



February 26, 2013

Questions and Issues Raised by Committee Members at the Initial House Labor and Commerce Hearing on HB74

1. Why does the bill at page 4, line 7 the change "Alaska" to "state" since these terms seem interchangeable?

Answer: This substitution of the word "state" for "Alaska" is part of an overall update of to the entire Alaska code and was suggested by the drafters of the bill in the Department of Law. The change from using "Alaska" to "state" is being done throughout all state statutes.

2. Are the funds referenced in HB 74, including the bond authorization for \$150 million, going to be used initially to fund a project study and then used for the natural gas distribution system?

Answer: None of the funding sought in HB 74 is for planning purposes. The monies sought will be used by AIDEA and AEA for the purpose of examining a specific potential development project, and then, if it is found to be feasible, constructing a gas distribution system based on LNG trucked from the North Slope to the Interior.

As Mr. Therriault explained during the hearing, the state has previously appropriated planning money to the Fairbanks North Star Borough that was used by FEDCO to study how the natural gas distribution system in the borough should be expanded. The FEDCO study suggests a target customer base of 22,000 households. Our analysis indicates that the initial buildout will supply 9,600 natural gas customers, increasing to 18,600 when expanded.

AIDEA will use this FEDCO study as a basis for developing a business case for the size of the distribution system that would be achievable with the funding sought in HB 74

The fiscal note includes funding needed for contractual services to coordinate project partners, complete the financing agreements to fund the LNG project, and perform technical evaluations on project proposals. The funding source for the fiscal note is AIDEA corporate receipts.

3. Will homeowners incur any costs to connect to the natural gas distribution system?

Answer: Homeowners and businesses that hook up to the gas distribution system will be charged a hook-up fee. As AIDEA noted at the hearing, the agency is examining a variety of models that could be used to finance individual household hookups to a distribution system. It is estimated at the present time that a hook-up charge would be in the range of \$300-\$500 per household. AIDEA understands that lowering the cost of the delivered gas will be an important part of incentivizing customers to hook up to the system.

4. Will the projected 16,000 or 22,000 homeowners have any "buy in" for the project if costs are associated with a necessary conversion to LNG?

Answer: AIDEA and AEA believe that the primary incentive for households to convert to gas is the cost savings achieved by the conversion. AEA's economic modeling indicates that gas could be delivered to residents in the greater Fairbanks area at a price that represents a 40 to 50 percent reduction in the current cost of heat using fuel oil. Such savings should allow residents to recoup the cost of hooking up and converting their boilers in 3 to 5 years.

5. How will the LNG project in HB 74, with a budget \$355 million for thermal heat, be affected when other energy projects are subsequently built? Specifically, will the Susitna-Watana Hydro Project at some point make electricity a cost effective source for heating homes in Fairbanks causing residents in the future to convert from liquefied natural gas to electric heat? In sum, what happens to the project set out in HB 74 if a lower cost solution arrives at a later date?

Answer: The LNG delivery and gas distribution system envisioned in HB 74 is designed to be compatible with a number of other potential energy development projects. As an example, the funds sought in the bill will be used to finance the build out of a gas distribution system. This will increase demand for gas that could, at a later date, be supplied by a pipeline.

AEA believes that, for the foreseeable future, gas represents a cost effective source for heating homes and businesses and that it is doubtful that electricity will be used for heating purposes even after the Susitna-Watana Dam comes online. AEA has calculated that electricity would have to be delivered to homes at less than 6 cents per kWh in order to compete with natural gas priced at \$15 per/mcf.

The financing package sought in HB 74 is needed to build out a workable gas system, but does not represent all of the funding needed to bring gas heating to all Interior residents. As Mr. Leonard explained at the hearing, trucked gas financed by HB 74 is designed to be an initial step that creates the first demand for gas that over time would allow the development of additional customers that can be served by a natural gas pipeline in the future.

6. Will the Healy Clean Coal Project (HCCP) provide another opportunity for low- cost electricity to the Railbelt and is there a role for coal as a source of energy?

Answer: As Mr. Leonard noted at the hearing, AIDEA is working hard resolving HCCP and is hopeful that that HCCP will come on-line soon in order to provide a lower cost source of electrical generation for Fairbanks. So the answer is yes, HCCP will play a role in providing competitive rates for electric generation in the Railbelt. Nevertheless, the cost of electric power from HCCP as a source for heating homes will not be lower than natural gas from the proposed trucking system as a heat source. AEA also continues to evaluate coal as an energy source.

7. GVEA has said it would take \$400 to 600 million and more than 22,000 homes to provide a build out for a gas distributions system for the greater Fairbanks area. Can the LNG project in HB 74 and natural gas distribution system cover everyone?

Answer: HB 74 is meant to be a starting point for the development of an Interior gas delivery system. The LNG trucking project is designed initially to bring cost effective natural gas heating service to the high and medium density areas of the Fairbanks North Star Borough. At first, it would reach about 9,600 residences with an expansion of the system raising that number to approximately 18,600.

Additionally, the propane stream (including other LPGs) that will be segregated by the North Slope plant is planned to be an additional energy source used by 1,800–2,200 averaged sized residences in the region (increasing to 2,700–3,300 with expansion). This will be especially useful to those living in rural areas because propane can be shipped by road and by rivers.

As Mr. Leonard noted at the hearing, the financing offered in HB 74 is not designed to cover all of the needs of a full distribution build out, but it does provide the low interest loan dollars needed to get this enterprise started. Once a gas distribution system for heating is in use, the full build out of distribution will then be accomplished through normal utility financing with a blend of private equity and borrowed money.

8. How does the plan in HB 74 fit into the need for scalability for both large or small gas lines and does the proposed LNG distribution system in the Fairbanks have value to the other, proposed natural gas projects?

Answer: The proposed trucked LNG project would set up a gas distribution system operated by a utility that would grow the customer base for natural gas. In the future, these same customers will be supplied by gas delivered by a pipeline. Once a gas distribution system exists, it can be expanded and served by a gas pipeline.

The further business case for the plan in HB 74 is that demand for LNG will exist to serve liquid fuel markets even after a pipeline is built. AIDEA anticipates that trucked LNG customers will be mines and other industrial users, including mines now being planned for possible development in the Ambler area. For this reason, AIDEA anticipates moving a portion or all of the LNG plant after a pipeline is built to a new location where it would produce LNG for users not served by the a piped gas distribution system or for industrial users reachable only by trucks.

9. Will other gas projects being considered by the Legislature supplant the need for the LNG project In HB 74?

Answer: The AIDEA/AEA team seeks the financing package in HB 74 as part of its examination of the feasibility of using LNG trucking to deliver cost effective gas to a piped gas distribution system. Once a gas pipeline to the Interior is built, the customers of

the gas distribution system funded in part by HB 74 would receive gas from a pipeline and not from trucked LNG. The piped distribution system, therefore, is compatible with and is a bridge to the development of a gas pipeline because it provides a base of customers for the gas delivered by a pipeline. The concept set forth in HB 74, therefore, prepares the Interior to receive and use natural gas from a gas pipeline in the future. Once a pipeline exists, the AEA/AIDEA team believes there will still be significant ongoing demand for LNG to serve rural and industrial liquid fuel demand. An AGDC or AGIA gas line will go down either the Richardson Highway or the Parks Highway leaving customer demand for transportable natural gas for the non-selected route, for both distant industrial users and rural customers. The LNG plant can be moved to a location where it could use pipeline gas to make LNG to serve these customers for many years.

10. Please describe the mobility of the LNG plant, and whether it could be relocated from the North Slope?

Answer: AIDEA's solicitation of letters of sought proposals for the construction and use of LNG plant components that are designed to be moved down the Dalton Highway by truck from a pad on the North Slope to another location once a gas pipeline is constructed. As a result, the North Slope plant should be redeploy-able in the future.

11. How does HB 74 compare to HB 58 since they both reference AIDEA and LNG?

Answer: HB 58 and HB 74 both relate to the construction of an LNG plant on the North Slope using AIDEA as one source of financing. HB 58 concentrates on financing the North Slope LNG plant and HB 74 assists in financing the plant and distribution system.

12. What would be the source for supply of the North Slope natural gas used in the LNG Plant?

Answer: In response to its solicitation of letters of interest, AIDEA received two turn key proposals that are linked to already negotiated gas supply contract using North Slope gas.

13. Will there be investment by stakeholders, such Fairbanks, Fairbanks Natural Gas, Fairbanks North Star Borough (FNSB), and the Fairbanks North Star Borough School District since this will allow significant savings?

Answer: The design of HB 74 is that the bill works only if there is sufficient participation by residents, businesses and governmental entities in the Interior that will join in the financing of the LNG plant and distribution infrastructure by signing up as customers for the natural gas. For example, the SETS loans proposed with the passage of HB 74 will be repaid by the customers that sign up to receive the natural gas in liquid or gaseous form. As a result, the feasibility of the LNG gas delivery project is dependent on having both sufficient customers and private sector financing to construct and then pay for the system.

14. What specifically will Fairbanks Natural Gas, LLC, (FNG) bring to the table?

Answer: FNG has submitted a turn key proposal as an expression of interest, but AIDEA is not able to disclose details of that submittal as yet. More information should be forthcoming as AIDEA proceeds with its evaluation of the various proposals it received, including the one from FNG.

This matter is being handled by AIDEA in the same manner and using the same examination process used for any other proposed development project. AIDEA is going through its normal evaluation and business assessment process, and, it is important to note, that passage of HB 74 does not guarantee that a LNG plant and distribution network will be constructed.

This outcome will only be achieved if a solid, financeable business deal can be negotiated between supply and demand for the enterprise that makes use of private sector financing in a form that is approved by the AIDEA Board. If the AIDEA Board decides that the project is not viable, then the project will not go forward.

15. How can the legislature make such a major decision since it does not currently have a lot of information?

Answer: HB 74 is a request to the legislature to provide potential funding and authorization for a finance package (equity, loans, bonds); it is this package of financial tools that could be used to construct both the proposed LNG plant and the attendant, needed gas distribution system. The bill provides for an equity investment by AIDEA, and loan funds that MAY be used only if a successful business plan is formulated and associated contracts are signed.

The bill does not alter how AIDEA negotiates and decides to finance business projects as directed by Alaska statute. The Legislature has equipped AIDEA with financing tools and endowed them with financing dollars. The LNG trucking proposal is only different due to its size.

16. Once the money is available it can create an expectation that the project will be built. What information is available on the proposals AIDEA received in response to its solicitation of letters of interest?

Answer: AIDEA and AEA have prepared a report on the 16 proposals that were received in response to the solicitation. In addition an AIDEA and AEA team, accompanied by expert contractors, is on its way to Fairbanks to begin the process of evaluating the proposals on an in depth basis. This review will include vetting engineering proposals, refining cost estimates, and evaluating the demand for gas by customers.

It is important to note in this regard that HB 74 does not guarantee that the trucking project and associated distribution build out will be constructed. The legislation only empowers AIDEA to move forward by providing a finance package that could be used if a viable business plan with supply and demand can be negotiated. The LNG project

described in HB 74 will only go forward if and when the AIDEA Board receives a Finance Plan for the project that it approves.

17. What plans do AIDEA and AEA have for providing propane and LNG to villages and mining areas?

Answer: The proposed LNG plant will separate a stream of propane from the gas that will be available for use by rural areas. Propane can be trucked or barged by river to communities that are not connected to a piped gas distribution system. Additionally, AEA and AIDEA are exploring the deployment of new technologies which could allow the transportation of LNG in containers to smaller communities not on the road system.

18. How will HB 74 assist residents of Fairbanks improving air quality in the region?

Answer: Use of natural gas for heating should significantly improve air quality in Fairbanks. AEA has referenced figures from the 2010 Sierra Research Fairbanks Home Heating Survey report prepared for DEC. This research indicates that if gas became available in 2015 the PM2.5 count for both High Conversion and Medium Conversion zones should both achieve PM2.5 readings well below 200 as compared to counts that now approach 1300 and 900 respectively.

19. Has AIDEA checked with the private sector to determine if the LNG project fits into a long-term energy plan?

Answer: The 16 responses AIDEA received to its solicitation of letters of interest in the LNG proposal illustrate that the private sector does see a purpose for the construction of the proposed LNG production plant with the associated expansion of piped distribution of natural gas in the Fairbanks North Star Borough. AIDEA envisions a public, private partnership moving this concept forward. This is borne out by the finance package in HB 74. HB 74 does not provide for all the capital and debt needed to build the LNG plan and the piped gas distributions system. AIDEA anticipates that it will need to locate an additional \$70 million from private sources to work in conjunction with HB 74 for the initial buildout. Future expansion of the project capacity is expected to be privately financed.

20. Does the project fit in with long-range energy plans?

Answer: The LNG/trucking plan is compatible with several of the proposed, long range energy plans for the state. It is designed, for example, to build out a gas distribution system that would provide a customer base for gas that would be delivered via a pipeline at a later date. This customer base will help the NPV [net present value] calculations for a gas pipeline and add to the overall demand for gas served by a pipeline.

Nor does HB 74 compete with or supplant power from the Susitna-Watana Hydro Project. AEA has developed calculations that show the power from the Susitna-Watana Hydro Project will not compete with space heat provided by trucked LNG. AEA believes that gas represents a cost effective source for heating homes and businesses and that it is

doubtful that electricity will be used for heating purposes even after the Susitna-Watana Hydro Project comes online. AEA has calculated that electricity would have to be delivered to homes at less than 6 cents per kWh in order to compete with natural gas priced at \$15 per/mcf.

21. Because the legislature wants a long- term energy plan, how does the proposal in HB 74 fit together, with what other communities, who will invest, and is it a plan that is worth investing in?

Answer: As noted above, the proposed LNG Plant and distribution system in HB 74 is compatible with several of the state's proposed energy projects AEA has developed calculations showing that power from the Susitna-Watana Hydro Project will not compete with space heat provided by trucked LNG. The design of HB 74 is that trucked LNG will grow the customer base for a future natural gas pipeline as well as help the NPV [net present value] calculations of a future gas pipeline.

The plan is worth investing in if AIDEA can develop a Finance Plan that demonstrates the viability of the project. As noted above, the AIDEA Board will have to approve the project based on the detailed feasibility study now being undertaken by AIDEA with AEA. The funds and authorizations sought in HB 74 will not be used for the LNG plant if it is not a financially viable project. AIDEA has received letters of interest from private sector interested in the project. AIDEA envisioned going forward in a public-private partnership to develop the project.

AIDEA has on its statutes legislative authorizations for several projects that the authority determined should not be financed. The fact that the legislature provides tools for AIDEA to be able to finance a project does not necessarily mean that the project will actually go forward. AIDEA therefore will not develop the project unless it has a sound business plan and attracts private investment.

22. Are local owners on board for supporting the necessary conversions to natural gas?

Answer: AEA has prepared calculations that show that the cost of heating a home in the Fairbanks should be reduced by 40 to 50 percent by converting to gas from heating oil. AEA believes that the size of this cost savings for individual residents converting to trucked natural gas will be so great that homeowners will be incentivized to sign up as natural gas customers.