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From the initial use of a pipeline to transport oil after the first commercial well was drilled in 1859, to today's modern web of lines that traverse our nation, the oil pipeline industry has been characterized by dynamism. The "oil pipeline" industry today has 212,000 miles of pipe carrying crude oil to refineries, natural gas liquids to fractionators, carbon dioxide to oil fields, and products like gasoline, diesel, jet fuel, and propane to American consumers, farms, and businesses, making American lives better and supporting millions of American jobs.

In this decade, oil pipelines are in a period of expansion to bring the benefits of increased North American energy production to more Americans. However, the oil pipeline industry's story is not a tale of constant growth and success. Industry participants have dealt with downturns, along with periods of declines in domestic production and regional demand. The North American energy renaissance is expected to continue for years to come, causing shifts in transportation needs and thus winners and losers in the midstream sector. While most Americans will continue to use fossil fuels for a long time, oil pipelines and their shippers are again in dynamic times. There is uncertainty driven by the possibility of alternative fuels and electric powered vehicles seizing market share, and a well-funded movement challenging energy infrastructure which makes expanding pipelines more difficult and costly than ever before.

The oil pipeline industry is like no other network industry in America. Oil pipelines are common carriers, and not public utilities. Strong competitive forces are at work in the oil pipeline industry. First, there is competition among oil pipelines, including direct competition in the same markets from existing pipelines, new pipelines, and pipelines that have modified their operations through a capacity expansion, product conversion, or flow reversal. Pipeline-to-pipeline competition is intense with many alternative pipelines operating in most origin and destination markets. An oil pipeline is very rarely the only supplier in a market.

Second, there is competition from other modes of transportation, including waterborne, railroad and truck transportation alternatives. Ships, railroads, and trucks are highly competitive on their own, and collectively they place significant competitive pressure on oil pipelines. These industries have significant competitive advantages over pipelines. They are not limited to shipping in a single direction and to fixed points, as are pipelines. Other modes of transportation, such as trains, can deliver the commodity more quickly than pipelines. They are more flexible in that smaller batches of petroleum products can be moved on these modes of transportation than can be moved on pipelines.

Additionally, as common carriers, most oil pipelines do not have customers with firm contract commitments, and competitors can respond to market changes by offering additional services to shippers. An oil pipeline's competitors, such as barges, tankers, rail and trucks, can easily enter the market, and they can respond faster to market conditions.

The oil pipeline industry faces market risk associated with the dynamic nature of the petroleum industry, including: (1) changes in the location and amount of refined petroleum products, crude oil and NGL production; (2) the volatility of the demand for service in these markets, including due to shifts in market demand caused by changes in global supply, expansions and closures of refineries; and (3) the changes in regulations that affect the demand for and supply of refined petroleum products (e.g., ultralow sulfur diesel and heating oil sulfur reductions, biofuel and fuel economy mandates).

The oil pipeline industry is rooted in risk taking and investments that lack any assurance of a long-term revenue stream. Oil pipelines operate in an environment with swift market changes. This unique oil pipeline delivery system is governed by a regulatory construct designed by the Federal Energy Regulatory Commission (FERC) to optimize the benefits of competitive pressures by encouraging efficient economic performance for the benefit of shippers and pipelines alike.

The pipeline response to the surge in production has meant substantial investment in pipeline projects. New entry has occurred in the form of newly built pipelines, expansion of existing pipelines, reversal of pipeline flows, and a change of products transported by pipelines. All of these developments substantially enhance competition in oil pipeline markets, which benefits shippers and consumers by providing access to more economic resources.

Development of oil pipeline projects is a risky and costly proposition. New greenfield construction is estimated to cost \$2.5 million to \$3.5 million per mile on average. The commercial environment for oil pipeline projects differs substantially from that of a typical regulated industry, given that oil pipeline projects are not supported by comparably long-term contracts and operate under a regulatory construct that provides no assurance of an opportunity to recover invested capital and earn a reasonable rate of return.

In addition to commercial risks, oil pipeline infrastructure development faces high regulatory hurdles. While the Keystone XL pipeline saga, with over a decade of regulatory review, has been well publicized, numerous other projects have been delayed or even canceled due to regulatory and legal challenges. Oil pipelines are approved generally at the state level but can require federal approvals for issues related to federal lands access, environmental statutes, and international border crossings. Pipelines need a fair government review process, with timely decisions on the merits that allow pipelines satisfying reviews to move forward.

The recent imposition of steel tariffs concern oil pipeline owners and operators. Pipelines require specialty steel products not always available in sufficient quantities and specifications from domestic manufacturers. Pipeline projects may not go forward if a steel tariff makes pipeline steel unavailable on a reasonable timeline and at a competitive price. Tariffs have caused a significant increase in steel prices. Some pipeline steel products are not sufficiently available in the U.S. to meet pipeline construction demand. It is crucial the tariff exemption process work to avoid U.S. pipeline workers losing their jobs. The law used to implement these steel tariffs allows relief from the duties for any “steel article determined not to be produced in the United States in a sufficient and reasonably available amount or of a satisfactory quality.”

The oil pipeline industry’s over-riding focus is on pipeline safety. Pipelines are the safest mode of transporting energy liquids, with more than 99.999% of products delivered safely. Pipeline operators work diligently to construct, operate and maintain their facilities safely, reliably, and with a goal of zero incidents. Oil pipelines make significant efforts to ensure the safety of their systems, employing a range of programs including the use of sophisticated in-line inspection tools and other means to assess safety. In 2016 alone, AOPL member pipelines spent more than \$1.65 billion on pipeline integrity management, which included more than 44,000 miles inspected, more than 1,700 tool runs, and more than 9,600 integrity-related digs.

The oil pipeline industry has many industry-initiated safety programs, and must comply with comprehensive regulatory requirements of the Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA). Oil pipelines share the goal of PHMSA of improving pipeline safety. Oil pipelines believe the current system of safety regulation with performance standards and a focus on risk, engineering assessment, proactive inspection and preventative maintenance is best suited to keep our pipeline system safe, allow for the use of innovative technologies, and serve the energy needs of the American public.

Oil pipelines play a crucial role in the American economy. Oil pipelines transport the energy Americans need in the safest, most reliable, environmentally favorable, and economically efficient way, and the cost attributed to transportation is typically just a few cents per gallon. New pipeline projects provide shippers with access to needed pipeline capacity and bring benefits to American workers and consumers, but they are expensive and entail inherent business risks because of opposition, a lack of long-term commitments, and re-contracting risk. FERC policies have a significant influence on whether pipelines invest to expand and have helped more Americans gain from today's energy renaissance.