New project announcements in 2006 signal a shift in gas supply fundamentals

The U.S. natural gas industry will witness dramatic changes to existing gas supply and transportation fundamentals over the next three to five years due to a wide array of infrastructure projects that were announced or launched in 2006.

Formerly stranded production from the Rocky Mountains will be transported closer to higher-priced East Coast markets around 2008 and 2009, right about the same time that pipelines originating in the Gulf Coast begin to carry a greater volume of imported LNG.

The implications could be widespread and could result in falling wholesale gas prices at the Henry Hub as LNG competes with Rockies supply. Customers in the Northeast, on the other hand, could see higher base rates as utilities in the region seek to recover investments in local infrastructure expansions to serve the influx of natural gas.

"The market is saying gas needs to get to the Northeast," Andy Franks, managing director with Denver-based E3 Consulting LLC, said. "I would say what's likely going to happen is you would see perhaps a reduction in Gulf Coast gas prices, if it's now competing with Rockies prices."

However, Franks said East Coast markets should not anticipate lower prices until they are able to develop local infrastructure to fully take advantage of the new supply. These new infrastructure projects will get gas near the Northeast but not inside the Northeast, he added.

West-East Migration

Franks believes that the market has been sending signals for some time that both Gulf LNG and Rockies transportation projects are needed to serve rising domestic demand. He noted the differences when comparing trading results at Henry Hub to spot prices at the west Texas Waha and Opal hubs.

"In a perfect market these basis differentials would track one another with the only difference being pipeline transportation costs between two areas," Franks said. "And yet what we do see, or have seen in the past, are basis differential blow-outs."

The 1.8-Bcf/d Rockies Express Pipeline <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4139422> and the 1.5-Bcf/d to 1.75 Bcf/d Mid-Continent Crossing Pipeline <http://www.snl.com/InteractiveX/article.aspx?ID=4261372> projects are obvious responses to these basis differentials. These may not be the only projects announced to move gas eastward <http://www.snl.com/InteractiveX/article.aspx?ID=4397796> , but they are the largest.

Rockies Express <http://www.snl.com/InteractiveX/article.aspx?ID=4912100> , jointly proposed by Kinder Morgan Energy Partners LP <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4066360> , Sempra Energy <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4057062> and ConocoPhillips Co. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4059405> , is attempting to satisfy Rockies producers by shipping gas east to Ohio, and possibly as far as Oakford, Pa.

Following on the heels of Rockies Express, Duke Energy Gas Transmission <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4092777> and CenterPoint Energy Gas Transmission Co. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4062566> jointly annoued the Mid-Continent Crossing, a pipeline project that would transport Midcontinent production to a proposed Oakford terminus.

"Basically, what the market is saying is, there's some basis differential between West Texas and Henry Hub, but there's even more from the Rockies," Franks said. "That's probably why we're seeing the Kinder Morgan project getting more traction." Franks also believes Rockies Express has an advantage because ConocoPhillips is a partner and a leading shipper in the project.

Rockies Express has been quiet regarding the Oakford extension portion of the 1,323-mile project following an open season <http://www.snl.com/InteractiveX/article.aspx?ID=4485970> launched in July. An announcement was expected in September.

DEGT and CEGT also have been relatively silent since announcing their 1,600-mile pipeline in June.

"I don't know what that means," Franks said, referring to the dearth of information about the Mid-Continent Crossing project. "It could be a situation where the market is more focused on Rockies Express and pulling gas out of the Cheyenne."

"I don't necessarily think the delay in an Oakford announcement [by Rockies Express] represents a hesitant commitment to Pennsylvania," Franks continued. "I think it's something that is so far in advance that shippers are probably looking to see if Cheyenne-to-Missouri gets built on time, and Missouri-to-Ohio gets built on time." The Oakford expansion is slated to come online in 2010.

Franks also noted Rockies Express's considerable advantage in being the first mover of the west-to-east pipeline projects announced over the last several months.

"Rockies Express Pipeline has a huge first-mover advantage and if it gets in, then the ability of another line to get in probably is going to be significantly hampered <http://www.snl.com/InteractiveX/article.aspx?ID=4759642> until the market sends signals that additional capacity needs to be built," Franks said. "And then Rockies Express can likely expand their pipeline more cost effectively than someone coming in for a new greenfield pipeline."

LNG

The market has also been signaling an increased need for LNG import capacity along the Gulf Coast as traditional gas supply reservoirs decline. Franks blamed declining Gulf production for higher prices and increased volatility in natural gas markets over the last several years. He also noted that U.S. rig counts and gas production used to track very closely. "When the rig count went up, production went up," Franks said. "That relationship decoupled in mid-2004."

"We've got a declining production base, so people are saying, 'Well, okay, LNG will come in and fill that void,'" Frank said. However, local policymakers and the public have indicated that they will generally accept LNG coming into the Gulf Coast. But LNG terminals being built off the East and West Coasts appear to be very difficult things to get the public to accept, he said.

Dominion Resources Inc. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4001616> 's existing Cove Point LNG site is undergoing <http://www.snl.com/InteractiveX/article.aspx?ID=4372334> an expansion, but newly proposed terminals on the East Coast are meeting with significant not-in-my-backyard resistance.

Adjustments

So how long will it take existing markets to adjust to the new supply and transportation?

Franks recalled MidAmerican Energy Holdings Co. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4057049> 's 2003 expansion of Kern River Gas Transmission Co. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4060861> 's pipeline system, which travels from southwest Wyoming to a terminus outside Los Angeles.

"From the year before the Kern expansion went in, that basis differential ran between say $1.95 and $2.05, depending on what point you were looking at," Franks said. "As soon as that expansion went in, the differential went down to say $1.05 to $1.31. So, it was very quick … the market was showing a need there for gas transportation — in this case going west. Once it went in, the basis differential closed significantly."

In a sense, the market has already begun adjusting to the siting of LNG import terminals along the Gulf Coast. The three main arteries for moving Gulf supply northward to East Coast markets are El Paso Corp. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4010586> 's Tennessee Gas Pipeline Co. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4057165> , Williams Cos. Inc. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4011165> 's Transcontinental Gas Pipe Line Corp. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4057168> and Duke Energy Corp. <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4121470> 's Texas Eastern

Transmission LP <http://www.snl.com/InteractiveX/snapshot.aspx?ID=4057166> . There is only so much available capacity on these pipes, and none has announced plans for expansion.

What the industry has seen, however, is a slew of announcements for new and expanded gas storage facilities along these pipelines' routes and near the Gulf Coast. The need for increased gas storage capacity has been emphasized <http://www.snl.com/InteractiveX/article.aspx?ID=2461337> by industry officials, including FERC Chairman Joseph Kelliher.

"If all the LNG is going to come in on the Gulf Coast, or the bulk of it, it will end up where slugs of gas will hit the market as a tanker of LNG comes in," Franks explained, noting that much of his work over the past two-and-one-half years has been focused on gas storage development. "That's really been one of the key drivers behind all of these gas storage projects that are being developed and built right now. It looks like the industry is developing LNG as much as possible in the Gulf."

Franks observed that while gas is getting near the Northeast, it has yet to make it into the Northeast.

"They're developing as much storage as geology allows," Franks said. "They're developing gas pipeline capacity from the Rockies. They're drilling a lot of wells in the Rockies. Where we're not seeing the infrastructure development is local development in the East and West Coast in order to distribute the gas properly to all customers that need it."

Franks predicted that local infrastructure development could be the target for the next wave of capital.

"Natural gas is such a clean-burning fuel, is environmentally friendly, is transportable to individuals and businesses and has been the fuel of choice for new power generation for the past 15 to 20 years," he said. "I think that there's going to be plenty of demand for natural gas going forward. The advantages are so widespread. It's the kind of fuel that will be used as much as can be supplied relatively economically. And that's what all these infrastructure projects are trying to do: keep the supply of gas at a level that's still economic."