

Trucking Liquid Natural Gas to Interior Alaska

Project Overview

Golden Valley Electric Association is teaming with Flint Hills Resources to investigate the potential of transporting liquid natural gas from the North Slope to Interior Alaska. The natural gas feedstock for this project is to come from a long-term supply contract on the North Slope. This raw gas would be processed and liquefied at a new facility on the North Slope. It would briefly be stored in a 1,000,000 gallon tank before being trucked to Interior Alaska via specialty trailers. The LNG product will be delivered to a 2,000,000 gallon storage tank located adjacent to the Flint Hills Refinery and the Golden Valley generation plant in North Pole. Here the product will be stored until it is warmed in a new re-gas facility and then made available as natural gas to end users.

The primary initial demand will come from GVEA's new gas turbine and the Flint Hills Refinery to heat North Slope crude oil obtained from the Trans Alaska Pipeline. **This primary demand equals roughly 7 billion cubic feet of gas per year.**

The partners on this project are looking into the possibility of running the delivery trucks off of LNG instead of diesel to bring additional cost savings to the project.

GVEA is reaching out to potential customers to determine if availability of this new resource can be used to help to reduce energy costs further in Interior Alaska. **Through additional capacity available under the gas supply contract from the North Slope producer, space heating and industrial uses could be addressed.**

To help refine the initial project cost numbers, GVEA and Flint Hills have secured the services of CB&I. **The initial work of this firm indicates that the total project cost will be roughly \$220,000,000 to \$245,000,000.** The project estimate currently contains historical cost data that has a margin of error of plus or minus 50 percent.

The current price range is between \$12 and \$17 dollars per mcf of gas. Additional work to reduce this uncertainty and thus narrow the range of the expected delivered price.

GVEA is very supportive of a pipeline eventually delivering natural gas to the Interior, the LNG trucking project can be developed immediately and with more certainty.

The current schedule calls for first gas from the project to be delivered in early 2015. As GVEA and Flint Hills continue to advance engineering on the concept, there is a possibility that delivery date can be moved forward.

Availability of additional LNG in Interior Alaska will also allow for an expansion of the current piped distribution system as well as initiation of other customer growth. This dynamic will improve the net present value calculations on a future pipeline operation since a larger customer base will be present to take gas off a pipeline immediately.