

## LNG: New Business, New Risks<sup>©</sup>

According to a survey completed April 19<sup>th</sup> by Pan EurAsian Enterprises, Inc. (www.paneurasian.com), 38 proposals are outstanding to build storage and regasification terminals for imported liquefied natural gas (LNG). The average construction cost for each of these projects is no less than \$400 to \$500 million each, all expect to be completed by 2009 or earlier. Although some are already falling by the wayside due to local opposition, most of the 38 projects' managers seem optimistic that their plants will get built.

The daily supply of natural gas to the nation's natural gas supply system from each of these terminals is generally 1 bcf (one billion cubic feet) of natural gas. Taken together, the 38 projects could supply nearly 60% of the total needs of the US market.

Driving this building boom is the perception that domestic production, plus Canadian exports, of natural gas are failing to keep up with a "rapidly" growing demand for natural gas, driven mainly by the popularity of gas-turbine power plants being completed around the country. Prices of natural gas have reached historically high levels in 2003, further buttressing the argument that the LNG imports are needed.

Often cited in permit applications are two respected sources that urge the imports of LNG: Federal Reserve Chairman Alan Greenspan and the National Petroleum Council.

Chairman Greenspan, concerned about the impact of high natural gas prices, and perhaps even more so about the unstable nature of natural gas prices over the last few years, has publicly stated that the country needs to open itself to the international gas markets, allowing for the flow of foreign natural gas into the country in the form of LNG.

In September 2003 the National Petroleum Council (NPC) submitted a report to the Secretary of Energy entitled: *Balancing Natural Gas Policy – Fueling the Demands of a Growing Economy*. This report also suggested that the US needs to begin importing LNG.

So far so good, the industry appears to be responding to a need in the market that has consensus support in industry and government. But, when we look further, we see considerable risks that need to be defined, understood, and managed.

In short, these risks are:

- The risk to the economy of further exacerbating already unstable price markets due to the potential flood of oversupply of gas;
- The risk to the finance sectors of an investment of \$15 billion or more, leveraged on a project finance basis, of projects that will not be able to service the debts;
- Risk to the gas marketing companies themselves that are undertaking long term arrangements with LNG suppliers that they will not be able to honor;
- Risk to consumers and industries that rely on a stable source of natural gas, stable in terms of both price and availability.

So far, in permitting the new facilities, FERC has not challenged any on their commercial viability. It seems clear here that the government is taking the position that the project sponsors are all "big boys" and can take care of themselves. FERC, in the so-called "Hackberry Policy," has said as much. Terminals are now considered to be like gas producers, independent entities

selling into a viable, competitive market. FERC is not about to exercise Texas Railway Commission style restraints on supply to the market.

It should be noted that the NPC study only suggests that 4.5 to 5.5 tcf (trillion cubic feet) per year are needed by 2025, an amount equal to about 23% of present demand for gas, not the nearly 60% the present list of projects could potentially supply by 2009. The NPC study is available for downloading on their website: [www.npc.org](http://www.npc.org)

The populist argument, which Chairman Greenspan seems to be embracing by derivation, is that an oversupply of gas to the market is good for consumers (low prices), and that is all that matters. The terminal owners, the banks, the institutional investors, and the gas marketers can take care of themselves. We would also suspect that the Chairman would prefer the lesser of the two risks: the risk of overbuilding versus the risk of not building at all.

That indeed identifies the financial risk universe. Like the previous building boom of independent power plants, there is likely to be some over optimism about the markets.

During the course of conducting the survey it was clear that the preferred method of financing was going to be leveraged project financing. In the words of one terminal developer, “the bankers are falling all over themselves to get into this new market.”

Some of the project developers are taking what we would characterize as a fairly cautious commercial approach. They are looking for long term (20 years, in some cases) contracts for both supplies of LNG from abroad and offtake by commercial customers in the US. In short, they are seeking to be neither long nor short on gas, but balanced in the long term. Assuming that there is credibility to the contracts, this seems cautious and effective.

But, many of the developers seem to be willing to “go merchant” with the gas. That is, there seems to be a willingness to rely on the liquidity of the markets on both sides (procurement of LNG and sales of gas) to keep a commercial balance. Such an approach seems to bring with it all the risks that have been demonstrated in the independent power business with merchant plants. The risks may be high.

So far, we have said nothing about some of the other risks that also exist.

During the development stage, there are the permitting risks. Although FERC seems very supportive of developing an LNG import infrastructure, and even though FERC (in the case of a proposed LNG terminal for Long Beach, California) has asserted sole jurisdiction as to the siting of these plants, there is still considerable siting risk. Since this risk is undertaken mainly by the project developer, it is not of great concern to the financial markets or consumers, unless none of these 38 plants can get built due to “NIMBY” (not in my backyard) style opposition. We doubt that the siting risk will stop all, or even many, of the terminals from getting built. But, local opposition to these plants can be virulent and it has already stopped or delayed a few.

Another risk, one that the government does worry about but sees as manageable, is the terrorist risk. There is considerable argument in the public media about how much risk there is from an uncontrolled leakage of LNG that will become a “fireball.” LNG ships coming into urbanized and congested harbors like Boston are already subjected to extraordinary safety procedures. Both the ships and the LNG storage tanks at the terminals themselves seem to be inviting terrorist targets for attack. There are those amongst the general public who oppose these terminals and cite this risk as sufficient reason not to allow them in built up areas.

Clearly, this risk of leakage and a “fireball,” whether caused by an attacker or by some kind of technical accident, is one that insurance companies are going to want to understand extremely well. The industry points to an excellent safety record; opponents point to a few accidents that have had consequences beyond the fence line of the facility.

Those who are sponsoring the 38 projects are serious companies, companies that are not about to back down easily. They include the major oil companies as well as some well established marketers of natural gas. Clearly they perceive the risks as acceptable to themselves. But, like all good project developers, they will seek to lay off as much risk as possible to others. *Caveat emptor.*

The survey is entitled “North American Terminal Survey for LNG Imports and Regasification (NATS), and is available from Pan EurAsian Enterprises, Inc. by contacting [nats@paneurasian.com](mailto:nats@paneurasian.com).

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