

LNG

US shifts LNG focus from import to export trades

Cheniere Energy's bid to get regulatory go-ahead for bi-directional facility at Sabine Pass is a sign of an impending role reversal



BARRY PARKER

THE tide of importing liquefied natural gas into the US has been weakening for years, but it could now be in the early stages of a reversal.

The shift, underscored by Cheniere Energy Partners' recent moves to start exporting LNG, could eventually see the US take a leadership position in LNG export trades.

High US gas prices throughout 2007-2008, together with strong markets spurred investment in the extraction of "unconventional" material including gas trapped in the shale formations, often found in close proximity to deposits of coal.

According to the American Petroleum Institute unconventional gas production is forecast to increase from 42% of total US gas production in 2007 to 64% in 2020.

That potential has now been translated into commercial interest in domestically produced LNG exports and earlier this month, Cheniere cleared one regulatory hurdle in its efforts to become the first exporter of gas liquefied in the Lower 48 states.

Its Sabine Pass import facility, which is located on the waterway separating Texas and Louisiana, is set to become what the company calls "a bi-directional import/export facility".

The existing regasification plant, which

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American Petroleum Institute

started operating in spring 2008, interfaces with the domestic gas pipeline network, handling up to 4.3bn cu ft per day.

Its customers include Total, Chevron and a marketing arm of Cheniere. Market sources also say that cargo has come in to Sabine Pass from Qatar and Yemen this year.

The regulatory path towards exporting is tortuous, with project approval required from many Federal agencies. In September, the US Department of Energy approved future LNG exports from the yet to be built liquefaction facility but approval is still required from the Federal Energy Regulatory Commission.

The plans call for four trains with a total capacity of 2.8bn cu ft per day. Filings with the the Department of Energy peg export volumes of 128,000 barrels per day of natural gas liquids.

At present, the world seems to be drowning in gas; available supply, in relation to demand, pushed Henry Hub prices to under \$4 per million btu at in early September.

But, paradoxically, the large oversupply in the North American gas business, where storage had climbed to record levels before the hot summer of 2010, may provide some insights into the longer-term future of the business.

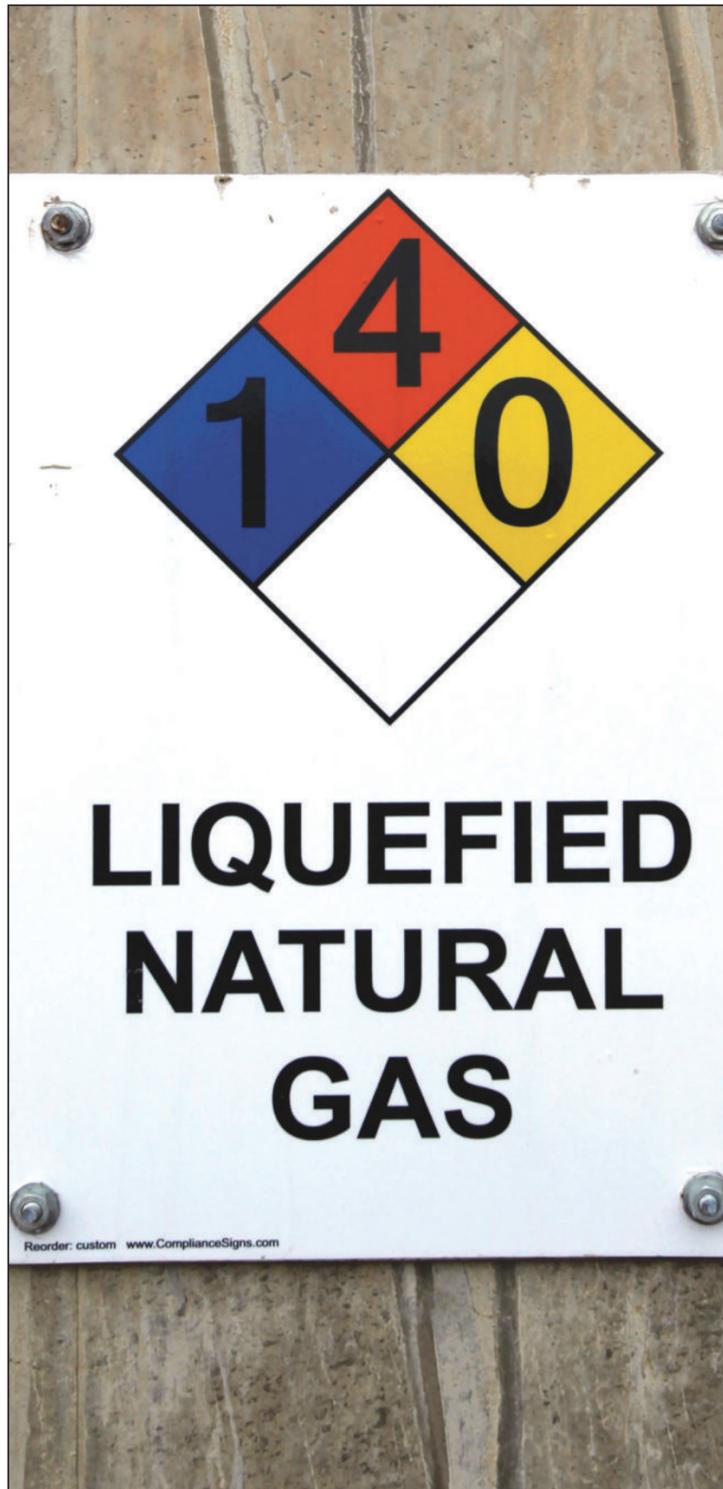
The business case framed by Cheniere, in an investor presentations is that an opportunity exists to export from North America, the world's largest producer, with low costs, at a time that "natural gas demand is not likely to keep pace with incremental supply".

Cheniere's case points to a looming gas shortage, not in North America, where 2010 gas demand is estimated to be 65bn cu ft per day, but in northern Europe, where production on the UK Continental shelf is likely to decline.

This potential demand for gas from Cheniere, which envisions tying its terminal into the Henry Hub, comes as worldwide demand, particularly in Asia, continues to soar.

Teekay LNG Partners, using Energy Information Agency data, forecasts LNG trade growing from 225m cu m in 2007 to 285m cu m in 2015 and reaching 425m cu m in 2030.

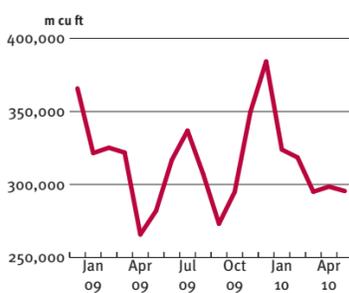
Golar LNG Energy cites Wood McKenzie data showing growth from below 150m metric tonnes per annum in 2005 to around 270m metric tonnes per annum in 2015. The growth is driven by movements to the Asia Pacific and also to Europe, which is consistent with Cheniere's expectations. ■



Stored potential: the LNG trade is forecast to grow from 225m cu m in 2007 to 285m cu m in 2015 and reaching 425m cu m 2030. Bloomberg

TOTAL LNG IMPORTS INTO US

January 2009 to June 2010



Source: US Energy Information Association

WELLHEAD PRICES FOR LNG

January 2009 to June 2010



Source: US Energy Information Association

Politics to play key role in opening export destinations

INTERNATIONAL politics are likely to have as much influence on trade flows as economics and logistics for a US LNG export boom to materialise, writes Barry Parker.

Export destinations are tightly controlled by a licensing procedure, with the Department of Energy currently approving exports to a small list of countries, which have bilateral Foreign Trade Agreements in place with the US.

When Cheniere Energy Partners moved to begin LNG exports, they had to request an expansion of this list of countries. According to a recent follow-up filing with the Department of Energy Cheniere sought to include members of the World Trade Organization and beyond, as long as this did not violate any US laws.

This move will ultimately prove significant in determining whether new LNG trades will develop. In the Western hemisphere, FTAs are in force with Peru and Chile, and a pact with Colombia is under consideration.

Shale gas is hardly new, but better drilling technologies, including lengthy horizontal boring, have enabled more efficient extraction, in regions such as the Appalachian Basin and Illinois Basin, which are better known for their ample coal supplies.

The newly realised potential has attracted investment from oil majors and from Asian-based oil producers. A recent research note by Poten & Partners points to India's Reliance Industries taking a \$1.15bn stake in the Eagle Ford shale project (in South Texas) alongside an independent Pioneer Natural Resources. Poten & Partners also highlights a transaction where sovereign wealth funds from China, Singapore and South Korea invested in Chesapeake Energy, which Poten & Partners describes as the "largest shale player" in the US.

In its brief, Poten & Partners also says: "Chesapeake has benefited from renewed interest in onshore energy following the BP oil spill."

Political and non-economic issues with shale gas are not just confined to exports; domestic gas can be problematical, particularly in the Northeastern US, a net importer with a permanent energy deficit.

Bill Cooper, who spearheads the lobbyist efforts at the Washington DC-based Center for LNG, said in a recent paper: "It is unclear what proportion shale gas will contribute to the US gas supply given the potential permitting, environmental, and economic hurdles it may face, including infrastructure and timing challenges."

Such observations are not lost on planners, contemplating how to extract and transport gas from the massive Marcellus field, which stretches from the Appalachian Mountains, into New York, a jurisdiction known for its harsh regulatory stance on both site selection and wastewater issues. ■

Carrier oversupply eases as demand tightens up

WHEN the worldwide surplus in natural gas was hit by the late 2008 economic collapse it quickly brought about a surplus of vessels as deliveries continued on orders that had been placed during the earlier boom times, writes Barry Parker.

Drewry figures show a current fleet of 349 vessels, totalling 50.7m cu m, with 27 vessels (aggregating 4.4m cu m), on order. The orderbook, sized at 8.7% of the overall fleet, is concentrated in the 150,000 cu m-200,000 cu m category.

Singapore-based Kenneth Wilson, from LNG Shipping Economics & Commercial Practice, says that unlike the dry bulk and tanker sectors, "ship delivery postponements have not been much of a factor in LNG compared to other sectors. The large majority of ships are dedicated to specific exporting projects."

To some extent, the recession cleaned out the supply side. Mr Wilson says that



Looking to the future: a Golar Energy LNG concept for a floating storage and regasification unit, based on the conversion of an older LNG vessel.

many of the older vessels that were laid up in early 2009 are unlikely to re-enter the market because of the entrance of modern ships, which are bigger, more fuel efficient and offer lower boil-off rates.

Mr Wilson, who predicted in spring 2009 that the surplus would ease, says that

there are now signs that supply and demand is tightening up.

"There are few modern ships available for spot charter, and freight rates are beginning to respond," he says.

Recent broker reports indicate that spot rates moved up in July and August.

Anne Tricerri, who is a consultant in the LNG group at Poten & Partners, told Lloyd's List: "Recently, there has been some tightening in the charter market and some ships have come out of lay-up. For example, the LNG Bonny was taken out of lay-up because production levels picked up at Nigeria LNG."

"There are definitely LNG vessels that are allocated for only executing spot/short-term trades," she says, adding: "Per year, from 2007-2009, both spot and short-term trade has fluctuated around 20% of total world LNG trade."

If Cheniere succeeds in its bid to broaden the list of receivers allowed by the US Department of Energy, then experimentation with more spot shipping, certainly to South America, might be a result.

A Drewry analysis of LNG Shipping mentions the use of floating storage

terminals by Brazil and Argentina — both among dozens of members of the WTO.

Shipbroker reports also point to conversions of older tonnage into floating storage units or regasification units; such vessels might form links in experimental supply chains.

Teekay Energy Partners cites "emerging niche opportunity in floating LNG solutions (receiving and liquefaction terminals)" in investor presentations, and Golar LNG Energy talks about floating regasification units as a cost effective way to meet low demand or to "grow into" LNG than a land-based terminal.

At the highest level, new trades, the fodder for spot LNG shipments, will be facilitated by midstream equipment. And, with the growth in US shale gas, some of these shipments may just turn out to be US exports from Sabine Pass and elsewhere. ■