PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



May 27, 2016

Mr. Sumeet Singh, Vice President Pacific Gas and Electric Company Gas Asset and Risk Management 6111 Bollinger Canyon Road, Room 4590-D San Ramon, CA 94583 GI-2015-07-PGE-22-01A

SUBJECT: General Order 112 Gas Transmission Inspection of PG&E's Milpitas District

Dear Mr. Singh:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission, Paul Penney, Fred Hanes and James Zhang conducted a General Order 112 inspection of Pacific Gas & Electric Company's (PG&E) Milpitas District (District) from July 20-24, 2015. The inspection included a review of the District's corrosion control records for the period of 2012 through 2014, as well as a representative field sample of the District's facilities at randomly selected locations throughout the District.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those records and pipeline facilities that SED inspected during the safety inspection.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by PG&E to address the violations, concerns and recommendations noted in the Summary.

If you have any questions, please contact Paul Penney at (415) 703-1817 or by email at Paul.Penney@cpuc.ca.gov.

Sincerely,

Kenneth Bruno Program Manager

Kuneth A.B

Gas Safety and Reliability Branch Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Mike Falk, PG&E Compliance

Susie Richmond, PG&E Gas Regulatory Support

¹ General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

SUMMARY OF INSPECTION FINDINGS

I. Probable Violations

A. PG&E's Internal Audit Findings

During the inspection, PG&E provided SED staff with its findings from the internal review it conducted of the Milpitas District.

Table 1 lists all of the findings from PG&E's internal review. Some of PG&E's internal review findings are violations of PG&E's standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.13(c).

SED staff noted that some of the findings were corrected prior to the inspection. For certain items pending at the end of the inspection on 7/24/15, please answer the following questions and requests, which are listed at the end of Table 1 below.

Table 1: PG&E's Milpitas District Internal Review—Corrosion Findings Only

Item	Finding Description	Corrective Actions	# of Findings/ Violations	Remediation Date
1	Rectifier on L-131 MP 48.7 has had readings of zero for last 3 reads. (Jan, Mar, & May 2015)	I-131 MP 46.34 50.53 has been permanently deactivated. Rectifier was removed on 12/27/2014	3	12/27/14
2	Rectifier Annual Inspections with noted deficiency and Work Request still open: Rectifiers: #57, #164	Work Requests 191501 and 191510 were created to perform corrective work.	2	9/30/15
3	Missing Cathodic Protection Station Report for rectifiers #207 Metcalf Rd and #000 Diana Ave.	Updated missing Station Reports and inserted into binder.	2	7/16/15
	Rectifier Test and Site Evaluation for rectifier #000 on L-300A at Diana Ave shows ground resistance as found/as left as N/A for 2012 & 2013,	WR 205434 and 206354 were created to remediate finding. In process of		
4	and 1130 ohms for 2014. No confirmation of 2nd ground rod.	installing 2nd ground rod.	2	Pending
	Rectifier # 132 on L-300A at Silver Creek has a note indicating new rectifier and anode installed in 2014 without	Station Report was updated		
5	an updated Cathodic Protection Station Report.	and inserted into binder.	1	7/16/15

 Table 2: PG&E's Milpitas District Internal Review—Corrosion Findings Only (continued)

Item	Finding Description	Corrective Actions	# of findings/ Violations	Remediation Date
		WR 210898 has been		
		created. The corrosion		
		mechanic measured the ON		
		and OFF potential. The ON		
		pipe-to-soil potential was		
		·2011 mv and the Off		
		potential was -1134 mv. The		
		OFF potential is more		
	L-I07 MP 25.80 has multiple	electropositive than -		
6	high reads from 2/25/2014 to 2/23/2015.	1200mv	Various	7/15/15
	L -107 has low P/S reads with no Action Plans at the following locations:			
	26.01, 26.40, 28.43, 29.00, 29.9,	Action Plan was created and		
7	30.38, 30.4, 30.5, 30.8, 31.5, 31.6	posted in binder	11	7/1/15
	31.0	WR 201934 and 206793		
	L-I07 MP 33.81 had a low P/S	were created. Reading on		
8	read on 2/27/14 with no Action	2/25/2015 of the following	1	2/25/15
	Plan.	year was good		
0	L-107 MP 34.99 had a low P/S	W/D 201025	1	0/20/14
9	read on 2/26/14 with no Action Plan	WR 201935 was created and completed on 9/20/2014.	1	9/20/14
	L-107 MP 33.0 was not read in	completed on 3/20/2011.		
	2013 or 2014. ETS noted	WR 210908 was created.		
10	missing. WR still open. 2015	Action Plan was also	2	7/1/15
	reading was low.	created.		
		L-107 and Casing deactivated. Retired under		
	L-107 MP 31.22 missing casing	job # 30859792.		
11	and LEL reading for 2/25/2015.	Construction end date was	2	11/18/14
· 	WR 210906 still open.	11/18/2014.		
	Irvington Station had low P/S			
	readings on 9/20/2014 at V-67,		_	
12	V-68, and V-66. WR's still	An Action Plan has been	3	7/15/15
	open. L-131 MP 47.15 & 50.55 had	created for this finding.		
	failures from no LEL readings			
	on 2/25/2014. WR's closed on			
	9/20/2014, although no LEL			
	recorded. Possibly no vent			
13	stack. MP 50.55 is a gelled	Action plan completed on	2	7/1/15
	casing.	7/1/2015.		

 Table 3: PG&E's Milpitas District Internal Review—Corrosion Findings Only (continued)

Item	Finding Description	Corrective Actions	# of findings/ Violations	Remediation Date
		L-131 has been deactivated between MP		
	L-131 MP's 45.00, 46.34, 48.20,	46.34 to 50.53. Adjustments were made at Andrade Rd rectifier to		MP 45 .00 - 7/15/2015
14	48.70, 48.95, 49.00, 49.38 and 49.79 had low reads on 2/26/2015. No Action Plan created. WR's still open.	bring L-131 MP 45.00 P/S to -880mV.	8	All others - 12/17/2014
15	L 131 MP 50.69, 53.13, had low P/S reads on 2/25/2014. No Action Plan. Not corrected until subsequent read on 2/27/2015.	Subsequent reading on 2/27/2015 was good.	2	2/27/15
16	L-131 MP 52.34 had a failure from no casing read on 2/25/2014. No Action Plan.	Corrected with WR 201928	1	9/20/14
17	L-131 MP's 51.20, 54.32 & 55.30 had low P/S reads in Feb 2014. No Action Plan.	Corrected with re-read . WR 20192"1, 201930, 201931.	3	9/20/14
18	Milpitas Terminal TL s/o V-46, V-47 had a high P/S read on 4/3/2014. No Action Plan.	Corrected on WR 202924	1	9/20/14
19	L-300A MP's 477.60, 480.69 had a low read in Oct 2013. No Action Plan before good read in Aug 2014.	Corrected on WR 199024, 199025	2	8/14/14
20	L-300A MP 482.85 did not meet 100 mv on 10/9/2014. No Action Plan. WR 209042 still open.	Mechanics measured the pipe-to-soil values at the coupon test station. ON Potential -754 mV, OFF -727 mV, native -495 mV. The difference between the OFF and native is	1	7/15/15

 Table 1: PG&E's Milpitas District Internal Review—Corrosion Findings Only (continued)

Item	Finding Description	Corrective Actions	# of findings/ Violations	Remediation Date
		The mechanics verified that the ETS on L-300A MP 486.32 has been removed. A new test station on L-300A MP 486.79 was located and		
21	L-300A MP 486.32 had a failed read on 10/22/2014 from no reading. WR 207743 still open.	read. The pipe-to-soil potential at MP 486.79 was -946 mV.	1	7/15/15
22	L-300A MP 488.50 had a low read on 10/17/2013. No Action Plan.	Corrected on WR 199026	1	3/10/14
23	L-300B MP 495.00 & 497.21. No LEL reading. Gelled casings. WR's still open.	Mechanics measured 0% LEL at L-300B MP 495.00 and 497.21	2	7/16/15
24	L-300A MP 496.26 No LEL reading. Gelled casing. WR 209044 indicates no test leads and no vent. WR still open.	Mechanics measured 0% LEL at L-300B MP 499.26	1	7/16/15
25	L-300B MP 496.45 had a low read in Oct 2013. No Action Plan before good read in Oct 2014.	This is a result of a contacted casing. There is an Action Plan in place for the contacted casing.	1	10/10/14
26	L-300B MP 500.23 indicates failure from gelled casing in Oct of 2013 & 2014. WR 207751 indicates casing was removed in 2013 and replaced with pipe.	Casing retired on 11/26/2013. Retire in PLM.	1	7/15/15
27	L-300A, MP 501.26 shows failure from missing casing read in Oct 2014.	CIS read on 6/22/2015 closes WR.	1	7/15/15

 Table 1: PG&E's Burney District Internal Review—Corrosion Findings Only (continued)

Item	Finding Description	Corrective Actions	# of findings/ Violations	Remediation Date
		L-303 MP 41.45. Action plan created on 4/15/2014. Casing remediation		
28	L-303 MP 41.75 had a failure from a casing read on 2/24/2014.	Project P5RS 38383 Order # 31142927. Currently scheduled for completion by 12/30/2016.	1	2/24/15
	Casing on L-100, MP 144.00, indicates it is a contacted casing but it is not included in the contacted casing program.	Casing has been added to		
29	This casing was filled with gel previously.	the contacted casing program.	1	7/15/15
30	Span on L-107 MP 30.80; Pipe wrap disbonding, paint cracking. WR 202170 dated 3/12/2014 still open.	This span has been retired under PSRS project 24674's.	1	10/20/14
31	Span, L-131 MP's 46.10 & 48.94: Pipe wrap disbonding, paint cracking WR183575 and WR183569 dated 3/07/2012 are still open.	L-131 MP 48.94 has been retired. WR 183575 created for MP 46.10	2	MP 48.94 - 12/17/2014
32	Span, 1-300A MP 483.22. Two noted deficiencies with no WR's. Small spots of coating missing and surface rust visible.	P5; this span will continue to be inspected during regular inspection frequencies.	1	6/25/15
33	Span, L-300A MP 478.14. Pipe wrap disbanding, bare metal exposed. No WR	P3 PSRS 35752, Est. MOB of 6/13/2016	1	12/31/16
34	Span, L-300A MP 482.37. Main support down; no support on pipe. Possible gunshot to pipe. Pipe wrap disbonding.	P2 P5R5 34802 Est. Mob of 4/28/2016	1	12/31/16

 Table 1: PG&E's Burney District Internal Review—Corrosion Findings Only (continued)

Item	Finding Description	Corrective Actions	# of findings/ Violations	Remediation Date
35	Span, L-300A MP 482.45. North pipe support missing, no WR	Pipeline Engineer inspected span and calculated support was not required.	1	6/25/15
36	Span, L-300A MP 482.56. Both ends of span transitions are disbonding. Bare metal exposed, surface rust visible, No WR	P2 PSRS 33955 Est. Mob of 5/12/2016	1	12/31/16
37	Span, L-300A MP 482.79. Pitting and wrap disbonding on both P/S transitions. Pipe wrap cracked, visible surface rust. Unacceptable, pitting and surface rust. WR 195242 dated 5/15/2013 was closed and replaced with WR 213521 which is still open.	WR 213521 created. P2 PSRS 34803 Est. Mob of 5/5/2016	1	12/31/16
38	Span, L-300A MP 482.79. Pitting and wrap disbonding on both P/S transitions. Pipe wrap cracked, visible surface rust. Support on north end completely down. WR 195243 dated 5/15/2013 was closed and replaced with WR 204344 dated 5/23/2014 which is still open.	WR 204344 created. P2 P5RS 34807 Est. MOB of 5/5/2016	1	12/31/16
39	Span, L-300A MP 483.00. Pipe wrap disbonding, surface rust, pitting visible. No WR	P5; this span will continue to be inspected during regular inspection frequencies.	1	6/25/15
40	Span, L-300A MP 483.13. Minor coating missing, surface rust present. No WR. Employee also dated top of form 5/15/2013 instead of 5/15/2014. Form is dated correctly at bottom.	P2 PSRS 33957 Est. Mob 4/27/2016	1	12/31/16

 Table 1: PG&E's Burney District Internal Review—Corrosion Findings Only (continued)

Item	Finding Description	Corrective Actions	# of findings/ Violations	Remediation Date
	5pan, L-300A MP 485.08. Paint			
	peeling and cracking. Possible			
	lack of support with one			
	concrete support missing. No	P2 PSRS 33961 Est. Mob		
41	WR.	4/28/2016	1	12/31/16
	Span, L-300A MP 489.39. Pipe			
	wrap disbonding, bare pipe			
	exposed, surface rust, pitting	WR 185521 created. P3		
	visible, pipe wrap peeling. WR	P5RS 35754 Est. Mob of		
42	185521 still open.	5/3/2016	1	12/31/16
	Span, L-300A MP 489.64.			
	Major disbonding, pipe wrap			
	missing, bare metal exposed.			
	Surface rust on both P/S			
	transition ends. Possible fire	WR 185522 created. P2		
	damage to wrap. WR 185522	PSRS 33194 Est. Mob of		
43	still open.	4/27/2016	1	12/31/16
	Span, L 300B MP 485.74.			
	Pitting on both PIS transitions,			
	pipe wrap disbanding, surface			
	rust on pipe. WR 195244 dated			
	5/14/2013 closed and replaced	WR 204345 created. P2		
	with WR 204345 dated	P5R5 33962 Est. Mob of		
44	5/22/2014.	4/27/2016	1	12/31/16

Follow-up Questions from Table 1

- 1. For item 2, please provide a copy of WR 191501 and WR 191510.
- 2. For item 4, please provide a copy of WR 205434 and WR 206354.
- 3. For item 7, please provide a copy of the action plan.
- 4. For item 24, please explain the comment under the "Corrective Actions" column, since the comment addresses L-300B but the "Finding Description" discusses a casing along L-300A.
- 5. For item 31, please provide a copy of WR 183575.
- 6. For item 35, please provide a copy of the calculation to determine if a support was required.

B. SED Findings

There were no violations found during the inspection.

II. Concerns and Recommendations

- 1. While doing field work along Line 300A, we took a read at an ETS at MP 482.85. The reads are as follows: Pipe-to-Soil (P/S) = -538mV; Instant off read -529mV; and Native read= -454mV. Title 49 CFR §192.463(a) requires operators to provide cathodic protection consistent with one or more of the applicable criteria in Appendix D, and Title 49 CFR §192.465(d) requires operators to take prompt remedial action to correct deficiencies found. Please provide documentation verifying that PG&E has restored cathodic protection levels to one or more criteria identified in Appendix D. The reads did not meet either the -850mV criteria or the 100mV shift criteria.
- 2. While doing field work at Irvington Station, we noted four low pipe-to-soil (P/S) reads at the following valves: V-51 (-788mV), V-66 (-690mV), V-67 (-665mV) and V-68 (818mV). Title 49 CFR §192.463(a) requires operators to provide cathodic protection consistent with one or more of the applicable criteria in Appendix D, and Title 49 CFR §192.465(d) requires operators to take prompt remedial action to correct deficiencies found. Please provide documentation verifying that PG&E has restored cathodic protection levels to one or more criteria identified in Appendix D.
- 3. While examining a rectifier located on a pole near the intersection of Bambi Lane and Galahad, there were strength concerns identified with the pole. Please provide an update on repair or replacement of the pole in question.
- 4. While examining Rectifier #000, PG&E personnel mentioned that there was a breaker upgrade of 30Amps was planned. However, during our examination of the breaker, PG&E personnel stated that the upgrade would be cancelled. Please verify that the breaker upgrade was cancelled.