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TESTIMONY

Statement of

Paul W. Parfomak
Specialist in Energy and Infrastructure Policy

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Good morning Chairman Murkowski, Ranking Member Cantwell, and Members of the Committee. My name is Paul Parfomak, Specialist in Energy Policy at the Congressional Research Service (CRS). CRS appreciates the opportunity to testify here today about oil and gas pipeline infrastructure. In accordance with our enabling statutes, CRS takes no position on policy or legislation.

Introduction

The United States' pipeline network is integral to the nation's energy supply and provides vital links to other critical infrastructure, such as power plants, airports, and military bases. Recent growth of domestic natural gas and crude oil production—primarily from shale—has resulted in an unprecedented expansion and reconfiguration of this network.

From an energy market perspective, continued expansion of U.S. pipelines has the potential to improve the efficiency of gas, oil, and refined products transportation—linking new producing regions with traditional consuming markets more directly, with greater capacity and reliability. Such linkages may lower average transportation costs and may reduce regional price differences for energy commodities. Especially in the case of crude oil, they may also reduce the volumes shipped by rail, truck, and barge. Pipeline expansion may also support jobs in energy production and pipeline construction, and may create economic benefits among industries that rely on oil and gas as key inputs. However, the future operation and expansion of the pipeline network also face significant challenges related to public safety, environmental risk, and energy market economics.

Safety and Security

Pipelines are a comparatively safe means of transportation compared to other modes. Nonetheless a single uncontrolled pipeline release can be catastrophic in terms of human life, property damage, and the environment. Uncontrolled releases in Michigan, Arkansas, California, and other states have raised congressional concern about pipeline risks and increased local intervention in pipeline development. Over the last 15 years, Congress has acted repeatedly to strengthen federal oversight of pipeline safety and security. Additional safety regulations are being finalized and new safety legislation is pending in the Senate. Congress is likewise examining the federal oversight of pipeline security, addressing both physical threats and the growing threat of cyber attacks. New safety regulations and evolving security guidance are intended to reduce overall pipeline network risk, but their associated costs and their practical impacts have yet to be determined.

EPA Emissions Rules

In 2015, the Environmental Protection Agency (EPA) finalized its Clean Power Plan to regulate greenhouse gas emissions from existing power plants. Last month, the EPA also issued new regulations to reduce emissions of methane and volatile organic compounds from the oil and gas industries, including pipelines. The Clean Power Plan may encourage natural gas-fired generation to replace coal-fired generation and to firm up renewable power. Such an outcome could increase demand for pipeline capacity and could potentially increase gas and power interdependency. Regulations to reduce pipeline system direct emissions will likely affect how pipelines are operated and maintained, with implications both for the environment and public safety. Taken together, these new EPA regulations may become a major factor affecting U.S. pipelines—complicating policy debates about energy supply and influencing investment decisions.

Price Volatility/Financial Uncertainty

Energy markets are in a period of significant price volatility. In January, for example, the price of Brent crude fell below $29.00 per barrel, dropping over 45% in about three months. Last week, Brent crude traded back above $50.00. Likewise, since 2012, Henry Hub natural gas prices have fluctuated from under $2.00 to over $6.00 per million Btu. Such price volatility creates financial difficulty for domestic producers. It also adds significant risk premiums to capital investment decisions for pipeline developers. The as-yet undetermined effects of new federal regulations create additional investment risk. One result of these uncertainties may be greater caution among developers before committing additional capital to new pipeline projects, or the cancellation of existing projects, such as the Northeast Energy Direct pipeline, which failed to attract enough customers. The oil and gas sectors tend to have a long-term perspective on infrastructure investment—often 20 years or longer—so short-term price volatility may not change their long-term plans, but the timing and location of their pipeline investments may have important implications for regional markets.

Public Perception

Public perception of pipeline infrastructure has long been a consideration in pipeline development, but its importance seems to have intensified over the last several years. Public concern about pipeline safety has prevented new pipeline siting in certain localities and increased development time and costs in others. Controversy surrounding the Keystone XL Pipeline and the Constitution Pipeline are just two recent examples of projects heavily influenced by public opinion. Even where there is federal siting authority, state and community stakeholders retain many statutory and regulatory avenues to affect siting decisions. Consequently, public perception is likely to be an ongoing priority in planning and policy related to pipeline development.

Thank you for the opportunity to appear before the Committee. I will be happy to elaborate on my opening remarks and address any questions you may have.

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