



April 4, 2013

The Honorable Alan Austerman
Co-Chair, House Finance Committee
State Capitol, Room 505
Juneau, AK 99801-3100

The Honorable Bill Stoltze
Co-Chair, House Finance Committee
State Capitol, Room 515
Juneau, AK 99801-3100

RE: SB 23 AIDEA and AEA Follow-up

Dear Representatives Austerman and Stoltze:

This letter is in follow-up to today's House Finance discussion on SB 23 and questions relating to propane production.

The proposed North Slope LNG plant will be capable of producing a small amount of propane as a by-product of the liquefaction process. Early estimates indicated that up to five percent of the plant output will be propane, totaling 10,000 gallons per day. This volume is enough propane to potentially serve up to 1,800 homes. As part of the LNG trucking project, AIDEA and AEA have identified this propane stream as an opportunity to further serve Interior and Rural Alaska energy needs.

The actual amount of propane produced will depend on the point at which the raw gas is extracted from the Prudhoe Bay fuel gas system and the how the LNG plant is configured. The propane produced will actually be a LPG (liquid petroleum gas) that contains small amounts of other hydrocarbons, such as butane. This combination will help to increase the amount of propane that is produced and result in a fuel that is better suited for arctic conditions.

While the propane production has the potential to assist with in-state energy needs, it is important to stress that the primary focus of SB 23 is on the production of liquefied methane (LNG) since this particular molecule makes up approximately 80 percent of the raw gas feed. As a result, the economic viability of the project depends on LNG distribution to Interior Alaska.

It is likely that the use of propane from this project will expand in stages. In the first stage, most of the propane would likely be used within the Fairbanks/North Pole area by customers who are not served by a natural gas distribution network. In the second stage, more propane will be available for rural use as the natural gas distribution system expands in the Fairbanks/North Pole area. Expansion of the piped distribution system will require a larger volume of LNG. As the amount of LNG produced on the North Slope increases, the volume of propane that is produced will also increase.

The AIDEA and AEA team is currently evaluating the economics of propane for Interior and Rural Alaska use. In this process, the team is first reviewing previous work on rural propane distribution and reaching out to potential partners and stakeholders. The team is also gathering information to develop a cost model for small scale and remote propane and LNG systems. This model will compare delivery by road, river, tidewater with seasonal ice restrictions, and tidewater with no ice restrictions by evaluating different parameters (product availability, transportation cost, community size, end uses, delivery type, delivery frequency, etc.).

As part of the due diligence process, the AIDEA and AEA team is assessing the potential customers base that could benefit from the propane associated with this project. Segments of the Fairbanks North Star Borough not served by a piped natural gas distribution system would be able to access propane. In addition, smaller rural communities along the state highway system may quickly develop the infrastructure to receive and utilize propane. Communities reliant on river or tidewater deliveries may take longer to develop infrastructure necessary to receive and store propane. AEA's rural energy program team is helping to develop cost estimates of needed rural community infrastructure.

In addition to determining the potential to utilize LNG and propane beyond Interior Alaska, we wanted to address the expected rates for potential customers of the LNG plant. It is the intent of the state to ensure that as much of the benefit from the Interior Energy Plan as possible will flow through to Alaska consumers through the rate regulation process overseen by the Regulatory Commission of Alaska. Customers served outside of this rate control mechanism can anticipate prices based on the full unit cost of production plus a reasonable rate of return for private sector investment in the production facilities.

Sincerely,

ALASKA INDUSTRIAL DEVELOPMENT AND
EXPORT AUTHORITY



Ted Leonard
Executive Director

Sincerely,

ALASKA ENERGY AUTHORITY



Sara Fisher-Goad
Executive Director