

# 'Homeless LNG' likely to keep market oversupplied this decade

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*(Larry Persily, assistant to the Kenai Peninsula Borough mayor, was invited to participate in an Asian LNG conference and prepared this report as part of the borough's ongoing efforts to share information about global LNG market developments. The conference paid the travel expenses.)*

Speakers at an annual Asian LNG conference in Singapore talked about “homeless LNG” — new supplies of liquefied natural gas coming into the market without enough buyers willing to sign long-term deals to guarantee a destination for all the potential cargoes.

With LNG export projects coming online in Australia and the United States, with demand on the decline in Japan and uncertain prospects elsewhere in the Far East, and with cheap coal a price-competitive energy source, the world has more capacity to make LNG than it needs for the next several years.

“This excess in supply will have to find a home,” Antonio Cailao, president of the Philippines National Oil Co. said at the annual LNG Global Congress in Singapore March 2-3. He said it will be a “beauty contest” based on price and contract terms.

Spot-market and short-term sales volumes are up as buyers take advantage of low prices in an oversupplied market. And the longer-term contracts that buyers are willing to sign are for smaller volumes, said Houston-based Jason Freer, head of business intelligence at Poten & Partners, a global energy advisory firm.

“Very few people out there in the market are signing long-term LNG contracts ... and why should they,” said Leigh Bolton, founder and principal of Holmwood Consulting, a global energy consulting firm based in the U.K. Spot-market prices in Asia are under \$5 per million Btu — down three-quarters from the record high two years ago when supply was tight — and are cheaper than many oil-price-linked long-term contracts.

The market oversupply will likely grow until 2020 before demand begins to catch up, said Desmond Wong, the London-based managing editor for LNG Platts news service.

## **LOW COSTS WILL WIN**

Vivek Chandra, CEO of Texas LNG, a smaller-scale project proposed for the Texas coast, described it as: “The new world. The realization that the customer is king.”

The low-price, oversupplied market is not hopeless, just sobering. “The really sound, commercially economical projects will go ahead,” Bolton said. Many of the projects coming

online in the near term were built on the premise that the high-priced Asian market would take all that the world could supply, he said. “Well, that’s gone.”

Chandra offered a similar view: “The low-cost project is always going to win.”

Anything that might come next will be based on market demand, he said. The first U.S. export project in the Lower 48 states — the Cheniere Energy plant at Sabine Pass, La. — shipped its initial cargo earlier this month. Construction continues on additional liquefaction capacity at Sabine Pass, and four more LNG plants are under construction in Texas, Louisiana and on Chesapeake Bay in Maryland. Several others are in varying planning stages.

“It’s a fool’s game to figure out what’s going to happen X years from now,” Chandra said.

Australia alone saw almost \$200 billion committed to seven LNG export projects between 2009 and 2012, with the last of the plants possibly online by late 2017, in total adding more than 20 percent to global LNG-making capacity. But those projects and the U.S. ventures could be it for a while, said David Morris, lead Asia LNG originator for Uniper, a Germany-based worldwide operator of power plants and commodities trader. “Mega-projects will take a hiatus,” Morris said, as markets adjust and absorb new supplies.

## **JAPAN RESTARTS NUCLEAR POWER**

In addition to new supply coming online, demand is not moving up as developers had predicted — and expected — just a few years ago. Part of that reason is Japan, where last fall the first nuclear power stations restarted since the Fukushima meltdown in 2011 closed down all plants nationwide.

Just three units have been reactivated, though two more have been certified to meet new safety standards and 20 others have applied for approval, said Yasushi Sakakibara, of the Asia Pacific Regional Office for Tokyo Gas.

Imported LNG provided 29 percent of Japan’s power-generation mix in 2010, jumping to 46 percent by 2014 to compensate for the lack of nuclear power, he said. But the government expects LNG to slip back to 27 percent by 2030 as nuclear power returns and as the country puts a heavy emphasis on renewable energy sources, including wind, solar and biomass. That much renewable energy probably is optimistic, Sakakibara said, with LNG and coal available to fill in any gap. The Ministry of the Environment has approved several new coal-fired power plants for construction.

“Everyone hates it (coal), but everyone uses it,” said Henning Gloystein, Asia energy editor for Thompson Reuters news service. “Japan’s coal use is at absolute records.”

Tokyo Gas estimates Japan’s LNG demand by 2030 for power generation and heat at 75 million to 100 million metric tons per year, down or maybe up a little from 2014’s imports of almost 90 million tons. Some of that gas will come from the United States, Sakakibara said, noting that

Japanese utilities have contracts for more than 9 million tons per year from three U.S. export projects under construction, with deliveries to start 2017 through 2022.

Supply diversity is important to Japan, he said, listing the Lower 48 U.S. states, Alaska, Canada and East African nations as potential new sources for the country that has relied heavily on Australia, Malaysia, Indonesia, Russia, Qatar and other Middle East suppliers.

### **BUYERS SEEK PRICE RENEGOTIATION**

Unfortunately for sellers, however, the current oversupplied market has created opportunity for buyers to push for renegotiated lower contract prices, said Edward van Geuns, in the Singapore office of the De Brauw Blackstone Westbroek law firm that advises energy companies on contracts and disputes. He related how India last year succeeded in negotiating lower prices in its long-term contract with Qatar. He titled his presentation: "Contractual train wrecks: How price volatility affects existing deals."

India's Petronet LNG saw it could purchase spot-market LNG at a lower price than its 1999 oil-linked contract prices and told Qatar it was not going to take delivery of as much gas as obligated under the contract. "Come and get us, we think the price is too high," van Geuns said of India's approach. "It actually worked."

Qatar agreed to cut its price in half, though future prices still will depend on oil markets. In exchange, Petronet agreed to buy more LNG and for a longer period.

China National Petroleum Corp. earlier this month said it, too, wanted to renegotiate pricing terms in its long-term contract with Qatar.

India was successful because Qatar really didn't have anyone else looking to buy the gas, said Zhi Xin Chong, principal analyst with global energy consultancy Wood Mackenzie. "Where are you going to find another off-taker willing to buy 7.5 million tons per year?"

He offered a similar comment regarding Chevron's efforts to market the unsold capacity of its \$54 billion Gorgon LNG project in Australia, which is coming online this month. Chevron has been offering lower prices to attract new buyers in China, Chong said. "You could say they were getting desperate."

But project developers still need long-term sales contracts to underpin their financing, said Ted Williams, of the American Gas Association and a leader for the International Gas Union's World LNG report. "Project developers need to secure LNG buyers for a large portion of project capacity before sanctioning a project. ... Uncertain market dynamics may make this task more difficult."

### **RUSSIA HAS PROBLEMS, TOO**

One country looking to sanction more gas supply projects is Russia, which has similar problems as every other producer. “Everything is quite questionable,” said Tatiana Mitrova, head of the oil and gas department at the Energy Research Institute in Russia. “With LNG, it’s even worse.”

There is too much gas in the world chasing after the same buyers, she said. And all that competition “makes price wars nearly inevitable,” she added. “You would have to think three times before you get involved in any new project,” Mitrova said of LNG investments. As to Russia in particular, “LNG plans are all going backward.”

She said a proposed LNG plant at Vladivostok has been postponed indefinitely; expansion of Russia’s only LNG project, at Sakhalin Island in the Far East, is unlikely before 2021; and several other proposals have also been delayed.

And though Novatek, the Russian lead partner in Yamal LNG under construction in the Arctic, continues to claim start-up of the plant’s first liquefaction train in 2017, Mitrova said 2018 is more likely. An even more pessimistic view came from London-based Mike Fulwood, a principal in the global gas practice at energy consultancy Nexant, who predicted 2019-2020.

Western sanctions on Russia over its role in the Ukraine crisis has made it difficult for the Yamal LNG partners to obtain financing for the full \$27 billion development.

Separate from LNG projects, Russia is looking to build a \$50 billion gas field development and 2,500-mile pipeline project to serve China. “Power of Siberia,” as it was named in a nationwide contest, is under construction, but slowly, Mitrova said. Start-up could come in 2019, a year later than planned, and even that is shaky, she said.

Gazprom is likely to delay the project a year or two, as allowed under its contract with China, she said. There just isn’t an urgent need in China for the gas. The sale price of the gas is linked to oil prices, Mitrova said, and current oil prices are far off the mark for what Gazprom needs to make money on the deal.

Russia isn’t alone in project delays. More than 200 trillion cubic feet of gas has been discovered offshore Tanzania and Mozambique in East Africa. The governments want to see the leaseholders build large-scale LNG projects, and the companies are looking hard at the projects, but there are hurdles to overcome, said Lennart Luten, a Singapore-based senior manager with global energy advisers Galway Group.

The complexity and cost of deep-water projects is one issue, he said, in addition to undeveloped legal and fiscal frameworks for natural gas in Tanzania and Mozambique, Luten said. Toss in stiff competition from Australia and the United States, and neither African nation may see a multi-train LNG plant sanctioned until the end of the decade, he said.

## **NEW CUSTOMERS ENTER MARKET**

The good news out of the Singapore conference is that new customers are signing up for LNG, although in smaller volumes than Japan, China and South Korea.

“We expect a lot of demand to come in 1-million and 2-million-ton chunks,” said Poten & Partners’ Freer. “The smaller markets ... will be important in balancing the physical market.”

Floating LNG terminals — ships anchored or tied up to take delivery of LNG, store it, regasify it and send it into onshore pipeline systems — are a low-cost and timely alternative for smaller importers to get into the game. Almost 20 FSRUs (floating storage and regasification units) are in place worldwide, Freer said, with four more under construction. “It’s not ridiculous” to expect that up to half of the 30 additional proposed FSRUs could be on the job within the next several years.

New or growing LNG buyers in recent years, including FSRU operators, count Lithuania, Egypt, Jordan, Pakistan, Brazil, Argentina, China, Thailand and India — with Vietnam and the Philippines looking to join the list. Egypt, Pakistan and Jordan alone in 2015 imported about 6 million tons. There were 33 LNG buyers worldwide in 2014, Wood Mackenzie’s Chong said, with a possible 55 by 2020.

“China and India, as well as smaller buyers, are likely to respond to lower prices,” Freer said, in a hopeful note of potential demand growth as gas becomes more cost-competitive with other energy sources.

Meanwhile, a lot of long-term supply contracts with Asian customers start expiring later this decade, he said. But will they sign new deals at the traditional 20 years, Freer said, or opt for the more recent trend of shorter contracts. “We’ll have a pretty good idea” of demand as those contracts turn over in a few years.