Gulf Coast holds oil from shale formations in abundance

Photo courtesy of Louisiana Offshore Oil PortThe above-ground tanks at Louisiana Offshore Oil Port's Clovelly facility allow the company to segregate specialty grades of crude oil for customers. This ability will be important if enough Canadian oil arrives in Louisiana to support the cost of adding the sysems needed to load vessels. Today, LOOP only offloads vessels carrying domestic and foreign crude.

Energy firms push for U.S. crude exports

BY TED GRIGGS

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The Gulf Coast is awash in oil from shale formations, so much light oil that the region's refineries can't process it all without spending big money on modifications. There's so much shale oil that the United States has become the world's largest crude producer, passing Saudi Arabia and Russia. There's so much shale oil that when energy analysts RBN Energy and Turner, Mason & Co. organized a two-day conference in August, they called it "Surviving the Flood of Light Crude Oil."

The question now: Is there enough shale oil to change U.S. energy policy and prompt exports of domestic crude, reversing the ban on exports Congress imposed in 1975 to reduce the country's dependence on foreign oil?

"I think there's a strong probability of it occurring on a limited basis," said David Dismukes, executive director of the LSU Center for Energy Studies. "I don't know that we're going to see huge, huge volumes initially."

If it happens, Louisiana Offshore Oil Port, the country's largest private terminal, stands to benefit by reconfiguring its import operations to also take on an export role.

The export idea is gaining support. In addition to the usual free-market advocates — such as the American Petroleum Institute and the U.S. Chamber of Commerce, not to mention the European Union — the Brookings Institution has urged President Barack Obama to lift the export ban.

"My goodness; to me that would almost seal the deal if Brookings is in favor of it because Brookings is a left-of-center think-tank," local economist Loren Scott said. "If they're in favor of it, holy cow."

The push for exports is coming from oil producers.

U.S. oil production jumped more than 50 percent between 2008 and 2013, from about 5 million barrels a day to nearly 8 million, according to the U.S Energy Information Administration. Shale oil accounted for almost all of that increase. By 2016, domestic oil production will pass the historic high set in 1970 of 9.6 million barrels per day. And shale production is expected to continue increasing until around 2020. After that, production may slowly decline for several decades, or advances in technology could generate even larger amounts of oil.

Much of the shale production is now being shipped to the Gulf Coast, where refineries process half the crude in the country. The problem is that those refineries spent billions of dollars in the 1990s equipping themselves to handle the heavy, sour crude from Mexico, Venezuela and Saudi Arabia. At the time, domestic light crude production was falling with no end in sight.

Now, investment bank Goldman Sachs predicts U.S. production could overwhelm the available refining capacity by mid-2015.

Scott is among the many who say shifting to light crudes could cost each refinery hundreds of millions of dollars for new equipment, not to mention years to complete those technological modifications.

For example, the first step in the refining process, distillation, separates crude into its naturally occurring components. Distillation columns are generally sized for specific types of crude. Changing the oil means that to operate efficiently, refiners must build new towers or install additional equipment.

The Flint Hills Corpus Christi plant in Texas spent $250 million so that it could exclusively handle light crude oil from the Eagle Ford Shale. Valero is spending an estimated $220 million to $280 million at its Houston refinery to process Eagle Ford oil.

"It always costs a pile of money to make these changes," Scott said.

Not everyone on board

Refiners and environmentalists oppose lifting the export ban, though for very different reasons.

Charles Drevna, president of American Fuel & Petrochemical Manufacturers Association, said the models supporting the export debate are based on a flawed premise: that production will increase while distribution systems and refining capacity remain unchanged.

Refiners are always adapting, Drevna said. Some relatively simple and inexpensive modifications will allow refineries to process another 900,000 barrels a day of light oil.

"People who say Gulf Coast refineries are geared to handle only sour crudes, I think that's a gross overstatement," Drevna said.

The refineries handle various types of crude and constantly adjust the mix based on prices, he added. The refiners are all for free trade, Drevna said. But allowing exports doesn't make sense, he said, without addressing the other impediments to a free market — such as requiring renewable fuels be mixed with gasoline, limiting which tankers can move oil between U.S. ports and restricting access to drilling on federal lands.

Additional investment will be necessary if production follows the high end of the Energy Information Administration's forecast. Those estimates show shale production is growing by 75,000 barrels per month and will top 11 million barrels of oil per day by 2018.

"I think it's remarkable, fascinating, interesting, any adjective you want to ascribe to it, that we could even be talking about (exports) in 2014 when five, six, seven years ago we were worried about whether we would have enough energy to run our automobiles," Drevna said. "It's great to be able to have that debate."

But energy policy can't just be about exports, environmentalists note.

Jonathan Henderson, coastal resiliency organizer for the Gulf Restoration Network, said increasing shale production and oil exports ups the risk of spills from trains, barges, tankers and pipelines. Higher production also means more pollution in the air, water, land and food.

Louisiana has already borne more than its fair share of the environmental consequences from the oil and gas industry, he said, and expecting the state to shoulder more of the burden and the environmental risk for energy that's just going to be shipped overseas seems unfair.

Drevna said there is little chance of any federal action on exports before the 2016 presidential election.

In January, the Center for American Progress, whose founder is one of Obama's advisers, issued a report saying exports were a bad idea. Domestic oil exports would further enrich oil companies by allowing them to sell at higher prices while hurting consumers who would pay more for gasoline, the Washington think-tank says.

Export opponents, like Sen. Edward Markey, D-Mass., say the U.S. still imports about 40 percent of its oil. Exports would increase U.S. dependence on imports, he argues.

In the meantime, the Gulf Coast glut is depressing the price for light crude.

"That's why the people who are producing this oil say, 'Shoot, we need to be able to export it so we can get the same price that the market is dictating for all the other oil in the world,' " Scott said.

A January report from global management consultants McKinsey & Co. says if the export ban stays in place, shale oil will have to displace medium-grade crudes; the shale oil is already replacing light oil imports from West Africa.

While this will provide room for several million barrels of shale oil, it will mean lower prices. Light U.S. oil could eventually be discounted $8 to $10 per barrel or more.

The Brookings memo to Obama recommends asking Congress to lift the ban on crude oil exports for a variety of reasons, including:

Surging domestic production. Without export markets, domestic prices could fall and less exploration and production would take place.

Substantial economic gains. Some industry reports suggest allowing exports could generate up to $15 billion annually.

No negative effects for energy security. Lifting the ban could stimulate additional domestic oil and associated natural gas production, benefitting the U.S. Treasury.

The ban on domestic exports resulted from Arab members of the Organization of Petroleum Exporting Countries, or OPEC, stopping oil shipments to the United States in 1973. The Arab countries in OPEC were angry over U.S. support of Israel in the Yom Kippur War with Egypt. By the time the embargo ended, oil prices had tripled, gasoline prices jumped 50 percent, and OPEC was firmly in control of oil prices.

Congress passed legislation to restrict oil exports, giving the president the power to make some exceptions “in the national interest.”

The United States’ major complaint about OPEC for the past 40 years was that the group restricted exports. OPEC members produce about 60 percent of the oil traded internationally. The organization plays a major role in the supply of oil.

LOOP looks ahead

If domestic exports are allowed, the Louisiana Offshore Oil Port, would easily fit into the new equation. LOOP unloads tankers — it can handle the world’s largest supertankers — and pumps the crude into facilities that can store more than 65 million barrels of oil.

“We have a very, very large storage and distribution facility at Clovelly, so it would really be ideal to store and distribute oil. We have 33 years of safe operating in the

Gulf of Mexico and a large storage capacity at our facility," said Business Development Manager Barb Hestermann. "It's a natural fit to be able to load vessels out in the event that we were able to do that on a large scale."

LOOP has been approached by some customers who would like to ship Canadian crude, by pipeline or train, to the facility and then export it by tanker. This would require LOOP to build about 45 miles of pipeline to connect the storage to the offshore mooring buoys located about 20 miles offshore. There the oil would be offloaded to tankers.

The facility would need financial commitments from customers and about 200,000 barrels a day of Canadian crude to make the project worthwhile, Hestermann said. The project would take several years to complete, in large part because new state and federal permits would be needed.

But once the pipeline is built, it could just as easily pump U.S. crude to awaiting tankers if domestic energy policy changes.

"That's outside of our realm," Hestermann said. "You deal with that when it happens."

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