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US Domestic Crude: An Export Revolution

Excerpted from the latest US Crude Export Report

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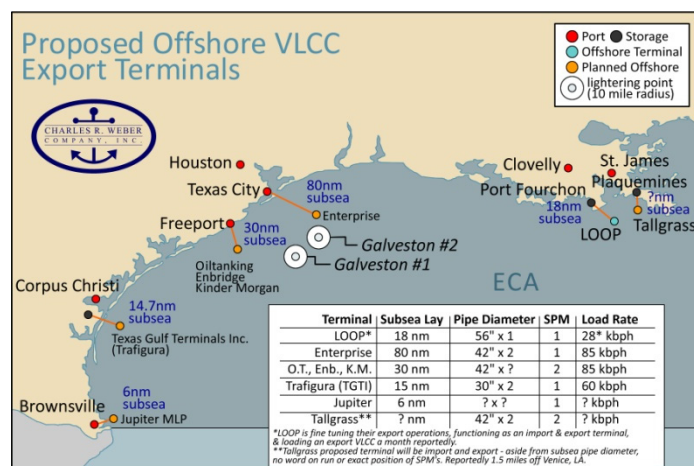
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According to the EIA the U.S. is now the largest oil-producing country in the world — recently surpassing both Russia and Saudi Arabia — with output at 11.7 MMB/d for the week ending January 4th 2019.

The major issue for U.S. crude production is that for it to keep growing, the oil needs to go somewhere other than domestically, and this means exported out of the U.S. While crude exports already have revolutionized Gulf Coast crude markets, more change is on the way. Houston is now so pivotal to crude trading that it has two brand new futures contracts for export hedging and pricing.

As we covered in our latest report, in 2018 a number of midstream companies and others announced plans to develop deepwater export terminals along the Gulf Coast that can fully load VLCCs. These are planned for Brownsville, Corpus Christi, Freeport, Houston and Louisiana. Some of these companies are moving toward FIDs that would bring their projects online in the early 2020s, terminal operators with existing VLCC-capable assets have also ramped up their activity at year end. Some of the more sophisticated deepwater terminal plans promise pumping rates capable of loading a VLCC in 24 hours, quite an improvement over the present partial loading or complete reverse lightering.



The much talked about takeaway constraints out of new shale basins, most notably the Permian, highlight the inability of pipeline permitting and construction to keep up with production gains. On top of this, the multiple offshore U.S. Gulf loading facility plans and moves to get more crude to export markets has put pressure on lines running from Cushing to the Gulf Coast.

While there are multiple new pipelines in the planning, permitting, open season and construction phase, as a short term fix, midstream companies are planning to switch some of their NGL pipes to crude at least temporarily.

In the Permian Basin, it had been reported that in the last 18 months alone crude production has increased by 1.5 MMB/d, or about 60%, filling any remaining available takeaway pipeline space and spurring widening differentials between crude prices in West Texas and those in either Cushing or along the Gulf Coast. Not that NGL takeaway is not needed, but there is an urgent need for crude takeaway capacity. As a result, plans are afoot to convert at least two NGL pipelines out of the Permian — one existing and one under construction — to crude service by the summer of 2019.

Enterprise has said that it plans to convert one of its three existing NGL pipelines from the Permian to the Gulf Coast to carry crude. Their plan is to complete this after their new Shin Oak NGL pipeline comes online in the second quarter of 2019. This pipeline conversion would provide Enterprise with total crude oil pipeline capacity of over 650,000 barrels per day from the Permian Basin to the

Houston area. Their initial plan had been to convert one of their pipes to crude in the first quarter of 2020, but they have reportedly indicated recently that the conversion date could be much sooner.

Additionally EPIC Midstream's new, 24-inch EPIC NGL Pipeline conversion to crude service is planned as soon as the leg from Crane, TX, to Corpus Christi is finished, which is scheduled for Q3 2019. The pipeline will have the capacity to transport up to 400,000 b/d of crude, and will operate in "crude mode" for an estimated six to nine months, by which time EPIC Midstream expects to complete its new, 30-inch-diameter, 600,000 b/d EPIC Crude Oil Pipeline. When the crude oil pipeline is complete in Q1 2020, the EPIC NGL Pipeline will revert to NGL service. EPIC's NGL and crude pipelines run parallel to each other for much of their length, enabling them to install pumping stations that will be used initially for the converted NGL pipeline and then for the larger crude pipeline.

An open season for the proposed 300,000 b/d Gladiator Pipeline was announced, which would run from Cushing to the Houston area and involve the conversion of much of DCP and P66 Partners' Southern Hills NGL to crude oil service, as well as the addition of small sections of new pipeline at Southern Hills' starting point and in the Houston area — all by the third quarter of 2020. The Gladiator project would provide Cushing-to-Gulf Coast capacity, presumably at a lower capital cost than building a new pipeline.

An open season for the Swordfish pipeline has been extended, which is being developed to connect existing terminal facilities in St. James, La., and Raceland, La., to LOOP. Since the open season was announced, LOOP has reportedly received a "sharp increase in customer requests" concerning its deep-water port export capabilities. LOOP has stated that the number of vessels loaded can be scaled to meet increasing demand. The proposed line would be a multi-diameter system with the ability to transport as much as 600,000 b/d of oil and provide storage services, vessel loading, and connectivity to other carriers. The pipeline is expected to be in service in first half 2020. Presently LOOP is the only existing offshore terminal that can fully load a VLCC. Through February to September 2018 LOOP was moving crude out of their terminal, there was a pause October to November as the facility worked on expanding its capacity and by December LOOP loaded three VLCCs in seven days. Some onshore facilities have also been bringing big ships alongside to load. Ingleside has fine tuned their ability to berth VLCCs, as has Seaway, Texas City.

An open season for the Jupiter Pipeline was announced, expected to be operational in Q4 2020. It will be a 650-mile, 36-in. crude oil system with origination points near Crane and Gardendale-Three Rivers, Tex., and an off-take point in Brownsville, Tex. As designed, it will be the only pipeline out of the Permian basin that can access all three major oil ports in Texas—Houston, Corpus Christi, and Brownsville.

Seaway launched an open season for expanded crude oil capacity on its existing system originating in Cushing, and extending to the Texas Gulf Coast. Projected to be available by Feb. 1, 2019, the expansion could provide 100,000 b/d of incremental capacity. The final capacity, as well as the points of origin and destination, will be determined based on the results of the open season.

MPC and their partners in the Capline pipeline have announced an open season for a reversal of the pipeline. The proposed timeline for startup in 3Q 2020 (earlier than the initially proposed 2022). The 1.2MM bpd crude pipeline currently runs from St. James, LA to Patoka, IL. It has been underutilized since the increase in domestic oil production that reduced inland refiner's import reliance. The initial reversal would likely be the first step in a gradual capacity increase on Capline southbound flows.