St. James Marooned by Capline Reversal

Louisiana trading hub to play lesser role.

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LLS Loses Leadership

Without a southbound link to the developing export market at the Louisiana Offshore Oil Port and with its huge northbound Capline conduit to the Midwest refining market about to be reversed, the role of St. James, Louisiana, located 60 miles upriver from New Orleans on the Mississippi, has shrunk from state crude trading center to little more than local refinery supply hub. As a result, the region's benchmark Light Louisiana Sweet grade has lost its leadership of Gulf Coast sweet crude pricing to usurper West Texas Intermediate delivered to Magellan's East Houston, Texas, terminal. Prospects for St. James' return to prominence rely on proposed new pipeline infrastructure to increase crude flows in and out of the hub. These plans have been slowed this year. This note looks at how the St. James crude market is evolving.

Before Thanksgiving, we noted how growing crude exports from LOOP are overturning the terminal's original import focus (see LOOP Transitions From Imports to Exports). Increased medium sour offshore Gulf of Mexico production as well as shale supplies from Texas and North Dakota is changing the diet of Louisiana refiners away from imports toward domestic barrels. As LOOP takes advantage of its deep-water location to develop exports, the focus of crude trading has moved away from the Mississippi refining hub at St. James toward the Gulf Coast.

St. James is upriver from New Orleans about 60 miles northwest of the LOOP storage caverns at Clovelly, Louisiana. The parish developed as a crude trading hub for two reasons: first as a staging point for storing and blending crude delivered to five local refineries with about 1.4 million barrels/day capacity; second as the starting point for the 1.2 mmb/d Capline pipeline delivering crude north to refineries in the Midwest. Company terminals at St. James including Plains, NuStar, Shell Sugarland, and Capline have over 38 million barrels of crude storage among them as well as rail unloading capacity and dock terminals on the river that can accommodate Aframax vessels.

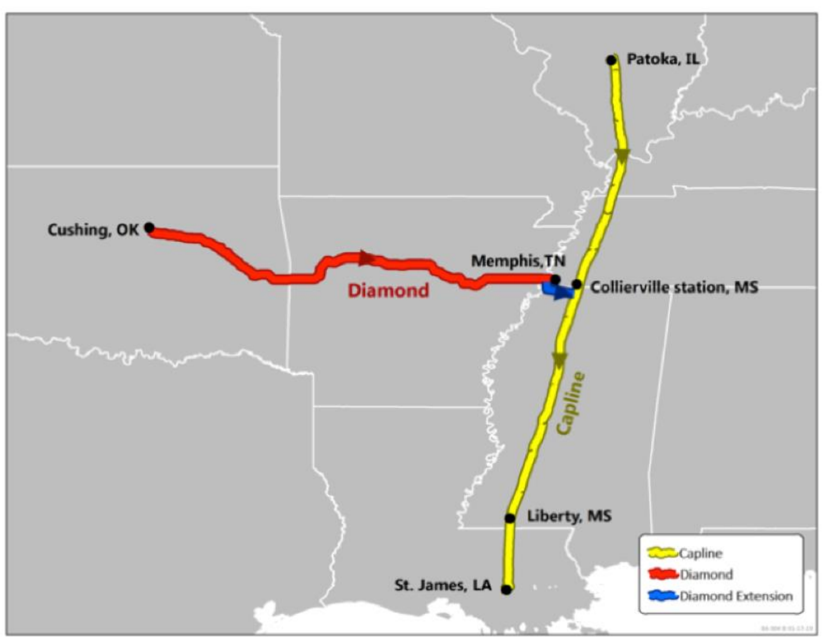
The five Louisiana refineries fed by pipeline from St. James are ExxonMobil's 503 thousand b/d Baton Rouge, Delek USA's 80 mb/d Krotz Springs, Marathon's 564 mb/d Garyville, Shell's 211 mb/d Convent, and Placid Refining's 75 mb/d Port Allen plants. These refineries traditionally received feedstock from offshore Gulf of Mexico production and imports brought ashore at LOOP's Clovelly terminal and shipped to St. James on the 1.7 mmb/d LOCAP pipeline. Local Louisiana onshore and offshore crude also reaches St. James via the 60 mb/d ExxonMobil HLS system (now owned by Crimson Midstream) and the 360 mb/d Shell Ship Shoal pipeline. Crude from Texas also reaches St. James via Shell Midstream's 260 mb/d Zydeco pipeline. In April 2019, the Energy Transfer/Phillips 66 joint venture Bayou Bridge pipeline linking Nederland, Texas, and St. James came on line with potential to deliver 480 mb/d of crude originating from North Dakota, Texas, and Western Canada.

Capline Reversal

Aside from feeding the five local refineries mentioned, inbound crude to St. James was traditionally shipped north to Midwest refineries on the 1.2 mmb/d Capline pipeline. As we described in a February note (see Louisiana Bound—New Crude Routes From the Midwest), Capline's northbound value declined in the face of increased output from North Dakota and Canada supplying Midwest refineries. Another blow came with the December 2017 opening of the Plains/Valero Diamond pipeline between Cushing, Oklahoma, and Valero's 190 mb/d Memphis, Tennessee, refinery that was previously fed by a lateral from Capline. Given stagnant flows northbound, the idea of reversing this major conduit to ship either shale supplies from the Lower 48 or heavy crude from Western Canada into Louisiana has steadily gained traction with the pipeline's shareholders: Plains All American (54%), Marathon (33%), and BP (13%). In August, Capline approved the reversal starting in September 2020 with 300 mb/d light crude service and extending to heavy crude in early 2022.

A reversed Capline is expected to initially offer light crude delivered from Cushing to an intersection with Capline at Collierville, Mississippi, via Memphis on the 200 mb/d joint venture Plains/Valero Diamond pipeline (Exhibit 1). Plains and Valero have announced plans to expand Diamond capacity to 400 mb/d, allowing for about 200 mb/d of incremental crude from Cushing to reach St. James. The addition of heavy crude service in 2022 awaits the expansion of pipeline capacity across the U.S. border from Western Canada via the Enbridge Line 3 and/or the TC Energy Keystone XL pipelines, both of which can deliver to Patoka.

Exhibit 1 Capline Reversal and Diamond Pipeline

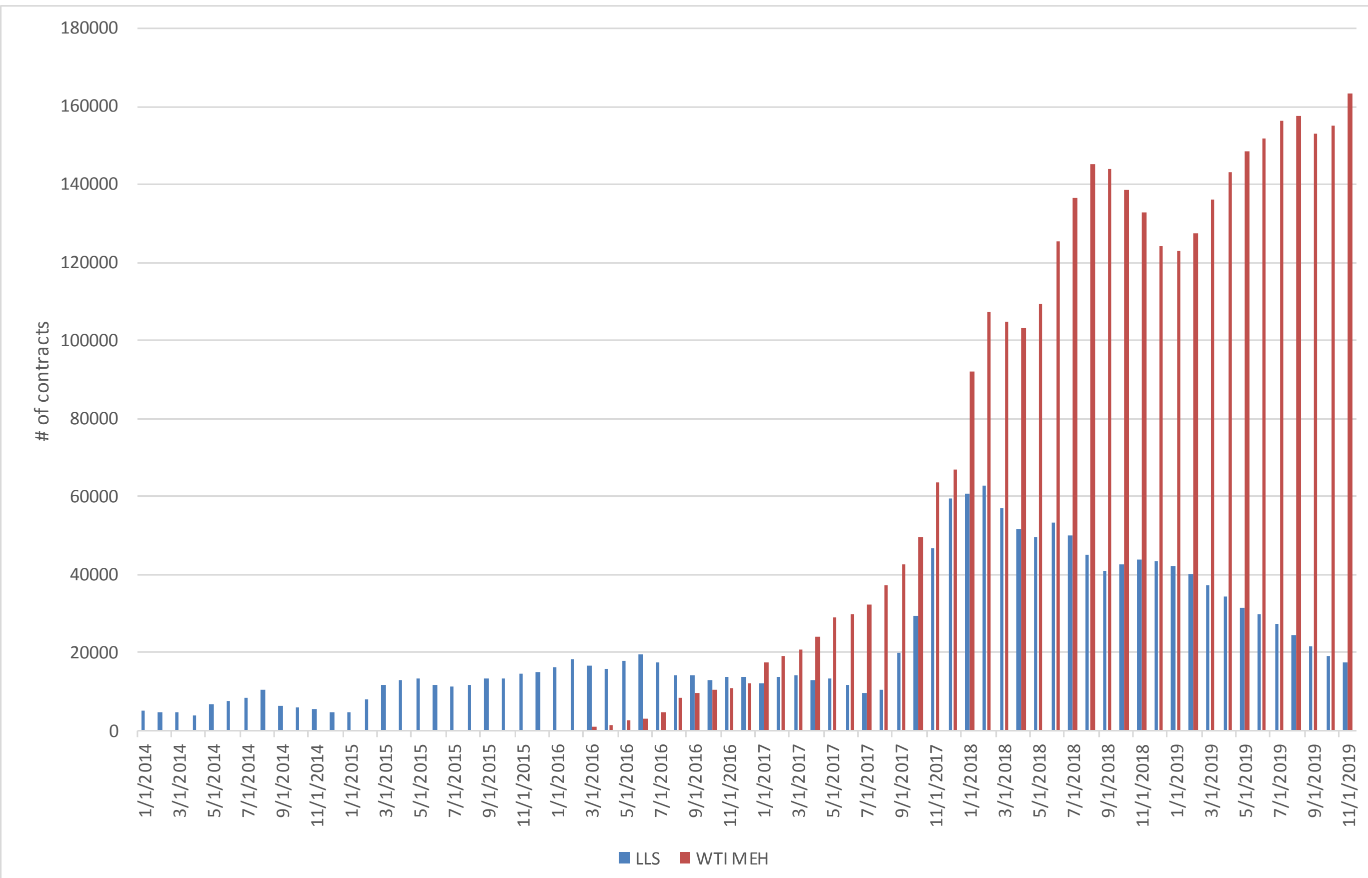


Source: Marathon.

Marooned

Absent crude deliveries into Capline north, LLS has lost much of its trade appeal. The specification for LLS originated from the Capline tariff, and LLS trades are assessed for delivery to St. James. Other than the five local refineries, crude demand at St. James is now limited to the export market that averaged 85 mb/d out of the Plains and NuStar terminals between January and November 2019, according to RBN Energy. Evidence from the swaps market indicates that LLS liquidity has dried up since 2017, especially compared with its newly popular WTI MEH rival. Exhibit 2 shows monthly average open interest in CME Group swap contracts for LLS and WTI MEH since January 2014. Although LLS open interest expanded in late 2017, it has declined ever since to 17,500 contracts on average during November 2019. By contrast, WTI MEH total open interest has ballooned since 2016 to 163,000 contracts during November 2019. Daily trade volume for LLS averaged less than 500 contracts in November 2019 compared with 3,500 contracts for MEH. As the Gulf Coast crude market has increasingly been dominated by exports and surging production in the West Texas and New Mexico Permian basin, WTI MEH has become traders' benchmark light sweet crude of choice.

Exhibit 2 Monthly Average CME Swaps Open Interest for LLS and WTI MEH



Source: CME Group, Morningstar.

Rejuvenation

Rejuvenating St. James as a trading hub relies on new infrastructure investment to encourage greater flows southbound on Capline and link the Mississippi hub to Clovelly storage and the LOOP export terminal. Two projects along these lines that were floated at the start of this year remain on the drawing board but aren't currently progressing. The lack of urgency suggests shippers are waiting to evaluate demand from southbound Capline shippers before investing in new connections. We described the two projects in a January note (see Shale Crude Heading East as Louisiana Market Opens Up).

The first of these, the 600 mb/d Swordfish pipeline being jointly developed by Marathon midstream subsidiary MPLX and Crimson Midstream Holdings, would connect St. James with a terminal at Raceland, Louisiana, and Clovelly/LOOP. Swordfish was initially expected on line during the first half of 2020. However, the project seems to have come off the boil this year in part because Marathon encountered activist shareholder pressure for stronger returns, which has focused midstream investment on the Permian basin since August. The company's third-quarter earnings call emphasized participation in the joint venture 1 mmb/d Wink to Webster pipeline from the Permian to the Texas Gulf Coast while the Swordfish project was absent from the slide presentation.

A second proposal is the Phillips 66, Harvest Midstream, and PBF Logistics joint venture ACE pipeline. That project would provide an initial 400 mb/d crude capacity between St. James and downstream Louisiana refineries in Belle Chasse (the 247 mb/d Phillips 66 Alliance), Meraux (135 mb/d Valero), and Chalmette (169 mb/d PBF Energy) as well as an optional destination at Clovelly, subject to market demand. The ACE pipeline was originally expected in service during the second half of 2020 but is still "developing," according to a November Phillips 66 investor day presentation.

A third proposal, the 800 mb/d Tallgrass Seahorse pipeline, would connect Cushing directly to St. James as well as an export terminal at Plaquemine, Louisiana, on the Mississippi River. Seahorse was first announced in August 2018 but has lost momentum since. It remains under consideration with shippers, awaiting a final investment decision, according to Tallgrass.

These expansion projects need shipper support to succeed, yet the brakes seem to be on now. In part this is due to delays getting increased volumes of Canadian crude over the U.S. border to Patoka for southbound shipment on Capline. Light crude shipping demand between Cushing and St. James is also likely being hampered by slowing shale production in the Anadarko (see our July note, Big Drilling Decline in Promising Oklahoma Play) and the Rockies, where growth this year has been slower than 2018, according to the Energy Information Administration. Midstream companies are generally showing caution developing new projects in the face of lower U.S. production growth this year.

LOCAP Reversal?

Absent new project development, the Capline partners might consider reversing LOCAP between St. James and LOOP. That would effectively extend Capline south to LOOP, opening a direct link to exports and access to the 1 mmb/d of refining capacity currently supplied from Clovelly. However, that development must wait until St. James no longer needs supply from LOOP to meet the needs of its five downstream refineries. We estimate that if LOCAP were reversed today and all other incoming crude pipelines to St. James were running at full capacity, the five refineries would be short at least 300 mb/d of crude, which means they still depend on LOOP supplies. Increased shipments into St. James next year via southbound Capline may alleviate that situation, but not before shippers commit to higher volumes from Cushing or Patoka.

Lesser Role

In the meantime, St. James is stuck playing a lesser role in the Louisiana Gulf Coast market along with its benchmark LLS crude. Provided that U.S. domestic production continues to increase and pipelines from Canada are finally completed, St. James has potential to rejuvenate blending and trading activity around the Capline assets. Those developments would spur the shipper commitments needed to encourage infrastructure build-out between St. James and the Gulf Coast export market. Until then, St. James must adapt to a quieter life away from the trading limelight.

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