From: Prosper, Terrie D.

Sent: 2/19/2014 8:18:23 AM

To: Cherry, Brian K (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=BKC7)

Cc:

Bcc:

Subject: RE: Is safety culture the next frontier in pipeline regulation? News re: PG&E,

CPUC, San Bruno

Thanks!

----- Original message -----

From: "Cherry, Brian K"

Date:02/19/2014 7:23 AM (GMT-08:00)

To: "Prosper, Terrie D."

Subject: Fwd: Is safety culture the next frontier in pipeline regulation? News re: PG&E, CPUC,

San Bruno

Something positive about safety.

Sent from my iPad

Begin forwarded message:

From: Sam Singer <singer@singersf.com<mailto:singer@singersf.com>>

Date: February 19, 2014 at 6:51:04 AM PST

To: Sam Singer <singer@singersf.com<mailto:singer@singersf.com>>

Subject: Is safety culture the next frontier in pipeline regulation? News re: PG&E, CPUC, San Bruno

Is safety culture the next frontier in pipeline

 $\label{lem:com_v1_url} \textbf{regulation?} < \underline{\text{https://urldefense.proofpoint.com/v1/url?u=http://www.snl.com/Interactivex/article.aspx?CdId%3DA-26887722-} \\ \textbf{26887722-} \\ \textbf{2688772-} \\ \textbf{2688772-} \\ \textbf{2688772-} \\ \textbf{2688772-} \\ \textbf{2688772-} \\ \textbf{268872-} \\ \textbf{26887$

11305&k=4%2BViHuL0UtSJBpVrYi3EdQ%3D%3D%0A&r=On4cF6sFAWYSTXqBsc78CA%3D%3D%0A&m=Sarah Smith, SNL Financial, February 14, 2014

Even as pipeline operators make headway on upgrading the nation's aging infrastructure, regulators are looking to the next big challenge: fostering safety culture across the U.S.

"You can build a perfectly robust safety management system and still fail if you don't have the proper culture and organization," Jeff Wiese, U.S. Pipeline and Hazardous Materials Safety Administration associate administrator for pipeline safety, said at the National Association of Regulatory Utility Commissioners winter meeting in Washington, D.C. "At the root of many of these horrific accidents, there's a human contribution somewhere. Typically, it's that the organization let them down in one way or another."

But Wiese and other regulators and industry representatives were quick to acknowledge that an enhanced safety culture is a far more nebulous objective than replacing miles of aging pipes. Further, there is value in not reducing

the components of a dynamic safety culture to a simple checklist, Wiese said.

Wiese and his colleagues at PHMSA have been engaging regulators of other high-risk industries, including the Federal Aviation Administration, to compare practices. Wiese has found the FAA reluctant to precisely define its approach to safety culture for fear that it will be oversimplified and thereby minimized in people's minds.

"I am torn," Wiese said of how regulators can best approach safety culture. "I think clearly we have a strong role in promoting it, making people aware, educating."

Gaétan Caron, chair and CEO of Canada's National Energy Board, said he too is torn about his agency's role in promoting safety culture. Caron said that in Canada, he has found some companies would be willing to submit themselves to safety culture audits, but he questioned how the NEB would be able to effect cultural changes even if the audits revealed unsatisfactory results.

"It's a bit like that famous dog chasing the car. It succeeds in grabbing the rear bumper. What does it do with the car next?" Caron said. "If we started to audit for safety culture ... I wonder what we do with that."

Still, Caron emphasized the intractably important role having a cohesive safety culture plays in the success of an organization. Citing research from Saint Mary's University in Halifax, Nova Scotia, on industrial accidents, Caron said the root causes of major incidents are "depressingly similar."

"It is that people don't do what they're supposed to do," Caron said. "You can have the best engineering, the best materials, the best inspectors in the field. If your people in the field do not give a great deal of importance to the human factor, you're going have a low-probability, high-consequence accident once [in] a while."

One such accident, PG&E Corp. subsidiary Pacific Gas and Electric Co.'s fatal 2010 pipeline rupture in San Bruno, Calif., has served as a catalyst for heightened scrutiny of safety practices across the industry.

Within the company, significant attention has been devoted to improving safety culture from the executive level down to those in the field, Nick Stavropoulos, executive vice president of gas operations, said at the NARUC meeting. Employees at all levels of the company have gone through training to reframe their approach to safety, Stavropoulos said, but a true culture change is an arduous process.

"It's important to point out that when we looked at companies in other industries in particular that have developed great safety cultures, they didn't happen overnight," Stavropoulos said. "In the companies we visited ... you're talking about five to 10 years. You'd like to think it's a light switch [or] an email that can go out from the chief operating officer, saying 'Hey, tomorrow come with a new attitude, and we're going to change the culture of our organization.' Well, that's a start, but it really takes a long time."

For his part, Wiese commended PG&E's willingness to open itself up to external and internal criticism in an effort to revamp the corporate philosophy.

"Nick and his company are doing what we would encourage all companies to do. It's a painful process, as we've seen," Wiese said.

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