PG&E/City of Lafayette/Gas Safety Task Force/CPUC Follow-Up Meeting - July 9, 2019 Meeting Notes

Meeting Attendees

PG&E: Bennie Barnes, Tom Guarino, Marvin Nushwat, Lanthy Le

City of Lafayette: Greg Wolff

Gas Safety Task Force: Dave Kosters, Dennis Kuzak, Scott Honegger, Howard Fuchs, Michael Dawson,

Gina Dawson

CPUC: Terence Eng

Meeting Context

This meeting was fourth gathering of stakeholder representatives.

Meeting Purpose/Objectives/Agenda

Continue to broaden understanding of how PG&E evaluates and prioritizes projects to address gas pipeline threats in the Lafayette community.

Next Steps:

- Lafayette residents to email PG&E what would be expected of PG&E before next meeting.
- PG&E to confirm if Piccaro (car based leak detection) used on our pipelines.
- PG&E to give details on which lines pressure tested/untested, what % in DFMs, etc.

Meeting Notes:

- 1. PG&E passed out presentation, will focus on WROF (weather related and outside force) and deep-dive into 14 sub-categories. Lafayette residents want to focus on all the local risks. CPUC will also present the findings of their records review. Lafayette residents concerned with wind and cat-astrophic risk of fire damage from pipeline rupture. Today's focus is likelihood of failure; wind-driven events are consequential effects, and PG&E has not built into their model; they recognize they need to. Residents interested in WROF to understand risk relative to other risk, not that we agree it's the largest risk for our community.
- 2. Slide 3, Lafayette Transmission Pipeline Miles to address data discrepancy. HCA (high consequence area) reported in 2017 erroneously due to mapping error as 2.5 miles vs. 2.9 miles (correct number) in 2019. PG&E explained PIR (potential impact radius) determined by diameter & pressure; impact circle from research by C-FER. Federal regulations 2 methods: 1) if 20 or more habitable structures or structure like school, it's HCA PG&E uses this. 2) Class 3 & 4 location, determined by flat distance sliding mile. PG&E was using PIR methodology, but with General Order 112-F (state regulation), now pipes less than 12.75" diameter can use PIR, but > 12.75" diameter, must use class methodology. Regarding transmission miles, 11 miles in 2017 vs. 10.9 miles in 2019 due to different GIS polygons used.
- 3. Slide 4, % Design Stress Versus % SMYS PG&E uses class methodology for pipes listed at 12.75" & 16", PIR calculations for smaller diameters. Residents need to know why is this important? Why

does it take 7 years to do pressure testing? PG&E said we can talk about pressure testing next time. Tom G thought pipelines were on 7 year cycle? No: PG&E identifies threats on pipeline, manufacturing threat on untested pipe, and performs baseline assessment. Annually must evaluate threat. By code in HCA, need to assess again. In case of manufacturing threat, strength test performed and then they look at what causes it to be unstable: land movement, etc. Must test at 7 year interval thereafter. Don't all transmission lines need to be replaced or tested per PU 958? Are we just waiting? PG&E has methodology for untested pipe: they look at low 4.5" diameter low SMYS vs. 400 PSi 30" diameter, larger PIR, and higher risk. Higher priority, and during rate making process, monetary expenditures set, so PG&E must make best use of it. PG&E goes to CPUC for rate cases - gas transmission and storage. D.11-06-017 - CPUC decision for testing. Residents aren't saying PG&E is not paying attention to Lafayette, we don't understand risks that Lafayette faces. Can we trust PG&E has localized IM picture? Projects get bumped over time. We need info to help advocate for our safety. PG&E thinks manufacturing and construction threat can be a focus on next time. Residents said - should we look at largest incidents and prioritize focus that way? PG&E said looking at incidents may be way to focus. We could talk on MAOP validation, or hydrostatic testing, etc.based on interest of committee, but does not connect dots of incidents. Let's talk about how to focus subject of next meeting(s).

- 4. Slide 5, WAROF Risk Drivers left side frequency per mile per year in Lafayette. Significant incidents informed mainly by PHMSA incidents. If they have PG&E data or Lafayette data, that's used. For lack of data, PG&E uses PHMSA data. Looking at various factors, 14 sub-category threats. Rain flood, slope, erosion, subsidence, liquefaction, vegetation types, vehicle types etc. go into it. Information is used to pull or push PHMSA data frequency. Residents asked if pipelines are old, do you adjust? Yes, but one of many. With 60% of line untested and no info on equipment, how do you factor unknown pieces knowing this must be a higher weight? The unknowns become highest weighting of all factors. Age as example, 70 yr old will be used even if unknown, may be 40 yr old. City said it understands if unknown, it will go to worst case scenario for calculations.
- 5. Look at slides 3 and 4, to address discrepancies. 2017, 32% SMYS still case? Bottom of slide 3, 3001-01. There's a longitudinal joint factor that comes into play, part of pressure calculation. Same with class location (density) and temperature derating factor (but usually 1, since not high temps). PG&E looks at % of SMYS and joint factor to design duration, etc. of pressure tests and decision making. Last preso looked at SYMS only. 19.1%. 32% number given was due to furnace butt weld, and factor was .6, so acted as strength derating (this is on the 4.5" diameter section). 2017 number was based on that number included. In last meeting, we discussed even at 32% SMYS, the likelihood of failing by rupture is less than if pipe was larger pressure & diameter.
- 6. In slide 5, drivers for WAROF being so high due to heavy rain, slope instability, erosion, etc. Note on bottom: not focusing today on threat of trees. Trees are interacting threat: interacts with corrosion, manufacturing threats, and access issue for emergency, etc. For purpose of moving along, continue to focus on WROF threat. Residents would like to know ranking of tree threats related to other threats. PG&E said they haven't done it.
- 7. Slide 6, WROF Mitigation Programs O&M programs, geo hazard, exposed pipe, etc.
- 8. Slide 7, WROF Operations and Maintenance not all programs, but some key ones that effect WROF threat. Patrols (looking for construction, exposed pipe, erosion) reported back annually. Last patrol June this year in Lafayette, no observations. For earthquake event, PG&E has teams and procedures to do assessment (as done in Ridgecrest). Dig-ins are a concern to PG&E, discussed last meeting. Lafayette residents asked if there's program to evaluate down-cutting and loss of ground cover given some large rain events have taken a foot of cover away? PG&E doesn't have this information and might want to include this in their risk analysis. PG&E will take this information back, may create program to review loss of cover after events. Leak survey found no leaks in Lafayette. Residents asked: how was done? PG&E said it by instruments, but couldn't say if by foot or by air.

Residents asked if PG&E could assure us Picaro used on our trails since so easily accessible by car; other cities had trees removed from CPSI program once Picarro was accessible to pipeline. PG&E will they would check to see what was used in Lafayette, Said Picarro is most sensitive way to measure, picks up smallest of leaks, which can be a problem.

- 9. Slide 8, Vintage Pipe Replacement Program doesn't just mean old, also means outdated construction types (eg, wrinkle bends) along with outside force (eg, land movement). PG&E overlays these two maps & uses prioritization method as described in Rate Case. Gives locations of high likelihood of failure along with high potential for land movement. Does Lafayette have wrinkle-bends? Lafayette has two vintage pipeline replacement locations. First is on 3001-01 at same location as capacity increase program, but City Council had issues with timing of project, so delayed until next year. The second vintage pipe replacement program on map (center of HCA in middle map). 191-1 near intersection 3rd St and Moraga Blvd, HCA. Does PG&E assess the old pipe being replaced? No regulation to inspect pipe, only test new pipe going in. PG&E said if there is external corrosion threat, uses ECDA. Does a pipe inspection of the live pipe. Residents asked: will we talk about why these projects were chosen? The first one vintage pipe project was done with capacity program, but for 191-1 is done because in liquefaction zone. PG&E is doing analysis if it truly is in liquefaction zone, that is why it wasn't done already. Maps are hard to read, but the pipe is crossing moderate-to-high liquefaction zone in HCA zone. High likelihood of failure + high consequence of failure, so it's high risk. Lower risk than other vintage projects due to pressure diameter. What about other areas as shown on map? Those are low-to-moderate liquefaction. Also, vintage pipe is also looking at wrinkle bends, etc. other manufacturing. It's likely that Lafayette has pre-1960's girth welds (GO 112 safety regulations enacted 1961, would have done a girth weld inspection). So no girth weld inspections when installed. PG&E followed methodologies ASME and ASA B31.8 regulations for girth welds. PG&E said higher likelihood they weren't inspected, so put into higher risk of failure when interacting with land movement. Residents seeking the prioritization after seeing how exposed pipeline was replaced without it being on list the prior year. What are risks, rationale for what projects are focusing on?
- 10. CPUC reviewed report "CPUC MAOP Validation Report Lafayette" dated June 28, 2019, previously sent in email. CPUC said they looked at pipeline diameter, wall thickness, longitudinal welds, yield strength, and strength pressure records. CPUC reviewed found PG&E has pressure tested less than 42% of transmission pipes in Lafayette. CPUC found two violations: lack of pressure test on 1' segment of line 191-B. PG&E said they would pressure test by 2026, and if no extraordinary risk elements, CPUC accepts this response. PG&E also failed to provide recording charts (pressure test as a function of time) for two segments, lines 3001-01 and 3002-01. Code requires these charts. PG&E replied to CPUC that they considered test records as "traceable, verifiable, and complete" and will not retest as they are outside of HCAs.
- 11. Residents concerned with 60% of line being untested, which creates lack of trust. Looking for more assurances as some specific lines may be 80% untested. Similar to tree program, there is no data to support programs that are happening in Lafayette. CPUC code 958 in 2015 required all utilities to pressure test all lines without valid pressure test. For the 60% in Lafayette untested, PG&E has plan to test in 2026. Residents expressed concerns these pressure tests keep getting pushed back, as are other programs. PG&E said the DFMs that are now transmission pipes were re-designated in 2017, and pressure requirements were only required starting then. Is that why the overall % is low? PG&E wasn't sure. Timeline, 2017 change of definition. For DFMs, 2018 looked at threat identification & risk algorithms. Then they looked at strength testing and integrity management programs & keeping PUC 958 in mind. In HCAs, by code first time, would have 10 years to do baseline assessment. Here, they are putting risk-based prioritized plan to get to completion of pressure testing by end of 2026. Residents don't know where the testing will be done, has already been done. Residents asked CPUC if 7 years acceptable, when is it unacceptable? There is no timeframe in code 958, 7 years for this amount of line sounds right. Majority or all of HCA has been pressure tested, untested is non HCA. Residents pointed out these untested lines run through neighborhoods, PG&E notes them as

"unstable" in BAP. Residents want to know of 60% lines untested, how much is within DFMs that were reclassified; what % untested line within historical definition of transmission. PG&E said historically transmission was defined by any pipe operated over 20% SYMS, but then said it wasn't that simple. PG&E wanted to know why this is being asked, just for our comfort level? Residents want to know would PG&E first test on traditional transmission lines (larger lines) and then smaller DFMs? PG&E said they could drill down in next meeting.

- 12. PG&E hearing residents would like to see risk picture. And show of plan using risk picture to reach the testing. Residents said we presented to Pipeline Safety Trust, said we were missing our local information. The past two years we've received generalized information regarding layers of safety, etc. How does it apply here when only one-half of line is tested? We're looking for local information, our local input, combine with regulatory standards and how PG&E looks at projects. Not trying to reprioritize for PG&E, but wanting to collaborate and get assurances that what needs to addressed is being addressed. Example: we know of PG&E geo-hazards team working in specific area of Lafayette that's not being mentioned here. We want be informed.
- 13. Discussion of what's expected in these meetings. Residents expressed still not getting prioritized list of risks and projects specific to our community. They City mentioned we asked PG&E to start macroscopically and look at all risks before looking at one factor so we have comprehensive understanding before drilling down to subtopics. Residents didn't want to just drill down into random sub-threats, we wanted to drill down into full view of all the Lafayette-specific threats and what projects will be implemented. Example: dig-ins. WROF important, and we do want to better understand how it applies to Lafayette. City: it warrants clarification if two years ago CPSI was priority of PG&E, or just one of multitude of programs, but the only one that needed city approval. We haven't focused on CPSI because it's one small thing and we're still working at higher level. Residents asked why close interval survey in town wasn't discussed in this setting, PG&E said it was and that it's an ECDA project shown on previous meeting slide showed 4-5 different projects and timing of ECDA projects, and that CIS is part of ECDA.
- 14. PG&E requested questions in writing from residents, residents agreed to send.
- 15. Next meeting scheduled for September 4th, 2pm at City offices.