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Sent: 7/20/2012 2:46:43 PM  
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Subject: FW: PG&E's Road to Redemption

FYI

**From:** Frizzell, Roger  
**Sent:** Friday, July 20, 2012 2:01 PM  
**To:** Officers - All  
**Cc:** All PGE Chiefs of Staff; Officers Assistants – All; All PGE Directors  
**Subject:** FYI: PG&E's Road to Redemption

All,

FYI. See the story below that just posted in Politico. Roger

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## **PG&E's road to redemption**

By Talia Buford

7/20/12 4:11 PM EDT

The 2010 natural gas pipeline explosion that killed eight people in San Bruno, Calif., left PG&E with an impossible task.

Could the utility right its overturned ship, correct the flaws that had allowed hazards to fester, and regain the faith of its community?

Some watching the company say it's done just that.

“PG&E ratepayers in the area have greater protection than anywhere else in the country,” said Rep. Jackie Speier, who represents the congressional district that includes San Bruno. After the

explosion, Speier suggested the company implement safety measures — such as installing automatic shutoff valves on existing pipelines — that went above existing law, and PG&E complied.

The company has certainly made visible changes. It brought in more experienced executives, apologized before Congress and paid a \$70 million settlement to the town of San Bruno. The company established a Rebuild or Repurchase Program and has closed escrow on 14 properties where residents didn't want to return home after the explosion, according to Brittany Chord, spokeswoman for PG&E. Roughly 44 homeowners have rebuilt or are in the process of rebuilding, she said.

PG&E began aggressively overhauling its culture and verifying all of the pipeline records it previously relied upon — which have since been discovered to have been one of the causes of the explosion.

The company still has critics who question whether its aggressive pipeline testing regime is safe or appropriate. But members of the industry have also held the company up as an example of what to do in the face of tragedy. One of PG&E's employees did a presentation on records verification and maximum allowable operating pressure validation at the World Gas Conference in Malaysia in June.

So what did PG&E do?

You could consider Nick Stavropoulos the key to PG&E's turnaround. Brought on nine months after the disaster, Stavropoulos is the company's executive vice president for gas operations, and he came with serious cachet within the gas industry. A gas man for 33 years, Stavropoulos most recently served as the chief operating officer of National Grid, one of the world's largest utilities.

PG&E is one of the largest natural gas and electric utilities in the United States, serving more than 5 million electric and 4.3 million natural gas accounts through California and Nevada, according to the company. The company services more than 200,000 miles of distribution and transmission lines.

When he walked into PG&E, Stavropoulos said he had three goals: change the culture, separate the gas and electric businesses, and recruit seasoned talent.

“The board was incredibly serious about making things better,” Stavropoulos said. “If I didn't feel that, I wouldn't have come. I didn't want this to be about using my reputation in the industry and using that as a base without something really behind it.”

Instead, he said, PG&E has a plan to comply with the Pipeline and Hazardous Materials Safety Administration's recently authorized pipeline safety rule, as well as exceed the safeguards mandated by law.

“We've been able to meet that new standard before the new standard had even been

developed,” Stavropoulos said. “We’ll be the first company to be able to say we can meet all new PHMSA standards 100 percent.”

By 2014, the company plans to have installed 259 automatic shutoff valves on pipelines throughout the system. Before the San Bruno disaster, records on the company’s pipelines were incomplete and out of date. The already damaged pipe that ultimately caused the explosion had been damaged more during a 1956 safety test, according to [news reports](#). PG&E has digitized the original source records documenting the company’s entire gas transmission network.

Beyond cementing the section of pipeline that failed in San Bruno, PG&E also hydrostatic pressure tested 164 miles of transmission line last year — a feat that the company’s colleagues in the industry said couldn’t, and in some cases shouldn’t, be done.

“The new guys say the right things, but the corporate culture doesn’t get it,” said Richard Kuprewicz, president of Accufacts, an energy pipeline consulting firm. “I think they have the right ideas. Getting them implemented in an organizational culture that doesn’t get it is just fodder for another disaster.”

Kuprewicz says that the hydrostatic testing that PG&E is conducting isn’t the appropriate test to search for leaks or other breaches of pipeline integrity. Instead of assessing the damage, Kuprewicz said, that kind of testing could worsen existing damage and harm pipeline seams.

Ben Campbell, PG&E’s director of hydrotest engineering, said the company is taking precautions to ensure it is testing pipelines safely. The company is testing lines at 1.5 times the maximum allowed operating pressure, with an additional 10 percent spike to account for any abnormalities. For example, line 132 — the pipeline that failed in San Bruno — had an operating pressure of 400 pounds, and was most recently tested at 660 to 750 pounds.

Experts told the company that it would take 200 to 500 years for a crack caused by a hydrotest to grow big enough to fail at the maximum allowed operating pressure. And the idea that testing could weaken the integrity of the pipe and cause defects to fail at a lower pressure has a 1 in 8 million occurrence rate, Campbell said experts told the company.

“We believe we’re testing at a high enough level that would prevent even the remotest chance of a defect growing in the test,” Campbell said. “We’ve now tested over 200 miles of pipe in our own program and put them back into service. And we haven’t had any incident yet where the pipe tested has had an incident. You would expect to see problems after we’ve been testing, but we haven’t seen those problems.”

The company is also using other technologies to ensure the pipelines are operated safely, Chord said, including using smart pig technology — a device used to test pipes for corrosion and damage — and even replacing lines in some places.

Kuprewicz still has his doubts.

“Repeating that you’re going to be a leader in the industry doesn’t make it happen,” he said. “I

understand they have a new CEO and operations manager. I hope they succeed.”

Stavropoulos will be the first to admit that the company is far from perfect. “We have to be humble,” Stavropoulos said, adding that “we’re not in a position to tell people what to do. We’re in the active listening mode.”

He added, “Our goal is to become the best.”

The truth is, companies have been learning from PG&E since 6:11 p.m. on Sept. 9, 2010, when the explosion ripped apart the serenity in the enclave of San Bruno.

At the time, Jesus Soto Jr. was working as vice president of operations services for El Paso Corp.’s Pipeline Group in El Paso, Texas. He remembers his company using San Bruno as a cautionary reminder of the need for quality control.

Now, Soto is senior vice president of gas operations for PG&E.

“The takeaway for me, because of the nature of the incident, was that we should reinforce our pipe mill,” Soto said, referring to the suite of design and fabrication. “Every piece of pipe we produce for any project has got to be of the utmost and best quality and it’s got to meet our specifications.”

The tragedy served as a benchmark for regulators and a real case for the call for more accountability, said Carl Weimer, executive director of the [Pipeline Safety Trust](#), an advocacy group for safe fuel transportation.

“PG&E kind of surprised a lot of people,” Weimer said. “They do a lot of PR around energy development. They were active in the community with donations.”

But as it turned out, he said, “while they were putting up this big PR (campaign), the reality was they weren’t really operating and maintaining their pipelines as they should have been.”

The explosion and its aftermath helped shape the pipeline safety reauthorization bill that Congress passed in December. Sen. Barbara Boxer (D-Calif.) pointed to photos from the disaster during hearings [on the bill](#), admonishing Commerce Committee members to “keep this picture in mind” as they tinkered with the bill.

Sen. Dianne Feinstein (D-Calif.) told the same committee why it was important to focus on ensuring pipeline safety.

“The problems that led to tragedy in San Bruno are not unique to that neighborhood or that pipeline,” Feinstein said. “They are widespread throughout the United States. Many older pipelines in urban areas have inaccurate and incomplete records, have never been pressure tested or inspected by smart pigs, and lack automatic or remote-controlled shutoff valves capable of limiting damage following a rupture.”

The final law doubles maximum fines for safety violations, increases the number of pipeline inspectors and mandates the use of automatic shutoff valves on new pipelines or as older pipelines are replaced “where economically, technically and operationally feasible.”

Speier said the strides PG&E had made to assure the safety of its customers highlights the inadequacies of the protections in the pipeline safety bill, which was reauthorized last year.

“It’s woefully inadequate,” Speier said. “In terms of the kinds of steps that should be taken — like putting in remote automatic shutoff valves in high density areas — the language is laughable. ... You can drive a Mack truck through it.”

That older pipelines aren’t addressed means the bill falls flat in some cities, like San Bruno, where portions of the city’s infrastructure are 100 years old or older, Mayor Jim Ruane said.

“You have to address that,” Ruane said. “I would never want anything like San Bruno to happen anywhere else.”

Whether the law gets strengthened or not, San Bruno and PG&E brought a microscope to the pipeline safety world, said Weimer, of the Pipeline Safety Trust. The natural gas industry came up with “measurable metrics to show to regulators and the public” and to demonstrate that they were committed to safety.

“Can people learn from PG&E?” Weimer said. “Yeah, I think they can. I think they already have.”