From: Mazzanti, Debbie com]

Sent:Wednesday, July 1To:Chhatre RavindraSubject:FW: How is this?

Cause of the Explosion

After many months of investigations, interviews, and inspections, it is this Party's opinion that there is no conclusive evidence as to the root cause of this horrific incident. No evidence, in my opinion, would allow anything other than speculation as to the root cause. I believe that the pipe bursting which was done in 2008 to enlarge the sewer line running beneath Line 132 "may have" compromised the integrity of the ground supporting this line which "may have" weakened the line and should not be dismissed as "not relevant".

This incident has disclosed many procedural and operational flaws, however, including a Fire Chief who was unaware of where the high pressure gas transmission lines were located which run through the city in which he is the Chief. Had he or someone from his department attended any of the training sessions which in the two years preceding the explosion, PG&E had invited his department to attend, he would have been fully aware of the transmission lines running through the city that he was hired to protect.

Corrective Action

Although it is easy to vilify PG&E, it is a gross injustice to overlook the heroics of the men and women of PG&E, the front liners, who immediately fell into action

from their homes despite being off of the clock. In many cases they did so without waiting to be called in by management. Due to the high level of skill and their pride in their profession, not to mention their concern for the safety of the public they serve, they left their homes, reported to yards to get their equipment, plowed through horrible commute traffic and risked their own safety to do all they could to get the gas shut off and then help in any other way possible. A Gas Serviceperson was asked to escort the Coroner through some of the area. In many cases these workers deployed before they were even sure if the cause was PG&E equipment. They knew there were gas transmission lines in that area and no matter what the cause, the gas would most likely have to be shut off. They should be recognized and thanked for the selflessness they demonstrated that night and the many days and nights that followed.

The Report of the Independent Review Panel (RIRP) identifies numerous issues and failings in PG&E's management and appropriate correction. Specific issues raised by the RIRP which this party endorses include:

Management and oversight weaknesses (RIRP, Exec. Summ., p. 5)

Cultural change needed (p. 7)

Lack of management focus on public safety (p. 7)

Lack of data (p. 8)

Not identifying all threats (p. 8)

Management incentives are wrong (p. 9)

Insufficient resources to complete integrity assessments (p. 9)

Leaders without gas background and lack of expertise in management (pp. 10, 17)

Employee fatigue (p. 10)

Retirements undermine institutional memory (p. 10)

Safety work deferred (p. 11)

Reactive planning (p. 13)

Lack of engineering or economic analysis (p. 14)

Need to develop and/or adopt best practices (p. 14)

Reliance on employee initiative in the absence of direction to protect customer safety (p. 15)

Rhetoric that doesn't match practices (p. 17)

"Appearance-led" strategy (p. 17)

Overemphasis on financial performance (p. 17)

Compromises on quality and quantity of resources (p. 26)

Excellence not demanded (p. 26)

Long-term decline that will require a long-term rebuilding effort (p. 26)

This Party cautions against a burst of subcontracting and an over-reliance on mechanization, and instead urges a return to staffing levels and core gas competency which were hallmarks of PG&E's gas transmission system not many years ago. There has been extensive conversation regarding remote and automatic valves and there were those that believed if these devices would have been installed near the explosion area there may have been less fire damage. Many of the fires burned as long as they did NOT because the gas valves took so long to shut off but rather because there was no water for over 45 minutes. There are many places where these tools can and should be utilized, however even the experts agree that remote and automatic valves are NOT the silver bullet and should NOT be used in every situation. With that said, I would recommend that PG&E do thorough research and install these devices where it would be practical to do so.

Lastly and perhaps most importantly, when putting work practices together this party would recommend that PG&E get in the trenches and listen to the people who do the work and incorporate their ideas and advice. They are the experts.

Debbie Mazzanti
IBEW Local 1245
415-517-0317
30 Orange Tree Circle
Vacaville, Ca. 95687