmission and Storage	631,801	(8,342)	623,459	(59,135)	564,324
24	Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) - SAFSTOR	7,168	(169)	6,999	(671)	6,328
25		5,983,572	(78,427)	5,905,146	(560,049)	5,345,099
26						
27						
28	**TOTAL Incremental Expense-related Revenue (including Interest and RF&U)**					
29	Electric Generation	131,091,577	(1,731,432)	129,360,145	(12,269,867)	117,090,278
30	Electric Distribution	192,466,026	(2,536,036)	189,929,990	(18,014,373)	171,915,618
31	Gas Distribution	126,649,036	(1,669,547)	124,979,489	(11,854,055)	113,125,434
32	Gas Transmission and Storage	47,813,342	(632,335)	47,181,007	(4,475,218)	42,705,789
33	Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) - SAFSTOR	637,657	(15,092)	622,565	(59,683)	562,881
34		498,657,638	(6,584,442)	492,073,196	(46,673,196)	445,400,000
35						
36						
37						
38						
39						
40						

Computation of refundable insurance payments for excess liability insurance coverage for the period covered by the application

(1) Determine population of refundable net expenses applicable to period covered by application ($574,190)

600,000	Fees Paid
(1,174,190)	Net Return of Reimbursements Received
(574,190)	Total Company refundable insurance payments

(2) Compute CPUC jurisdictional portion of refundable net expenses ($522,388)

2019 CPUC %		
90.98%	(522,388)	CPUC Jurisdictional Portion

(3) Allocate amount subject to refund to various funding sources utilizing related settlement RRQ ($445.4M) ratio.

Ratio	Settlement RRQ	
26.29%	117,090,278	Electric Generation
38.60%	171,915,618	Electric Distribution
25.40%	113,125,434	Gas Distribution
9.59%	42,705,789	Gas Transmission and Storage
0.13%	562,881	Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) - SAFSTOR
100.00%	445,400,000	

	Refundable Cost	
	137,330	Electric Generation
	201,633	Electric Distribution
	132,680	Gas Distribution
	50,088	Gas Transmission and Storage
	660	Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) - SAFSTOR
	522,388	

PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency Financing

California Alternative Energy and Advanced Transportation Financing Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison Schneider & Harris LLP Energy Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
ICF
IGS Energy
International Power Technology

Intertie

Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
Yep Energy

ATTACHMENT 10.2

A.23-02-018 - PG&E Data Request 24,
ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q002

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_024-Q002		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q002		
Request Date:	August 18, 2023	Requester DR No.:	024
Date Sent:	August 25, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Ryan Stanley	Requester:	Nicholas Hwang/ Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.23-02-018 PG&E – DR NO. 24

Regarding tabs [P) 2022 AET – EG] and [(B2) 2022 ERRA Forecast] of spreadsheet "ERRA- 2022-PGE-Compliance-CalAdvocates-DR-010-Q001_F42-CONF" provided in response to Data Request 10:

$29,662.30 was transferred from the Wildfire Expense Memorandum Account (WEMA) to ERRA in the Annual Electric True-up Transfer and is included in the total value of tariff line- item 5.ah in PG&E's 2022 ERRA closing sheet. As noted in PG&E workpapers, AL 6407-E, which approves the transfer from WEMA to various other accounts for recovery, does not authorize recovery from the ERRA.

QUESTION 002

In cell A25 of tab [P) 2022 AET - EG], the workpaper states that PG&E "…decided to transfer the $29,662.30 to ERRA account consistent with the rate recovery presented in its 2022 ERRA Forecast Application and approved in D.22-02-002." Explain in greater detail how the transfer to ERRA and PABA included in PG&E workpapers is more consistent with rate recovery established in the ERRA Forecast than the transfer to PABA anticipated in AL 6407-E.

ANSWER 002

The WEMA costs and the 2020 GRC RO model allocation are authorized in the 2022 ERRA Forecast Application and approved in D.22-02-002. As described in PG&E's November Update testimony (please see Section C.4.a., "Updated UOG Related Cost"), PG&E proposed an allocation methodology utilizing the D.20-12-005 adopted 2020 GRC revenue requirement of applicable facilities, which includes allocations to both PABA and ERRA.[1] This methodology was acknowledged in D.22-02-0002, page 21 and that "no party dispute[d] PG&E's proposed revenue requirements for Utility-Owned Generation Costs as reflected in the adopted December Update."[2]

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1 Please see PG&E's responses to Questions 1 and 4 of this data request for more information on facilities recovered in ERRA.

2 D.22-02-002, p. 21.

ATTACHMENT 10.3

A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q003-Atch01.

(Available via Email)

ATTACHMENT 10.4

A.23-02-018 - PG&E Data Request 24, ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q004

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_024-Q004		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_024-Q004		
Request Date:	August 18, 2023	Requester DR No.:	024
Date Sent:	August 25, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Ryan Stanley	Requester:	Nicholas Hwang/ Karl Stellrecht

SUBJECT: DATA REQUEST NO. CAL ADVOCATES A.23-02-018 PG&E – DR NO. 24

Regarding tabs [P) 2022 AET – EG] and [(B2) 2022 ERRA Forecast] of spreadsheet "ERRA- 2022-PGE-Compliance-CalAdvocates-DR-010-Q001_F42-CONF" provided in response to Data Request 10:

$29,662.30 was transferred from the Wildfire Expense Memorandum Account (WEMA) to ERRA in the Annual Electric True-up Transfer and is included in the total value of tariff line- item 5.ah in PG&E's 2022 ERRA closing sheet. As noted in PG&E workpapers, AL 6407-E, which approves the transfer from WEMA to various other accounts for recovery, does not authorize recovery from the ERRA.

QUESTION 004

State any specific expenses associated with the $29,662.30 transferred to ERRA.

ANSWER 004

WEMA costs include incremental wildfire liability insurance costs which are allocated to ERRA and PABA vintages based upon the 2020 GRC RO model allocation factors based upon the Hydro, Fossil and Solar facilities. The portion that was allocated to ERRA of $29,662.30 is related to two small solar facilities (AT&T Park Solar Arrays and SF Service Center Solar Plant).

ATTACHMENT 10.5

A.23-02-018 - PG&E Data Request 10, ERRA-2022-PGE-Compliance_DR_CalAdvocates_010-Q001_F42-CONF.

(CONFIDENTIAL)

(Available via email)

ATTACHEMNT 10.6

A.23-02-018 - PG&E Data Request 22, ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q001

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_022-Q001		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q001		
Request Date:	July 27, 2023	Requester DR No.:	022
Date Sent:	August 17, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:	Ryan Stanley / Donna Barry	Requester:	Nicholas Hwang/ Karl Stellrecht

QUESTION 001

Regarding cell G82 of tab [B2_2022 GRC UOG Allocation] of "ERRA-2022-PG&E-Compliance_CalAdv010-Q001_F17_Pt02-CONF" and the amount of $4,795,048.78[1] included in the calculation of the March 2022 ERRA BA closing sheet entry for Preliminary Statement tariff line-item 5.j. (sum total $3,599,339.66): Explain why PG&E included $222,149.12 of non-ESA debits in the calculation of the ERRA BA 2020 Adopted GRC RRQ Gross of RF&U.

ANSWER 001

All non-ESA costs are part of the General Rates Case (GRC) revenue requirements that are recoverable in ERRA and PABA as authorized in AL 5440-E. For 2022 (and each year), the allocation of these costs between ERRA and PABA vintages is also presented as part of the total revenue requirement which is approved in the ERRA Forecast Decision (D.22-02-002).

Regarding the approximately $222 thousand of non-ESA debits referenced in the question above, these are associated with two of PG&E's utility-owned solar facilities – AT&T Park Solar Arrays and SF Service Center Solar Plant. These facilities were pilot projects and are not PCIA-eligible facilities. The facilities had been fully depreciated prior to the implementation of PABA in 2019. The non-ESA expense is intended to reflect an allocated portion of the authorized O&M and decommissioning costs approved in the 2020 Adopted GRC RRQ for PG&E's utility-owned solar facility resource portfolio. An allocated portion of the authorized solar facilities O&M and decommissioning costs was assigned to these two pilot solar facilities and allocated to ERRA for recovery in rates during the 2022 ERRA Forecast proceedings approved for 2022.

Upon review of the allocation methodology, PG&E has determined that part of the non-ESA costs allocated to AT&T Park Solar Arrays and SF Service Center Solar Plant inadvertently include some allocated amounts for capital revenue requirements associated with depreciation and return. PG&E proposes to review its revenue allocation methodology and, if appropriate, to adjust this allocation methodology for the final implementation of the 2023 GRC Decision to ensure that amounts for these two plants are only associated with O&M and decommissioning expenses.

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1 Computed in cell H106 of the same tab, or cell G51 of tab [B_NEW 2022 GRC EG Base] in the same Excel file.

ATTACHMENT 10.7

A.23-02-018 - PG&E Data Request 22, ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q002Supp001

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_022-Q002		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q002Supp01		
Request Date:	July 27, 2023	Requester DR No.:	022
Date Sent:	August 10, 2023 (original) August 17, 2023 (supplemental)	Requesting Party:	Public Advocates Office
PG&E Witness:	Ryan Stanley / Donna Barry	Requester:	Nicholas Hwang/ Karl Stellrecht

QUESTION 002

Does PG&E assert that these non-ESA charges should be included in the referenced calculation?

ANSWER 002

Undetermined at this time.

ANSWER 002_SUPP

PG&E believes it is appropriate to include these non-ESA charges in the referenced calculation for ERRA recovery consistent with the approved presentation of revenue requirements approved in the 2022 ERRA Forecast Decision (D.22-02-002) and underlying workpapers. As noted in response to Question 1 of this data request, the two utility-owned solar facilities – AT&T Park Solar Arrays and SF Service Center Solar Plant – were pilot projects that are not PCIA-eligible facilities. PG&E consistently presents these facilities and their authorized revenue requirements as recoverable in ERRA in this ERRA Compliance Proceeding as part of data responses providing its monthly Regulatory Data Inventory (RDI) in response to CalAdvocates_MDR001-Q064 and associated attachments.[1,2] A review of the RDI entries for these resources shows that they do not indicate a CAISO resource ID as the resources are directly connected to PG&E's distribution system.

[1] Please see entries for Lognums 26R001X, 26R002X, and 26R003X within any RDI attachment provided.

[2] Similar information has been provided as part of PG&E's response to JointCCAs_001-Q04, Attachment 2.

ATTACHMENT 10.8

A.23-02-018 - PG&E Data Request 22, ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q004Supp001.

PACIFIC GAS AND ELECTRIC COMPANY
2022 Energy Resource Recovery Account – Compliance
Application 23-02-018
Data Response

PG&E Data Request No.:	CalAdvocates_022-Q004		
PG&E File Name:	ERRA-2022-PGE-Compliance_DR_CalAdvocates_022-Q004Supp01		
Request Date:	July 27, 2023	Requester DR No.:	022
Date Sent:	August 10, 2023(original) August 17, 2023(supplemental)	Requesting Party:	Public Advocates Office
PG&E Witness:	Ryan Stanley	Requester:	Nicholas Hwang/ Karl Stellrecht

QUESTION 004

Are non-ESA costs adjusted out of the ERRA BA closing sheet entry for tariff line-item 5.j.?

a. If yes, provide additional supporting documentation for the adjustment or indicate supporting entries in previously provided workpapers.

ANSWER 004

Undetermined at this time.

ANSWER 004_SUPP

PG&E interprets this question to ask whether there is a separate effort or process to further adjust out non-ESA costs *after* the process that produces the analysis found in tab [B2_2022 GRC UOG Allocation] of "ERRA-2022-PG&E-Compliance_CalAdv010-Q001_F17_Pt02-CONF."

No, there is no further process to adjust out non-ESA costs after the analysis previously provided.

ATTACHMENT 10.9

A.23-02-018 - PG&E Data Request 22,

ERRA-2022-PGE-Compliance_DR_CalAdvocates_010-Q001_F17_Pt02-CONF.

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