Auctions Offer Houston Crude Exporters Half-Baked Solution

New exchange offerings don't bridge logistics gap.

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Sandy Fielden
Director, Oil and Products Research
+1 512 431-8044
sandy.fielden@morningstar.com

Data Sources for This Publication
CME Group
ICE
U.S. Census
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Bolstering Liquidity

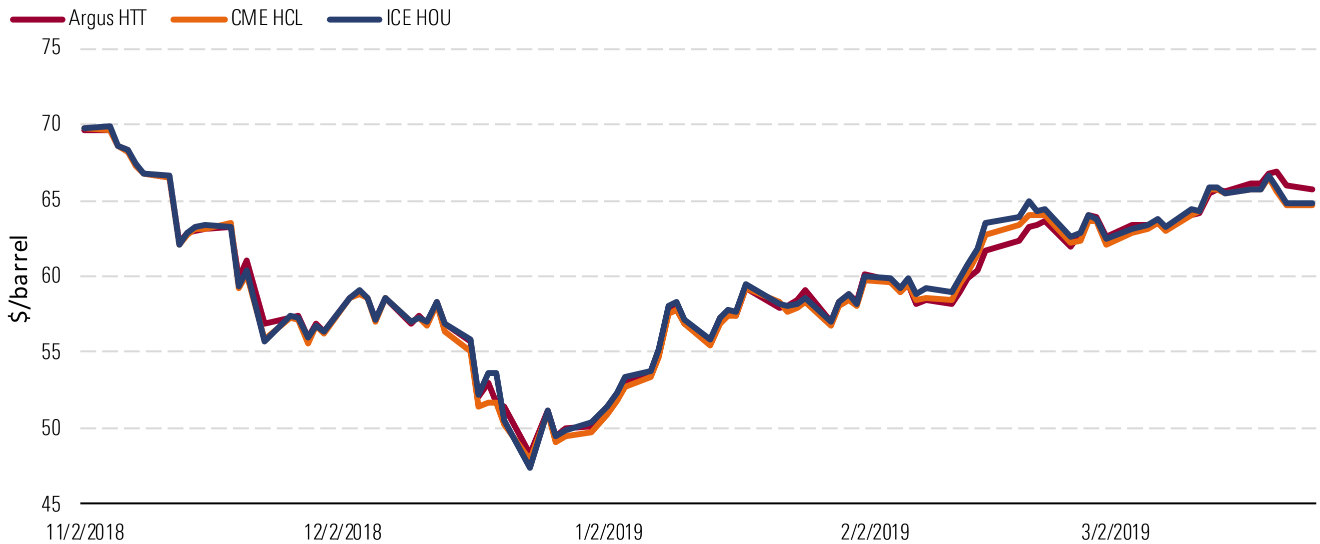
On April 4, the CME Group exchange will hold its second auction for an export cargo of West Texas Intermediate crude delivered to the buyer at Enterprise's Houston Ship Channel terminal. The first auction, on March 5, attracted 17 parties and was won by trader Glencore with a bid of $0.46/barrel above CME's Houston WTI futures contract. The CME auctions as well as rival Intercontinental Exchange's Permian WTI storage auctions at Magellan's East Houston terminal hope to bolster liquidity in new futures contracts and bridge the logistics gap between Houston's pipeline system and the export cargo market. This note looks at Houston's crude futures market progress.

Houston WTI

Two new Houston futures contracts for WTI crude began trading at the end of 2018, as we detailed in a November note (Quality and Location Count for WTI Contracts). The first to launch at the end of October was ICE's Permian WTI (symbol HOU), delivered at Magellan's East Houston storage terminal, followed a week later by CME's Houston WTI (symbol HCL) delivered to Enterprise's Ship Channel ECHO terminal as well as two other Houston terminals in the Enterprise system. Given that new futures contracts are typically slow to take off, both have seen a steady build in volume and open interest, but the CME contract has experienced better volume and open interest. Between the start of the HCL contract on Nov. 2, 2018, and March 22, 2019, daily volume averaged 891 contracts and open interest averaged 1,734 contracts. Over the same period, the ICE HOU contract saw average daily volume of 181 contracts and open interest of 695 contracts. Neither contract has come close to the success of its precursor, the CME ClearPort Argus WTI contract (symbol HTT) deliverable at Magellan East Houston, which saw average daily volume of 2,276 contracts and open interest of 128,270 contracts over the same period.

These three Houston crude contracts traded in a narrow price range of $1.91/barrel over the November-March period with meaningful spreads only widening between the Argus contract and the other two during the contract roll period around the 20th of the month. Exhibit 1 shows daily pricing for the three contracts since the start of November 2018.

Exhibit 1 Houston WTI Futures Contracts



Source: CME Group, ICE, Morningstar.

Export Auction

The CME export auction is an anonymous matching platform that provides an open venue for bilateral physical transactions. The first auction offered 1 cargo (650-850 thousand barrels) of light sweet crude oil from Midland, Texas delivered via the Enterprise Houston Ship Channel terminal. The specification meets the standards of the CME WTI Houston futures contract. The auction floor price is benchmarked against the futures contract. The 2-minute electronic auction is hosted by CME and can extend by 15-second increments if a bid is placed within 15 seconds of the close. Bids cannot be removed or lowered, only bettered. The winner negotiates the delivery quantity with the seller (Enterprise). The winning bid in the first auction held March 5 was a $0.46/barrel premium to WTI Houston futures.

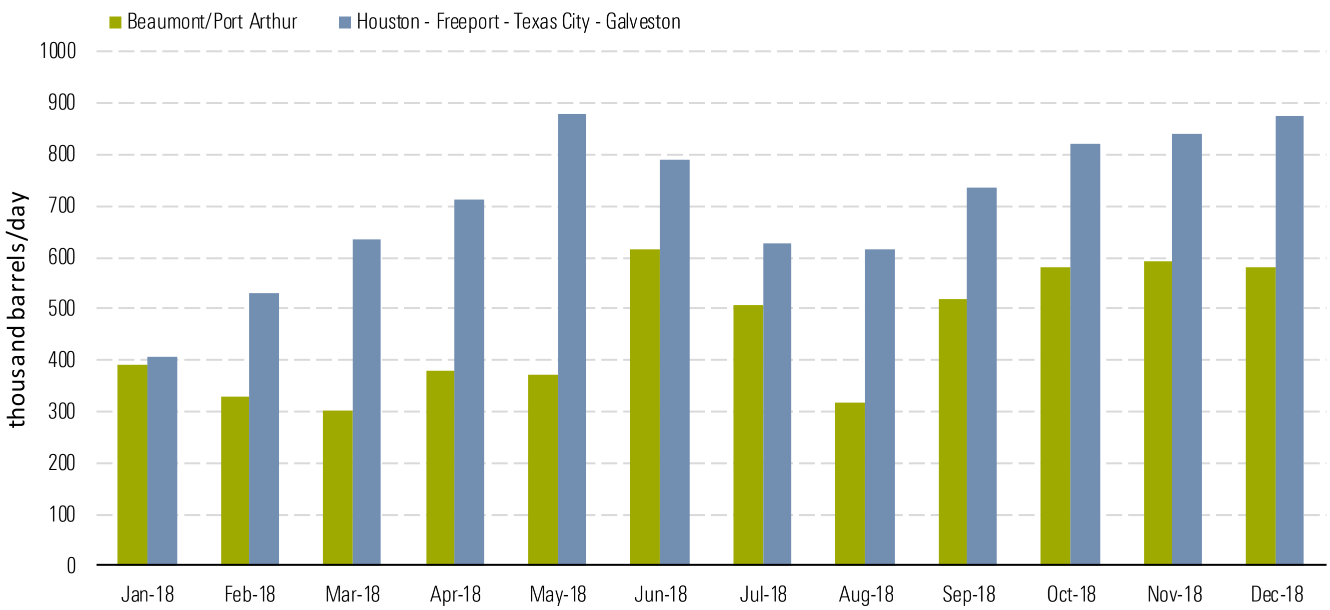
Storage Auction

Coincidentally on March 5, ICE completed its first monthly auction for ICE Permian WTI storage futures. We detailed similar storage auctions at the LOOP terminal in Louisiana two years ago in an April 2017 note (Can LOOP Ever Be a Gulf Coast Cushing?). Participants in this type of auction bid for the right to store crude barrels in commercial storage during future delivery periods. The ICE auction—conducted using the blind Dutch method—starts with a high price, which is lowered until a successful bid is matched; it sold 1,350 lots, or 1.35 million barrels, of storage to five participants, spread across six monthly contracts: May 2019, June 2019, July 2019, August 2019, September 2019, and October 2019. The storage futures are listed on ICE Futures Europe and represent the right to store 1,000 barrels of Permian WTI crude oil at Magellan's East Houston Terminal during the delivery period. Magellan has allocated 1 million barrels a month of capacity, and deliveries against the contract must be supplied either by Magellan's Permian pipelines or have a quality that matches that supply. Since stored barrels at Magellan East Houston can be delivered against the ICE Permian WTI, the storage futures complement the crude futures contract.

Growing Crude Exports

In fact, the export cargo and storage auctions as well as the futures contracts are all designed to serve the growing Gulf Coast crude export market that we described two weeks ago (Gulf Coast Crude Exports to Europe and Asia Drive 2018 Growth). In that review of 2018 exports, we noted that Houston region ports in the Ship Channel, Freeport, Texas City, and Galveston led the way in Gulf Coast crude exports during 2018 with an average daily send-out of 706 thousand barrels, followed by the Texas Beaumont/Port Arthur region, which averaged 475 mb/d, according to U.S. Customs data (Exhibit 2).

Exhibit 2 Houston Region and Beaumont/Port Arthur Crude Exports 2018



Source: U.S. Customs, Morningstar.

Auction Battle

With most incremental production barrels going to export docks these days, reporting services and the world's biggest futures exchanges are battling to establish a transparent price for Houston crude exports. The challenge comes in translating domestic pricing used by Gulf Coast refiners into an equivalent waterborne price that international buyers can rely on. The first steps have already been taken on this path with the establishment of better crude quality standards for WTI crude as we detailed last November (Quality and Location Count for WTI Contracts). Both Houston futures contracts are designed to mirror the "Permian quality" WTI crude that international buyers prefer. But futures contracts for delivery into Magellan East Houston or the Enterprise Houston system still don't account for the logistics hurdle necessary to get crude barrels onto the very large crude carrier super tankers in the Gulf of Mexico that buyers in Asia and Europe prefer for cheaper long-distance freight cost.

That logistic hurdle is represented by the $0.46/barrel premium over Houston WTI that Glencore bid in the March CME export cargo auction. The cost represents transferring crude out of Enterprise storage on the Houston Ship Channel onto Aframax vessels that can carry 600 thousand barrels and transshipping onto a very large crude carrier located in deeper water offshore for the 50-day voyage to Asia. In effect, the auction premium represents the spread between Houston refining market barrels and free-on-board export cargo barrels. The CME auction offers a simple way to bridge the gap linked to its futures contract. The ICE storage auction is a less complete solution but facilitates bulking up crude in Houston storage to assemble an export cargo—again linked to the futures contract.

Half-Baked

In truth, while these exchange auctions increase futures liquidity and market transparency in Houston, they only provide a half-baked solution for the needs of exporters. The ICE storage auction helps aggregate a large crude parcel from incoming pipeline barrels. The CME auction packages an export-size crude parcel ready for loading. But both mechanisms are best suited to ad hoc transactions rather than regular deliveries to an overseas buyer. As the export market develops, we expect to see more term deals where international buyers make regular purchases under long-term contracts. Such transactions will benefit from the completion of planned export infrastructure to load VLCCs directly in Corpus Christi or to offshore platforms in the Gulf of Mexico. In the meantime, as exports continue to grow, a firmer logistics spread between Houston pipelines and waterborne cargoes should also emerge. M

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For More Information

+1 800 546-9646 North America
+44 20 3194 1455 Europe
commoditydata-sales@morningstar.com

MORNINGSTAR®

22 West Washington Street
Chicago, IL 60602 USA

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