TransCanada Responds to Friends of the Earth Document on Keystone XL Pipeline

This morning, Friends of the Earth released a document done by a University of Nebraska-Lincoln professor that questions the studies that have been done for the Keystone XL project. The Keystone Pipeline system is subject to comprehensive pipeline safety regulation under the jurisdiction of the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA). As the recent State Department Supplemental Draft Environmental Impact Statement (SDEIS) recognizes, PHMSA is responsible for protecting the American public and the environment by ensuring the safe and secure movement of hazardous materials to industry and consumers by all transportation modes, including pipelines. To protect the public and environmental resources, TransCanada is required to construct, operate, maintain, inspect, and monitor the pipeline in compliance with the PHMSA regulations at 49 CFR Part 195, as well as relevant industry standards and codes. These regulations specify pipeline material and qualification standards, minimum design requirements, required measures to protect the pipeline from internal, external corrosion, and many other aspects of safe operation.

While a thorough review of the document is being conducted, we believe that it is important for us to respond to some of the claims that have been published in the media. One of the claims in the document says the company made ‘flawed and inappropriate assumptions about the frequency and severity of expected spills from its pipelines.’ This statement is wrong. TransCanada’s failure frequency for Keystone XL is based on analyzing the applicable threats and then estimating the probability of failure based on those threats along with the risk reduction factors (design, construction and operations integrity programs). We use risk based assessments that are industry leading methods to quantity failure frequency.

Another claim highlighted in the media is that ‘the amount of time it would take to shut down the Keystone XL pipeline should a leak occur could be as much as 10 times greater than what is assumed by TransCanada.’ This statement is wrong. The fact is the time to shutdown Keystone XL has been accurately reflected in the risk analysis and is consistent with the Keystone Pipeline record. We have established our own operating record that demonstrates prompt reaction time to any indication of an operational abnormality. In our recent incidents in May, 2011, we isolated the pump stations in under 10 minutes. This document does not address the differences in system design and operating characteristics (including single phase flow in Keystone) that make it unlikely that Keystone operators would have difficulty distinguishing a leak.

This document incorrectly asserts that ‘TransCanada left out spills from a category called “other spills” and ignored 23% of statistical pipeline failures.’ This statement is wrong. Our analysis accurately represents historical data. Because the PHMSA data does not identify the cause for 23% of pipeline incidents, TransCanada used a more detailed assessment of causes of historical pipeline incidents, evaluating Keystone against each of these threats to establish an accurate risk profile. This fact was noted within the DNV report itself: “It should be noted that the factors are similar but not identical to the U.S. Department of Transportation Office of Pipeline Safety (OPS) categories of failure (e.g., third party harm).” (DNV 2006, p. 3)

As we’ve seen from others groups, this document claims that ‘Keystone would be carrying diluted bitumen – a far more corrosive and leak-prone material...’ This statement is
The fact is that independent analysis of oil sands derived crude oils has conclusively demonstrated that these oils are not corrosive to steel. Keystone XL will ship a wide variety of crude oil types including conventional oil, shale oil, partially upgraded synthetic oil and oil sands derived bitumen blends. None of these crude types create a risk of destroying the pipeline from within and causing leaks. Why would we construct a $13 billion pipeline system only to put something in it to destroy it? A recent independent assessment of crude oil quality by the firm Crude Quality Inc., including corrosion potential, has been completed and provided to the U.S. Department of State supporting these findings.

Another claim being made is that ‘the pipeline is susceptible to high rates of corrosion because it is below ground.’ This statement is wrong. We employ an approach to corrosion protection that has virtually eliminated failure due to external corrosion in the 25-plus years it has been in use. It includes a fusion bond epoxy coating and an active cathodic protection, which places a small current on the pipe preventing loss of metal due to corrosion. Keystone XL will also be inspected more frequently than standard regulations require, to ensure the effectiveness of this system. Relative to other failure modes at river crossings, such as flooding or increased river flows scouring the river bottom or banks and exposing the pipe and making it vulnerable to damage or breakage, we will utilize crossing methods that put the pipe 25 feet or more below the river bottom where scour is a threat. Other measures at river crossings further reduce the likelihood of failure. For instance, each of the river crossings mentioned in the report (Yellowstone, Missouri, Platte) will be installed using horizontal directional drill and heavy-walled pipe that makes these locations among the least likely for a release on the entire pipeline.

In regards to incidents along the Keystone Pipeline System, the system has experienced sixteen small unplanned releases within pump/valve station facility sites in Canada and the U.S. None of these incidents have involved the pipeline itself. Each incident was contained within our pump station facility and equipment has been replaced or repaired. In all cases, Keystone’s operation personnel immediately isolate all releases and clean up and remediation efforts were employed to mitigate any effects to the environment. We meet or exceed all notification and reporting requirements to all state and federal agencies. In many of these cases, reporting to regulatory agencies was not required due to the very small volume of these spills. We’ve taken a transparent approach to proactively report all spills to federal and state regulatory agencies regardless of volume.

As a pipeline operator across North America for over 60 years, safety is a top priority for TransCanada. We would not put our reputation or the public at risk by doing the things that this document, released by the Friends of the Earth, suggests.