Liquefied natural gas could play key role in isles' energy transition

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Hawaii potentially could import up to 2 million metric tons of liquefied natural gas a year as part of a move to replace costly fuel oil with a less expensive energy option, a top state official said Wednesday during a presentation at an international energy conference in Singapore.

Richard Lim told participants at the ninth annual LNGA Conference that the biggest demand for liquefied natural gas in Hawaii is for power generation, marine and ground transportation, and industrial uses.

Conference participants included high-level government officials and LNG buyers and sellers from global energy companies. Representatives from ExxonMobil Asia Pacific, as well as the state gas and oil companies in Indonesia and Malaysia, were among the attendees.

Both Hawaiian Electric Co. and Hawai‘i Gas are pursuing plans to bring in LNG as a lower-cost alternative to their current supplies of oil-based fuel products. The HECO companies use fuel oil to produce more than 70 percent of the electricity they sell. Synthetic natural gas, the main product sold by Hawai‘i Gas, is made locally using a petroleum product called naphtha.

HECO recently disclosed that it is in negotiations with the U.S. Navy to develop a nearshore floating terminal at Joint Base Pearl Harbor-Hickam where LNG could be unloaded from ships and piped to the utility's power plants.

Hawai‘i Gas, meanwhile, is moving ahead with its own plan to begin shipping LNG to Hawaii. Hawai‘i Gas officials said they hope to receive approval soon from the state Public Utilities Commission for the first phase of the project, which involves bringing in limited quantities of LNG in specialized shipping containers.

Lim mentioned Pearl Harbor as well as Kalaeloa Barbers Point as potential locations for an LNG import terminal. He said the state expects bulk shipments of LNG to begin by 2018 that could be used for power generation. Lim cited the Hawaii Natural Energy Institute, which estimated LNG demand in Hawaii ranging from 1.2 million metric tons to 2.1 million metric tons a year, depending on several variables.

Lim emphasized that DBEDT sees natural gas as a temporary replacement for fuel oil during the transition to renewable energy.

"LNG is viewed as a transitional replacement for residual oil and other petroleum products in (the) current fuel mix," according to Lim's PowerPoint presentation titled "Hawaii: An Emerging LNG Market."
In addition to reducing electricity rates, LNG would allow utilities to improve grid resiliency and accommodate more renewable energy, Lim said. Gas-fired generating units are more flexible than oil burners, able to start up more quickly and respond to fluctuations inherent in solar and wind power, he said.

The state also views LNG as a "clean and low-cost replacement fuel for ground fleet and marine transportation," according to Lim's presentation.

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