Adapting to the "New Normal" in Oil and Gas Construction:

How the Market Will Endure Growing Regulatory, Labor and Commodity Pricing Pressures

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On February 24, President Obama vetoed legislation authorizing TransCanada's Keystone XL pipeline. The 7-year regulatory saga is emblematic of the regulatory and public relations burdens on U.S. energy projects. With the Keystone veto, this burden will grow.

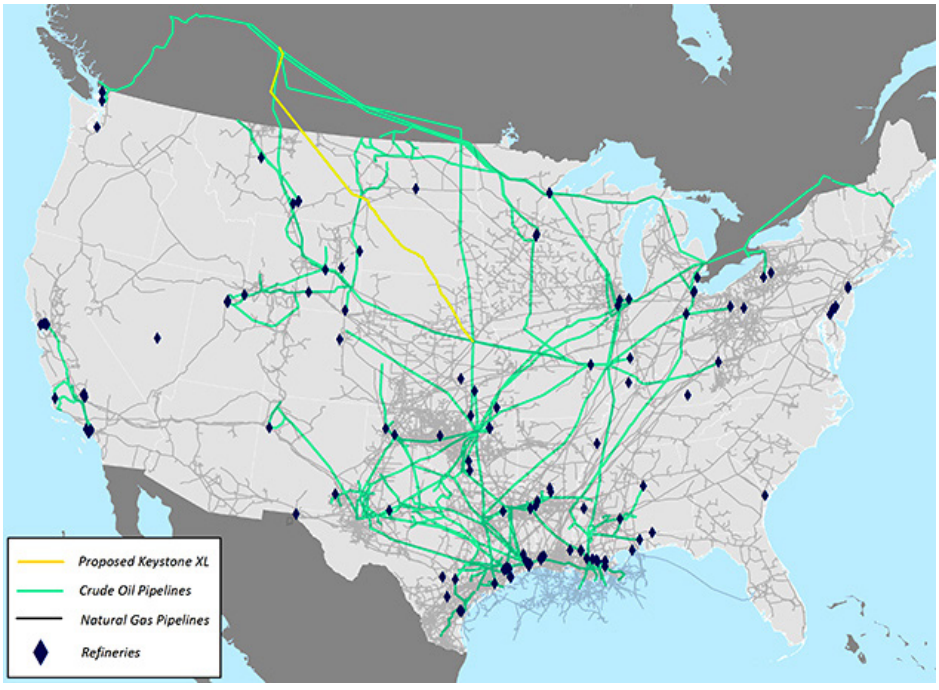
However, the difficulties faced by the U.S. energy infrastructure market do not end there. Trade labor markets are tightening and lower commodity prices have made funding and executing projects a struggle. These three factors – regulatory uncertainty, trade labor constraints, and commodity pricing volatility – represent a "new normal" for energy infrastructure markets in the U.S. They also present a unique opportunity for the contractor community to meet the challenges of a rapidly changing marketplace.

The Growing Regulatory Burden

How can an oil pipeline, that would represent less than one percent of the total oil pipeline infrastructure in the U.S., draw such remarkable political opposition?

The answer is threefold. First, like many political issues, the debate has become symbolic. In the case of Keystone XL, the debate has transformed into one about climate change and environmentalism. It is also bearing the brunt of environmentalists' objections to a U.S. oil industry that has grown with remarkable speed since 2009.

Exhibit1. U.S. Oil Pipelines

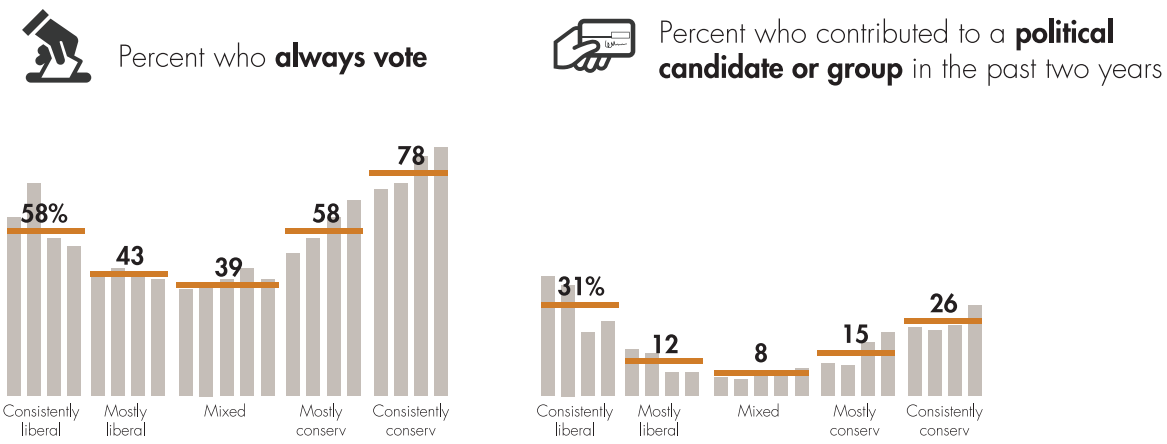


Source: Brookings

Second, political activism is changing. No longer does an activist need to go door to door to generate support for a cause. Facebook, Twitter, and the broader internet have all changed the political discussion, as well as access to power in the U.S. As a result, constituencies can be built around tweets and blog posts, with the ability to change rapidly the political debate in Washington.

Third, as the country becomes more politically polarized, politicians use these debates to their own advantage. According to the Pew Research Center, the most frequent voters and campaign contributors are also the most ideologically extreme (Exhibit 2). In this self-perpetuating cycle, Keystone XL can become a debate about climate change and environmentalism, which invigorates both ends of the political spectrum. The fact that Keystone XL would represent less than 1 percent of U.S. oil pipeline infrastructure, with negligible effect on the environment, is lost in the noise.

Exhibit 2. "The 'U-Shape' of Political Activism; Higher at Ideological Extremes, Lower in Center



Source: 2014 Political Polarization in the American Public
Note: Bars represent the level of participation at each point on a 10 question scale of ideological consistency. Figures are reported on the five ideological consistency groups used throughout the report.

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Political polarization, the changing nature of political activism, and the growth of the U.S. energy industry have collided on Keystone XL. For TransCanada, this has been an expensive effort. Last summer, TransCanada's CEO Russ Girling told the Wall Street Journal that the $5.4 billion total cost of the Keystone XL would nearly double by the time the U.S. government completed its review of the project.

With political activists emboldened in the wake of President Obama's veto, the energy industry will face greater regulatory burden and public relations scrutiny. This will result in greater compliance costs and project delays.

In this environment, project owners face a dilemma. There is no room for error in project quality or safety. In addition, regulatory costs are increasing and project returns declining. How do owners construct a project at lower cost using contractors that have an excellent safety record and a strong reputation for quality? Moreover, how do contractors that could fill the void face a problem that may grow worse during an extended market downturn – the availability of skilled labor?

Labor — A Not So Ancient History

From December 2007 to June 2009, the Great Recession resulted in more than 8.2 million job losses in the U.S. Construction put in place fell from a seasonally adjusted annual rate (SAAR) of $1.2 trillion in March 2006, to a low of $754 billion in February 2011. By the end, approximately 2.3 million construction jobs were lost – nearly 30 percent of the construction workforce.

Five years later, the construction industry has rebounded modestly. Construction put in place has yet to eclipse $1 trillion (SAAR), but it is improving steadily. Total construction employment has rebounded to just over 6 million workers, still a far cry from its peak of 8 million workers in 2006. However, despite being more than 20 percent below its 2006 peak, the industry is struggling to find qualified labor. Could 2 million workers have left the workforce for good?

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The answer is an unequivocal "yes." Some workers found new careers, while others left the workforce entirely. This issue has caused challenges in the industry: nearly 83 percent of employers reported having trouble finding skilled labor in October of 2014, according to the Associated General Contractors (AGC).

The oil and gas industry now finds itself in the same precarious position. As the downturn persists, employers lay off skilled labor. The workers then move to other sectors of the economy or leave the workforce entirely. When the market does rebound, laid off workers do not rush back into the market to fill the void.

If markets in North Dakota and West Texas struggled to find talent when oil was $100 a barrel – how will they find it at $70 a barrel? First, only the most talented labor and field management will remain in the industry through the layoffs. When prices rebound, labor will move to the highest bidder. This will place pressure on already constrained contractor margins and will likely force some firms out of the market. Only the most efficient operators will survive and flourish.

Second, because of labor constraints, the U.S. oil market may not be able to mobilize on new drilling and production as quickly once prices rebound. The supply chain for remote infrastructure will be labor constrained and delays will become even more prevalent than they were in early 2014. Ironically, this could affect oil prices and create a self-correcting price response.

It's Still an OPEC World, for Now

While most analysts project the downturn in oil prices will last anywhere from six months to a few years, a political event in the Middle East or within another OPEC state could cause prices to rebound rapidly. The rapid decline rates of U.S. shale wells could also cause supplies to fall quickly and prices to rebound more quickly than anticipated. Global demand growth remains the third major wild card, and forecasts vary.

While one can debate the timing of a market rebound, one thing is certain: commodity prices will be volatile as oil and gas from U.S. shale continues to disrupt world energy markets. Because of hydraulic fracturing and horizontal drilling, U.S. oil production has increased by more than 125 percent since September 2008 and natural gas production has grown by more than 35 percent during that same period. U.S. oil production now represents nearly 10 percent of global oil supply. U.S. liquefied natural gas export facilities will come on line in 2015. The U.S. is now a leading global energy producer.

OPEC and other oil rich nations are struggling with the new reality as lower prices put pressure on fiscal policy and political leadership. OPEC's cohesiveness will continue to be tested. Coupled with the political environment in the Middle East, changes in global demand, and improving hydraulic fracturing and horizontal drilling technologies, volatility is likely.

In an environment where volatility, regulatory burdens, and labor scarcity combine, the infrastructure owners' dilemma becomes even more acute. So how do owners construct a project quickly, at lower cost, with contractors that have an excellent safety record, a reputation for quality, and access to trade labor? In FMI's discussions with a variety of industry participants, we found that many companies are already developing solutions to this question.

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Bruce Brown,
General Manager of
Oil, Gas & Chemical,
Cianbro

The Integration of the Energy Infrastructure Construction Value Chain

The concept of vertical integration has been around since the 1970s, when companies like Fluor and Bechtel began building reputations for applying innovative methods and performing precise engineering and construction work within the petroleum industry. By adding turnkey solutions and offering a comprehensive suite of EPCM services, these large vertical integrators have gained tighter controls over processes and positioned themselves closer to their end users.

Today, industry stakeholders are considering long-term strategic alliances to plan and execute complex projects using more integrated and collaborative delivery methods. In FMI's discussions with industry leaders, we found many contractors already using this strategy to improve their services and capabilities.

Bruce Brown, general manager for oil, gas & chemical at Cianbro, states, "As the programs grow from the owner's perspective, there will be an interest in more turnkey capabilities. On larger projects, I think labor constraints will drive partnerships to the medium-sized contractors – and more alliances between contractors and engineers – to help provide turnkey capabilities."

Ronnie Wise, COO at Price Gregory, adds, "Some of the larger contractors with the financial resources will attempt to provide services in addition to construction. They will be able to provide the additional resources to execute the major expansions planned in the shale plays. Some owner companies will try to take advantage of this type of arrangement to involve contractors in the development stage of the project or even going to an EPC approach during the peak construction years. These efforts could yield benefits in a safer more efficient project with less budget and schedule risk for the client."

Companies like Kiewit are planning for future labor needs by looking at innovative contracting methods that help them get in on the "ground floor" with client projects. Operating in a direct-perform general contractor role as part of a large EPC team – as opposed to working in a subcontractor role – Kiewit often gets involved with jobs several years before those projects even break ground. "That gives us the opportunity to plan for future labor needs well in advance," says Dan Lumma, senior vice president at Kiewit's Energy Group. During the months or years leading up to a new project, for example, Kiewit places qualified individuals in its clients' and engineering partners' offices. Lumma says this is a fairly new strategy that is working out well for the company, particularly with progressive clients who have a long-term vision and strategy.

This approach to resource planning and activity scheduling is closely aligned with clients' functional planning and allows both engineering and construction firms to acquire and deploy the right resources to the right place at the right time. This type of "integrated planning" also establishes a clear line of sight between project strategy and execution while reducing the risk of cost overruns and schedule delays.

Vertical integration will be a driving force in energy infrastructure construction markets over the next decade as owners and service providers react to greater regulatory burdens, labor risks, and pricing volatility.

While long-term strategic alliances and partnerships are gaining more traction in the oil and gas industry, some energy infrastructure construction firms are looking at acquisitions aimed at diversifying and integrating their project portfolios. Through acquisition, firms are able to apply their knowledge and resources to different geographic areas and service lines, allowing them to serve clients more effectively while also limiting risk.

Flatiron, one of the largest infrastructure contractors in the U.S. and Canada, is a good example of a company that has used this growth strategy. Christian Büscher, VP of corporate development and risk management at Flatiron, explains, "Diversification means investing in areas you can control – the work types, the kind of business you do – but adding geographical areas to it. Say 'Let's have a second leg to stand on.'"

While acquisitions are a vital driver of competition and growth among varied players in the oil and gas engineering and construction space, there is no magic formula for acquisition success. As one industry executive put it, "It is more an art than a science." That said, the game is always changing, and small or medium firms can capitalize upon the existing market presence of an acquired firm to move into new markets or expand their service offerings.

Over the past few years, transactions to diversify capabilities and geographic coverage have been extensive. While large transactions like AMEC / Foster Wheeler, AECOM / Kentz, and CB&I / Shaw garner all of the headlines, many smaller, little noted transactions have given some contractors diversification that will provide them with a long-term advantage. For example, Wood Group's acquisitions of Elkhorn Holdings, Sunstone Projects, and Swaggart Brothers provide the company with an integrated presence in the U.S. and Canada with a full complement of field services — engineering, construction, maintenance, and fabrication. The Company is now capable of providing a suite of service offerings that can provide greater value to customers.

Vertical integration will be a driving force in energy infrastructure construction markets over the next decade as owners and service providers react to greater regulatory burdens, labor risks, and pricing volatility. By improving customer service through integrated project delivery, client partnerships, and expanded capabilities, leading engineering and construction companies are providing solutions to a market with both substantial challenge and opportunity ahead.

For more information please contact:

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