PACIFIC GAS AND ELECTRIC COMPANY Gas Operations Data Response

PG&E Data Request Index No.:	12919		
Request Date:	02-27-2019	Date Sent:	03-29-2019
Requesting Party:	Government Relations		
External Requester:	Alexandria Colletti	PG&E Contact:	Christine Cowsert

QUESTION 12919.01: ER1 - Finalized timeline of PG&E response

RESPONSE 12919.01: Please see attachment "Index 12919-01_TIMELINE 02132019 1500 w supp docs_CONF.xlsx" for a copy of the finalized timeline for the emergency response to the third-party dig-in in San Francisco on February 6, 2019. Note, PG&E provided a copy of this timeline to the NTSB on February 13, 2019, and is re-providing a copy for convenience with an additional column describing any supporting documentation that was readily available.

Please see attachment "Index 12919-01_Timeline Supporting Documentation_CONF.zip" for copies of the timeline supporting documentation.

QUESTION 12919.02: ER2 - Documentation to support finalized timeline (emails, texts, call logs, notes, internal interview records, SCADA logs, etc.)

RESPONSE 12919.02: Please see Response 12919.01.

QUESTION 12919.03: ER3 - All procedures relating to Emergency Response/Abnormal Operations with Release *Note: Emergency Response Plan has already been received, but specific procedures are needed

RESPONSE 12919.03: Please refer to the table below for copies of PG&E procedures and processes related to gas emergency response to dig-in events:

Attachment	Description
Index 12919-03_TD-4100P-08_CONF.pdf	PG&E utility procedure titled "Performing Leak Surveys after Significant Events"
Index 12919-03_TD-6100P-04_CONF.pdf	PG&E utility procedure titled "Gas Event Evacuation For Gas Service Representatives (GSRs)"
Index 12919-03_TD-4441P-04_CONF.pdf	PG&E utility procedure titled "Emergency Clearances for Distribution Facilities"
Index 12919-03_911 Notification Process_CONF.pdf	PG&E Gas Control Center Process – 911 Notification Process

Attachment	Description
Index 12919-03_Abnormal Incident Reporting Process_CONF.pdf	PG&E Gas Control Center Process – Abnormal Incident Reporting Process
Index 12919-03_Emergency Event Command Mode Process_CONF.pdf	PG&E Gas Control Center Process – Emergency Event Command Mode Process
Index 12919-03_GDCC Gas Event Response Process_CONF.pdf	PG&E Gas Distribution Control Center Process – GDCC Gas Event Response Process
Index 12919-03_GDCC Gas Incident and Event Notification Process_CONF.pdf	PG&E Gas Distribution Control Center Process – GDCC Gas Incident and Event Notification Process

Note, PG&E provided a copy of PG&E's Gas Emergency Response Plan (GERP) to the NTSB on February 9, 2019, and is re-providing a copy for convenience. Please see attachment "Index 12919-03_EMER-3003M_CONF.pdf."

QUESTION 12919.04: ER4 - Internal Accident Report with lessons learned **RESPONSE 12919.04:** Please see attachment "*Index 12919-04_2019_SF OEC-GEC Parker and Geary Fire 02-06-19 AAR_CONF.xlsx*" for a copy of the after-action review (AAR) for the third-party dig-in in San Francisco on February 6, 2019.

Note, PG&E provided a copy of PG&E's Dig-In Reduction Team (DiRT) to the NTSB on February 15, 2019, and is re-providing a copy for convenience. Please see attachment "Index 12919-09_PGE DiRT Investigation Narrative EMT 21439_CONF.pdf."

QUESTION 12919.05: ER5 - All isolation strategy documents created by the GDCC planning team during the event response, including the initial isolation strategy (4" & 6" squeeze-offs), Synergi screenshot, and final version with the times they were created and distributed **RESPONSE 12919.05:** Please see the following table and accompanying attachments for copies of isolation strategy documents created by PG&E's Gas Distribution Control Center (GDCC):

Attachment	Description	Created	Distributed
"Index 12919-05_1355 Isolation Plan_CONF.jpg"	Emergency shutdown zone screenshot	February 6, 2019 at 1355 hours	February 6, 2019 at 1355 hours
"Index 12919-05_1441 Isolation Plan_CONF.pdf"	PDF embedded in incident 21439 14:37	February 6, 2019 at 1424 hours	February 6, 2019 at 1437 hours
"Index 12919-05_1523 Isolation Plan_CONF.pdf"	PDF embedded in incident 21439 15:23	February 6, 2019 at 1520 hours	February 6, 2019 at 1523 hours
"Index 12919-05_1935 Isolation Plan_CONF.pdf"	Third page of "Incident Number 21439 06-Feb-19 15- 20-56.pdf"	February 6, 2019 at 1520 hours	Unknown
"Index 12919-05_Incident Number 21439 06-Feb-19 14-24-27_CONF.pdf"	First 2 isolation scenarios	February 6, 2019 at 1424 hours	February 6, 2019 at 1437 hours

Attachment	Description	Created	Distributed
"Index 12919-05_Incident Number 21439 06-Feb-19 15-20-56_CONF.pdf"	Addition of the final (third) isolation scenario with valve locations	February 6, 2019 at 1520 hours	February 6, 2019 at 1523 hours
"Index 12919-05_Final Isolation Plan_CONF.pdf"	Final strategy created for OEC documentation and distribution after isolation	February 6, 2019 at 1935 hours	February 6, 2019 at 1935 hours

QUESTION 12919.06: ER6 - System Map with GIS data overlay for all 6 valves closed and the 4" squeeze-off point as well as the locations of the 2 attempted 6" squeeze-off excavations **RESPONSE 12919.06:** Please see attachment "Index 12919-06_Map - Isolation Plan and Bell Hole Locations CONF.pdf" for a copy of the system map showing the following locations:

- the six valves used to shutoff gas in the area of the incident
- the two attempted 6" squeeze-off points
- the 4" squeeze-off point

QUESTION 12919.07: ER7 - ICS procedures

RESPONSE 12919.07: PG&E does not have specific procedures for its Incident Command System (ICS); however, this systematic tool is described in section 3.2.2.2 titled "Incident Command System (ICS)" of PG&E's Gas Emergency Response Plan (GERP). The GERP further describes how Gas Operations utilizes the ICS structure in section 3.2.4 titled "Gas Emergency Centers, Teams, and Facilities." The internal gas departments/programs (i.e. Field Services, Gas Control Center, etc.) specific emergency response procedures referenced within the GERP are ICS compliant.

QUESTION 12919.08: ER8 - Dig-in response time statistics for the last 5 years in San Francisco County

RESPONSE 12919.08: Please see the below table, which provides the number of dig-in calls responded to by PG&E's Gas Service Representatives (GSRs) in San Francisco Division, by year, along with average response times:

Year	Number of Responses	Average Response Time (minutes)
2014	143	18.2
2015	137	21.2
2016	115	21.5
2017	120	21.9
2018	102	23.1
2019 ¹	13	21.9

Year	Number of Responses	Average Response Time (minutes)
¹ through February 28, 2019		

The data in the table reflects the following:

- PG&E does not have response data broken down by counties. Data was pulled for the San Francisco Division. An additional review of two years of response data for the adjacent Peninsula Division found no responses located within San Francisco County borders.
- Data includes responses to all calls initially reported as "Dig In"; some of these responses may subsequently be determined to have no unplanned release of gas.
- Data includes Dig In calls responded to by Gas Service Representatives (GSRs) from Gas Field Service. Data excludes Dig In calls responded to by Maintenance and Construction (M&C) crews before a GSR could respond.
- Average response time is the time PG&E was notified to when a GSR arrived onsite.
- Data represents Gas Field Service responses to all calls received between January 1, 2014 and February 28, 2019.

Additionally, please see the table below, which provides Average Make Safe Time/Shutting in the Gas (SITG) performance in San Francisco, by year:

Average Make Safe Time (minutes)		
Year	STIG Mains	STIG Services
2014	49.8	33.7
2015	57.3	38.6
2016	62.7	32.9
2017	76.2	34.0
2018	63.4	31.2

QUESTION 12919.09: ER9 - Procedures for Emergency Response drills and results of last drill training exercise

RESPONSE 12919.09: Please refer to the table below for copies of the materials for the last company functional exercise that the San Francisco Operations Emergency Center (OEC) participated in between August 8-9, 2017 which simulated a catastrophic earthquake:

Attachment	Description
Index 12919-09_2017 Company Exercise ExPlan_CONF.pdf	Exercise Plan
Index 12919-09_SF OEC EEG_CONF.pdf	Exercise Evaluation Guide
Index 12919-09_2017 Earthquake FE AAR 082517_CONF.pdf	After-Action Report

Note, a functional exercise is an operations-based exercise that is a single or multi-agency activity designed to evaluate capabilities and multiple functions using simulated response. An FE is typically used to evaluate management of the Emergency Operation Center (EOC), command posts, and headquarters, and assess adequacy of response plans and resources.

QUESTION 12919.10: ER10 - Monthly >2 hr Response Call meeting notes and/or lessons learned for 2018

RESPONSE 12919.10: PG&E's Gas Operations holds a "Monthly SITG Review Meeting" to review long duration events, generally defined as events lasting over 120 minutes, that occurred during the previous month. These meetings, which are hosted by the Shutting in the Gas (SITG) process owner, are attended by supervisors, superintendents and directors from the Gas Maintenance and Construction and Field Services groups, managers and supervisors from the Gas Distribution Control Center, and the director and manager from the Gas Dispatch Center. There are four main elements to each meeting: (1) review metrics from the previous month and YTD results for both mains and services, (2) incident review of the previous month's long duration events, (3) share lessons learned and best practices, and (4) roundtable.

There is no formal documentation of meeting notes or lessons learned from these meetings. However, PG&E does have Outlook emails and meeting invitations for each of the monthly meetings in 2018. These Outlook items contain agenda topics and a list of the long duration events that are anticipated to be discussed at each meeting. Please see attachment "Index 12919-10_2018 Monthly SITG Review Meeting Agendas_CONF.pdf."

PG&E also has a list of initiatives and issues raised that are generated from tier reporting. See the following table:

Description	Status
Pursue shoring trailers to aide in delivering shoring to active events	Reviewing divisions without owned shoring and identifying costs and implementation strategy of trailers
Reinforce the use of emergency trailers on all main damages	Discussed on each call, emphasize utilization is a best practice
Pursue OQ of GSRs to squeeze steel pipe <1 inch	Requires union agreement
Develop audit of response communications	Launched in February 2019
Develop metric to measure quality data entry of incident details	Launched in February 2019
Identified 212 issues	Regularly engage IBEW leadership to work with represented employees to respond to events. Want to improve 212 language to promote prompt after hours response

Additionally, see below for SITG Key Process Improvements since 2012:

- Enhanced plastic squeeze capability from ~50% to all GSRs < 1.5" plastic pipe
- Provide yearly plastic squeeze training for all Field Service employees
- Purchased and implemented emergency trailers in every division, allowing for emergency equipment to be accessed quickly and easily
- Purchased additional steel squeezers for 2-8" steel pipe (housed on emergency trailers)
- Implemented Emergency Management tool to alert M&C of SITG events when notified by 3rd party emergency organizations
- Established concurrent response protocol (dispatch M&C and Field Service resources)
 when notified by emergency agencies
- Implemented 30-60-90-120+ minute communication protocols between GDCC and IC to ensure consistent communication and issue escalation during events
- Tier 3 incident review meetings monthly to share best practices and review long duration events
- Changed thought process in Gas Operations from a perspective that "blowing to atmosphere" is safe, modified to "shut in" is priority over keeping customers in service

Please see attachment "Index 12919-10_SITG yoy 2012 2018_CONF.xlsx" for a copy of PG&E's Average Make Safe Time/Shutting in the Gas (SITG) performance in systemwide, by year.

QUESTION 12919.11: ER11 - Procedures for valve closures and annual inspections **RESPONSE 12919.11:** Please see attachment "Index 12919-11_TD-4430P-04.pdf_CONF" a copy of PG&E's utility procedure titled "Gas Valve Maintenance" for valve annual inspections and valve operations during maintenance, including closures. This procedure is applied in emergency situations for manual valve closures.

QUESTION 12919.12: ER12 - Procedures for squeeze-off **RESPONSE 12919.12:** Please refer to the table below for copies of PG&E procedures for squeeze-off:

Attachment	Description
Index 12919-12_WP4170-02_CONF.pdf	PG&E work procedure titled "Squeezing Polyethylene (PE) Pipe"
Index 12919-12_TD-4611P-01_CONF.pdf	PG&E utility procedure titled "Squeezing Steel Pipelines - 3/4" through 2" Operation - Using Mustang Model PS-62 Steel Squeeze Tool"
Index 12919-12_TD-4611P-02_CONF.pdf	PG&E utility procedure titled "Squeezing Steel Pipelines - 2" through 8" Operation - Using Connectra or Georg Fischer (GF) Models SLS-4A and SLS-8B Steelsqueez™ Equipment"

QUESTION 12919.13: ER13 - Procedures for locates and excavation

RESPONSE 12919.13: Please refer to the table below for copies of PG&E procedures for locates and excavation:

Attachment	Description
Index 12919-13_TD-4412P- 05_Rev3_CONF.pdf	PG&E utility procedure titled "Excavation Procedures for Damage Prevention"
Index 12919-13_TD-5811P- 1100_Rev0a_CONF.pdf	PG&E utility procedure titled "Locating Methods and Instruments"
Index 12919-13_TD-5811P- 1200_Rev0c_CONF.pdf	PG&E utility procedure titled "Locating and Marking Subsurface (Underground) Facilities"
Index 12919-13_TD-5811P- 1300_Rev1b_CONF.pdf	PG&E utility procedure titled "Responding to an Underground Service Alert (USA) Ticket"

QUESTION 12919.14: ER14 - Specifications and description of equipment used for line location during the excavations for squeeze-off

RESPONSE 12919.14: The Vivax vLoc-9800 and Pipehorn 800-HL were used for line location during the excavations for squeeze-off for the third-party dig-in in San Francisco on February 6, 2019. This equipment is described in the attachment "Index 12919-14_M-60_Rev5_CONF.pdf" PG&E Gas Design Standard titled "Approved Locate and Mark Instruments, Equipment, Accessories, and Products".

QUESTION 12919.15: ER15 - Incident Action Plan for this specific event and other ICS documentation created for this accident

RESPONSE 12919.15: Please refer to the table below for copies of the Gas Incident Situation Reports and Incident Command System (ICS) documentation created for the third-party dig-in in San Francisco on February 6, 2019:

Attachment	Description
Index 12919-14_SF Dig In at Geary_02062019_ERC_CONF.pdf	Emergency Preparedness Coordinator checklist
Index 12919-14_SF Dig In at Geary_02062019_GIR 1_CONF.pdf	Gas Incident Situation Report, First Situation Report at 1525 hours on February 6, 2019
Index 12919-14_SF Dig In at Geary_02062019_GIR 2_CONF.pdf	Gas Incident Situation Report, Second Situation Report at 1616 hours on February 6, 2019
Index 12919-14_SF Dig In at Geary_02062019_GIR 3_CONF.pdf	Gas Incident Situation Report, Third Situation Report at 1800 hours on February 6, 2019
Index 12919-14_SF Dig In at Geary_02062019_GIR 4_CONF.pdf	Gas Incident Situation Report, Fourth Situation Report at 2200 hours on February 6, 2019
Index 12919-14_SF Dig In at Geary_02062019_GIR 5_CONF.pdf	Gas Incident Situation Report, Fifth Situation Report at 1000 hours on February 7, 2019

Attachment	Description	
Index 12919-14_SF Dig In at Geary_02062019_GIR 6_CONF.pdf	Gas Incident Situation Report, Sixth Situation Report at 1400 hours on February 7, 2019	
Index 12919-14_SF Dig In at Geary_02062019_GIR 7_CONF.pdf	Gas Incident Situation Report, Seventh Situation Report at 1700 hours on February 7, 2019	
Index 12919-14_SF Dig In at Geary_02062019_GIR 8-Final.pdf	Gas Incident Situation Report, Eighth Situation Report at 2300 hours on February 7, 2019	
Index 12919-14_SF Dig In at Geary_02062019_ICS 201 (GEC).pdf	Form ICS 201 – Incident Briefing (GEC)	
Index 12919-14_SF Dig In at Geary_02062019_ICS 202 OP 1 (OEC).pdf	Form ICS 202 – Incident Objectives (OEC) operational period 1	
Index 12919-14_SF Dig In at Geary_02062019_ICS 202 OP 2 (OEC).pdf	Form ICS 202 – Incident Objectives (OEC) operational period 2	
Index 12919-14_SF Dig In at Geary_02062019_ICS 206 (OEC).pdf	Form ICS 206 – Medical Plan (OEC) operational period 2	
Index 12919-14_SF Dig In at Geary_02062019_ICS 208 OP 1 (Day 1 GEC).pdf	Form ICS 208 – Safety Message (GEC) operational period 1, day 1	
Index 12919-14_SF Dig In at Geary_02062019_ICS 208 OP 1 (Day 2 GEC).pdf	Form ICS 208 – Safety Message (GEC) operational period 1, day 2	
Index 12919-14_SF Dig In at Geary_02062019_ICS 211 OP 1 (OEC).pdf	Form ICS 211 – Check In/Check Out Log (OEC) operational period 1	
Index 12919-14_SF Dig In at Geary_02062019_ICS 211 OP 2 (OEC).pdf	Form ICS 211 – Check In/Check Out Log (OEC) operational period 2	
Index 12919-14_SF Dig In at Geary_02062019_ICS 215 (GEC).pdf	Form ICS 215 – Operational Planning Worksheet (GEC)	
Index 12919-14_SF Dig In at Geary_02062019_ICS 230 OP 1 (GEC).pdf	Form ICS 230 – Schedule (GEC) operational period, day 1	
Index 12919-14_SF Dig In at Geary_02062019_ICS 230 OP 1 (OEC).pdf	Form ICS 230 – Schedule (OEC) operational period 1	
Index 12919-14_SF Dig In at Geary_02062019_ICS 230 OP 1 -Day 2 (GEC).pdf	Form ICS 230 – Schedule (GEC) operational period 1, day 2	
Index 12919-14_SF Dig In at Geary_02062019_ICS 230 OP 2 (OEC).pdf	Form ICS 230 – Schedule (OEC) operational period 2	

Note, the Incident Action Plan (IAP) consists of the ICS Forms 201, 202, 206, 208, 215, and 230, all provided in this response.

QUESTION 12919.16: ER16 - OQ information for individuals who responded to this event in the field with brief descriptions of the work they performed (e.g. John Doe located 4" main,

hand-dug for 4" excavation); specifically, personnel who performed line locates, 4" & 6" excavations, 4" squeeze-off, valve closures, purge, welding of the fitting to complete purge, cutout of damaged pipe, replacement of pipe, and other major field roles in the emergency response and restart of the system (not including gas service representatives performing relights and other related activities)

RESPONSE 12919.16: The third-party dig-in in San Francisco on February 6, 2019 was responded to by PG&E personnel from the following organizations: Locate and Mark (L&M), Gas Pipeline Operations and Maintenance (GPOM), Maintenance & Construction (M&C), and Gas Distribution Control Center (GDCC).

Descriptions of each individual's covered tasks performed as related to this incident are provided below.

Attachment	Employee (LAN ID)	Description of Work Performed
Index 12919-16_OQ WRP7_CONF.pdf	Bill Pagan	Located 12" steel main on Geary Boulevard and the 6" main, which is tied to the 12" main, as part of attempt to locate the 6" and the 12" tee connection at the intersection of Parker Avenue and Geary Boulevard.
Index 12919-16_OQ VSM2_CONF.pdf	Vinny Matsu	(1) Located the 6" main on Geary Boulevard with Bill Pagan, (2) Located the end of the 2" plastic main on the north end of Geary Boulevard, (3) Located the electric primary and secondary on the northwest corner of Geary Boulevard and Parker Avenue, (4) Located all CGI (Can't Get In) gas services for cutoffs.
Index 12919-16_OQ DMSP_CONF.pdf	Danny Spencer	Operated valves V-3486, V-3489, V-315, and V-3406
Index 12919-16_OQ A6M1_CONF.pdf	Alex Medina	Assisted Danny Spencer in operating valves V-3486, V-3489, V-315, and V-3406
Index 12919-16_OQ J2GA_CONF.pdf	Jerrod Greer	Operated valves V-190 and V-367
Index 12919-16_OQ R6GV_CONF.pdf	Ray Gutierrez	Assisted Jerrod Greer in operating valves V-190 and V-367
Index 12919-16_OQ AAA8_CONF.pdf	Alex Adames	(1) Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used, (2) Dug hole at the intersection of Arguello Boulevard and Geary Boulevard, (3) Purged main

Attachment	Employee (LAN ID)	Description of Work Performed
Index 12919-16_OQ ANT6_CONF.pdf	Andrew Thomas ((1) Dug hole at 176 Parker Avenue, (2) Dug at repair site at 3300 Geary Boulevard, (3) Performed squeeze at 176 Parker Avenue, (4) Repaired damaged pipe (including cutting and replacing): performed tapping of tee, pressure test, and soap test at operating pressure
Index 12919-16_OQ A7B0_CONF.pdf	Anthony Bagala	(1) Dug hole at 176 Parker Avenue, (2) Repaired damaged pipe (including cutting and replacing): performed all fusions to plastic (two 4" electrofusion couplings, one 2" electrofusion tee, two 2" electrofusion couplings)
Index 12919-16_OQ A4SG_CONF.pdf	Anthony San Diego (Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ RMBU_CONF.pdf	Bob Barlesi	Purged main
Index 12919-16_OQ CRHA_CONF.pdf	Chris Holland	Purged main
Index 12919-16_OQ EJE6_CONF.pdf	Emmanuel Escalante	Dug hole at 176 Parker Avenue
Index 12919-16_OQ JO1Q_CONF.pdf	Jack Macaulay	Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ J3FZ_CONF.pdf	Jason Frink	Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ JJPW_CONF.pdf	John Preciado	Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ J7PY_CONF.pdf	Juan Perez	(1) Dug hole at the intersection of Arguello Boulevard and Geary Boulevard, (2) Tapped and welded 2" fitting on main at the intersection of Geary Boulevard and Arguello Boulevard, (3) Purged main

Attachment	Employee (LAN ID)	Description of Work Performed
Index 12919-16_OQ K1DB_CONF.pdf	Kham Dang	Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ OMT1_CONF.pdf	Omeli Tagoilelagi	Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ PFM8_CONF.pdf	Patrick Macaulay	Dug hole at 176 Parker Avenue
Index 12919-16_OQ R6L3_CONF.pdf	Ricardo Luna	(1) Dug hole at 176 Parker Avenue, (2) Dug hole at the intersection of Arguello Boulevard and Geary Boulevard
Index 12919-16_OQ RBH0_CONF.pdf	Rod Harrington	Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ R5S2_CONF.pdf	Ryan Stoops	(1) Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used, (2) Dug hole at the intersection of Arguello Boulevard and Geary Boulevard
Index 12919-16_OQ SJFB_CONF.pdf	Steve Fare	Dug hole at 176 Parker Avenue
Index 12919-16_OQ TXFP_CONF.pdf	Tahmal Fleming (Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used
Index 12919-16_OQ T1BA_CONF.pdf	Travis Bautista	(1) Dug hole at the intersection of Geary Boulevard and Parker Avenue to access a possible steel squeeze point that was not used, (2) Dug hole at the intersection of Arguello Boulevard and Geary Boulevard
Index 12919-16_OQ C2RL_CONF.pdf	Christina Rogers (Senior Operator on duty monitoring continuous data provided to the control room via SCADA during the dig-in and emergency response ¹
Index 12919-16_OQ W1M3_CONF.pdf	William Massey	Operator on duty monitoring continuous data provided to the control room via SCADA during the dig-in and emergency response ¹

Attachment	Employee (LAN ID)	Description of Work Performed
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¹ Note, there were no alarms or significant trends that led the Operator to immediately identify the event. PG&E's Gas Control was notified of the event through external sources.