

Ports vie to feed North America's natural gas habit

Kitimat and Prince Rupert are proposed destinations for tankers from the Pacific Rim

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British Columbia's north coast is rapidly becoming a contender in the race to import liquefied natural gas to a gluttonous North American energy market. And it may have an advantage over U.S. ports closer to population centres, where some residents fear gas-bearing ships could become the target of terrorism.

Over the past three months, two separate proposals to build LNG terminals have surfaced in the business-hungry ports of Kitimat and Prince Rupert. If they pass regulatory and other hurdles, either or both could become the first conduit for LNG from the gas-rich Pacific Rim to North America, where domestic production is expected to fall short of demand before 2020.

Late last month, Calgary startup WestPac Terminals Inc. announced plans for an LNG terminal on industrial Ridley Island, south of Prince Rupert. The facility would include a cryogenic storage tank for at least 150,000 cubic metres of gas -- the amount carried by modern LNG tankers -- at minus-160 Celsius, according to WestPac president Rob Woronuk. In liquid form, natural gas can be compressed to 1/600th of its gaseous volume.

Woronuk said the terminal could be operating as soon as 2009, taking gas shipped from places such as Indonesia, Malaysia, Australia, Qatar, Russia and Alaska and delivering it to North American customers by pipeline, truck, rail or barge. WestPac would do geotechnical surveys on the site by the end of 2005, he said.

Another Calgary company, Galveston LNG, made plans public in April for a two-tank facility in Kitimat. The \$300-million Pacific Coast Terminal could start operations in late 2008, creating 50 jobs, said Tom Dawson, Galveston's vice-president of marketing. The firm, headed by former Duke Energy Europe president Alfred Sorensen, will begin environmental assessment in September, Dawson said.

Woronuk said the WestPac proposal should cost less than \$300 million and create around 20 full-time jobs, but would likely create more jobs in spinoff activities such as power generation and tug and barge traffic.

Prince Rupert Port Authority President Don Krusel, who has been working with WestPac for months on the project, anticipates further spinoffs as gas users locate near the terminal.

"One of the issues that has plagued industrial development in this region has been the ability to secure sufficient quantities of natural gas at internationally competitive rates," Krusel said.

Prince Rupert Mayor Herb Pond agreed that "an unlimited supply of gas ... becomes a catalyst for other investment."

North Coast residents have heard the promise of LNG before. In the late 1970s, a group including Dome Petroleum proposed an LNG export facility that would take gas from Alberta and Northeastern B.C., liquefy it and send it to Japan, still the world's largest LNG consumer. That project collapsed along with world energy prices in the 1980s.

In recent years, LNG has burned brightly again with the combination of a dramatic drop in liquefaction and shipping costs and the realization that Europe and North America are losing their self-sufficiency in the resource. Prices have soared in North America far above those in the Middle East and the Pacific Rim.

"That's where the surplus is," said Woronuk, who was first attracted to the idea of importing LNG while serving as a senior analyst for the Canadian Gas Potential Committee, a joint government-industry think-tank. He was one of the first people warning of the depletion of reserves in the Western Sedimentary Basin, and today the U.S. National Petroleum Council's own projections for supply and demand of natural gas point to between 10 and 20 per cent of North America's supply being imported by 2020.

Galveston's Dawson said North America will be an attractive market for exporters as long as the domestic price of gas exceeds \$3.50 to \$4 US per million British thermal units (BTU). Prices currently hover around \$6 for a million BTU.

Those kinds of economics have attracted new interest in liquid gas from a variety of quarters.

"We just see the whole area [of the LNG trade] having tremendous growth," said David Glendinning, president of Teekay Gas & Offshore, a division of Teekay Shipping Corporation created on Jan. 1 of this year to capitalize on the LNG boom.

Since then Teekay, which is registered in the Bahamas but maintains its administrative headquarters in Vancouver, bought Naviera F. Tapias S.A., a Spanish LNG shipper with two vessels in service and two on order, for \$810 million US.

Earlier this month, it won a contract worth \$55 million US a year to operate three ships for Ras Laffan Liquefied Natural Gas Co. of Qatar for 20 years, with options to extend it to 35 years, beginning by early 2007.

Subsequent to that deal Teekay placed a \$510-million US order for three ships from South Korea's Daewoo Shipbuilding & Marine Engineering Co. Ltd.

Glendinning says Qatar is expected to surpass Indonesia as the world's largest exporter of LNG within a few years.

Though Teekay's seven ships will likely be occupied shipping LNG to Europe, Glendinning foresees shipping to North America in the longer term. He said Teekay was approached about taking part in one of the North Coast projects, but the company prefers to stick to shipping, where there is a limited number of players in the LNG trade, including the Japanese consortium J5, the Malaysian International Shipping Corp. and major oil companies.

By contrast, there are already four LNG terminals operating in North America and some 35 either proposed or under construction.

There are none on the Pacific Coast -- closest by sea to the major exporting regions -- and public concerns over safety have stalled proposed terminals in the United States and Mexico.

Americans in particular fear LNG carriers or storage tanks could be targeted by terrorists. Since 9/11, public advocacy groups have seized on calculations by James Fay, a semi-retired professor of mechanical engineering at the Massachusetts Institute of Technology, that suggest a suicide attack on an LNG tanker near an existing terminal in suburban Boston could create a deadly fireball covering several square kilometres.

LNG proponents have countered that the industry has operated for 40 years, often in heavily populated areas such as Tokyo Bay, without a major mishap.

Earlier this year, though, an accidental explosion at a liquefaction plant in Algeria killed 27 people.

At first blush, residents in both Kitimat and Prince Rupert appear more welcoming to an LNG facility than their American counterparts.

"Our people are supportive of any responsible operator," said Prince Rupert Mayor Pond, adding that his city is "not on the radar screen" of international terrorists. Pond said he's confident in the port's security.

"We're a community that understands the value of work," Pond said.

"We believe that Prince Rupert is the ideal location on the West Coast," said port president Krusel, noting the Ridley Island site is 15 kilometres away from the city and buffered by a mountain.

"The vulnerability in a location like Prince Rupert is not there like at other locations."

Marine risk studies have shown Prince Rupert has the lowest risk rating of any port on the coasts of B.C. and Washington, he said.

Krusel said it would take ocean-going tankers 11 extra hours each way to travel up Kitimat Arm to Kitimat, versus stopping in Prince Rupert.

Woronuk said the main attraction of the North Coast is it's closer to Pacific-basin gasfields -- even those in Australia -- than other proposed sites in southern California, Mexico's Baja California and Washington's Puget Sound.