

September 7, 2017

## Midstream Energy and MLPs in the Wake of Hurricane Harvey

Since Hurricane Harvey made landfall in Texas on August 25, the impacts have been deeply felt at the economic and, more importantly, humanitarian levels. With approximately \$1.0 billion of investments in midstream energy and MLP assets under management, Duff & Phelps' Energy & MLP portfolio management and research team summarize their thoughts on the space, based on data available as of September 1, 2017.

### Supply-Side Impacts

It is difficult to assess the supply-side effects of a hurricane/tropical storm because there are so many moving parts and every storm is different. Nevertheless, Gulf of Mexico hurricanes historically have been bullish for oil and natural gas because they tend to knock out a significant amount of oil and natural gas production. However, since the emergence of shale-extracted oil as a viable alternative to oil pumped from the Gulf, reliance upon Gulf production has waned considerably. This is especially true for natural gas, where Gulf production has fallen from 26% to 4% of overall U.S. production, according to research from Barclays Capital released August 29, 2017.

Harvey was also different from typical Gulf hurricanes in that it strengthened late and came in from the south, causing it to miss most of the Louisiana offshore production area. Because of this, current estimates are that only about 18% of Gulf oil production went offline due to the storm, which represents about only 3-4% of total U.S. production. Harvey impacted some onshore production as well, particularly in South Texas' Eagle Ford shale basin, which represents about 15% of U.S. oil production. Combined, Barclays is estimating that 5% of oil production and 2% of gas production is offline. So while that impact is felt, it is not catastrophic in our estimation. The biggest risk is not around production itself, but whether bottlenecks downstream (e.g., processing plants, refiners, tankers) will force production offline because there is no place for it to go.

### Demand-Side Impacts

The bigger impact from Harvey is on the downstream refiners which, as the largest U.S. users of oil, represent a major part of the demand side of the equation. Almost 50% of U.S. refinery capacity is on the Gulf Coast and nearly half of this is currently offline. No question, demand for oil is going to take a hit. We've already seen this manifest in higher gasoline prices, widening "crack spreads" between crude oil and wholesale petroleum prices, and Brent crude is trading at wider spreads to West Texas Intermediate (WTI) crude. This is good for Midwest refiners, but higher gas prices are likely to be a negative for the consumer and overall demand.

Harvey's impacts go well beyond crude oil and affect the entire petrochemical value chain:

- The U.S. petrochemical industry has perhaps taken the biggest hit. Over 50% of the nation's ethylene capacity is offline. This is a negative for chemical companies in the region and demand for natural gas liquids (NGL) and prices.
- The Houston Ship Channel (the conduit by which ocean-going vessels access Houston-area terminals) remains shut down. This keeps imported oil out at sea, and prevents oil and propane from being exported.



- We are monitoring for potential impact the construction of key liquefied natural gas (LNG) export facilities on the Gulf Coast.
- The storm dropped 50 inches of rain on Mont Belvieu, home of the largest NGL underground storage facility. Flooding there is causing containment issues, which we continue to follow closely.

### Outlook

We will not know the true effects of Harvey for at least a few weeks. Specific to our focus on the midstream energy space, including refineries, chemical plants, processing plants, and production fields, we need to determine whether there is any permanent damage. It will be essential to survey the entire petrochemical value chain—upstream, midstream, and downstream—because bottlenecks can reverberate up the chain.

Other encouraging signs we are seeing within the MLP midstream sector:

- Many of the major pipeline operators (e.g. Enterprise, Targa, Energy Transfer, and ONEOK) stated that they didn't sustain any significant damage.
- Cheniere Energy, the preeminent U.S. exporter of shale LNG, said its facilities suffered minimal damage, though it had to curtail shipments at its Sabine Pass location as they await the "all clear" notification from the Coast Guard.
- Reports of power outages have been relatively isolated, as compared to the millions who lost power during previous major hurricanes such as Katrina and Sandy. This is a positive as it keeps demand for power up (and thus natural gas).

We expect the closely watched weekly U.S. Department of Energy inventory reports will be heavily distorted for the next few weeks. As these reports have recently been generally bullish for oil prices, this is likely a near-term negative. We are watching inventories at the Cushing, Oklahoma, storage hub (always a source of worry for traders) as levels there are likely to spike up as oil from the Permian Basin is diverted north. We also expect the availability of labor in and around Houston to be problematic. This may have a temporary detrimental impact on new construction of LNG processing plants, new petrochemical plants, and pipelines. Oil bounced back the last few days after falling a couple of dollars when the storm made landfall, but there is probably not a catalyst within the Harvey situation that will suddenly get MLPs moving (or energy for that matter).

Growing U.S. shale production, against a backdrop of easing pipeline regulations, remain the key upside catalysts for the midstream energy space. We believe the midstream sector has been oversold as investors fled all things energy-related in a time of depressed oil prices. This correlation to commodity prices is unusual, as pipeline volumes—many of which are secured via long-term take-or-pay contract agreements—drive the revenue model for these companies. For this reason we remain bullish on the midstream energy and MLP space due to overall solid fundamentals and attractive valuations.

*This material has been prepared using sources of information generally believed to be reliable; however, its accuracy is not guaranteed. Opinions represented are subject to change and should not be considered investment advice or an offer of securities. Forward-looking statements are necessarily speculative in nature. It can be expected that some or all of the assumptions or beliefs underlying the forward-looking statements will not materialize or will vary significantly from actual results or outcomes.*