IJGlobal
A Green Street Company

Terminal velocity

01/10/2004

With only four existing liquefied natural gas (LNG) terminals now in existence within the US, and at least seven needed by 2025, oil and gas players are in a race to get the required approvals and get started building new facilities. But with an estimated 35 projects in the works, some have already started falling by the wayside. For those that do get approvals, getting financing is another challenge. Although bankers are interested in the projects, deal structuring is complex, dependent on offtake agreements - where they are available - and output is sold into an illiquid market in the wake of the merchant energy collapse.

Demand for imports of LNG is growing exponentially. The four LNG terminals now in existence in the US - at Everett, Maine; Lake Charles, Louisiana; Cove Point, Maryland; and Elba Island, Georgia - cannot hope to meet this demand, even with the expansion plans they have in the works. According to the National Petroleum Council, in a study for the US Energy Department, between seven and 10 new terminals are needed within the US by 2025, even assuming the new Alaskan pipeline is completed as planned.

A number of projects have already received the green light from regulating agencies - the Federal Energy Regulatory Commission (FERC) for onshore facilities and the Maritime Administration (MARAD), within the US Department of Transportation, for offshore. Which terminals make the grade and go forward depends not only on passing stringent regulatory hurdles, but also getting local approval and closing financing in a complex market.

However, the growth in demand for LNG industry, and the consquent growth of an LNG market, dictate the need for such terminals. Says one adviser: "Those facilities that have received regulatory approval are well into the development process, and there will clearly be more projects under way as and when they get the necessary approvals. This is big business at the moment, and will become more so."

Damien Gaul, an industry economist at the Energy Information Administration of the US Department of Energy, says that higher domestic natural gas prices, beginning in 2000, and lower LNG costs demonstrated once again the competitiveness of imported LNG. He explains, in a report: "The outlook for LNG's role in the US natural gas industry is quite strong, with a renewed interest in baseload supplies of LNG through international trade, and continuing interest in the construction of LNG storage facilities to meet peak demand periods."

The contenders and the form

One of the major deals now under way is Sempra's Cameron LNG terminal - with a 1,500 million cubic feet per day (cf/d) expected baseload capacity - in Hackberry, Louisiana. It received final approval from FERC on 10 September 2003.

The approval was particularly important because it showed a drastic shift in FERC policy - the terminal was designated as a gas supply facility, rather than a facility for interstate commerce, and is therefore not subject to cost-based rates and open bidding requirements.

Says Gaul at the EIA: "FERC has stated its intention to apply the new policy to other proposals for land-based LNG import facilities." This means that developers will be able to import supplies for their own use and marketers can contract privately for terminal services at market-based rates, he says.

Sempra also has a proposal in for a new facility at Port Arthur, Texas, and ExxonMobil has two terminal projects under advisement with FERC: the $600 million Vista del Sol project - with 1,000 million cf/d baseload capacity - and the Sabine Pass terminal near the Texas-Louisiana border.

Another onshore project that has received approval is the $450 million Freeport LNG terminal - with storage of about 7 billion cf and send-out capacity of 1,500 million cf/d - on Quintana Island about 50 miles south of Houston, Texas. Freeport LNG is 60% owned by general partner Michael Smith, 30% Cheniere Energy and 10% Contango Oil & Gas.

ConocoPhillips has acquired 1 billion cubic feet (bcf) per day of regasification capacity in the terminal and a 50% interest in the general partner managing the venture. The group will also provide between $400 and $500 million in construction funding. The Royal Bank of Scotland has been mandated to lead arrange a supplemental loan facility to augment the financing package from ConocoPhillips.

In addition, Dow Chemical has signed a 20-year offtake agreement for 500 million cf/d with Freeport. CEO Michael Smith at Freeport says that the two deals in combination mean that: "we will be able to commence construction on the first new LNG regasification facility in the United States in more than two decades with up to 100% of our capacity committed as soon as we receive FERC approval." In addition to Freeport and Port Arthur, Texas looks likely to host Cheniere's proposed 2.6 billion cf/d capacity Corpus Christi terminal.

Offshore, two substantial projects will shortly be vying for the market's attention. MARAD has given the go-ahead for ChevronTexaco's Port Pelican terminal and Excelerate's Energy Bridge project, both of which are to be located off the coast of Louisiana. Energy Bridge uses a floating dock design with processing capacity of over 500 million cf/d, wherein LNG is regasified on ship and sent to an offshore pipeline using a mooring system. Port Pelican, with a capacity of 1.6 billion cf/d, connects to Henry Hub Natural Gas through ChevronTexaco's gas pipeline infrastructure. Says Gaul: "If construction is completed, these terminals will be the first offshore LNG import facilities.''

On the east coast, projects under way include Tulsa group Muddy Bay's Quoddy Bay terminal in Maine, which will file with the FERC by December this year. The facility, expected to come in at between $300 million and $500 million, is in competition with two Canadian terminal developments - the Bear Head project of Access Northeast Energy in Nova Scotia and Canaport, a project of Irving Oil in New Brunswick - to be the first to access the Maritimes & Northeast pipeline serving much of New England.

The Canadian projects are both farther developed, having already received approval of environmental impact statements by the Canadian government, but Quoddy Bay has the advantage of being within the US, thus undercutting tariffs on natural gas coming from Canada. Quoddy Bay has received local approval, although it still faces opposition from the same lobby groups that helped quash other LNG site plans along the Maine coast.

As Freeport LNG explains in a report: "The major US LNG challenge is one of location, because LNG terminal site requirements are stringent. The site must have a 45-foot draft channel to open water; there must be a port facility sufficient to service the large LNG carriers; it must be located in a supportive state and local environment; and it must be near existing pipeline capacity. As such, the number of potential, viable sites for new terminals shrinks considerably."

The Feds ride to the rescue

With a long and tortuous government sanction process, and with the pitfalls of local endorsement to deal with, it is a tough road even for the best projects. But with the FERC loosening some of its stringent guidelines - in changing the designation of these new terminals to avoid cost-based rates and open bidding requirements - those that are getting approval will find it easier to go ahead. Says Smith at Freeport: "The current administration recognizes the challenges that lie ahead in satisfying the increasing demand for natural gas in the United States."

But getting project financing can also be a challenge. These deals are more complex than most, and the key to getting a debt structure in place is securing offtake or tolling agreements, and details of contractual terms with suppliers. Says one banker: "Offtake agreements and supply pricing structures are the key here. Because floating pricing structures are used in supply contracts - tied to indices like Henry Hub - understanding the pricing risks should the market change is critical to

any debt structure." In addition, the liquidity of the markets to which the natural gas is going is important, he adds.

With offtake agreements, the problem is two-fold. First, having such a contract in place is critical to getting any debt financing in place, but with the collapse of the merchant power market finding entities that can sign long-term offtake agreements is limited, explains the banker.

Second, in some jurisdictions, regulators either discourage or actively forbid gas utilities to commit to long-term natural gas contracts. Although there is growing demand and an obvious need for a number of new facilities, the challenge of dealing not only with a dysfunctional market with a diminished

Another challenge is that of project cost. Projects in the Gulf tend to be larger than those in the works in other areas, with much lower capital costs. They tend to come in at the $600 million or greater range - depending on site-specific considerations such as whether or not a site is offshore.

But in areas such as the Northeast and California, proposed terminals tend to be smaller and require less upfront capital, but have much higher per unit capital costs. They range around a capex of about $400 million for a newbuild with capacity of between 500 and 600 million cf/d. This makes for per unit capital costs that can be double those for a larger facility in the Gulf of Mexico, so such projects are really only viable for energy markets that have premium prices relative to those in the Gulf.

Gaul at the EIA says growth in liquefied natural gas within the natural gas supply appears likely over the next several years. "This growth depends on increased utilization and expansion of current facilities and new construction. LNG storage facilities will also continue to be important in meeting peak demand needs of local utilities and as a way to store gas until needed." He adds that the demand for domestic LNG is expected to increase as companies make inroads into several niche markets such as vehicular fuel and as a replacement for propane at facilities off the pipeline grid.

Those projects that can get regulatory go-ahead as well as local support in a site that offers the right combination of good location and access to the grid, will stand a good chance. And with a market that is set to take off, there may be more room for new facilities than is, at present, suggested. The dilemma is a familiar one: those that take the first steps soonest may be best situated to take advantage of that growing demand - as long as it materialises. Those that do not get things off the ground soon may find themselves left far behind.