## Tokyo Gas sees Alaska in potential LNG supply mix

By Larry Persily lpersily@kpb.us June 9, 2015

(This report, provided by the Kenai Peninsula Borough mayor's office, is part of an ongoing effort to help keep the public informed about global LNG markets and the potential for the Alaska LNG project.)

Natural gas can grab a bigger share of Japan's energy mix in the years ahead if the price is "economically reasonable," said a senior vice president of Tokyo Gas, adding that diversified supply sources are also important to the country that is so dependent on imported energy.

Affordable pricing, as it affects Japan's demand for liquefied natural gas imports, could mean a difference of up to 40 million metric tons a year (more than 5 billion cubic feet of natural gas per day) by 2030, said Tomo Hoshizaki, senior vice president for midstream and downstream business development at Houston-based Tokyo Gas America, the utility's U.S. subsidiary.

Price is that important, he said, particularly for power generation and industrial customers, though Hoshizaki never quoted a price or provided a range of what might be considered "economically reasonable."

He did, however, list several potential new long-term LNG supply sources for Japan, including Alaska, Canada, the U.S. Gulf Coast, Russia and East Africa. Hoshizaki presented at the Canada LNG Export Conference May 21 in Calgary, Alberta.

Tokyo Gas was an original customer of the LNG plant in Nikiski, Alaska, when Phillips Petroleum and Marathon Oil started shipments of Cook Inlet gas in 1969 from the first export plant in the United States. The small plant is still in operation. A partnership of ConocoPhillips, ExxonMobil, BP, TransCanada and the state of Alaska is looking at the same industrial area in Nikiski to build a much larger plant — almost 20 times the capacity — to liquefy Alaska North Slope gas for export. An investment decision could come by 2019.

Much of Japan's potential for increased LNG demand could come from the permanent retirement of many of its nuclear power plants, Hoshizaki explained. Though Japan is expected to restart some of its shuttered nuclear reactors — closed down after the 2011 Fukushima disaster — their output will start declining in the 2020s as many reach the end of their 40-year life span. That opens up the potential for increased natural gas imports, but only if the gas is affordable and the supply is sustainable, Hoshizaki said

Price is imperative. Japan paid \$29 billion for LNG in fiscal year 2010, the last full year before the Fukushima meltdown drove up gas imports to replace lost nuclear power. The country's LNG import bill in calendar 2014 was \$65 billion, according to a

presentation in Calgary by Takashi Yamada of the Japan Oil, Gas and Metals National Corp.

Tokyo Gas, Japan's third largest buyer of LNG behind Tokyo Electric and Chubu Electric, last year purchased almost 13 million tons of LNG, holding long-term contracts for supply from Australia, Malaysia, Brunei, Indonesia, Qatar and Russia. It also has contracts for LNG deliveries from two U.S. export plants under construction.

The utility forecasts its import volume climbing to 16 million tons by 2020, mostly for increased sales to industrial users and power generators. "LNG and natural gas demand can be increased by competitive and sustainable supply," Hoshizaki said.

LNG prices in Asia have come down substantially in the past year, both long-term contract prices linked to oil and spot prices driven down by the current oversupply in the market. To keep prices affordable in the years ahead, Tokyo Gas is looking for pricing linked to market supply and demand, not just strictly oil. And it wants more flexibility to move around the cargoes it buys to better serve its own financial interests, not the market-control interests of exporters.

Hoshizaki showed a slide listing seven Japanese LNG importers that have all signed contracts to take LNG from plants under construction in Texas, Louisiana and Maryland, with the cargoes priced at the U.S. benchmark for natural gas plus liquefaction and shipping costs — no oil linkage.

The Japanese trading company Mitsubishi is one of those seven buyers of U.S. LNG, and an official from one of the company's subsidiaries said at the Calgary conference that the biggest long-term growth potential for LNG demand in Asia will not come from the two largest customers today, Japan and South Korea, but from China, India and Southeast Asia.

Shinya Miyazaki, CEO of Diamond Gas Management Canada, a Mitsubishi subsidiary active in Canadian gas development and LNG export proposals, said his company forecasts an additional 130 million tons a year of LNG demand in Asia between 2015 and 2030, much of it from China and India.

Vancouver-based Teekay Corp., which operates 48 LNG tankers, also sees the strongest long-term growth potential in China and India, said Ian Fraser, director of Teekay Gas Services. LNG import capacity in those two countries is set to triple by 2018, Fraser said, with further growth expected.

Potential new suppliers include Canada, the U.S. West and Gulf coasts, Russia and East Africa, along with expansions in supply from Australia and the Middle East, Miyazaki said.

Positive qualities for potential LNG suppliers looking to sign up customers include abundant, proven resources, along with predictable delivery, government support, proximity to the Asian market, destination flexibility and allowing investment in the full value chain. Negatives, Miyazaki said, include no history of LNG exports, and regulatory, fiscal and labor uncertainties.

Community acceptance, also called "social license," is one of those uncertainties, and a frustrating one for proponents of LNG export projects on Canada's West Coast. A lack of social license for energy projects is denying Canada access to global markets, said Perrin Beatty, president and CEO of the Canadian Chamber of Commerce.

"It is so often discouraging to read the news and see the headlines" of energy-vsenvironment debates, he said, referring to disputes over oil and gas pipeline routes and LNG plant sites. "Anything that diminishes the Canadian brand costs us."