

# Some Beach

## 4 Bcf/d Permian Gas Capacity Headed to the Beach – What Happens to Flows and Basis?

- In RBN's "Mid" production scenario, there would not be enough gas from Permian, Eagle Ford and other Texas sources to meet Gulf Coast demand plus exports to Mexico and for LNG exports.
- To meet that demand, East Texas gas flows to Louisiana would reverse and flow from Louisiana into Texas.
- Today forward Houston Ship Channel basis indicates that Texas pricing is expected to be below Henry Hub. For gas to flow into Texas, the differential would have to flip and trade above Louisiana.

### Major shifts coming to Texas Gulf Coast Natural Gas Basis outlook forecasts flip in forward basis

#### Two New Permian Pipelines will Move Permian Gas to the Gulf Coast

Within the next year, 4.0 Bcf/d of incremental natural gas pipeline capacity will be coming online from the Permian basin to "some beach" along the Gulf Coast and the demand markets therein – primarily LNG export terminals. The two new pipelines providing this capacity, Permian Highway and Whistler, follow Kinder Morgan's Gulf Coast Express, which began service last year and so can already move about 2.0 Bcf/d to the Agua Dulce hub, near Corpus Christi. The total of 6.0 Bcf/d from the three pipes is a huge increase in capacity to move Permian gas to the Gulf Coast.

#### Permian Production Will be Lower; LNG Exports Uncertain

But things have changed considerably since these pipelines were first proposed. For one thing, the outlook for Permian production growth is down. The decline in oil prices has slashed budgets for West Texas producers and rig counts show no sign of a big increase anytime soon. As a result, growth of oil and associated gas from the Permian will be tepid at best over the next few years, which is a major change from when oil prices were more attractive for producers. And the situation for LNG exports has also undergone a major correction. Even with firm export capacity contracts in place, a steep drop in global demand for LNG resulted in a collapse in U.S. LNG exports during Summer 2020, resulting in the cancellation of close to 175 cargoes. More recently, the prospects for winter demand have firmed up international LNG prices, and most export terminals are again moving contract volumes to global markets, but there is a lingering question for what will happen next summer and in future years if there is a repeat of the low-demand scenario experienced in 2020.

#### Waha Basis Tighter; Texas Flows to Louisiana Could Reverse

Depending on how these market developments play out over the next few years, the outlook for Gulf Coast gas markets could vary substantially from what was expected in the pre-COVID, pre-price-crash world. Lower Permian supplies will tighten the market considerably. In RBN's "Mid" price scenario (\$45/bbl Cushing WTI and \$2.50/MMBtu Henry Hub prices, both flat for 5 years), there will not be enough gas production to fill the new pipeline capacity and to continue flows at current levels on existing pipelines. The consequences will include a narrower differential for Waha basis versus Henry Hub, and less gas flowing out of the Permian on some existing/legacy pipelines. In fact, the pipelines currently flowing north out of the Permian could reverse and flow south into the Permian to provide needed throughput for the new pipelines.

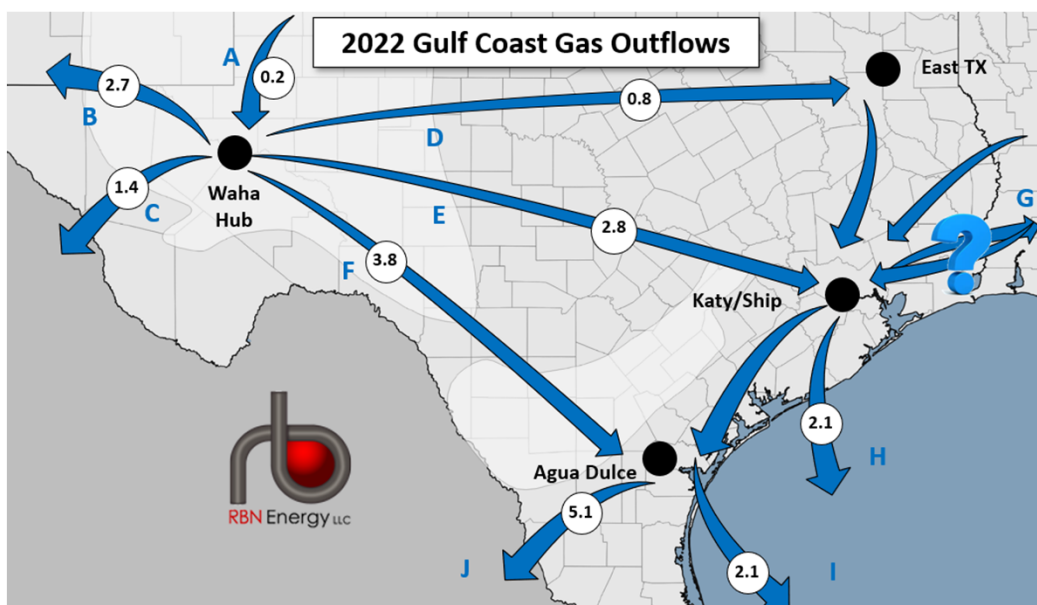
But a lower outlook for Permian production is only part of the story. Assuming production from the Eagle Ford declines, as is the case in the "Mid" price scenario, and pipeline exports to Mexico increase as expected, then the combined impact of all these factors would mean there would not be enough gas along the Texas Gulf Coast to meet the demand from LNG export facilities – if those facilities are running at relatively high utilization rates. So where would the incremental gas come from? Most likely it would come from the east, with gas flowing into the Houston Ship Channel (HSC) from South Louisiana.

## Flow Reversal Could Flip Basis

That is not the direction of flow currently indicated by the HSC forward curve. Today forward pricing indicates that Texas Gulf Coast prices are expected to be below Henry Hub. For gas to flow west into Texas, the differential would have to be the other way around, with HSC pricing above Henry Hub. A reversal of the HSC basis differential could have a significant impact on supply planning for the multitude of end-users, LNG players, and exporters to Mexico that participate in the Gulf Coast gas market.

This study details the fundamental analysis used to prepare RBN's recently completed examination of Gulf Coast gas markets, and lays out forecasts for production, pipeline flows, and basis. In the study, the analysis explains the apparent disparity between forward basis markets and the combined impact of a lower outlook for Permian production plus another 4 Bcf/d of pipeline capacity coming to the Gulf Coast.

The Some Beach report will be published on November 12, 2020 but is available for pre-order today at a discounted price and includes an optional virtual presentation of our findings by RBN senior analysts scheduled on a first-come, first-served basis. For more information, contact TJ Braziel at [tjbraziel@rbnenergy.com](mailto:tjbraziel@rbnenergy.com).



### Table of Contents

- 1. Introduction: Major Shifts Coming to Gulf Coast Gas**
  - 1.1 Permian production and LNG exports
  - 1.2 Potential impact on regional price differentials
- 2. Production Forecast**
  - 2.1 Price scenarios and premises
  - 2.2 Crude oil and natural gas production outlook
  - 2.3 Permian – regional natural gas supply
- 3. Permian Flow and Basis**
  - 3.1 Waha basis outlook
  - 3.2 Northbound flows from Permian reverse
- 4. Gulf Coast LNG – Takeaway Capacity and Demand**
  - 4.1 Summer 2020 collapse in LNG exports
  - 4.2 Global LNG demand; implications for Gulf Coast LNG terminal utilization
- 5. Potential for Texas-to-Louisiana Gas Flows to Reverse**
  - 5.1 Texas LNG demand could exceed available supply
  - 5.2 Impact on Houston Ship Channel and other regional basis relationships
- 6. Conclusions**