

PG&E Inspecting Peninsula Pipeline with 'Smart Pig' Built for the Job

1. Descriptive audio script:

The video starts on a blue screen. A title in white typeface says P.G. and E. inspecting Peninsula pipeline with smart pig built for the job. At the bottom right it says, Currents. There is a shot of a large black pipe suspended above ground. Next there is a large, long, cylindrical robotic device with both metal sections and white and blue sections moving slowly into a large pipeline. Two men in hardhats and orange vests watch it enter the pipeline. There is a series of shots of the pipeline which has bends in it and is next to a large highway. Men are working on the pigging device. A group of men wearing orange vests and P.G. and E. hardhats stands in a semi-circle next to the pipeline talking. One of the men is Sumeet Singh. He is a young man with a white P.G. and E. hardhat and some facial stubble. He is vice president of asset and risk management in Gas operations. There is a shot of the pigging device as it disappears into the large pipeline and two men observe. A P.G. and E. worker wearing a white hardhat and an orange vest sits at the desk using a mouse and looking at a computer monitor. On the monitor is a map of California. We see another smaller pig that has bright yellow sections on it. Next, Jeff Janvier, who is a supervising Gas engineer at P.G. and E. talks. He is wearing safety goggles, a white hard hat and an orange vest over his button-down shirt. There is a close-up of the cleaning pig as he describes it. We can see the yellow sections are scrapers. The diameter of the tool is about that of the large pipeline. The geometry tool is what we saw going into the first pipeline. It has white sections, metal sections with rollers on them, and some blue as well. This tool also has a diameter of a large pipeline. The last tool is all blue with white rollers on it. It is about 8 feet long. It is also about the diameter of the large pipeline. We see shots of workers installing pipelines as well as welders who are working on pipelines. There is a large red metal valve. The final slide is all blue and says currents in white upper-case font. Underneath that is the url w.w.w. dot p.g.e.currents dot com.

2. Original Video Transcript

- [Matt] At PG&E's Milpitas terminal, a high-tech tool known as a Smart PIG, slowly moved into a pipeline launcher. From there, the PIG began a 12-mile, three-hour journey to inspect the inside of line 101, which delivers gas on the San Francisco Peninsula. The tool was created especially for the project as line 101 had some tight bends. PG&E Sumeet Singh talked about the significance of the project.

- For the first time in our history we've launched an in-line inspection tool on a peninsula pipeline, at line 101. And an in-line inspection tool assesses the integrity of the pipeline from the inside of the pipeline. It's analogous to going to a doctor and the doctor doing an MRI to identify do we have any issues on the internals and insides of us? And the in-line inspection

does the same exact thing to identify if there's any corrosion, any mechanical damage. Identifies the precise location, so we can pinpoint, excavate and repair the pipeline.

- [Matt] Actually three different in-line inspection tools were used for this project.

- We run a series of tools. We always start with what we call cleaning pigs. Cleaning pigs have brushes, scraper disks built into the tool that allow us to clean the inside of the pipeline to ensure a successful smart pig operation. After the cleaning pigs are run, we move on to a geometry tool, which is what we're running here today. The purpose of the geometry tool is to look for dents, any other kind of geometric anomaly associated with the pipeline. And then the third and final type of pig that we run is what we call the MFL tool. The MFL tool has magnetics and sensors on board that are designed to detect and size any kind of metal loss associated with the pipeline.

- [Matt] Using smart pigs to inspect gas transmission pipelines is just one way that PG&E has been steadily improving its gas system over the last several years. In 2013 that included automating the 100th valve since 2011, completing nearly 200 miles of hydrostatic pressure testing and replacing more than 60 miles of transmission pipeline. For Currents, I'm Matt Nauman.