City of Lafayette Staff Report

For: Lafayette City Council
By: Steven Falk, City Manager
      Eric Singer, Assistant Planner
Date: 7/9/2018
Subject: Planning for Community Workshop on PG&E Matters

Introduction

At your meeting on May 22nd, Council asked staff to catalog community concerns regarding PG&E’s Community Pipeline Safety Initiative in preparation for the September 10th City Council meeting. The purpose of this report is to provide the community feedback that was collected via Lafayette Listens! and the Save Lafayette Trees group.

Background

During the past few years and months, a number of issues related to PG&E and its provision of service in Lafayette have arisen as topics of robust public conversation and concern including:

- PG&E’s Community Pipeline Safety Initiative (CPSI), in which the utility proposes to remove and replace 113 trees that pose a safety concern along public trails and city streets located in Lafayette;

- PG&E’s plan to replace 6,000 linear feet of gas pipeline on St. Mary’s Road during Summer 2018, which work will have notable traffic and congestion impacts and also necessitate the removal of certain trees and vegetation;

- Other PG&E safety concerns alleged by residents Michael and Gina Dawson and others, including but not limited to the need for automatic shut off valves; exposed segments of gas pipeline that should be repaired; PG&E expenditure priorities; and PG&E’s representation of facts related to pipeline integrity testing;

- New State rule changes related to tree limb trimming that will require more aggressive tree trims this summer and in the future, and which work may be conflated with the other issues listed above.
Discussion

Staff has worked with Councilmember Anderson and representatives from PG&E to propose the following sequential process for proceeding on these matters.

1. **City sends a letter to PG&E reminding the utility that there will be no tree removal associated with the CPSI program until PG&E presents the City Council with all of the information required by the City’s Tree Protection Ordinance including, but not limited to:**
   
i) Maps showing the location, assessment, ownership (public/private), and disposition of the trees.
   
ii) Site plan(s) with property lines, parcel numbers/addresses, showing the trees proposed for removal.
   
iii) A mitigation plan showing the location of proposed trees to be planted.
   
iv) An acceptable restoration plan for the removal of public trees that maintains aesthetics in public areas.

2. **City Manager will contact PG&E representatives to summarize the Council’s interest in having a public meeting to allow the community to air its concerns;**

3. **City Council will add an item on its agenda on May 29th at which the Council will discuss the future workshop and its preferences for when and how it should occur.**

4. **Not later than June 30th, the City Manager will forward a catalog of community concerns to PG&E operations and safety to PG&E representatives.**

5. **City Council will host a meeting on September 10th, 2018 where representatives from PG&E can address the concerns.**

Note that steps 1, 2, and 3, and 4 above have been completed.

Community Feedback

Pursuant to step 4, above, City staff has collected community concerns via *Lafayette Listens!* and email. Please see the attached documents, labeled Exhibit “A” and Exhibit “B”, for community feedback collected by *Lafayette Listens!* and the *Save Lafayette Trees* group, led by Michael and Gina Dawson.
**Recommendation**

Receive and file.
Exhibit "A"
PG&E Concerns For September Open Meeting

What are your concerns about PG&E’s work, the safety of its pipelines, tree trimming and any other matters related to the utility? Please provide your detailed comments on any PG&E concerns you have here.

All Registered Statements sorted chronologically

As of July 2, 2018, 10:01 AM

LAFAYETTE LISTENS.COM

Lafayette Listens! is not a certified voting system or ballot box. As with any public comment process, participation in Lafayette Listens! is voluntary. The statements in this record are not necessarily representative of the whole population, nor do they reflect the opinions of any government agency or elected officials.
Exhibit “A”
PG&E Concerns For September Open Meeting

What are your concerns about PG&E’s work, the safety of its pipelines, tree trimming and any other matters related to the utility? Please provide your detailed comments on any PG&E concerns you have here.

As of July 2, 2018, 10:01 AM, this forum had:
Attendees: 47
Registered Statements: 6
All Statements: 9
Minutes of Public Comment: 27

This topic started on June 8, 2018, 2:08 PM.
This topic ended on July 2, 2018, 10:01 AM.
Thanks Jeff for proactively organizing the discussion. I hope we can continue this constructive theme. At least for myself, I’m willing to assume good faith on all sides, unless shown to be unwarranted. And I would encourage all stakeholders to remain open to new ideas on this complex topic.

We should also consider the process by which we reach an agreement, since details will change as more information becomes available, and adjustments are 100% guaranteed to be needed. It’s awfully handy to have a clear foundation for decisions. A few thoughts on standard project planning concepts:

1. We need dialog focused on goals, alternatives, and informed compromise. To be fair: distributing gas is difficult, dangerous, and expensive. Compromises must be made. So let’s be clear about what we’re trying to achieve, then compare and prioritize options. And let’s be courageous enough to ask meaningful questions, including “What would it take to upgrade all old pipes to new, safer ones?” Maybe it would take 50 years and bankrupt us all, I don’t know, but if that’s the most effective solution, let’s describe what it would take, so—if nothing else—we understand why compromises are required. I assume replacement is the benchmark, and would be done in stages. If that’s the right thing to do, I would support the decision even through the inconvenience of construction.

2. WHAT are we trying to achieve (and avoid)? Presumably the goals are to minimize risk, disruption, and cost, while maximizing service quality. From a risk-management perspective, what are the most important failure modes to avoid? What are the key performance measures to maximize?

The answer should be a list of attributes, quantified or at least weighted, and applied consistently. This forms the basis for a standardized scorecard to evaluate options. Group items to simplify however is helpful, e.g.:

a) Risk of sudden failures due to...
- Earthquake
- Digging
- Fire vehicle access...

b) Risk of gradual failures due to...
- Tree roots?
- Corrosion and/or component failure (Note: this can happen to any component of any system. In fairness, discussing this should not automatically imply corporate guilt any more than discussing auto accidents implies driver guilt).

c) Service quality
- Capacity for growth
- Service interruptions

If the St. Mary’s area is sufficiently different from other areas, then segment and address them separately. Presumably PG&E already plans this way.
3. HOW: Describe the options (i.e. solutions). How can they be combined?
Any realistic plan would include multiple actions, drawn from a menu of identified options. Especially, can we have a candid discussion about automated shut-off technologies? If we can’t discuss shut-off details publicly because of security concerns, could we at least designate a committee to evaluate it? Could it buy us time while a new line is installed?
Mike, I see you’ve done recent fieldwork on this: thanks for that info and generally helping keep us informed. And kudos to PG&E for the progress already made on this initiative locally and state-wide. More to come, I’m sure.

4. COMPARE options.
Propose and contrast recommended solutions. All assessments will be imperfect, but hey, that’s life. Describe benefits, costs, timelines, and other drawbacks of each proposal, to the degree those factors are known or can be estimated. Having a clear rationale makes it easier to accommodate input and create fast(er), (more) durable decisions, including budgets and implementation plans.

Although I enjoy our local landscape as much as the next person, I also appreciate not having a catastrophic event in my neighborhood. Let’s see to what degree we can achieve both. Again acknowledging I’m no expert, but it seems to me that cutting down any number of trees does not address all the safety issues. Maybe it’s prudent to be MORE aggressive than the current plan, possibly with regards to trees (but I admit hopefully not), probably with regards to other corrections.

Technical projects are hard. Public policy is harder. But transparency helps build and maintain support. Lafayette is probably better-suited to this approach than the average community, so let’s build a plan, with the opportunity for good faith to be shown as justified.

This approach works best if stakeholders are willing to wrap their heads around multiple imperfect options: I challenge us all to attempt that as best we can. Raise objections? Certainly, but I would not want to torpedo a well-thought-out (and well-communicated) plan—when we see one—on the basis of a single issue. Nor would I want to see us miss the big picture.

Thanks again Jeff, Mike, Damon, and others for shepherding the dialog.

Michael Dawson inside City Boundary
June 30, 2018, 8:08 AM

I’m posting this for a Lafayette resident who asked PG&E the following questions a year ago and did not receive direct answers. His questions:

1. I recently did a bike ride along the Lafayette- Moraga trail from the corner of South Lucille to the Moraga Commons. I was told by contractors (about 1-1/2 years ago) that they were installing automatic shut-off valves at the corner of South Lucille and St Marys road. I noted that there are two vaults plus a solar panel. The id on the electrical panel says SCADA, which provides 24/7 data to your pipeline center in San Ramon. Can you please confirm that these are either automatic valves and/or remotely operated valves that can rapidly close in the event of a pressure drop due to leak or rupture.
2. I also found two more locations with two relatively new underground vaults. One is located across St Mary road from the St Mary’s college soccer/rugby field. The other one is located at 1413 Moraga Rd near condo units, reasonably close to the Moraga Commons Park, and near the southern terminus of the 12 inch gas line from Olympic Blvd. Can you also confirm if these are automatic/remotely activated gas valves? The St Mary’s valves are about 1.4 miles from South Lucille and the Moraga Rd valves are about 0.7 miles from the St Mary’s college valves. The gas line from South Lucille to St Mary’s College travels through a much more rural and low populated area than Lafayette. The segment from the college to the Moraga commons has populations similar to or slightly less than Lafayette, in the area north of South Lucille to the terminus at Olympic Blvd.

3. I also rode north on the bike trail until the gas line changed direction near Las Huertas Rd, ultimately reaching Olympic Blvd and Reliez Station Road. It appears there are additional automatic valves at the South East Corner of the intersection.
But I did not see any other vaults along the line north of South Lucille.

4. Assuming these are automated valves, can PG&E define the criteria to install valves at these locations? And why (apparently) they did not install valves north of South Lucille, in the more populated areas of this pipeline?

5. Can PG&E provide a complete list of automatic/remotely controlled valves as well as manually activated valves in Lafayette and the criteria used to locate the valves?

6. PG&E states that the selected trees must be cut to provide rapid access to a gas line leak/rupture, resulting in increased risk to the public if the trees are not cut. However, first responders have stated that they will not enter an active gas rupture zone until the gas leak has been stopped, presumably by use of manual and/or automatic shut-off valves. So it is not logical to argue that cutting trees along the pipeline prior to a leak will increase the safety to the public. Working manual valves or automatic valves need to be activated first, before any efforts by PG&E crews and first responders can enter the rupture area. What am I missing in your argument for cutting the trees for access?

7. PG&E has also suggested that tree roots can induce pipeline corrosion, potentially leading to a material rupture/break in the line. Does PG&E have any real evidence (not just expert opinion) that this has occurred in their entire system in the past? Corrosion is a serious issue from both internal and external sources. PG&E has committed to the highest pipeline safety standards in the US, and as such must have a very thorough corrosion mitigation (cathodic protection), monitoring and line replacement. If induced corrosion is a real (as opposed to a theoretical risk), I would think that PG&E’s corrosion control programs would identify the tree root issue along with all potential sources of corrosion.

8. If such tree roots are a bona-fide risk to the line, has PG&E performed any quantitative risk studies which show the increase in risk of rupture or ignition per/year/mile of lines with tree roots versus lines with no tree roots? And has PG&E conducted a quantitative risk study on the current pipeline system in Lafayette? What is the annual probability of a major ignition in the city? And what are the major contributors to this risk?

In summary, PG&E has done a dis-service to the residents of Lafayette by offering only one proposed solution to risk reduction-the cutting of trees along the pipeline route. PG&E needs to offer alternate solutions which would accomplish the objective we all strive for and that is minimizing the risk of another San Bruno situation.
would like to see your proposal for installing automatic/remotely activated valves vs cutting trees. Or rerouting sections of the gas line in certain high risk areas. Or some other imaginative solution.

(Submitted to PG&E on June, 2017)
1 Supporter

Name not shown inside City Boundary  
June 26, 2018, 7:37 PM

PG&E has been in the business of transmitting and distributing essential gas and electricity services to our homes and businesses for over a hundred years. They are the experts in this field. They are not without fault and they have accepted accountability for their mistakes and have worked in earnest to address and resolve these faults. PG&E is not a corporate monopoly, rather it is a coalition of expertly trained and dedicated employees - people like you and me who live in our Lafayette neighborhoods. What PG&E seeks to do is for our own safety. They are condemned for their failure to have adequately trimmed tree branches that fell in high winds and sparked the Butte fires a few years ago and were rightfully condemned for their failure to replace ancient gas supply lines whose failure resulted in the unforgivable tragedy of San Bruno. But they stepped up and took responsibility for those epic failures and every single employee of PG&E dedicated themselves to PG&E's mission to never allow a repeat of these failures. This mission requires the trimming and/or removal of drought-stricken trees and trees that encroach upon and compromise transmission and distribution lines so we don't have a repeat of Butte or San Bruno. Upgrading the line along St. Mary's road may be an inconvenience but it is necessary to insure our safety and to protect against another San Bruno-like tragedy. So you can't have it both ways - you can't condemn PG&E for their failures to keep us safe and also condemn them for cutting the trees and replacing their infrastructure in order to keep us safe.

I am not an employee of PG&E nor do I have any relatives employed by PG&E. I am simply a resident of Lafayette without a selfishly myopic view of PG&E's activity in Lafayette. We are all part of a much greater community that should remember and honor the victims of the San Bruno tragedy by supporting PG&E's safety improvement efforts spawned by this tragedy to insure a similar tragedy never occurs in Lafayette or anywhere else.

Leota Woods inside City Boundary  
June 26, 2018, 3:47 PM

Leota Woods: I noticed along Hidden Valley Road, Davey Tree Service, PG&E contractor, trimmed the trees above the power lines and did not remove the large pieces of wood. This has created a very large fire danger since this dead wood is along Highway 24.

DAMON Pellegrini inside City Boundary  
June 26, 2018, 2:11 PM

My name is Damon Pellegrini I live at 3233 sweet dr. I am a fire captain with San Ramon Valley Fire. The tree removal of our oldest residents is a attempt by PG&E to say they "did something" to prevent a natural gas disaster. My protocol as a firefighter is to isolated, deny entry and evacuation of residents. They want to remove our oldest residents to make it easier for them to inspect from the air. There is NO reason for this, simply the
pipe needs to be replaced it was installed in the 50s-70s with steel. The new standard is plastic the moves with the shifting of the earth. That pipe needs to be moved to the center of the bike trail and away from the back fences of the affected neighborhoods. If the city council and PG&E really wanted to protect its citizens this is exactly what would happen. If I respond to this pipe being compromised my protocol from DOT requires me to create a safe zone 300 yards-1/2 mile, these are PG&E and federal guidelines. They simply don’t want to pay for what would keep us safe and the city received a fat payday for selling out to them. I am disappointed the city did not due it’s due diligence to study this problem. Damon Pellegrini

Wendy Martin inside City Boundary

June 8, 2018, 3:56 PM

Tree removal is not necessary for the maintenance of these lines this is a red herring by PG&E
Exhibit “B”

A catalogue of concerns regarding PG&E’s safety priorities and gas operations in Lafayette

Author: Save Lafayette Trees
Recipient: City of Lafayette
Date: June 30, 2018
Status: First draft

SECTIONS:

| Safety Prioritization and Risk Management |
| Safety Risk: Tree Roots |
| Safety Risk: First Responder Access |
| Pipeline Testing/Patrolling/Records |
| Pipeline Infrastructure: Shallow and exposed pipelines |
| Pipeline Infrastructure: Markings |
| Pipeline Infrastructure: Valves |
| Pipeline Infrastructure: Cathodic Protection |
| Pipeline Infrastructure: Coating |
| Pipeline Infrastructure: Manufacturing |
| Questions for the City of Lafayette |

QUESTIONS:

Safety Prioritization and Risk Management

1. PG&E notes that planned pipeline projects in Lafayette, like vintage pipeline replacement and shallow pipeline burial, are subject to outcomes of PG&E’s Gas Transmission & Storage Rate Case. How do outcomes of the ratecase affect planned safety projects in Lafayette? To what extent do ratecase outcomes affect prioritization and implementation of safety measures?

2. What does PG&E perceive as the top safety risks in Lafayette? Please provide quantitative qualification for identification of those risks. How does PG&E prioritize address of these risks? What is PG&E doing to mitigate these risks?

3. In the 2019 Gas Transmission and Storage Rate Case papers for 2019, PG&E quantifies the risk of pipeline rupture causes on a scale of 0-1000. PG&E’s own risk scoring attributes a red "severe risk" rating of 975 for a rupture caused by a third-party dig-in accident. In comparison, PG&E applies a risk score rating of 58 due to tree risk damage, and admits
the occurrence is less than 1 in every 100 years, but PG&E artificially inflated it due to "uncertainty". Why was this number inflated due to uncertainty? If it wasn't inflated, what would the risk score be?
(source: https://docs.wixstatic.com/ugd/de4240_66ca1375a327432a86e73c4efdf49796.pdf)

4. Given the above, and given the magnitude of difference between the two (risk score of 58 vs 975), how does PG&E justify safety prioritization of time and resources (PG&E states $500M) towards tree removal over pipeline dig-in incident reduction in California and specifically Lafayette?

5. In 2014, a house blew up in Carmel while a PG&E crew was working on a gas distribution line. Even though the crew had a valid USA ticket, PG&E had inaccurate pipeline records on file. Subsequently, the CPUC fined PG&E $26M for related record keeping violations and $11M for “dismal” emergency response to the incident. Thankfully nobody was hurt. With this in mind, we are concerned that PG&E reported 13 third-party dig-ins in Lafayette in 2016. In more than half of the dig-ins, the excavator had a valid USA ticket, meaning they called 811. How did these valid tickets result in dig-in incidents? Who was at fault, and was PG&E mapping/record info correct in each instance? Please list all of the dig-in incidents, location, damage, and repair.

6. How many dig-in accidents were reported in Lafayette in 2017? Please report incident information as requested for 2016 incidents.

7. Aside from USA ticket system, what else is PG&E doing in our community to mitigate the safety risk of dig-in accidents?

8. On 5/22/18 during the annual shareholders' meeting, Nick Stavropoulos (PG&E company president & COO) said the following in response to a shareholder question about gas pipeline safety:
"Federal regulators for pipelines in the U.S. Department of Transportation have identified that the number one safety issue for transmission pipelines is to defend the right of way—to make sure that the right of way around pipelines is kept clear of incompatible vegetation and structures." (source: https://www.youtube.com/watch?v=IFiIDWJ7VslI&t=9s).

After reading the above statement by PG&E’s president, Tom Finch, PHMSA Western Region Community Liaison, U.S. DOT, provided the following comments:

"1. I do not know of anyone in the DOT who agrees with Nick’s statement that "Federal regulators for pipelines in the U.S. Department of Transportation have identified that the number one safety issue for transmission pipelines is to defend the right of way—to make sure that the right of way around pipelines is kept clear of incompatible vegetation and structures”. This does not accurately describe the number one safety issue for U.S. gas transmission pipelines.

2. PHMSA has identified the number one safety issue for U.S. gas transmission pipelines. It is Material/Weld/Equipment Failure.

3. I agree with the [pipeline safety priorities shown in the attachment to this email], and it is my opinion that the top three safety issues for U.S. gas transmission pipelines are:
   --Material/Weld/Equipment Failure
   --Corrosion
   --Incorrect Operation"
Please explain who at the U.S. DOT provided the information that served as the basis for Mr. Stavropoulos's statement above. Please provide a copy of that DOT information.

9. Regarding the above, please investigate the stark difference in the "top transmission pipeline safety issue" according to federal pipeline regulators as conveyed by Mr. Stavropoulos versus by Mr. Finch. Would PG&E now acknowledge that "defending the pipeline ROW/keeping the ROW clear of incompatible vegetation and structures" is not among the top priorities of federal pipeline regulators, and that Nick Stravropolous's statement was misleading?

10. PHMSA regulations describe in considerable detail what's required for a pipeline operator's integrity management (IM) program (a system of risk analysis and mitigation). For gas transmission pipelines this requirement began in 2004, and its scope applies only to HCAs (a relatively small percentage of total gas transmission mileage). The inadequacy of PG&E's IM program was a major point of criticism in the NTSB's report on San Bruno. According the Pipeline Safety Trust, some pipeline operators have elected to apply IM on their entire system. Following San Bruno, California's PUC added § 961 which mandates, among other things, that gas operators must go beyond what is considered “adequate” to develop and implement gas safety plans that are “consistent with best practices in the gas industry.” Has PG&E chosen to broaden the application of IM beyond portions of its transmission lines categorized as HCAs? Why/why not?

11. Regarding the above, when was the IM plan for applicable portions of Lafayette's pipelines last updated?

12. Regarding the above, please provide a list of all threats identified in the most recent IM updates for Lafayette and the risk scores assigned for each threat.

13. Regarding the above, please explain the process that was used to calculate these risk scores, including the types and sources of data used.

14. Regarding the above, please provide a copy of the most recent safety improvement plan for Lafayette's pipelines that resulted from the threat analysis.

15. Regarding the above, please describe the method that PG&E uses to periodically evaluate the effectiveness of its gas IM program and the main changes that have been made to the program over the past five years as a result of this evaluation.

16. Regarding the above, what are the top three metrics that PG&E uses to assess the effectiveness of its gas IM program?

17. Regarding the above, please provide the results for each the past three years according to the above metrics (applicable to PG&E's total gas system, and if, available, applicable to Lafayette)

18. Over the past 20 years, what are the top 7-10 causes of transmission line safety incidents in PG&E's entire service area? For each cause, what percentage did this cause represent of the total safety incidents?
19. Over the past 10 years, please provide a report of all PG&E gas transmission pipeline line safety incidents. Data requested for each incident is:
   a. location of event and size of line involved
   b. year
   c. buried depth of the line and MAOP
   d. size of gas release (minor/moderate/major)
   e. root cause of the incident
   f. how was emergency repair made and how long did repair take
   g. was the line shut down to make the repair (if not, why not)
   h. how long did it take to make the decision to depressurize the line
   i. did the repair involve welding on a pressurized line
   j. was the event reported to PHMSA
   k. did the event require reporting to PHMSA (based on PHMSA regulations)

20. How does PG&E quantify the risk of the 272 trees in Lafayette, and the improvement to this risk score when these trees are removed? Please explain how PG&E quantifies risk for each gas pipeline threat, including how these risk scores are adjusted to reflect unique circumstances within a local community such as Lafayette, and how historical safety incidents are used in the calculation of risk scores.

21. The CPUC's Safety and Enforcement Division issued a report on 7/18/14 that was critical of PG&E's risk ranking methodology. In particular, the report says that PG&E "makes strong use of qualitative risk assessments. Staff recommends that PG&E inject additional quantitative rigor into its risk evaluation process." What are the changes that PG&E has made to its risk modeling/risk evaluation process following this SED recommendation?

22. During the 5/9/18 PG&E open house in Lafayette, multiple PG&E representatives, and Jesus Soto, SVP of PG&E Gas Operations at the recent annual shareholders meeting, said that other pipeline companies do not allow trees in gas pipeline rights of way, and that PG&E has a "unique situation" with respect to trees currently growing in its transmission line rights of way. That statement is disputed by PHMSA. Please explain how your company came to its conclusion, including the sources of your information about the uniqueness of PG&E's situation. (source: https://www.phmsa.dot.gov/regulations/title49/interp/PI-76-0108 https://www.phmsa.dot.gov/regulations/title49/interp/PI-00-0102 http://pstrust.org/wp-content/uploads/2014/12/Mulligan-Pipeline-Safety-Trust-ROW-Clearing.pdf)

23. PG&E’s written materials explaining CPSI for its 5/9/18 Lafayette community open house include this statement:
   "[CPSI] is based on guidance from state and federal regulators, pipeline safety organizations, industry associations, and other pipeline operators regarding safe uses near natural gas transmission pipelines. These entities all agree on the importance of keeping the area from a minimum of 10 feet and up to 25 feet free of vegetation and other items that could block critical access or damage the pipe."
A 5/14/18 emailed comment from Tom Finch, PHMSA Western Region Community Liaison, said the following:

"1. I am not aware of any federal regulatory agency that has taken the position that 'all agree on the importance of keeping the area from a minimum of 10 feet and up to 25 feet free of vegetation and other items that could block critical access or damage the pipe.'
2. The different guidance coming from PHMSA (which consistently says tree removal is a matter to be negotiated and not mandatory) and PIPA, which appears to have a very different perspective, is that PIP is a suggested
reference document and is not binding as a regulation."

Does PG&E agree that PIPA is not a regulatory agency, but instead is an association of a wide variety of pipeline stakeholders including members of the pipeline industry, the real estate industry, and the public?

24. Regarding the above, please identify the source of PG&E's statement quoted above that indicates federal regulators "agree on the importance of keeping the area from a minimum of 10 feet and up to 25 feet free of vegetation . . . ."

25. An analysis of PG&E's gas transmission pipeline significant safety incidents reported to PHMSA over the past 30 years (see pages 4, 5 & 17 in link, below) found that significant PG&E incidents averaged 1.2/year from 1986-2011 but averaged 4.7/year in the period 2012-2017, with a rising trend over the past five years. According to this data, in the period following San Bruno (and following PG&E's implementation of an aggressive ROW tree removal program), significant incidents have increased by an average of 400%. The same analysis (p 4) found that PG&E's averages of fatalities, injuries, and property damage reported to PHMSA are all up dramatically in the past four years (2014-2017) compared to the four years immediately prior to San Bruno. In comparing these two periods, total incidents reported to PHMSA are up 186% in the past four years vs 2006-2009, and property damage is up more than 1,000%. When compared to its industry peers, PG&E's overall safety performance using these metrics ranks worst among its peers.

Does PG&E agree with PHMSA and the Pipeline Safety Trust that the above metrics rank at the top of the metrics hierarchy for assessing gas pipeline operator safety performance? (source: https://docs.wixstatic.com/ugd/de4240_988b8bd6733642a0af64172776fd2803.pdf)


27. Regarding the above, if PG&E does not agree with the importance of these metrics in evaluating overall gas safety performance, please identify the metrics that PG&E believes to be the most important, and provide PG&E's quantified annual results applicable to each of these metrics for the period 1986-2017.

28. Regarding the above, this statement appears in the Introduction (p 1) of PG&E's 2017 Gas Safety Plan: "PG&E has made great progress in achieving Gas Safety Excellence over the last six years." Please explain why PG&E failed to mention in this report, and in its 2018 report, its alarming (and accelerating) deterioration in transmission pipeline safety performance over this period as measured by fatalities, injuries, property damage, significant incidents, and total incidents reported to PHMSA. (source: https://www.pge.com/pge_global/common/pdfs/safety/gas-safety/safety-initiatives/pipeline-safety/GasSafetyPlan.pdf)

29. Regarding the above, the Introduction to PG&E's annual Gas Safety Plans states, "The purpose of PG&E's Plan is to demonstrate PG&E's commitment to safe and reliable operations." The strategy and plans in this document focus almost entirely on PG&E's internal processes and metrics associated with those processes, e.g., improvements in transmission control points, miles of pipeline made piggable, and improvements in response time to reports of gas odor. Please provide a copy of any documents that do discuss PG&E's identification of the deteriorating incident rates
mentioned above and the company’s plans for addressing this problem.

30. Regarding the above, what does PG&E’s Integrity Management department believe are the primary contributors to the substantial increase in transmission pipeline incidents referred to above?

31. Regarding the above, what does PG&E’s senior management believe are the primary contributors to this substantial increase in incidents since San Bruno?

32. Regarding the above, what corrective strategy and specific actions has PG&E’s senior management initiated in light of the pattern of increasing pipeline incidents since San Bruno?

33. Save Lafayette Trees recently did a cause analysis for the 86 PG&E gas transmission incidents reported to PHMSA in the period 1984-2017. The analysis relied on PG&E’s initial description of incident causes, and its scope covers both significant and other transmission line incidents that PG&E reported to PHMSA. It concluded that, while excavation dig-ins remain the largest overall factor, the steady rise in total incidents has been driven over the last three years by increases in equipment failure, incorrect operation, and material failure. PG&E’s 2018 Gas Safety Plan (on p 13) describes the company’s Apparent and Root Cause Evaluation studies that are conducted for gas incidents. Please provide copies of the root cause analysis for each of the transmission line incidents reported to PHMSA for the years 2014-2017, and the accompanying identification/implementation of corrective action for each incident (as specified in the company’s Learn from Experience pillar of its Process Safety Management System). (source: https://docs.wikistatic.com/ugd/de4240_c263a60d3e834fd0848dd9ce7c4e725e.pdf and https://www.pge.com/pge_global/common/pdfs/safety/gas-safety/safety-initiatives/pipeline-safety/2018GasSafetyReport.pdf)

34. Please estimate PG&E’s gas safety improvement spending during the six-year period 2012-2017 in the 11 categories below. It is understood that there will be some spending overlap with these categories, and double-counting of spending is okay if needed. The first 7 categories are major causes of transmission pipeline failure; the last 4 categories are some of PG&E’s many targeted gas safety improvement programs.
   a. Excavation damage/dig-ins
   b. Equipment failure
   c. Incorrect operation
   d. Material failure
   e. Corrosion
   f. Outside force
   g. Earth movement
   h. Valve automation
   i. Improved ROW marking
   j. Increased pipeline piggability (ILI)
   k. Pipeline Pathways/CPSI
35. During the PG&E 2018 Annual Shareholders’ Meeting in San Francisco, Sumeet Singh, VP of Gas Asset & Risk Management, was asked if implementing other safety projects such as improved inspections would change their risk management equation for tree risks, thereby making tree cutting less necessary. He replied “Yes.” Does PG&E stand by his response? Given the upcoming projects scheduled for Lafayette (including automated shut off valves, improved inspections, burying exposed pipelines, and replacement of vintage pipelines), why is tree removal being scheduled when the need for their removal will change after these projects are completed?

36. According to the Dept of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) national database, there has never been a reportable underground transmission pipeline accident in the United States in the last 20 years. Jesus Soto, VP of Gas Operations at PG&E told us that the rest of the United States does not have trees along the pipeline. Does PG&E stand by the statement that there are no trees along the 300,000 miles of pipeline in the US, or the over 7000 miles in California? (source: https://docs.wixstatic.com/ugd/de4240_3a2200235ff245f91384d1ecde9c412.pdf)

37. Regarding the above, does PG&E have a historical safety reason for tree removal along their underground transmission pipeline? If there is no historical reason, what are PG&E’s reasons for believing that trees will cause incidents along the underground transmission pipeline in the future?

38. PG&E is planning on removing trees in recognized areas of landslide and liquefaction potential. How did PG&E measure the risk mitigation of tree removal compared to the potential risk of enhanced ground instability when trees are removed? PG&E concluded that removal of most of the targeted trees along Las Trampas Creek will not impact bank erosion, but that does not account for the balance of the trees that will pose a bank erosion hazard. How does PG&E plan to mitigate this risk that they seem to be introducing to the pipeline?

Safety Risk: Tree Roots

39. The Dynamic Risk “final report” issued August 30, 2013, contained this caution about the potential for decaying dead tree roots to cause pipeline corrosion:

"One factor not considered in this assessment, and also requires consideration as part of the development of a tree root removal program, is the effect of tree roots that are not alive and have the potential to decompose. It is recognized that the decomposition of organic matter will produce carbon dioxide (CO2) and this has the potential to increase the susceptibility to cracking of the outside diameter pipe surface. Further study, assessment and consideration for this phenomenon is required."

The above caution does not appear in Dynamic Risk’s rewrite of their final report, issued January 17, 2014. Instead, this sentence appears in the 2014 report: "There was insufficient data collected in this study to draw any conclusions as to whether the presence of dead tree roots in contact with the pipe has any impact on pipeline integrity." Was there further assessment and consideration for this phenomenon, as required by this report? What is the name of the person(s) who expressed concern about the potential added hazard of dead tree roots in the 2013 study, and why was the 2013 alert about the potential for added corrosion from dead tree roots, and the recommendation to better understand and consider this phenomenon, deleted from the 2014 report? (source: https://docs.wixstatic.com/ugd/de4240_8a5875dbc38747e5a5daf27b1a0b12db.pdf)

40. Regarding the above, why did CPUC request a copy of the 2013 version of the report, but this version was never
distributed? Why are the authors and contributors different for the 2013 and 2014 reports, and why are there so many substantive differences between the two reports?

41. Regarding the above, Table 2 (page 14) indicates that tree removal without root removal is less safe than tree removal with root removal (because of lessened threat from external corrosion/cracking). Why was this information removed from the 2014 version of Dynamic Risk’s report?

42. Regarding the above, what data did PG&E collect and analyze in support of its decision to leave the roots in place of the trees being destroyed adjacent to its transmission lines? Please provide a copy of the analysis.

43. Regarding the above, is there a possibility that PG&E could be introducing further pipeline damage via external corrosion and cracking by implementing the CPS1 program in the state of California?

44. Regarding the above, a table on page 14 is titled "Examples of Monitoring and/or Mitigation Actions and Effect on the Risk Profile." In that table it looks at the reduction of threat likelihood with different mitigation actions. Tree removal and Root Barrier System provide the exact same benefits in all categories (external corrosion/cracking, lightning, weather/outside force, and fatigue). Given this information why is PG&E claiming removal of trees is the only way to reduce root/pipeline interaction?

45. Regarding the above, the table on page 14 also lists alternative mitigation actions and the expected risk reduction for each alternative. The alternatives listed include (1) tree removal with root removal; (2) tree removal without root removal; (3) deployment of a root barrier system. Alternative 2 (which PG&E chose to implement) is shown in the table to provide the same effect on risk reduction as alternative 3. Alternative 1 is shown in the table to provide better risk reduction than alternatives 2 or 3. Please describe what investigation was made to explore the potential of a root barrier system before the concept of a root barrier system was deleted from the 2014 re-write of Dynamic Risk’s 2013 report.


47. The 2014 Dynamic Risk report recommended performing supplementary work on ground penetrating radar to determine if it is an effective means for identifying and characterizing the location and extent of roots near buried pipelines. Please identify what follow-up studies were done in response to this recommendation and provide copies of the study documentation.

48. Please provide the details of PG&E’s risk assessment algorithm that results in certain trees in the company’s pipeline ROWs to be classified as "unacceptable risk" (thus requiring destruction), versus other trees to be classified as "manageable risk" (requiring monitoring but not destruction). We are seeking the inputs to this algorithm, methods of quantification, and the computational details that result in the classifications described in the preceding sentence.

49. In a December 1, 2017, letter from Joe Echols of PG&E to Martin Bernal, City Manager of Santa Cruz, titled “Pacific Gas and Electric Company’s Undertakings Regarding Tree Removal Within the City of Santa Cruz for the
Community Pipeline Safety Initiative", Mr. Echols wrote on page 4:

"PG&E will consider reasonable alternatives for mitigating potential pipeline safety issues, including but not limited to: 
"b) Regular, ongoing monitoring and inspection of pipelines, including possible use of subsurface radar to determine whether, and to the extent to which tree roots have grown into contact with pipelines. c) Root barriers to protect pipeline coating when appropriate."... "e. Potential pipeline retrofitting to accommodate in-line inspections or their inspection technology."

Why was subsurface radar and root barriers not offered similar “reasonable alternatives” to tree cutting for the City of Lafayette? If PG&E is planning on retrofitting the Lafayette pipelines to accommodate in-line inspections, as PG&E claims, wouldn’t this be classified as an alternative for mitigating potential pipelines safety issues, e.g., removing Lafayette trees?

50. Please explain the decision to cut the trees and leave the roots remaining in place versus removing the entire tree and root structure.

51. Over the past 20 years, how many gas transmission line safety incidents caused by tree roots did PG&E report to PHMSA?

52. Please describe any gas transmission line safety incidents caused by trees in PG&E’s service area in the last 20 years that were not reported to PHMSA.

53. How many underground gas transmission line safety incidents caused by trees were reported to PHMSA in the last 20 years by any pipeline operator in the U.S.?

54. During the May 2018 Open House in Lafayette, none of the PG&E experts we spoke with were aware of the 2013 Dynamic Risk Assessment root study. Also, one employee indicated that the 2014 tree root study was updated in 2015. Although these studies lack the scientific weight of being independent and third-party reviewed research, they clearly are having a significant impact on PG&E risk assessment and pipeline ROW decision making. Please provide copies of all versions of this study.

55. Was the PG&E’s 2014 Dynamic Risk Assessment study conducted with the assistance of Bronson Ingemansson who manages the tree removal spreadsheets and algorithms for PG&E’s CPSI program? Can PG&E point to any independent, peer-reviewed tree root & pipeline interference study that was conducted in the last 10 years?

56. What studies have PG&E conducted or that are known to PG&E which describe the benefits of tree roots in the proximity of pipelines, including the lessening of soil erosion, landslides, an liquifaction (during earthquakes), and also the benefits of moisture removal from the soils surrounding pipelines?

57. Has PG&E found soil failure in locations where they have previously conducted tree cutting? (One possible example: https://www.youtube.com/watch?v=kphxVkrNkc)

Safety Risk: First Responder Access
58. Lafayette's firefighters, fire captains and hazmat professionals reject PG&E’s CPSI rationale and have gone on record as saying that gas pressure must be shut off and the gas dissipated before any emergency personnel will enter a live leak area. This procedure is required by federal law per CFR 192.165 which states “Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property.” The removal of trees do not provide the safety benefits of automatic or remotely activated shut-off valves on transmission lines, or is it required by any section of the CFR. How does PG&E explain the fact that first responders in Lafayette consistently dispute PG&E's most frequently cited reason for tree removal? Is PG&E’s desire to remove discretionary physical objects near pipelines a safety consideration, or is it a timing consideration to minimize the timeframe of gas flow disruptions to customers? (Source: https://www.law.cornell.edu/cfr/text/49/192.615)

59. Lafayette’s March 27, 2017 Tree Cutting Agreement states "PG&E is conducting a community pipeline safety initiative to ensure that first responders and safety crews have immediate access to their pipelines in an emergency..." Also, the 2018 Gas Safety Plan from PG&E states “When a structure is identified in the pipeline right-of-way, PG&E works with the local jurisdiction or property owner to remove and/or relocate the structure outside of the right-of-way and away from the pipeline.” The Plaza Park trellis is such a structure and lies directly over the transmission pipeline and is a violation of Utility Standard: TD-4490S which explicitly prohibits “buildings, structures, or foundations” but does not prohibit trees in the right-of-way. It also represents a significant impediment to digging should a rupture occur beneath it. According to documents provided by the City during a Public Request Act, it was communicated to City Staff that PG&E would relocate the line in order to remedy this situation; however, this does not appear to be the case. On what basis was the decision made to ignore this significant obstacle sitting on top of the pipeline? Who made the decision, and why was the designation changed three times from: need to remove, pipeline to be rerouted, to leave in place? (source: ftp://ftp2.cpuc.ca.gov/PG&E20150130ResponseToA1312012Ruling/2013/07/SB_GT&S_0263354.pdf)

60. Regarding the above, why are certain structures, such as the Plaza Park trellis discussed above, and other private structures apparently left on the pipeline, allowed to remain which would significantly hinder the access in the case of an emergency? What are the standards that are applied in making these decisions? Do these standards appear somewhere other than in TD 4490S? If so, please provide a copy of that PG&E standard. (Source: ftp://ftp2.cpuc.ca.gov/PG&E20150130ResponseToA1312012Ruling/2013/07/SB_GT&S_0263354.pdf)

61. According to the FAQ in the City Staff Report of March 27, 2017, PG&E is cutting trees for this stated purpose: "We are working with our customers and communities to check the area above the pipeline for any items that could delay safety crews from getting to the pipe in an emergency and making it safe. Items like trees and structures can slow response times and potentially cause damage to the pipe." Why are certain trees being eliminated, but the same size, species, and age tree at a similar distance from the pipeline are NOT being removed from the pipeline? Why is PG&E treating the community’s tree in a binary fashion (safe/not-safe)? Could there be further refinement into additional categories, such as “need to explore root interaction” or “leave now but review in near term”, etc? (Example sites: the young bay laurels at latitude 37.9462 / longitude -122.1327, (photo: https://goo.gl/4NYUPH), and many mid-sized oaks along the Lafayette-Moraga Trail between cross streets Olivera and Glenside Roads.)

62. In response to CPSI pushback, PG&E has stated:
"There are many reasons why it is important to have direct and immediate access to the area above a pipeline. The way we approach pipeline access is similar to why cars cannot park in front of a fire hydrant. While fire trucks do not need to regularly access the fire hydrant, when they do, they need immediate and unblocked access. In an emergency or natural disaster, trees located over or around an underground pipe can delay access by first responders and slow response times. Every second counts in an emergency."
Knowing that an excavator and team is not readily available in the case of an emergency, how many seconds would it take, and what equipment and teams would be required, to excavate a section in the middle of St. Mary's Road? How many seconds would it take, and what equipment and teams would be required to excavate around a 10-20" DBH tree, the median size of tree in Lafayette scheduled for removal? (source: Source: https://www.pge.com/includes/docs/pdfs/about/environment/ButteCountyCPSITownHallFollowUpAugust2015.pdf)

63. Regarding the above, why does “every second count” when the correct procedure is to shut off gas pipeline flow before any repairs are made?

64. A significant number of Lafayette trees identified as “unacceptable risk” fall into this category primarily because their location interferes with PG&E’s need for immediate pipeline access in the event of a pipeline emergency. How many of the 272 unacceptable risk trees in Lafayette are on this list more because they interfere with emergency pipeline access rather than the potential threat of the tree roots to pipeline integrity?

65. Regarding the above, please provide the decision criteria that PG&E uses to place a tree in the unacceptable risk category due to emergency access concerns.

66. In May 2017, PG&E’s spokesperson Jeff Smith explained on a local TV news segment for Lafayette that PG&E needs to remove trees in order to dig out a section of a pipe in the case of an emergency and then said "we actually squeeze it off with a gigantic pair of pliers". Does PG&E stand by this explanation of how they treat a rupture to a high-pressure steel gas transmission pipeline rupture? What are the steps for repairing a significant rupture, including gas shut-off, dispelling gas, excavation, repair, etc? (source: http://abc7news.com/news/lafayette-residents-push-back-against-pge-tree-removal/1970139/)

67. Over the past year (e.g., at the May 9 open house in Lafayette, at the May 30 Pipeline Safety Trust workshop in Richmond, and in an August 2017 meeting in Lafayette), PG&E experts have given diverse and conflicting answers to the question, “In the event of a gas transmission line emergency, does PG&E routinely depressurize the line before attempting to make repairs?” The answers have ranged from, “Yes, we first shut the line down,” to “Every leak is different. We often don’t shut the line down, even when there are very large leaks…we actually weld on live (pressurized) transmission lines,” to “These days we no longer need to attempt repairs on live lines. We’ve developed methods to avoid this.” Please clarify PG&E’s operating standards applicable to transmission line gas emergencies—when should the line be depressurized? When should an emergency repair be attempted on a leaking, pressurized transmission line? In the past five years, what percentage of the time has an emergency fix been attempted on a live transmission line, rather than first depressurizing the line? Please provide a copy of PG&E’s operating standards that cover this topic.

68. PG&E’s CPSI flyer distributed to many Lafayette residents’ homes in May 2017 explained the importance of immediate access for first responders in the event of a gas transmission line emergency. The flyer said, “Trees can block safety crews from getting to gas pipelines in an emergency or natural disaster, when every second counts.” However, leading up to the summer of 2018 when PG&E had the choice of routing the length of its 6000 ft higher-capacity gas transmission line under St. Mary’s Rd or along the parallel Lamorinda Trail (where immediate access could be considerably better), it chose the traffic-disrupting path under St Mary’s Rd. This choice is especially perplexing in light of a 2011 gas transmission leak that occurred at a point where the pipeline merely intersected a roadway in Novato. Here is an extract from PG&E’s report to PHMSA about this incident:

"Unfortunately, the source of the leak was not at either side of the roadway but appears to be located somewhere..."
under the roadway. Due to the location of the leak it is not feasible to attempt to repair the leak. A new pipe will be
installed under the roadway to replace the leaking pipe. Construction is scheduled to begin 10/19/11. [one month
after discovery of the leak]

Please explain how positioning a new 6000 ft section of pipeline under St Mary’s Rd will result in first responders
having immediate access to the pipeline in the event of a gas pipeline emergency (when “every second counts”).

69. What is the width of the construction ROW that PG&E is using to install the replacement line this summer along St
Mary’s Rd? What is the minimum width of the construction ROW that PG&E has prior experience with for installing a
12” diameter transmission line where the circumstances required absolute minimum impact during construction on
the pipeline corridor?

70. Regarding the above, please explain the routing considerations and thinking that went into the choice to route the new
line under St Mary’s Rd rather than along Lamorinda Trail (which closely parallels the road).

71. In 2017, PG&E proudly announced their new “best-in-class training environment” training facility in Winters, CA. Given
that trees have been given as a reason for implementing the $500 Million CPSI program, what training is being
provided for dealing with pipeline ruptures caused by tree roots? (source:

72. In the May 2018 CPSI Open House in Lafayette’s Veterans Memorial Center, PG&E displayed large placards to support
the tree-cutting program, including a quote and photograph of Contra Costa Fire Chief, Jeff Carmen. The only purpose
to show his photograph, name and position was to imply that Chief Carmen endorses the CPSI program. On the
contrary, he wrote in an email on May 9: “Please don’t confuse my statement that I somehow endorse PG&E’s tree
removal program. I simply support the initiative to provide first responders access to pipelines. The way PG&E is
implementing their program is outside of my expertise.” Why did PG&E purposely mislead the Lafayette public in this
regard?

Pipeline Testing/Patrolling/Records

73. If PG&E conducts twice-yearly patrols of their pipeline, why was the 4’ exposed segment of pipeline near Beechwood
Dr. not known to the PG&E representatives, including a PG&E land-use employee, when residents walked the trail with
them in May 2017? And why wasn’t it known to PG&E despite Lafayette residents submitting this pipeline exposure
over 10 years ago? Can PG&E provide patrolling records that include when the exposed pipeline was first identified?
Why only after Save Lafayette Trees efforts did this pipeline repair become a scheduled project?

74. A PG&E representative said at the May 2018 Open House that they patrol the gas pipeline 2x a year. In the August
2017 Pipeline Report for Lafayette, it says “aerial patrol is performed, at a minimum, quarterly” and later says "PG&E
often patrols its gas transmission pipelines monthly", all which are contradictory. Please provide patrol records for the
past 10 years so we can determine how often the pipelines in Lafayette have been historically patrolled and how they
have been patrolled.

75. What are the advantages and what are the disadvantages of ground/foot patrolling of transmission pipeline in
Lafayette? What are the advantages and disadvantages of aerial patrolling in Lafayette? What is the determined
76. If PG&E has not "pig" inspected any pipeline in Lafayette, and DFM 3001-01 has not been strength tested for 30 years, nor has it been inspected with direct assessment (as confirmed in PG&E's August 2017 report) and the pipeline characteristics are such that these welds were only visually inspected (as confirmed by PG&E representatives), how can PG&E determine the integrity of the Lafayette-Moraga Trail pipeline with any assurance? (Source: https://www.law.cornell.edu/cfr/text/49/192.921 and https://docs.wixstatic.com/ugd/de4240_093fda41fe8148b1ba3fa9dfe4994cc1f.pdf)

77. All pipelines in Lafayette were initially installed in the late 1940s or early 1950s. PG&E reports strength testing of lines only starting in 1963 and later, presumably as newer segments of the lines were added. Can PG&E provide integrity testing results specifically for the older segments of pipeline? (source: https://www.law.cornell.edu/cfr/text/49/192.619 and D1106107 NTSB rec post SB )

78. After San Bruno, the NTSB recommended and the CPUC ordered PG&E to search for all specs, testing, and related records for pipeline system components such as pipe segments, valves, fittings, weld seams in Class 3 locations and Class 1 and 2 High Consequence Areas (HCA). What is the class location and High Consequence Area (HCA) designations in Lafayette? If Lafayette qualifies as any class location or HCA subject to these orders by the CPUC, can PG&E show that they have these records for Lafayette and that these records are traceable, verifiable, and complete? In 2011, at a related CPUC hearing, then Sr. Vice President for Gas Engineering and Operations was quoted as saying: “What you want to know is everything that’s in the ground before you start conducting that test, so that you don’t put yourself in a situation where you’ve led to unintended consequences by pressuring that pipe up." (Source CPUC D11-06-017 https://docs.wixstatic.com/ugd/de4240_37b0ff35e65840fcb95b1cfd6c3c70a.pdf)

79. Related to above, the PUC requested operators to determine Maximum Allowable Operating Pressure (MAOP) on the weakest section of the pipeline component to ensure safe operation. Can PG&E demonstrate that pipeline MAOP in Lafayette is determined by this requirement?

80. This summer, PG&E is replacing a 4" transmission pipeline segment in Lafayette, along St. Mary's Rd., with a 12" pipeline segment, reported by PG&E to increase service capacity to customers in Moraga. The current MAOP is 170 psig. Why is the psig so much lower on this line relative to other pipelines in Lafayette? How does the new 12" pipeline impact the MAOP of the line?

81. PG&E states pipelines are upgraded based upon risk. For those pipelines that risk cannot be assessed, (i.e. no strength testing, no ILI because of low MAOP), how does PG&E determine need of upgrade for safe operation? Does PG&E have plans to increase MAOP to optimize line service in Lamorinda area and/or better accommodate testing ability?

82. How does PG&E plan to test for internal corrosion on all of Lafayette lines, first one installed in 1947, and not tested completely, or tested at all, in that timeframe? In cannot do in-line inspection on lines with low operating pressure. If Will the MAOP be increased with the placement of the new 12" pipeline?

83. Lafayette’s gas transmission lines were installed over multiple years (dating back to 1947 for some sections). Some sections of these lines were never pressure tested. Some sections were designed, manufactured, and installed before the advent of California’s 1961 pipeline safety laws. Please provide the following details for each Lafayette pipeline section that has never been pressure tested:
a. Name of the line  
b. Year this section was installed  
c. Length of untested section  
d. Geographic location of this section  
e. Nominal diameter  
f. MAOP  
g. Weld type  
h. Wall thickness  
i. Coating type  
j. Does this section potentially have “vintage pipeline features” that might make it better suited for replacement?  
k. Class location (if multiple, provide details)  
l. HCA (yes/no) (if both, provide details)  
m. Date when pressure testing will be done on this section

Pipeline Infrastructure: Shallow and exposed pipelines

84. Federal standards state that gas transmission pipelines should be installed under at least 36” of soil. How many instances has PG&E recorded soils depths that do not meet this threshold? At what distance intervals are measurements taken along the 11 miles of PG&E in Lafayette? When were these measurements made, and would they be any different if measured today?

85. In the Gas Operations Data Response document provided on 5/1/2017, PG&E stated on page 3 that the depth of cover is "1.1 feet to approximately 8.9 feet for Line 191-1 near the Lafayette Moraga Regional Trail" and "1.6 feet to approximately 11.5 feet for DFM 3001-01 near the Lafayette-Moraga Trail". Given that residents have reported seeing the exposed pipeline near Beechwood Drive over 10 years ago, how old are these measurements?

86. What amount of water and subsequent side-force pressure is acceptable on PG&E’s transmission pipelines, such as seen on the 4’ section of exposed pipeline near Beechwood Drive during the 2017/2018 rainstorms, and years prior?

87. What risk does PG&E see from exposed pipelines in residential neighborhoods, including atmospheric corrosion, vandalism, falling branches, automotive accidents, etc?

88. Is PG&E aware that on multiple occasions, and most recently on May 28, 2018, early morning explosions in Lafayette have woken up residents, and that police suspect that these explosions are an intentional act using “illegal fireworks” or possible “a small pipe bomb” by individuals who have never been caught? Thankfully most of the transmission pipeline is buried, but what is the potential for a serious gas accident should someone criminally place such a bomb at the site of the exposed 4’ of pipeline along the Lafayette-Moraga Trail? (Source: https://news24-680.com/2018/06/11/not-sewer-gas-or-truck-doors-banging-shut-lafayette-police-say-pre-dawn-blasts-are-intentional-act/)

89. What internal risk score (via PG&E’s Risk Register) does PG&E put on exposed pipeline compared to trees? (source: https://docs.wixstatic.com/ugd/de4240_66ca1375a327432a86e73c4efdf49796.pdf)
90. One Lafayette resident has reported seeing an exposed pipeline in Lafayette that is not the recognized 4’ segment near Lucille Drive. This resident gave us the general location which does match the pipeline location per PG&E’s information. Given PG&E’s extensive patrolling and need to monitor for external atmospheric corrosion, what is the location of this exposed pipeline, and how was it remedied to eliminate the chance of corrosion and vandalism?

**Pipeline Infrastructure: Markings**

91. Recognizing that dig-ins are the most frequent cause of accidents in PG&E’s transmission pipelines, and PG&E conducts twice-yearly inspections, why is line 3001-01 in Lafayette without any visible markers in long stretches? And why are the markers we found along Las Trampas so covered with vegetation, it took residents walking the pipeline three attempts to find & uncover them?

92. What are the pipeline marking standards, including spacing between markings and visibility in transmission line ROW, that the best gas industry performers (lowest rate of excavation incidents) have adopted? Please provide copies. To what extent does transmission pipeline marking in Lafayette conform with the marking standards being used by the industry’s best performers? Which best-industry performers/marking standards are being referenced here? (source: https://www.law.cornell.edu/cfr/text/49/195.410)

93. During a pipeline safety workshop in Richmond on May 30, 2018, representatives from Kinder Morgan said that their company’s standards for pipeline ROW marking require that when an observer stands at one marker, the next markers (both upstream and downstream) must be clearly visible. When asked about PG&E’s marking standards, Andy Wells (PG&E Gas Emergency Preparedness) said that PG&E had the same standard. Please provide a copy of PG&E standards covering ROW and pipeline marking requirements.

94. Which pipeline operators in the U.S. have the best performance in terms of managing dig-in incidents? Over the past four years, how does PG&E’s transmission line dig-in incident rate compare to these best performers? Please answer this using these two metrics: dig-ins per 1,000 tickets and dig-ins per million miles of transmission line. (The latter metric is PHMSA’s preferred approach when comparing operator dig-in performance across different regions of the country.)

95. Please describe best practice benchmarking in the area of dig-in prevention that PG&E has conducted with the industry’s best performers over the past four years. What changes has this led to at PG&E? What further changes are planned in light of (1) what has been learned from benchmarking, and (2) PG&E’s continued performance erosion with respect to dig-ins (using the metric of incidents/mm miles of transmission line)?

**Pipeline Infrastructure: Valves**

96. According to PG&E’s Pipeline Safety Guide 2017:

"PG&E’s Valve Automation Program is designed to accelerate emergency response in the event of gas transmission pipeline rupture. This program builds upon the scope and principles in PG&E’s Pipeline Safety Enhancement Plan. The Pipeline Safety Enhancement plan replaced, automated, and upgraded gas shut-off valves across PG&E’s gas transmission system from 2011-2014 and the Pipeline Safety Enhancement Plan’s scope
of work was completed in 2015. In 2016, an additional 18 valves were installed through the 2015-2018 Gas Transmission and Storage Rate Case Valve Automation Program, expanding the Company's ability to shut-in pipeline sections over widespread urban areas including the San Francisco Peninsula and the North Bay, further providing for public safety in the event of a dig-in or rupture. The Valve Automation Program allows the transmission pipeline to be rapidly isolated through remote and automatic control valve technology. Installation of automated isolation capability on major pipelines in heavily populated areas may reduce property damage and danger to emergency personnel and the public in the event of a pipeline rupture."

Given this statement by PG&E, why is PG&E prioritizing tree cutting in Lafayette over valve automation?

97. PG&E apparently replaced an "Inoperable and Hard-to-Operate Valve" near the Lafayette Reservoir entrance this year. Does PG&E have record of when it became aware of the non-operational valve? What kind of valve is installed in this location?

98. How is Lafayette's safety improved by PG&E installing a manual valve at S. Lucille Drive to facilitate operations when an automatic or remote valve would enable quicker shut-off in case of an emergency?

99. How does PG&E measure the time it would take a crew to manually shut-off the new S. Lucille Drive shut-off valve, in the event of an emergency? How does time-of-day commute traffic and the knowledge that there are only one or two entry points to that community from Lafayette effect that timing?

100. Assume a pipeline is struck by a construction crew at Lafayette-Moraga Trail, adjacent to the busy Lafayette Community Center. Since there are no automatic shut-off valves, how would PG&E today stop the gas pressure at the accident site, allowing first responders to enter the accident area, and what is the time estimate for this gas shut-off?

101. Is the planned 2021 installation of two automated valves in Lafayette guaranteed to happen?

102. In 2007, Contra Costa County began requiring automatic gas shut-off devices in all new buildings and in existing buildings upon sale/significant modification. The purpose of this requirement is to reduce the risk of fire/explosion in the event of a major earthquake. Does PG&E agree that the above requirement is a prudent step to improve community safety?

103. Regarding the above, over the past 20 years, U.S. pipeline operators reported to PHMSA 47 transmission pipeline safety incidents where the cause was attributed to earth movement (2.3% of all incidents reported). What was PG&E's transmission line incident rate due to earth movement in this period?

104. Regarding the above, what percentage of PG&E's transmission line valves are manual, as opposed to automatic/remotely controlled? How has this percentage changed in the period 2010-2018?

105. Regarding the above, does PG&E agree that pipeline safety risk due to earth movement is a relevant consideration that weighs in favor of installing automatic/remotely controlled valves on transmission lines, and particularly when installing new and replacement lines in populated areas such as Lafayette?

106. In the 2010 San Bruno explosion, the NTSB said it took more than 90 minutes to shut down the gas supply, and NTSB experts concluded that this likely increased the community damage. In 2011, Rep. Jackie Speier introduced a bill in Congress that would require natural gas pipeline operators to install automatic or remote shutoff valves in all urban
areas and within 10 miles of high-risk earthquake faults. The NTSB concluded as part of its San Bruno investigation that auto/remote controlled valves should be installed in HCAs and in class 3 & 4 locations; the 2011 Federal Gas Safety Act (signed into law January 2012) specifies auto/remote controlled valves for new and replacement gas transmission lines. Are explosions a more common event on transmission lines than on distribution lines when an unintentional gas release occurs?

107. Regarding the above, does PG&E agree that automatic/remotely controlled valves on transmission lines can improve community safety?

108. Regarding the above, does the San Bruno community that was most impacted by the 2010 transmission line explosion now have automatic/remotely controlled valves installed to enable fast shut-off in the event of an emergency?

109. Regarding the above, why is PG&E planning to install manual valves as part of its St Mary's Road pipeline replacement project?

110. How many sectionalizing block valves are currently installed in Lafayette's transmission lines to provide timely shut-off in the event of an emergency? What are the distances along each pipeline segment between these valves, and the associated federal classification for each segment (e.g., HCA, class 2, etc.)?

111. Which block valves in Lafayette will not accommodate in-line inspection as currently configured?

112. PG&E plans to replace the transmission line manual shut-off valve located near Reliez Station Road and Olympic with a remotely controlled valve within the next two years. Over the past five years, how many auto valves has PG&E installed in its transmission lines? How many remotely controlled valves?

113. Regarding the above, what are the considerations that most often drive the selection of auto vs remotely controlled valves on transmission lines in PG&E's system?

114. Regarding the above, can a modern auto valve accommodate a remote signal to close in essentially the same fashion as a remotely controlled valve?

115. Regarding the above, why has a remotely controlled valve been chosen over an auto valve for Reliez Station Rd and Olympic Blvd?

116. What are PG&E's standards for placing an automated (automatic or remote-controlled) valve in new or reconstructed transmission pipeline installations?--In what ways are these standards different for Class 1-4 and HCA locations?

117. PG&E confirmed that the valve that will be installed in the summer of 2018 at S. Lucille and St. Mary’s Road will be a manually operated valve to help facilitate future maintenance. However in other communities, manually operated valves are being replace with automatic valves. One example:

"As part of its Pipeline Safety Initiative, PG&E is installing an automated gas valve system located on South Novato Boulevard across from Cowbarn Lane. This system includes above ground valve assemblies that are remotely controlled via a wireless antenna connection—allowing PG&E to shut-off the flow of natural gas through its pipelines in the event of an emergency. This is one of many safety improvements PG&E is making to

What type of valve is being replace at S. Lucille Lane? Why is this safety improvement being made in Novato, but not in Lafayette and Moraga?

**Pipeline Infrastructure: Cathodic Protection**

118. Have there been, or is there currently, any instances of inadequate cathodic protection in Lafayette? Please list the incidents.

119. Safety incidents on PG&E’s transmission lines have been increasing in recent years, based on PHMSA data. What role does cathodic protection play in mitigating this risk?

120. How often does PG&E verify the proper functioning of the cathodic protection system on each of Lafayette's transmission lines? How does this frequency compare with PG&E standards and PHMSA regulations?

121. What are the benefits of installing continuous monitoring (telemetry to central monitoring station) of the cathodic protection system? What is restraining the installation of such a system for Lafayette's transmission lines?

122. Cathodic coupon stations were newly installed last year along the Lafayette-Moraga Trail after residents raised safety concerns regarding the transmission pipeline. We’re glad PG&E is responding to our safety concerns, but what was your reason for installing these stations at this time? What was your rationale for the locations selected? What benefits/potential benefits do you associate with this change? What other locations within Lafayette might benefit from a similar upgrade?

**Pipeline Infrastructure: Coating**

123. In PG&E’s May 2018 Open House information packet, (page 2), 11 instances of coating being damaged in the past 13 years is provided as “evidence” that tree roots cause pipeline corrosion, however this information doesn’t give a complete picture. What is the TOTAL number of coating damages, any cause (rocks, earth movement, age of coating, etc), reported during the last 13 years along PG&E’s entire gas transmission pipelines, and what were the causes of these incidences? Please rank cause of damage to pipeline by frequency. (source: https://docs.wixstatic.com/ugd/de4240_e8e518be538e4df5be6f0e4cb58bc2d.pdf)

124. Regarding the above, what were the species of trees that caused this damage? what is the depth of pipeline in each instance, and distance from tree? Type of soil? Were there any instances of actual pipeline corrosion?

125. Regarding the above, how were these instances discovered by PG&E?

126. During the May 2018 PG&E Open House in Lafayette, PG&E representatives said that the current standard for pipeline coating is an enamel epoxy that is installed during fabrication. What studies has PG&E conducted on tree root interference with this type of coating? What were the findings and recommendations from these studies?
127. According to the 2014 Dynamic Risk Assessment report: “While additional investigation of the impact of tree roots on various coating types is warranted, the current data indicates PG&E can consider coating as an attribute for predicting the interaction with tree roots. Of the 45 sites where the external coating types were either hot applied asphalt or coal tar enamel, coating damage was identified at 38 sites (or 84%). For the 8 remaining sites where the external coating type was polyethylene tape, 2 sites (25%) identified coating damage. The reason for this difference was not resolved as part of this study.” Given the extreme differences in root/coating interaction based on the type of coating, with tape being more protective than asphalt, what is the coating type at each proposed tree-removal location? What additional investigation has happened since this report was released?

**Pipeline Infrastructure: Manufacturing**

128. In the April 23, 2018 presentation to Lafayette City Council, PG&E showed a slide titled "Pipeline Scope and Background" which characterized DFM 3001-01 as follows: "The existing welded steel pipelines in Lafayette are considered critical infrastructure and were installed along St. Mary's Road in 1952. Pipe installed in this era was welded before modern radiography was used to inspect welds and as such the welding inspection was only visual. Additionally, modern manufacturing practices are far superior to those of that historic era." In fact, numerous City of Lafayette communications confirms this project is to “replace the aging pipeline.” If PG&E is replacing this pipeline from S. Lucile to Rheem, in part due to age and construction concerns, how is PG&E unconcerned with the remainder of the same pipeline with the same characteristics, north of S. Lucile to downtown Lafayette?

129. What are the top five transmission pipeline maintenance practices that impinge on pipeline lifespan? Please quantify the potential lifespan-shortening effect for each of the maintenance practices if they are not followed.

130. One finding of the NTSB after San Bruno was the fact the pipeline was "fabricated at an unknown facility to no known specification". Please tell us where the Lafayette pipelines were fabricated, and to what specification. (source: https://www.pipelinelaw.com/wp-content/uploads/sites/24/2013/07/NTSB_Final_SB_Report.pdf)

131. The effects of wrinkle bends on the long-term integrity of pipelines are a recognized concern in the industry. According to a 2009 article in Pipeline and Gas Technology magazine, “"At the time, contractors commonly used a process of conforming steel pipe to the surrounding topography by forcefully compressing the pipe to create a bend in it. This technique created what have come to be known as "wrinkle bends" in the pipe." Are there any wrinkle bends in any of the pipelines in Lafayette? (Source: http://compositerepairstudy.com/downloads/Evaluating_the_effects_of_wrinkle_bends_(September_2009).pdf and http://www.naturalgasintel.com/articles/89168-southern-seeks-to-iron-out-wrinkle-bend-hazards-on-pipe-system)

132. PG&E reports that Lafayette pipeline includes Electric Resistance Welds (ERW), Furnace Butt Welds, Lap Welds, Seamless and Spiral weld types. Low frequency ERW, Furnace Butt, and Lap welds are known to be of poor quality and are obsolete. As PG&E reports, in-line inspection (ILI) is not currently available to Lafayette. How has PG&E been historically testing integrity of these seam welds to regulatory standard? (source: 192.241 weld inspection)

133. According to PG&E’s May 2018 Open House document, “The U.S. Department of Transportation’s Pipeline & Hazardous Materials Safety Administration, for example, states that the life of a pipeline is virtually endless if it is constructed and maintained correctly. That’s one of the reasons why this gas safety program is so important.” Given the answers to
other questions listed here regarding construction of older pipeline, untested welds, no in-line inspections, lack of strength testing for over 30 years, as well as self-reported lapses in cathodic protection, what assurance does PG&E have that each pipeline in Lafayette is safe and free of latent hazards? (source: https://docs.wixstatic.com/ugd/de4240_e8e518be538e4df5be6f01e4cb58bc2d.pdf)

134. In 2010, PG&E transmission line 132 in San Bruno exploded as the result of a defective longitudinal seam weld. Twenty-two years before this (in 1988), line 132 experienced a leak attributable to a defective longitudinal seam weld at a point about 9 miles south of the 2010 rupture. The repair in 1988 involved replacing about 12 feet of line 132. Four years after the 1988 incident (in 1992), a defective longitudinal seam weld was detected in another part of line 132 when a tie-in girth weld was x-rayed. In light of the serious nature of the 1988 defect (which provided evidence of longitudinal seam welds in line 132), why wasn’t an aggressive risk assessment and mitigation program immediately initiated for all of line 132, including the section located in San Bruno? (source: https://www.ntsb.gov/investigations/AccidentReports/Reports/PAR1101.pdf)

135. Regarding the above, can state-of-the-art In-Line Inspection (ILI) technology in 2018 detect the kind of defect that was present in San Bruno line 132 in 2010?

136. Regarding the above, has line 132 been retrofitted to enable use of In-Line Inspection (ILI)? How much of the line is ILI capable? When was this capability added for each segment of line 132?

137. Are there any "pups" on Lafayette pipeline that have manufacture and/or installation dates from the 1950s? If so, which lines are these pups incorporated into? (NTSB says pups from 1956 did not meet industry quality control or welding standards then in effect; 5 out of 6 pups on SB Line 132 were sub-standard, either overlooked or ignored; one pup ruptured, causing the explosion). What is PG&E’s level of confidence about its answer regarding use of pups in Lafayette’s lines? (source: https://www.ntsb.gov/news/events/Pages/Pacific_Gas_and_Electric_Company_Natural_Gas_Transmission_Pipeline_Rupture_and_Fire_San_Bruno_California.aspx)

138. PG&E’s information about San Bruno Line 132 was both inaccurate and incomplete. Why should the city of Lafayette and Lafayette residents believe that PG&E’s records about Lafayette gas transmission lines installed in the same era provide reliable, complete, and accurate information?

Other

139. Federal law requires that gas pipeline operators adhere to the legally recorded easement agreements between PG&E and the property owner to determine what activities are explicitly allowed in the easement. What language in the easements where PG&E operates in Lafayette explicitly allow for tree removal?

140. Removal of trees are known to increase the risk of soil erosion and landslides. Lafayette is prone to this type of land movement during wet winter months. What studies can PG&E provide that will reassure us that removal of roots holding pipelines in place will not make conditions for erosion, landslides, and liquefaction worse?

141. During a 2017 walk with Lafayette residents, PG&E employee Joey Perez answered the question “Won’t land become more unstable with tree removal?” by saying that they assume after time, and by the time tree roots decompose in a few years, other trees will take root and help stabilize the slope. Please explain the thinking behind this answer. Is
PG&E counting on the continued encroachment of its right of way in order to maintain land structure integrity?

142. We asked pipeline expert Richard Kuprewicz, president of Accufacts, about the need for cutting down trees, and he is on the record stating in an email 9/3/17: "Something else is going on here and safety isn’t the major reason, because the bulk of the arguments are, shall we say, bogus. Nothing like trying to steal a pipeline ROW. In some states that would be very illegal..." Why do independent pipeline experts dispute PG&E’s rationale for tree cutting?

143. On 6/19/13, Roland Trevino approved PG&E’s Utility Standard TD-4490S pertaining to “Pipeline Rights-of-way Management.” Is this the current version of this standard, or has it been superseded? If it has been superseded, please provide a copy of the current standard pertaining to this topic. (Source: ftp://ftp2.cpuc.ca.gov/PGE20150130ResponseToA1312012Ruling/2013/07/SB_GT&S_0263354.pdf)

144. Regarding the above, TD-4490S requires removal of trees larger than 8” diameter that are within 10 ft of the outer edge of a gas transmission pipeline, and removal of trees larger than 36” diameter that are within 14 ft. Tree removal timing is subject to decisions by Integrity Management personnel. In the city of Lafayette, PG&E initially identified more than 1,000 trees that were designated as “unacceptable risk” and designated for removal. Later, PG&E concluded that the Lafayette trees it regarded as unacceptable risk were those within 5 ft of the pipeline, and this reduced the total number designated for removal to 272. Have the roughly 750 trees that were removed from the unacceptable risk category merely been placed in a “delayed removal” status per Section 2.6 of the standard, or have these trees been exempted from removal per Section 6.1 of the standard?

145. Regarding the above, if some of the trees discussed above have been exempted from removal, please provide a copy of the documentation describing the rationale for the exemptions and the analysis supporting these decisions, as required by Section 6.2 of TD-4490S.

146. Given that the St. Mary’s Road pipeline replacement is being installed on a corridor that was described by PG&E as being only 22’ in width, and that one of the benefits of replacing this line is to replace pipelines with unknown welds and aging infrastructure, why hasn’t PG&E seriously considered replacement of similar aged pipelines in Lafayette located in areas of similar access width, such as on the Lafayette-Moraga Trail, downtown, and the Reservoir Rim Trail?

147. Why did PG&E divert $100 Million in gas safety and operations money and spend it on other purposes, including stockholder profit and executive bonuses, as disclosed by a CPUC audit? (source: https://www.sfgate.com/bayarea/article/PG-E-diverted-safety-money-for-profit-bonuses-2500175.php)

148. Does PG&E acknowledge that, according to the Code of Federal Regulations, specifically Title 49 CFR 192 and the US Department of Transportation’s Pipeline and Hazardous Materials Administration, there is no legal requirement to remove trees along gas transmission pipelines, and that this is a discretionary program being implemented by PG&E? Does PG&E dispute the fact that this tree removal program benefits are for potential ongoing maintenance accessibility and ease of visual patrolling by aircraft? (source: https://www.phmsa.dot.gov/regulations/title49/interp/PI-76-0108 https://www.phmsa.dot.gov/regulations/title49/interp/PI-00-0102 http://pstrust.org/wp-content/uploads/2014/12/Mulligan-Pipeline-Safety-Trust-ROW-Clearing.pdf)

149. What assurances does PG&E give us that pipeline maintenance operations are performed per pipeline safety law requirements?
Save Lafayette Trees is applying for a federal grant from the Department of Transportation, specifically, the Pipeline Safety Information Grants to Communities: Technical Assistance Grants (TAG), that provide funding for technical assistance to local communities and groups for technical assistance related to pipeline safety. The TAG purpose states: “Pipeline Safety is a shared responsibility and informed communities play a vital role in the safety and reliability of pipeline operations.” Our application includes allowances for a 3rd party technical engineer / analysis of pipeline safety risks in Lafayette and objective to work collaboratively with community, municipality, utility, and agency stakeholders that have common interest in optimal pipeline safety in Lafayette and building relationships between stakeholders. The goals of the TAG project include creating a basis to rebuild trust in PG&E and pipeline maintenance operations in Lafayette. Whether or not we receive the grant, could PG&E commit to work with us on this shared goal? Is PG&E willing to designate a PG&E employee that can represent the organization in these efforts?
Questions for the City of Lafayette

1. According to the City Council Meeting on March 27, 2017, page 12: “Councilmember Mitchell said when the Council heard this proposal two years ago PG&E had mapped out the pipe and it looked like the pipe was going through the Plaza Park area. He asked Ms. Canales to address this area. Ms. Canales stated initially they had shown a few trees for removal in the Plaza Park area as well as indicated the City would have to re-design the trellis in the plaza. There have been a number of discussions with PG&E and staff’s understanding is that PG&E has agreed to move their line in that location and the park can be left as is.” and also email dated February 9, 2017 from Megan Canalis to Steven Falk “Thanks, Steven! Appreciate the update on your meeting with Tom and so glad to hear they are willing to move the line near the Trellis (smiley face icon)” How did the City get comfortable negotiating for the retention of the plaza park trellis, recognized as a visible and cherished element by our community, knowing residents would be required to remove their trees, many of which are similarly cherished by their families, with this agreement? Why did the City not contact these residents notifying of this potential development prior to signing the Tree Cutting Agreement?

2. Regarding the above, at some point of time, the City of Lafayette must have heard from PG&E that the pipeline would not be rerouted, and would continue to run underneath the trellis structure. How did the City continue to defend the need for the Tree Cutting Agreement as a safety measure as warranted by PG&E (which states the need to provide immediate access to all points of the pipeline) knowing such a safety requirement would not be implemented in this public city space? There are other structures that PG&E is targeting for removal on the pipeline easement. Although these are on private property, like the majority of trees targeted for removal, did Mr. Falk speak with PG&E about saving other structures from removal?

3. When the City of Lafayette signed the Tree Cutting Agreement of March 27, 2017, the City received the monetary value of the in-lieu mitigation fees for residents’ trees without the residents’ knowledge, and set in motion the process where PG&E is seeking agreements with private property owners. Some residents have chosen to decline making agreements and we have direct knowledge that residents in other cities who made similar decisions have been threatened with legal action (by this billion dollar company). This same scenario has a chance of playing out in Lafayette. On top of an undue burden of decision, to agree to tree removal or not, for “community safety”, the idea of legal action is unfair and possibly coercive. What did the City of Lafayette do to inform residents of the pending agreement? It seems Lafayette had at least one meeting in which other stakeholder representatives were present, i.e. EBMUD, EBRPD. Who represented residents? If it was a person on city staff, how was meeting information distributed to residents for comment? At the March 27, 2017 meeting in which Council voted to sign the agreement, then Mayor Anderson commented people would be upset. For such an impactful decision, could Council have delayed motion to accept agreement to a later time? Does Council believe this is the proper code of conduct for a city, especially considering the insufficient public notice leading up to the City Council’s decision to enter into its agreement with PG&E?

4. Did the City of Lafayette research the rights of each owner with respect to their PG&E gas easements, including City property, EBRDP property, EBMUD property, and private properties? What explicit rights do these easements give for tree cutting? (REMOVE, City can’t research property rights for other entities)

5. It seems that the City opted to make the agreement with PG&E so they might avoid litigation from PG&E. PG&E first
approached City of Lafayette a few years prior with a its tree clearance program, Pipeline Pathways, in which PG&E sought to clear a wider swath around the pipeline (for which they might not have had easement rights to do so anyway). At that time, Lafayette clearly reacted to the number of trees, approx. 1200, that PG&E proposed to remove as did other local cities, including Walnut Creek, that led initial efforts to bring suit against PG&E and subsequently worked on a framework with PG&E to assess trees individually for safety risk. Did PG&E threaten or imply litigation if Lafayette did not sign the agreement? What precedent did the city of Lafayette use in terms of another city being sued by PG&E if tree removal wasn’t signed?

6. We are glad that CPSI proposes a lesser number of trees for removal, but what did the City understand was the new parameters for tree removal per CPSI as opposed to Pipeline Pathways? It is our understanding that the cities like Walnut Creek and Danville who were party to the opposition efforts, had at most, a handful of trees removed by PG&E (unfortunately not including unaccounted for resident trees). Why did Lafayette choose not to engage in this local city effort to challenge the tree removal program? Did Lafayette city staff investigate the results of these efforts to adopt “best agreement practices”? The agreement that PG&E made with Lafayette seems very non-substantive in terms of mitigation of trees, aside from in-lieu mitigation fees provided for in municipal code adopted subsequent to the Pipeline Pathways proposal. What other safety risk mitigation options did city staff consider with PG&E? Did city staff confer with any other cities approached by PG&E? If not, why not?

7. Why has the money that the City has received from PG&E been put into an east-end-of-town median planting fund where 1) the replacement trees would be planted far from their removal sites, 2) ornamental trees would be planted instead of the natural habitat large oaks that will be removed, and 3) according to the City Manager, there isn’t enough tree planting currently contemplated for this project to spend down this amount? Why is this money not being used to restore or otherwise attempt to recompense the neighborhoods which will be impacted by large, iconic heritage tree removal?

8. What is the City doing to address the discrepancies between the arborist report/tree list upon which the agreement was struck and the CPSI targeted tree removal list that PG&E provided? There is at least a 10% discrepancy in these lists which could mean more trees will be removed than intended and/or the wrong trees will be removed.

9. The City seems to not have made any provision for in-lieu mitigation aside from receipt of associated fees. Why did the City fail to consider the loss and calculation for value of benefits of trees including air purification, shading, screening, wildlife impact, aesthetic value, community heritage value, etc?

10. Why is the City not requiring PG&E to post tree-removal signs on the trees proposed for removal, as has been done in other communities, in the interest of full transparency to the public? What benefit does the community receive by not being aware of the specific trees to be removed?

11. Have ALL the Lafayette structures as identified by PG&E as being encroachments over the gas pipeline right of way been removed? Why or why not?

12. What happened to the dead tree in Lafayette Plaza park? Was there a PG&E gas leak that killed the tree? Did the City remove the tree or PG&E?

13. Save Lafayette Trees is applying for a federal grant from the Department of Transportation, specifically, the Pipeline Safety Information Grants to Communities: Technical Assistance Grants (TAG), that provide funding for technical
assistance to local communities and groups for technical assistance related to pipeline safety. The TAG purpose states: “Pipeline Safety is a shared responsibility and informed communities play a vital role in the safety and reliability of pipeline operations.” Our application includes allowances for a 3rd party technical engineer / analysis of pipeline safety risks in Lafayette and objective to work collaboratively with community, municipality, utility, and agency stakeholders that have common interest in optimal pipeline safety in Lafayette. The goals of the TAG project include creating a basis to rebuild trust in PG&E and pipeline maintenance operations in Lafayette and build relationships between stakeholders. Whether or not we receive the grant, can the City commit to work with us on this shared goal? Is the City willing to designate a staff employee that can represent the organization in these efforts?