

From: Dowdell, Jennifer
Sent: 7/25/2011 5:09:20 PM
To: 'Shori, Sunil' (sunil.shori@cpuc.ca.gov)
Cc: Hogenson, Todd (GT&D)
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Bcc:

Subject: RE: Response to your July 12 question regarding valve shut-off times

Sunil,

Per our discussion, during PG&E's outreach with emergency responders, we strove to identify ideas, tools and resources needed to create partnerships between PG&E, emergency responders, and city/county agencies during emergency situations.

Their feedback has helped PG&E better understand how a first responder would manage an emergency pipeline situation. Fuel control and isolation is key.

Below are individuals PG&E spoke with concerning improvements to enhance public safety in regard to natural gas transmission pipeline events.

- Fremont Fire Chief Bruce Martin (Current Chair Alameda County Fire Chief Association) 510-494-4204
 - Milpitas Battalion Chief Americo Silvi 408-586-2827
 - Livermore-Pleasanton Deputy Fire Chief Joseph Rodondi 925-454-2301
 - San Mateo Battalion Chief/Training Officer Carl Levon Kustin 650-522-7910

As we mentioned in today's conversation, the feedback from these individuals was just one of the pieces of data we considered in developing PG&E's valve automation strategy and implementation plan.

Following a pipeline event, there are four key elements that must occur before the fuel source is eliminated:

- Detection (where is event located),
 - Decision (how and where to isolate),
 - Isolation (close valves either manually or automated)
 - Venting, de-pressurization

PG&E's valve automation vision is to automate key valves so they can be closed in minutes,

- Give operators the information to make isolation decision, or have local control in place to automatically trip the valves,
 - Ensure valves are spaced so that in case of a full pipeline rupture, pressure in the pipe will dissipate in minutes, and
 - Employ leading-edge seismic protocols

During our discussion today, we discussed pipeline blow-down times and valve spacing. The figure below displays pipeline isolation blow-down time vs. valve spacing mileage for a full pipeline rupture at 500 psig.

**Pacific Gas and Electric Company
Blowdown Times VS. VALVE SPACING For FULL Pipeline Ruptures**

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Please do not hesitate to call me if you have concerns or require additional information.
Best regards,
Jennifer
415-973-2904