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G20151113-01-DOT

January 12, 2023

Mr. Terence Eng, P.E.
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Notice of Gas Incident Violations (NOPV) for Pacific Gas and Electric Company (PG&E) –
Department of Transportation (DOT) Incident # 1133387

Dear Mr. Eng:

PG&E submits this response to the Safety and Enforcement Division's (SED) NOPV letter dated December 16, 2022, associated with DOT Incident # 1133387. The NOPV letter was issued in response to Jeff Alexander d/b/a Big N Deep Agricultural Development ("Alexander") providing the trial testimony of PG&E employee John Hancock given in the matter of *Ruckman v. Big N Deep, et al.*, Kern County Superior Court Case No. BCV-15-101623 (the "Ruckman Action"). This was one of two trials related to the November 13, 2015 dig-in incident (DOT # 1133387) (the "Incident"). Both trials resulted in judgments against Alexander. As SED will recall, the Incident occurred when Alexander's employee struck and punctured PG&E Line 300A while deep ripping after Alexander's USA ticket expired. The NOPV letter identifies two violations based on Mr. Hancock's testimony: (1) failure to comply with PG&E procedure TD-5811P-104, Rev. 0 because flags were placed more than 50 feet apart; and (2) failure to comply with PG&E procedure TD-5811P-101 Rev. 0 related to screening for expired tickets.

The testimony Alexander provided to SED is incomplete and misleading. Mr. Hancock provided testimony four times (two depositions and two trials). The testimony provided is hostile cross-examination by Alexander's counsel. The questioning misstates and mischaracterizes facts. Because PG&E was no longer a party to the Ruckman Action at the time of Mr. Hancock's testimony, PG&E's counsel did not have an opportunity to question Mr. Hancock to complete the record and clarify misleading questioning by Alexander's counsel. As discussed below, Mr. Hancock did not violate PG&E policies related to flag placement or expired tickets.

Separately, PG&E's policies and procedures related to Locate and Mark ("L&M") have been substantially revised over the course of the last seven years. As discussed below, these changes include new policies related to quality control and documentation of L&M activities. These changes and clarifications are designed, first and foremost, to continue to improve PG&E's efforts to avoid incidents like the Incident at issue, but also to improve documentation to avoid confusion when reviewing these matters in hindsight.

Investigative Finding #1: Spacing of Line Markings

TD-5811P-104, Rev. 0 states in part, "Space line-markings 5-50 ft apart depending on the length of facility being located, the terrain of the land, and the type of excavation."

Starting on page 31 of 81 and ending on page 32 of 81 in Attachment B, Mr. John Hancock was questioned and he answered the following:

Q. All right. So with regard to the spacing of the flags, we have testimony from Dr. Hudgins, who's the expert in this matter, and Dr. Gish showing that they were over 100 feet apart. Do you agree that that was the spacing that you spaced those flags?

A. No.

Q. You think they were 70 feet?

A. 50, 60, 70 feet. I didn't measure them. I paced them out.

Q. You testified in your deposition, sir, 70 to 100; right?

A. At one time. Best of my recollection. It's seven years ago. I believe the first deposition I – I said closer to 50.

Q. Right. Second deposition you said 70 to 100; right?

A. Possibly.

Q. Yes, sir. All right. So with regard to that, you understand that, as it relates to the Damage Prevention Manual, they're supposed to be spaced no further than 50 feet; correct?

A. Correct.

Q. So that would be a violation, too; right?

A. Correct.

According to Mr. Hancock's direct examination above, he did not space the line-markings between 5 and 50 ft apart. SED found PG&E in violation of Title 49 CFR §192.605(a) for failure to follow its procedure TD-5811P-104.

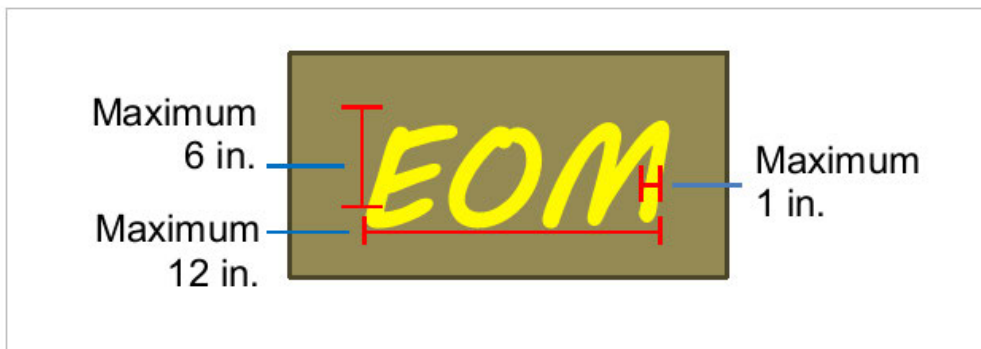
Response to Investigative Finding #1: Spacing of Line Markings

Mr. Hancock initially testified that he placed line markings 50 feet apart. He only stated that they may have been further apart after hostile cross-examination. PG&E procedure TD-5811P-104, Rev. 0 provides as follows:

2. Mark as follows:

- For facility size and composition, create markings not to exceed 6 in. in height and 1 in. thick.
- Mark each line no longer than 12 in. in length. See Figure 2, "Marking Size."

Figure 2. Marking Size



- Space line-markings 5–50 ft apart depending on the length of facility being located, the terrain of the land, and the type of excavation.
- Use offset if facilities are in soil or if markings might be removed by excavation process.

See Attachment 1, Procedure TD-5811P-104, Rev. 0.

Following the incident, SED and PG&E conducted extensive investigations. SED interviewed Mr. Hancock and examined the flags present in the field. SED issued conclusions on December 6, 2016. See Attachment 3, SED Incident Investigation Report dated Dec. 6, 2016. SED concluded that “[t]he pipeline was marked accurately at the time of the incident.” *Id.* at p. 31. SED’s conclusion was based on interviews and field observation and included comparing yellow flags northwest of the rupture location to white remark flags placed by PG&E at SED’s request. *Id.* at fn. 19. These flags were documented in Figure 8 of SED’s Report:



Id. at Fig. 8.

During his first deposition on March 9, 2018, Mr. Hancock testified that the flags were placed 50 feet apart:

Q. Okay. And in marking, um, um, by putting a flag, um, do you have any standard at how you space the flags over the line?

A. I believe it was approximately 50 feet flag – per flag.

Q. Okay. Now, would you, um, place the flag by going through the same process every 50 feet?

A. Yes.

Q. Okay. And so in the end, across the field that was going to be excavated, um, you have this spacing of flags over the line approximately every 50 feet?

A. Correct.

See Attachment 4, March 9, 2018, Hancock Depo. Tr. 32:2-14.

When Mr. Hancock was questioned regarding the flag placement in 2022, four years after his first deposition and almost seven years after the incident, he admitted that he could no longer recall the distance between the flags:

Q. So do you have a better recollection now over how many years later?

A. No. It's – it's getting further and further the span of time. So no.

Q. Okay. So was it between 75 and 100 feet, by what you remember?

THE WITNESS: It could be closer to 60 feet.

BY MR. PARRIS:

Q. You have no idea; isn't that true?

A. At this time, at this date in time, no. Just where the flags are is where the flags are.

See Attachment 5, June 29, 2022, Alexander Trial Tr. 4237:8-4238:24.

Mr. Hancock does not appear to have placed flags further than 50 feet apart. Additionally, PG&E's procedure at the time (and currently) relied on the judgment of locators like Mr. Hancock to place flags at appropriate intervals. L&M supervisors have testified that the 5 to 50 foot reference in PG&E's Damage Prevention Manual was guidance, and not a strict policy. As set forth below, PG&E's Field Guide has been amended and clarified to indicate that marking intervals must be selected to ensure that PG&E's facilities are clearly visible to the excavator. The Field Guide allows the locator discretion to determine the best way to accomplish this, including the distance between marks, based on the terrain, the work being performed, and the locator's discussions with the excavator.

SED investigated the Incident and reached conclusions in 2016. One of those conclusions was that "[t]he pipeline was marked accurately at the time of the incident." Attachment 3 at p. 31. SED should not reverse its position based upon cross-examination of a witness that admits he no longer has specific recollection seven years after the fact.

Investigative Finding #2: Screening of Expired Tickets

TD-5811P-101, Rev. 0 states in part, "IF your folder has an expired ticket, THEN do the following: 1) Inform excavator to submit a renewal or extension ticket. 2) Document conversation with excavator in the Notes section of ticket. 3) Close the expired ticket."

Starting on page 78 of 81 and ending on page 80 of 81 in Attachment B, Mr. John Hancock was questioned and he answered the following:

Q. So with regard to the expired tickets, have you seen this section before, sir?

A. I'm vaguely familiar with it.

Q. All right. It states here that "Sort tickets by creation date"; correct?

A. Correct.

Q. And it states, "Look for expired tickets"; correct?

A. Yes.

Q. "And if expired ticket is older than 28 days"; correct?

A. Yes.

Q. And then if you have that in your folder, then it says, "Do the following." It goes down to No. 1, do the following:

"Inform the excavator to submit a renewal or extension ticket." Do you see that?

A. I do.

Q. Did you do this here?

A. No, this doesn't pertain to us.

Q. Why doesn't it pertain to you, sir.

A. Because we were working under Irthnet by PC computer, not a tablet. When we closed out our tickets on Irthnet, the ticket went away. The only expired tickets we would see were the ones that we did not work and did not cancel.

Q. So with regards to the Damage Prevention Manual, is there any language in there regarding Irthnet or other items that you're aware of that gives extension to this requirement?

A. No. That's why we were not inside this manual.

Q. So you just had your own system that was outside the Damage Prevention Manual?

A. We had a system that we had been working on for years prior to this newest revision.

Q. But, sir, you must have had your own manual, then; right?

A. No. This is -- this is the manual that covered the job. But backbone transmission was not included in detail in this document.

Q. That's because Kettleman City was basically on its own; right?

A. No. All of backbone, which would be Kettleman, Tracey, Hinkley, Topock, Burney, Tionesta all the districts with backbone did it the same way.

Q. Right. But, eventually, it was brought into this system after this accident, wasn't it, sir?

A. I don't have knowledge of that.

According to Mr. Hancock's direct examination above, he did not inform the excavator to submit a renewal or extension ticket because he could only see the expired tickets that he did not work and did not cancel under Irthnet on a computer. If TD-5811P-101 required PG&E locators to inform the excavator to submit a renewal or extension ticket for an expired ticket, Mr. Hancock should be provided with proper equipment for him to follow the procedure. SED found PG&E in violation of Title 49 CFR §192.605(a) for failure to follow its procedure TD-5811P-101.

Response to Investigative Finding #2: Screening of Expired Tickets

Mr. Hancock testified that the PG&E procedure related to screening for expired tickets was not applicable because the tickets related to the Incident were closed and therefore no longer in Mr. Hancock's folder. This testimony was corroborated by numerous other PG&E witnesses who testified that this process applies to tickets in a locator's "folder," that is, open tickets assigned to a locator. Once a locator has completed L&M work related to a ticket, the ticket is closed and it no longer appears in their folder. The procedure at issue only applies in the unlikely event that a locator is assigned an expired ticket that was not closed. It would be impractical and a waste of resources for a locator to continually monitor tickets after the L&M work is complete. Every ticket expires at 28 days unless renewed and it is the responsibility of the excavator to keep their ticket current if work is ongoing. PG&E cannot and should not be responsible for continuously monitoring every closed ticket ever created.

PG&E procedure TD-5811P-101, Rev. 0 provides as follows:

5

Screening Expired and Misplaced Tickets

1. Sort tickets by creation date.
2. Look for **expired tickets**. An expired ticket is older than 28 days, has an expiration date that has passed, but has not been extended or renewed.
 - A. IF your folder has an expired ticket,

THEN do the following:
 - 1) Inform excavator to submit a renewal or extension ticket.
 - 2) Document conversation with excavator in the **Notes** section of ticket.
 - 3) Close the expired ticket.

See Attachment 2, Procedure TD-5811P-101, Rev. 0.

Mr. Hancock testified at his deposition in March, 2018, that once he completed work on a ticket it would be “closed” and no longer appear in his folder. He could not, therefore, screen for its expiration:

Q. Okay. Then let’s go down to Screening, expired, misplaced tickets. Um . . .

A. What? Screening, expired and misplaced tickets. Okay.

Q. Okay. And it says, “If your folder has an expired ticket, then do the following: Inform the excavator to submit a renewal or extension ticket and document the conversation with the excavator in the notes section of the ticket.” Does that fit into any work that you’re doing?

A. No. Because our folder did not have an expired ticket folder. The ticket – It would say “expired” if the ticket was left open.

Q. Okay.

A. It would stay in the folder until closed. And then when it expired, it would give us a notification that the ticket that was held open had expired. On a closed ticket, it goes away.

Q. And tell me the distinction between an open ticket – would it – let me – what is an open ticket?

A. A ticket that’s being held open because – one example would be a large excavation, say, a rural area or a large length of street that you would – the term, I believe, is “phase the ticket” in different times so that you could only – instead of marking 8 miles of highway, you mark it 1 mile at a time at different times.

Q. So that’s an example of an open ticket.

A. Correct. And that ticket would stay open until it is closed.

See Attachment 4, March 9, 2018, Alexander Depo. Tr. 74:19-75:24.

L&M Supervisor Katherin Mack corroborated that testimony:

Q. Have you thought any more or do you have anything else to add about whose obligation it was to call – If anybody's obligation, to call the excavator when the ticket expired?

A. Well, so that's an interesting question because if it's expired and it's already marked, the locator's not even going to see that ticket, or if it's already been resolved. That's not even in their folder. It would have to be in their folder for them to see it. So it's kind of like a, you know, is it in their folder, or is it not in their folder?

See Attachment 6, May 22, 2022, Mack Depo. Tr. 170:11-21.

The NOPV letter indicates that Mr. Hancock should have been provided with "proper equipment" to comply with this procedure. This appears to be a misunderstanding based on the selectively quoted testimony. At the time of the Incident, Mr. Hancock had access to tickets assigned to him. His access was consistent with access provided to all locators. He was able to view a folder on his shared computer that included tickets assigned to him. Once he completed work on the tickets they were marked "closed," and no longer appeared in his folder. Tickets were marked closed once the locator either determined that there was no conflict, or completed a locate and mark of any facilities in the work area. No PG&E policy requires locators to continue to monitor tickets after they are closed.

Mr. Hancock did not violate any PG&E policy or procedure by failing to screen tickets for expiration after the ticket was marked and closed. Indeed, Mr. Hancock would have no reason to know that Alexander was excavating on an expired ticket.:

Q: And as the locator that was assigned this ticket, based on your training and experience as a locator up there in Kettleman, is there any way for you to know that Mr. Ojeda was out there ripping on November 13, 2015?

A: There was no way for me to know any excavation was going on at this time.

See Attachment 5, Alexander Trial Tr. June 29, 2022 at 4305:18-4306:22.

Changes to PG&E L&M Procedures

PG&E has issued revised policies and procedures related to L&M several times over the past 7 years. This includes separating procedures contained within Technical Documents from those intended to be guidance on how to comply with procedures. The non-procedural guidance is contained in the L&M Field Guide. The Field Guide is intended as a practical resource for locators to participate in reaching PG&E's vision to become the safest, most reliable gas company in the United States. The Field Guide emphasizes the need to create a safety-first culture over time through encouraging personnel to speak up and engaging with local and national stakeholders. With regard to L&M specifically, the Field Guide provides practical guidance for ensuring that locators respond to tickets appropriately and safely and document the responses. All locators now have access to software on their phones and tablets to assist with and document this process. The software used to manage tickets has been upgraded since the Incident to eliminate confusion and ensure accurate record keeping.

PG&E procedure TD-5811P-1200 continues to instruct locators to "[s]pace markings 5 to 50 feet apart, depending on the length of the facility, the terrain, and the type of excavation." *See Attachment 9, Procedure TD-5811P-1200 Rev 5b.* PG&E's Field Guide now provides further guidance regarding this policy, including the following:

Place marks as follows

- Clearly, so that all facilities can be identified during excavation activities, and proper steps can be taken to prevent damage.
- Use the appropriate amount of marks.
- At the appropriate intervals. Marks should not be continuous for long distances.
- Accurately, so that the mark is within 2 ft. of the outermost edge of the actual facility location

What marks should be used?

Refer to TD-5811P-1200; the procedure contains pictures and guidance on what marks to use. Refer also to CGA best practices if a facility installation requires a marking which is not identified in a Company procedure. If any conflicts are identified, follow PG&E procedures.

See Attachment 7, PG&E Field Guide at p. 68.

This revised procedure ensures that locators are allowed discretion in marking facilities provided that the marks are placed to clearly identify all facilities during excavation.

The Field Guide also provides practical guidance on how best to document markings and conversations with excavators, including advice for taking and retaining photographs and entering notes related to markings and communications in the field. This robust guidance helps to avoid confusion regarding markings after an incident occurs.

With regard to screening for expired tickets, procedure TD-5811P-1300 has been clarified to state that locators should screen their assigned tickets for expired tickets at the time of assignment (not after the work has been completed):

3 Receiving and Screening Assigned USA Tickets

- 3.1 Locate and mark supervisors assign work to locate and mark personnel as appropriate.
- 3.2 Locate and mark personnel screen tickets as appropriate to determine appropriate actions for each ticket. Ticket examples may include the following:
 1. Emergency ticket. Emergency means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.
 2. Normal notice ticket (due in two working days, not including the day it was requested).
 3. Follow-up, extension, or renewal ticket.
 4. Expired or misplaced ticket.
 5. Remark ticket for a project that has been located and marked within one year.

See Attachment 8, Procedure TD-5811P-1300 Rev. 4 Effective May 1, 2022.

In addition to revising and clarifying procedures, PG&E has undertaken a number of other efforts to prevent dig-in incidents. PG&E requires all coworkers assigned to the Locate & Mark Department to attend a Nulca accredited training program (Locate & Mark Fundamentals) that is approximately 7 weeks in total length and includes a combination of classroom and field coursework with knowledge checks after each module. Additionally, each locator is required to test for and pass an Operator Qualification examination prior to performing any locating activities.

In addition to the above training program, PG&E had a second supplemental training program (Field Training Outline) accredited by Nulca in June of 2021. This 7-day training was provided to nearly all locating personnel by the end of 2021 with additional courses and refreshers being provided since. Much of the currently contracted locating personnel have also attended the FTO training program.

In 2018, PG&E established a Standby Governance department with several full time employees responsible for coordinating standby activities with excavators when field meets have identified excavation will take place in proximity to critical PG&E gas infrastructure. The Gas Resource Specialists assigned to this department also conduct quality reviews of Field Meet and Standby activities.

In 2019, PG&E launched an internally developed Ticket Management System which incorporated smart workflows to enhance compliance with procedures and required documentation. Some of the enhancements included requiring digital photographs be attached before work can be completed after marks are placed and automatic form creation for Field Meets when critical facilities are identified in the work area.

These revised procedures, additional training and oversight, addition of Standby Governance Department, and new Ticket Management System are intended to increase safety and reduce the likelihood of future incidents. These changes have contributed to an exceptional record since the Incident. PG&E's Damage Prevention Team has tracked a significant decrease in excavation incidents since the Incident.

Please do not hesitate to contact PG&E with any questions regarding the foregoing.

Sincerely,

[REDACTED]
[REDACTED] of Gas Regulatory and Risk

cc: [REDACTED]
[REDACTED]

Attachment Table:

Attachment Number	Document Title	Description
1	Procedure TD-5811P-104, Rev. 0.	Proper Markings
2	Procedure TD-5811P-101, Rev. 0	Preparing for Daily Locate and Mark Work
3	SED Incident Investigation Report dated Dec. 6, 2016 CONF	CPUC Incident Investigation report
4	March 9, 2018, Hancock Depo. Tr. 32:2-14	March 9, 2018 Hancock Depo Excerpt
5	June 29, 2022, Alexander Trial Tr. 4237:8-4238:24	June 29,2022 Alexander Trial Excerpt
6	May 22, 2022, Mack Depo. Tr. 170:11-21	Mack Trial Excerpt
7	PG&E Field Guide	Locate and Mark Field Guide
8	Procedure TD-5811P-1300 Rev. 4_CONF	Responding to an Underground Service Alert (USA) Ticket
9	Procedure TD-5811P-1200 Rev. 5b_CONF	Locating and Marking Subsurface (Underground) Facilities