



Interior Energy Project

Quarterly Report to the Alaska State Legislature Interior Energy Project

April 9, 2018



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LIST OF ATTACHMENTS

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Attachment B:	IGU Resolution 2017-06R
Attachment C:	AIDEA Resolution G17-16A

ACRONYMS LIST

ADOT&PF	Alaska Department of Transportation & Public Facilities
AIDEA	Alaska Industrial Development and Export Authority
ARRC	Alaska Railroad Corporation
AS	Alaska Statute
EPC	Engineering, Procurement and Construction
FA	Financing Agreement
FEED	Front End Engineering and Design
FID	Final Investment Decision
FNG	Fairbanks Natural Gas
FNSB	Fairbanks North Star Borough
HB	House Bill
IEP	Interior Energy Project
IGU	Interior Gas Utility
LNG	Liquefied natural gas
mcf	Thousand cubic feet
MMCF	Million cubic feet
MOU	Memorandum of Understanding
PACE	Property Assessed Clean Energy
Pentex	Pentex Alaska Natural Gas Company, LLC
PSA	Purchase and Sale Agreement
RCA	Regulatory Commission of Alaska
RFP	Request for Proposal
RUS	Rural Utilities Service
SETS	Sustainable Energy Transmission and Supply Development Fund
SLA	Session Laws of Alaska
Titan	Titan Alaska LNG, LLC
USDA	United States Department of Agriculture

INTRODUCTION

House Bill (HB) 105 passed the 29th Alaska Legislature on April 27, 2015, and was signed by Governor Bill Walker on June 30, 2015. This legislation was enacted to advance the Interior Energy Project (IEP), a project designed to bring low-cost energy to as many residents and businesses of Interior Alaska as possible, as quickly as possible. The financing package designed by this legislation provided the Alaska Industrial Development and Export Authority (AIDEA) the tools necessary to develop an integrated supply chain bringing lower-cost energy to residents and businesses through local utilities.

A critical component of the original financing for the IEP is the ability to provide financing for the project that will permit the development of a unified gas utility with competitive rates (Chapter 26, SLA2013). HB 105 provided AIDEA with several financial tools and a designated deposit of \$125,000,000 into the Sustainable Energy Transmission and Supply Development Fund (SETS; Alaska Statute [AS] 44.88.660). The legislation included a limitation on interest charged for the project financing and an allowance for AIDEA to waive “any limitations or requirements of its regulation that are otherwise applicable to the Alaska Industrial Development and Export Authority sustainable energy transmission and supply development fund.” This language was retained in the IEP financing tools when HB 105 became law on June 30, 2015.

HB 105 requires AIDEA to provide written quarterly reports to the Alaska State Legislature on the status of the IEP. The specific bill language includes:

“The Alaska Industrial Development and Export Authority shall submit quarterly to the legislature a written report on the Interior Energy Project. The authority shall deliver the report to the senate secretary and the chief clerk of the House of Representatives and notify the legislature that the report is available. The report must include:

- (1) a description of project progress on all components;*
- (2) an update on the status of local distribution infrastructure buildout;*
- (3) to-date and anticipated conversions; and*
- (4) a financial accounting of funds expended and funds anticipated to be spent, including loans, grants, and bonds.”*

On September 21, 2017, the AIDEA Board considered and approved a development plan that met the requirements of HB 105 outlined above. Reaching this milestone provided the Authority access to the remaining IEP financial tools. AIDEA continued to advance the IEP goals by pursuing consolidation of the existing natural gas utility infrastructure owned by AIDEA, under Pentex Alaska Natural Gas Company, LLC (Pentex), and infrastructure owned by the Interior Gas Utility (IGU). The combined utility is proposed to be owned and controlled by IGU. If IGU chooses to not proceed with assuming the IEP responsibility, AIDEA will be able to advance the project under its own authority.

A copy of the HB 105 Plan Memorandum is included with this report as Attachment A. The projected cost of delivered natural gas to residential customers, from the HB 105 Plan Memorandum, is included as

Table 1. Information contained in Table 1 is based on reduced expectation of customer conversions down to 50 percent over an 8-year period.

Table 1: Summary Cost of Gas with Storage Tax Credit

Summary Cost of Gas - With Storage Tax Credit										
Anticipated Demand (Bcf)	0.75	0.75	1.19	1.83	2.55	3.25	3.90	4.41	4.75	4.95
Cost of Gas (\$/Mcf nominal)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Natural Gas - Cook Inlet	\$7.72	\$7.72	\$7.72	\$7.72	\$7.87	\$8.03	\$8.19	\$8.36	\$8.52	\$8.69
Pipeline Trans. Cost to Pt. Mac. (3rd-party)	0.65	0.66	0.68	0.69	0.70	0.72	0.73	0.75	0.76	0.78
LNG Production - Titan Plant	4.28	4.34	3.22	2.53	2.19	2.02	1.92	1.88	1.87	1.89
Trucking - Pt. Mac. To Fairbanks	2.48	2.53	2.58	2.63	2.68	2.73	2.79	2.84	2.90	2.96
Subtotal - Cost to Utilities	\$ 15.12	\$ 15.25	\$ 14.19	\$ 13.57	\$ 13.45	\$ 13.50	\$ 13.64	\$ 13.83	\$ 14.06	\$ 14.32
Distribution, Storage, Vaporization	4.76	4.85	3.13	2.07	1.51	1.21	1.03	0.93	0.88	0.86
Total Cost of Gas before Financing	\$ 19.88	\$ 20.10	\$ 17.31	\$ 15.64	\$ 14.96	\$ 14.71	\$ 14.67	\$ 14.76	\$ 14.94	\$ 15.18
Debt	-	-	-	0.72	0.51	0.40	0.43	0.78	1.34	1.69
Total Cost of Gas (nominal)	\$ 19.88	\$ 20.10	\$ 17.31	\$ 16.35	\$ 15.48	\$ 15.11	\$ 15.10	\$ 15.54	\$ 16.28	\$ 16.87
Total Cost of Gas (real)	\$ 19.11	\$ 18.94	\$ 16.00	\$ 14.81	\$ 13.74	\$ 13.16	\$ 12.88	\$ 13.00	\$ 13.36	\$ 13.57
Equivalent Fuel Oil Price (nom. \$/gal)	\$ 2.74	\$ 2.77	\$ 2.39	\$ 2.26	\$ 2.13	\$ 2.08	\$ 2.08	\$ 2.14	\$ 2.25	\$ 2.33
Equivalent Fuel Oil Price (real \$/gal)	\$ 2.64	\$ 2.61	\$ 2.21	\$ 2.04	\$ 1.90	\$ 1.81	\$ 1.78	\$ 1.79	\$ 1.84	\$ 1.87
Planned Average Customer Rates*	\$20.20	\$20.20	\$17.31	\$16.35	\$15.48	\$15.11	\$15.10	\$15.54	\$16.28	\$16.87
Equivalent Fuel Oil Price (nom. \$/gal)	\$ 2.79	\$ 2.79	\$ 2.39	\$ 2.26	\$ 2.13	\$ 2.08	\$ 2.08	\$ 2.14	\$ 2.25	\$ 2.33
*Differs from Total Cost of Gas in 2018 and 2019 due to utility consolidation										

The supporting documents for the HB 105 plan can be downloaded at www.interiorenergyproject.com/resources.html.

This is the eleventh quarterly report submitted under the requirements of HB 105. Each section of the report will correspond to one of the four items required by HB 105. This report augments the information previously provided, and covers the period from January 1, 2018 through March 31, 2018.

DESCRIPTION OF PROJECT PROGRESS ON ALL COMPONENTS

The IEP effort is structured on the following project components: Supply, Liquefaction, Transportation, Distribution (including Storage and Regasification), and Conversions.

Following negotiations in 2016, a non-binding Utility Integration Memorandum of Understanding (MOU) was approved by the IGU and AIDEA Boards in January 2017. The purpose of the MOU was to provide guidance and structure for a separate Financing Agreement (FA) and Purchase and Sale Agreement (PSA) designed to form a single, investment-grade natural gas sourcing and distribution utility within the Fairbanks North Star Borough (FNSB), through the consolidation of IGU with the AIDEA-owned Pentex Natural Gas System, commonly referred to as Fairbanks Natural Gas (FNG).

Negotiations continued on the FA, PSA and supporting documents through much of 2017. Work concluded in November 2017, leading to IGU Board approval of the FA and PSA on December 5, 2017, through the adoption of IGU Amended Resolution # 2017-06R (Attachment B), and AIDEA Board approval of the documents on December 7, 2017, through the adoption of AIDEA Resolution G17-16A (Attachment C). As authorized, the PSA and FA documents were signed on December 13, 2017. The signed PSA and FA can be found at www.interiorenergyproject.com. Final closure of these agreements

will utilize the IEP project financing authorized under Chapter 26, Session Laws of Alaska (SLA) 2013 and capital funds appropriated in Sec. 11, Ch. 38. SLA2015, page 32, lines 17–25.

As required by HB 105, the status of Supply, Liquefaction, Transportation, Distribution (including Storage and Regasification), and Conversions are summarized below.

Supply

Titan Alaska LNG, LLC (Titan), a Pentex subsidiary, has a gas supply contract with Hilcorp to provide the current liquefaction facility with a term expiring March 31, 2021. The “All Requirements” Agreement provides Titan with enough capacity (5 million cubic feet [MMCF]/day) for its existing customers, and allows for the expansion of up to 15 MMCF/day upon 18 months’ advance notice to Hilcorp. The terms of the contract:

- Allow the IEP to engage with other Cook Inlet producers as early as 2021.
- Amend the existing supply contract to avoid a scheduled price increase of 4 percent, slated to start on January 1, 2018.
- Offer the IEP a great deal of volume flexibility without any take or pay risk.
- Contain no price escalation over its duration.
- Remove a price differential for peak winter gas that is contained in the current supply contract.

As the proposed future owner of the consolidated natural gas utility within the FNSB, IGU has initiated discussions with potential natural gas producers for supply to begin in spring 2021.

Liquefaction

Under the terms of the signed FA and PSA documents, steps will now be taken to finalize the optimal design and commercial structure to increase the availability of liquefied natural gas (LNG) from the Titan plant through a Front End Engineering and Design (FEED) process. At the completion of FEED, a determination will be made whether to make a Final Investment Decision (FID). If the FID is approved, a commercial solicitation will be initiated to increase the capacity of LNG available for shipment to the Interior.

LNG expansion under ownership and control of a consolidated natural gas utility structure within the FNSB will necessitate access to AIDEA project bonds that were pre-authorized with the passage of Chapter 26, SLA2013. Senate Bill 125 is currently pending in the Alaska Legislature to extend access to the bond authorization until June 30, 2023.

Transportation

Rail Option Update

FNG continues to explore the potential for future shipments of LNG with the Alaska Railroad Corporation (ARRC) as part of the overall IEP effort. As work proceeds to increase LNG storage capacity in the FNSB, consideration will be given to facilitate delivery by rail in the future.

Trucking Update

Three large-capacity HEIL trailers have been integrated into the Pentex LNG transportation fleet. These trailers are configured to facilitate adding a hitch at a later date to allow pulling an additional “pup” trailer if this proves to be feasible and is determined to be economically advantageous.

Distribution

Systems Expansion

No major changes have been made to the distribution system since the October 1, 2015, *IEP Quarterly Report*. Detailed maps of the build-out accomplished in 2015 are included in that report, available at www.interiorenergyproject.com.

FNG will continue to work with the City of Fairbanks, FNSB, and the Alaska Department of Transportation & Public Facilities (ADOT&PF) during the upcoming road construction season to perform minor pipe installs in conjunction with major roadwork.

In December 2017, the AIDEA and IGU Boards agreed to initiate construction of a 5.25 million gallon LNG tank. Following a competitive Request for Proposal (RFP) process, Preload Cryogenics was selected as the primary Engineering, Procurement, and Construction (EPC) contractor for a facility with a double-walled, full containment design. Preload Cryogenics has contracted with, or is negotiating contracts with, Alaska firms for the following project components:

- Great Northwest – All site preparation, clearing, excavation, and construction pad and tank foundation preparation
- Anchorage Sand & Gravel – Manufacture of outer tank pre-cast panels
- Golder & Associates – Geotechnical design
- Arctic Foundations – Thermo-syphons design, manufacture, and installation
- Rady Concrete – Tank foundation
- Fullford Electric – Site power
- Diamond Fence – Construction fencing
- Precision and/or Alaska Crane
- Mappa Testing
- Alaska X-ray or similar testing service

Construction on the project foundation began in January 2018 and has progressed rapidly. As of March 31, 2018, the foundation site was excavated, backfilled, and a thermos-syphon system installed to maintain an appropriate ground temperature below the facility. Most recently, reinforcement steel has been placed and foundation forms constructed in preparation of pouring cement. The LNG storage project has a target completion date of fall 2019.



*Excavation work preparing site
for tank foundation*



*Installing rebar to reinforce the tank's
concrete foundation*

Systems Consolidation

Separate FA and PSA agreements were negotiated over the course of the last calendar year and signed on December 13, 2017. These documents allow the consolidation of the AIDEA-owned Pentex assets and the IGU assets into a single, investment-grade natural gas sourcing and distribution utility within the FNSB. Closure under these contractual agreements is anticipated to take place before May 31, 2018.

Legal representatives for AIDEA and IGU are collaborating on the suite of agreements that will be necessary to close the utility consolidation deal. The entities have advocated for expedited consideration of Docket U-18-001 before the Regulatory Commission of Alaska (RCA). The docket must be approved to allow the transfer of control of the FNG Certificate of Public Convenience and Necessity to IGU. Although the RCA initiated the decision docket and solicited public comment, no determination has been made regarding the request for a decision by the end of May 2018.

Conversion

Efforts to assist consumers with conversion to natural gas have centered primarily on identification of low-cost loan funds and access to favorable financing mechanisms. Work has also been done with furnace and boiler manufacturers regarding new boiler components that may reduce the cost of individual customer conversion to natural gas.

Consumer Interest in Conversion Assistance

The Cardno Entrix *Interior Energy Project Natural Gas Conversion Analysis*, finalized in January 2014, identified a high level of interest in converting to natural gas as a lower cost, cleaner source fuel for space heat if the delivered price approached the target of \$15 per thousand cubic feet (mcf). At the time the Cardno Entrix analysis was performed, many homeowners indicated a desire to forego financing conversion and instead expressed a willingness to fund this action from personal savings due to the high cost of fuel oil. For individuals without personal

funds for this purpose, the ability to finance all, or a portion, of the cost over an extended period scored high as a necessary tool to support their conversion to gas.

The ability to pass the obligation for repayment of conversion financing to a new owner of a building proved to be very attractive to residential owners. The ability to spread natural gas conversion costs over a 10- to 20-year period and the use of transferable financing are both attributes of two energy efficiency financing mechanisms described below that have achieved widespread use across the Lower 48.

The current low price of home heating fuel oil increases the importance of conversion assistance that will incentivize individual property owners in the FNSB to switch to natural gas when it becomes available. The original Cardno Entrix conversion estimates and demand model was modified to reflect the lower price of fuel oil and expected reduction in natural gas conversions. However, just as the price of home heating oil declined unexpectedly, the future price is uncertain.

Property Assessed Clean Energy Financing

Property Assessed Clean Energy (PACE) is a means of financing improvements that increase the energy efficiency of commercial buildings. The improvements are financed with repayment accomplished through a voluntary assessment placed on the annual property tax bill. PACE financing is often structured to allow a longer payback period than is possible with conventional business loans. The strength of the PACE collection mechanism results in low default/low risk loans, which may justify a lower interest rate.

PACE legislation (HB 80) was passed by the 30th Alaska Legislature on April 17, 2017. HB 80 was signed into law by Governor Walker on October 6, 2017. The Alaska Energy Authority is now working with municipalities to determine how to best implement the law.

On-bill Financing

On-bill financing allows utility customers to borrow funds that are repaid via a voluntary line item added to their standard utility bill. This financing mechanism is often used by utilities to assist new customers in overcoming the initial cost of accessing a utility service. Funds for this purpose may be provided by the utility itself or in conjunction with local private sector financial institutions. Previous conversion surveys and focus group work performed as part of the IEP indicated that access to such a transferable financing mechanism would help incentivize conversion to natural gas. Coupling this tool with low cost loan funds will be helpful.

Alaska statutes are currently silent regarding on-bill finance. Although the current ownership and governance structure of IGU and FNG may allow these local utilities the flexibility to offer an on-bill financing/repayment mechanism, it is uncertain if financial institutions will provide loan funds without statutory clarity. As a result, House Bill 374 was introduced on February 21, 2018, and is currently pending in the legislature.

Identified Funding Sources for Conversion Assistance

The Local Conversion Working Group has identified the following possible funding sources for conversion assistance:

- I. Commercial lenders
 - a. Commercial loans as part of a community-wide conversion program
- II. Local government
 - a. PACE-enabled conversion loans
 - b. Possible local government back-stop funding for PACE loans
- III. State sources
 - a. Air quality programs
 - b. Community Development Block Grants
- IV. Federal sources
 - a. United States Department of Agriculture (USDA) Rural Utilities Service (RUS) Energy Efficiency and Conservation Loan Program
 - b. USDA RUS Rural Energy Savings Program loans
 - c. Clean Water Fund
 - d. United States Environmental Protection Agency Targeted AirShed Grants
 1. Funding for the targeted airshed grants was recently increased to \$40,000,000 by federal budget action

UPDATE ON THE STATUS OF LOCAL DISTRIBUTION INFRASTRUCTURE BUILD-OUT

No major changes were made to the distribution system in the last quarter other than work with the City of Fairbanks, the FNSB, and the ADOT&PF to coordinate pipe installs that could be efficiently constructed along with roadwork taking place. Detailed maps of the build-out accomplished in 2015 were included in the October 1, 2015 *IEP Quarterly Report*.

TO-DATE AND ANTICIPATED CONVERSIONS/CONNECTIONS

To-Date Conversions/Connections

Due to limited gas supply, no conversions are currently occurring. Until the supply is increased, there is not sufficient gas in the winter to ensure uninterrupted service to additional customers. Expanded distribution lines installed previously have been pressurized and are available to supply gas to homes and businesses when additional natural gas is available.

Anticipated Conversions

The number of anticipated conversions provided in the October 1, 2015 *IEP Quarterly Report* was based on the analysis undertaken by Cardno Entrix. The report assessed “willingness to convert” based on a number of factors related to conversion costs, prior conversion history, survey data, and potential

savings. A copy of that report can be found at

interiorenergyproject.com/Resources%20and%20Documents/IEP_Conversion_Analysis_Final.pdf.

The significant change in the price of heating fuel required a fresh look at the “willingness to convert” with specific attention paid to the closing of the cost gap between heating fuel and the IEP natural gas price targets. Cardno Entrix was engaged to update the analysis of “willingness to convert” based on a range of scenarios of lowered heating oil prices. In the most conservative scenario, expected conversions were projected to drop by approximately one-third from the original analysis.

The change in projected “willingness to convert,” combined with an extension of the time needed to reach conversions from six years to eight years, results in a revision to the number of anticipated conversions and the anticipated demand for the project. Table 2 depicts the anticipated number of conversions, by year, based upon the revised Cardno Entrix analysis. Due to project delays, the first year in customer growth is not expected to occur until 2020.

Table 2: Natural Gas Customer Projection

	2015	2016	2017	2018	2019	2020	2021	2022	2023
FNG	959	959	1,506	2,183	3,031	3,732	4,362	4,635	4,807
IGU	-	-	167	576	1,285	2,255	3,502	4,818	5,998

Anticipated/Potential Connections

The anticipated mission expansions to the Department of Defense bases in the FNSB provide an opportunity to add significant natural gas demand for the consolidated utility system by installation of natural gas heating systems in the new housing units that will be required. The IEP team is working with the FNSB and the cities of Fairbanks and North Pole to explore mechanisms to ensure those new housing units use natural gas space heating. Options to be considered include incentives (e.g., reduced cost connections) and potential building code or other mandates. The financial viability of the consolidated FNSB natural gas utility – and its ability to offer low rates attractive enough to drive conversion of existing residences – can be substantially enhanced by adding demand from the new housing units.

FINANCIAL ACCOUNTING OF FUNDS EXPENDED AND FUNDS ANTICIPATED TO BE SPENT, INCLUDING LOANS, GRANTS, AND BONDS

Table 3 outlines the IEP expenditures related to the \$57.5 million capital appropriation, the \$125 million of SETS fund capitalization, and the \$150 million of SETS bond authorization.

Table 3: Expenditures from and Remaining Funds of Legislative Appropriation & Authorization(s)

Expenditures* from and Remaining Funds of Legislative Appropriation & Authorization(s):				
	HCS CSSB 18 \$57.5 mill Cap Approp	SB 23 SLA 2013 \$125 mill SETS	SB 23 SLA 2013 \$150 mill Bonds	Total
Development Costs	IEP Phase 1 (Pre HB 105)			
	LNG Plant	7,585,150	-	7,585,150
	North Slope Pad	6,003,418	-	6,003,418
	Distribution	500,005	-	500,005
	Total	14,088,573	-	14,088,573
	IEP Phase 2 (Post HB 105)			
	Commodity	100,786	-	100,786
	LNG Plant	430,030	-	430,030
	Trucking	14,075	-	14,075
	Storage	1,517,594	-	1,517,594
	Distribution	26,000	-	26,000
	Project Management	490,441	-	490,441
	Due Dilligence & Deal Structuring	576,452	-	576,452
	Total	3,155,378	-	3,155,378
	Total	17,243,951	-	17,243,951
Loans & Investments	LNG Plant	-	-	-
	Trucking	-	-	-
	Storage	-	-	-
	Distirubtion	-	-	-
	FNG Loan**	-	60,500,000	60,500,000
	IGU Loan	-	37,780,000	37,780,000
	Total	-	98,280,000	98,280,000
Total	Total Expenditure	17,243,951	98,280,000	115,523,951
	Remaining Funds	40,256,049	26,720,000	150,000,000
Notes Financial data per unaudited accounting system records as of 03/29/2018 * Expenditures include Actuals, Encumbrances, and Commitments as of 03/29/2018. Legislative Appropriation & Authorization(s) only include those identified above and do not include AIDEA operating, Economic Development Fund, or other sources. ** As directed by adoption of AIDEA Resolution G17-20 on 12/7/17, an additional \$45,500,000 of SETS financing has been authorized to Fairbanks Natural Gas to expand LNG storage in the FNSB.				

SUMMARY

The adoption of a HB 105 Plan by the AIDEA Board on September 21, 2017, provided access to IEP financing tools necessary to finalize, approve, and sign:

- a Purchase and Sale Agreement, and
- a separate Financing Agreement.

As a result, steps are underway to expand LNG storage capacity, prepare to expand LNG production capacity, and to consolidate the separate natural gas distribution infrastructure owned by AIDEA (Pentex) and the IGU under ownership and operation of the IGU.

The next quarterly report is due in early July 2018.



Attachment A: House Bill 105 Plan Memorandum



MEMORANDUM

To: John Springsteen, Executive Director
Alaska Industrial Development and Export Authority

From: Gene Therriault, IEP Team Lead
Mark Gardiner, IEP Team Member
Dan Britton, CEO Pentex/Fairbanks Natural Gas

Date: September 20, 2017

Re: Interior Energy Project – HB105 Required Project Plan

This memorandum and accompanying attachments constitute an IEP project plan that complies with specific requirements of Chapter 39, SLA 2015 (HB105). In addition, the documents assess the impact of current low fuel oil prices on the IEP. Finally, this memorandum recommends the AIDEA Board approve this plan through consideration and adoption of Resolution No. G17-13.

The IEP Team recommends adoption of the HB105 compliant plan for development of the natural gas system in the Fairbanks North Star Borough (FNSB) based on incremental investment in system capital and continued low-cost utility operations. The AIDEA IEP HB105 Plan achieves the IEP objectives for significant customer rate reductions sufficient to support a critical mass of space heating fuel conversion to natural gas. The plan is based on proven municipal utility principles, establishing the foundation for integration of the existing Fairbanks Natural Gas (FNG) and Interior Gas Utility (IGU) natural gas distribution infrastructure in the FNSB into a single, consolidated utility. The Plan invests the appropriated capital funds, deploys designated funds from the Sustainable Energy Transmission and Supply (SETS) fund and makes prudent use of authorized bond financing in the early years – thereby matching the financial requirements for capital investment to the conservative estimated conversion and gas demand growth rates.

Background

In 2013, the Alaska Legislature, at the request of Governor Parnell and the Interior community, acted to authorize a financing package designed to bring North Slope gas to the Interior via trucked Liquefied Natural Gas (LNG). Financing for the project (the Interior Energy Project or “IEP”) included \$57.5 million of state appropriated funds and \$275 million of authorized project financing consisting of \$125 million appropriated to the SETS fund and an authorization of \$150 million in AIDEA bonds backed by a state “moral obligation” credit support. The financing portion of the project was contained in SB23 of the 2013 Legislative session.

In the remainder of 2013 and all of 2014, AIDEA proceeded to select a project partner and advance development of a LNG plant on the North Slope of Alaska. At the end of 2014, the project development Concession Agreement for the North Slope plant expired, leading to termination of the Concession Agreement in early 2015.

During the 2015 Legislative session, HB105 reauthorized the IEP financing with new language expanding alternatives (gas sourced from other than the North Slope, propane, or small diameter pipelines) for supplying energy to the Interior of Alaska. This legislation, introduced by Governor Walker and supported by the Interior community, passed both houses of the legislature unanimously and was signed into law June 30, 2015. One change in HB105 from the previous authorization was the addition of a requirement that the AIDEA Board approve, by resolution, a project plan for the Interior Energy Project. The specific language of that requirement states:

“(a) The Alaska Industrial Development and Export Authority, through the Alaska Industrial Development and Export Authority sustainable energy transmission and supply development fund (AS 44.88.660), may provide financing up to a principal amount of \$275,000,000 for the development, construction, and installation of, and the start-up costs of operation and maintenance for, a liquefied natural gas production plant and system and affiliated infrastructure in the state that will provide natural gas to Interior Alaska as a primary market and natural gas delivery and distribution systems and affiliated infrastructure that will provide natural gas to Interior Alaska, if the members of the Alaska Industrial Development and Export Authority approve by resolution a project plan. The project plan must

- 1. identify the source of the natural gas;*
- 2. include the estimated cost of the project;*
- 3. and include the estimated price of natural gas supplied to natural gas utilities in Interior Alaska before distribution to consumers. “*

This memorandum, and the associated attachments, provide the documentation for Board Resolution No. G17-13, RESOLUTION OF THE ALASKA INDUSTRIAL DEVELOPMENT AND EXPORT AUTHORITY APPROVING AN HB 105 COMPLIANT PROJECT PLAN FOR THE INTERIOR ENERGY PROJECT.

Project Plan

The project recommended by the IEP team to the AIDEA administration for action by the AIDEA Board is founded on a “Titan 2” LNG plant in the Cook Inlet area, co-located with the existing Titan LNG facility at Point MacKenzie presently serving Interior Alaska.

The proposed Titan 2 project will add approximately 100,000 gallons per day (3Bcf per year) of LNG capacity to the present output of the Titan facility. The existing Titan plant has a production capacity of 50,000 gallons per day. Estimated capital cost for the new plant capacity is \$46 million. That number will be refined and confirmed by early works Front End Engineering and Design (FEED) efforts prior to presenting a Final Investment Decision (FID) recommendation.

Additionally, FNG will construct a new 5.25 million gallon LNG storage facility in Fairbanks. The cost of this project component is estimated to be \$42 million and the storage facility is expected to qualify to receive a State of Alaska LNG storage payment of \$15 million under the provisions of AS 43.20.047. This storage project will meet the RCA’s requirement for five days of storage and provide an increased level of seasonal supply by storing LNG produced in the summer for use in the winter. Completion of this storage facility will allow the existing LNG tanks in South Fairbanks to be re-deployed to North Pole for initial supply to the existing IGU system.

The structure of the commercial and supply chain arrangements is as follows:

- I. The IGU or AIDEA SETS fund will acquire Pentex Alaska, LLC from the AIDEA Revolving Fund. Pentex is the parent company of Fairbanks Natural Gas, LLC, Arctic Energy Transport, LLC, and Titan Alaska LNG, LLC. Pentex and its subsidiaries constitute an operating natural gas enterprise currently providing natural gas utility service to 1,100 customers in Fairbanks.
- II. IGU and/or Pentex will continue to operate expanded liquefaction, transportation, storage, re-gasification, and distribution of the gas to existing and new customers in the FNG and IGU service areas.
- III. AIDEA will provide financing to IGU and/or Pentex consistent with HB105 authorizations and IEP goals, maintaining fiscal controls through loan terms and covenants.
- IV. IGU and/or Pentex will construct the Titan 2 addition integrated with the current Titan LNG plant. A copy of the Titan Expansion Development Plan is included as Attachment A.
- V. Titan will purchase feed gas for the expanded liquefaction plant. Gas will be provided into the plant via a gas sales agreement between Titan and Hilcorp Alaska. A copy of the gas sales agreement executed by the parties is included as Attachment B.
- VI. Titan will arrange for transport of the LNG to the Interior. Initially, this transport is expected to be accomplished via trucking in a manner similar to the present trucking arrangement. A summary of the large capacity trailer pilot project results and projected costs are included as Attachment C.
- VII. FNG will construct new LNG storage capacity sufficient to meet the RCA required 5-day minimum storage requirement as well as provide increased seasonal supply during peak winter months. A summary of the LNG storage expansion project is included as Attachment D.
- VIII. IGU and FNG will distribute natural gas from the LNG storage facilities to existing and new customers.

Specific HB 105 Required Components

(1) Source of Natural Gas

Titan recently executed a new gas supply contract with Hilcorp to provide Titan's current liquefaction facility with a term beginning April 01, 2018 and expiring March 31, 2021. The All Requirements Agreement provides Titan with enough capacity (5 MMCF/ Day) for its existing customers, and allows for the expansion of up to 15 MMCF/Day after Titan provides 18 months' notice to Hilcorp. This is enough capacity to allow for the expansion of the Titan facility as described in this memo.

(2) Estimated Cost of the Project

The estimated costs of the project, including future expansions of the combined distribution systems and LNG plant, are outlined in Table 1. The capital costs are split into three categories: Already Invested, Immediate, and Demand Dependent. The immediate capital costs will be incurred upon project sanction in order to meet the goals of the IEP. The immediate capital investment will allow for demand and corresponding revenue growth. Upon sufficient revenue

growth, IGU and/or Pentex will have the financial ability to incur revenue-backed debt to finance additional expansion of the LNG plant and combined distribution systems within the FNSB.

IEP Capital Program	Already Invested	Stage 1 & 2 - Consolidated Utility - Immediate	Stage 3 - Demand Dependent	Total
SOURCES OF FUNDS				
Capital Appropriation	\$ 15,060,000	\$ 42,440,000	\$ -	\$ 57,500,000
SETS Loans	42,400,000	82,600,000	-	125,000,000
Bond Financing - Capital	-	19,451,400	121,092,600	140,544,000
Storage Tax Credits	-	18,500,000	-	18,500,000
Commercial Financing	-	1,825,000	2,920,000	4,745,000
Utility Revenues	-	-	-	-
Total - Sources of Funds	\$ 57,460,000	\$ 164,816,400	\$ 124,012,600	\$ 346,289,000
USES OF FUNDS				
Pentex Acquisition	\$ -	\$ 59,575,000	\$ -	\$ 59,575,000
Liquefaction Development	-	46,200,000	25,000,000	71,200,000
Transportation	-	1,825,000	2,920,000	4,745,000
Storage & Regasification	-	52,000,000	-	52,000,000
Distribution	42,400,000	5,216,400	96,092,600	143,709,000
Other Project Costs (NS, etc.)	15,060,000	-	-	15,060,000
Total - Uses of Funds	\$ 57,460,000	\$ 164,816,400	\$ 124,012,600	\$ 346,289,000

Table 1

(3) Estimated Price of Natural Gas Supplied to Natural Gas Utilities Before Distribution to Consumers

The estimated price of natural gas supplied to Interior customers is outlined in Table 2. Under the project plan, the LNG plant is owned by IGU and/or Pentex and the capital costs are integrated into the entire utility, including the storage and distribution system. For purposes of HB105, the estimated price of natural gas (LNG) supplied to utilities is shown in the line labeled “Subtotal – Cost to Utilities”.

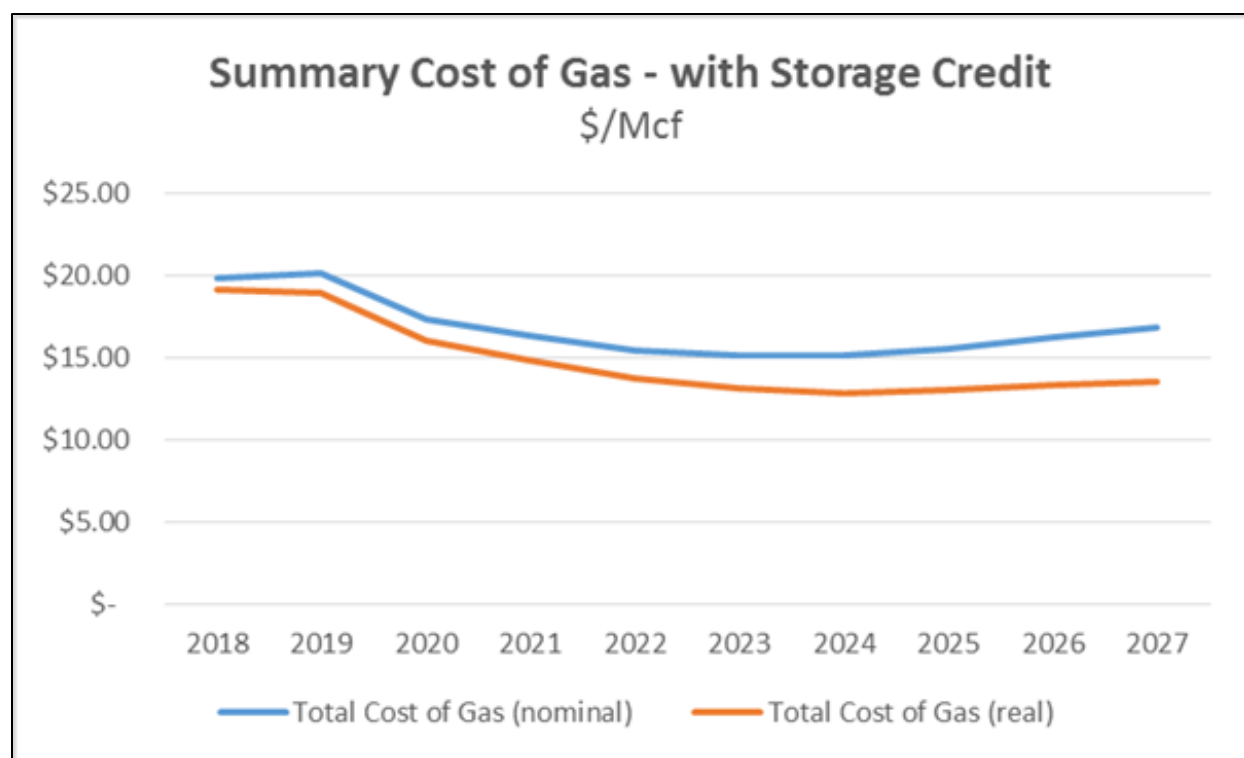
The cost of debt for the project recovers the pooled capital investment for all assets of the project identified in the category above. The total cost of gas is shown in nominal and inflation adjusted real dollars. The table below shows that after adjusting for inflation this project can meet the price goals of the IEP most years. It is anticipated that rates will be set slightly higher than costs in order to provide cash reserves and smooth out the impact to the end consumer of the year-to-year fluctuations in cost.

Summary Cost of Gas - With Storage Tax Credit										
Anticipated Demand (Bcf)	0.75	0.75	1.19	1.83	2.55	3.25	3.90	4.41	4.75	4.95
Cost of Gas (\$/Mcf nominal)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Natural Gas - Cook Inlet	\$7.72	\$7.72	\$7.72	\$7.72	\$7.87	\$8.03	\$8.19	\$8.36	\$8.52	\$8.69
Pipeline Trans. Cost to Pt. Mac. (3rd-party)	0.65	0.66	0.68	0.69	0.70	0.72	0.73	0.75	0.76	0.78
LNG Production - Titan Plant	4.28	4.34	3.22	2.53	2.19	2.02	1.92	1.88	1.87	1.89
Trucking - Pt. Mac. To Fairbanks	2.48	2.53	2.58	2.63	2.68	2.73	2.79	2.84	2.90	2.96
Subtotal - Cost to Utilities	\$ 15.12	\$ 15.25	\$ 14.19	\$ 13.57	\$ 13.45	\$ 13.50	\$ 13.64	\$ 13.83	\$ 14.06	\$ 14.32
Distribution, Storage, Vaporization	4.76	4.85	3.13	2.07	1.51	1.21	1.03	0.93	0.88	0.86
Total Cost of Gas before Financing	\$ 19.88	\$ 20.10	\$ 17.31	\$ 15.64	\$ 14.96	\$ 14.71	\$ 14.67	\$ 14.76	\$ 14.94	\$ 15.18
Debt	-	-	-	0.72	0.51	0.40	0.43	0.78	1.34	1.69
Total Cost of Gas (nominal)	\$ 19.88	\$ 20.10	\$ 17.31	\$ 16.35	\$ 15.48	\$ 15.11	\$ 15.10	\$ 15.54	\$ 16.28	\$ 16.87
Total Cost of Gas (real)	\$ 19.11	\$ 18.94	\$ 16.00	\$ 14.81	\$ 13.74	\$ 13.16	\$ 12.88	\$ 13.00	\$ 13.36	\$ 13.57
Equivalent Fuel Oil Price (nom. \$/gal)	\$ 2.74	\$ 2.77	\$ 2.39	\$ 2.26	\$ 2.13	\$ 2.08	\$ 2.08	\$ 2.14	\$ 2.25	\$ 2.33
Equivalent Fuel Oil Price (real \$/gal)	\$ 2.64	\$ 2.61	\$ 2.21	\$ 2.04	\$ 1.90	\$ 1.81	\$ 1.78	\$ 1.79	\$ 1.84	\$ 1.87
Planned Average Customer Rates*	\$20.20	\$20.20	\$17.31	\$16.35	\$15.48	\$15.11	\$15.10	\$15.54	\$16.28	\$16.87
Equivalent Fuel Oil Price (nom. \$/gal)	\$ 2.79	\$ 2.79	\$ 2.39	\$ 2.26	\$ 2.13	\$ 2.08	\$ 2.08	\$ 2.14	\$ 2.25	\$ 2.33
*Differs from Total Cost of Gas in 2018 and 2019 due to utility consolidation										

Table 2

Visual Comparison of Total Cost of Gas to customers (nominal vs real)

Graph 1 utilized values from Table 2 to provide a visual comparison of the Total Cost of Gas (nominal) and the Total Cost of Gas (real) over time.



Graph 1

Comparison of AIDEA IEP Projected Gas Cost to Notional IEP Target Cost

Table 3 provides a comparison of the projected AIDEA IEP cost of gas versus the pre-IEP Pentex gas price and the notional IEP price target. In order to reflect an apples-to-apples comparison, all of the costs in this table reflect an assumed 2.00% rate of inflation.

Cost of Gas (with inflation)	2.00%									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Pentex Rate (pre-IEP)	\$24.00	\$ 24.48	\$ 24.97	\$ 25.47	\$ 25.98	\$ 26.50	\$ 27.03	\$ 27.57	\$ 28.12	\$ 28.68
IEP Notional Target Rate	\$15.00	\$ 15.30	\$ 15.61	\$ 15.92	\$ 16.24	\$ 16.56	\$ 16.89	\$ 17.23	\$ 17.57	\$ 17.93
AIDEA IEP Rate - w/ Storage Credit	\$19.88	\$ 20.10	\$ 17.31	\$ 16.35	\$ 15.48	\$ 15.11	\$ 15.10	\$ 15.54	\$ 16.28	\$ 16.87
AIDEA IEP Rate - no Storage Credit	\$19.88	\$20.10	\$17.31	\$16.96	\$15.91	\$15.46	\$15.37	\$15.80	\$16.53	\$17.11
% of IEP Target Savings										
AIDEA IEP Rate - w/ Storage Credit	45.8%	47.7%	81.8%	95.4%	107.8%	114.6%	117.7%	116.4%	112.2%	109.8%
AIDEA IEP Rate - no Storage Credit	45.8%	47.7%	81.8%	89.1%	103.3%	111.1%	115.0%	113.8%	109.9%	107.6%

Table 3

As Table 3 shows, the LNG storage credit/payment enables the AIDEA IEP HB105 Plan to achieve the same level of savings as the IEP Notional Target rate by 2022.

Recommendations for AIDEA Board action

The IEP Team and the AIDEA administration recommend the AIDEA Board vote to pass Resolution No. G17-13 approving this HB105 compliant project plan.

AIDEA Board passage of Resolution No. G17-13 will accomplish the following actions:

- Approve an IEP Project Plan with components specified in HB105
- Authorize AIDEA access to full IEP funding to be deployed in pursuit of the project goals
- Authorize AIDEA to consider sale of Pentex Alaska, LLC to the IGU or the AIDEA SETS fund under separate action

This action provides the commercial structure and financing tools for IGU or Pentex to control the IEP project. This includes constructing the Titan 2 LNG plant, building additional LNG storage in Fairbanks, integrating the existing FNG and IGU distribution infrastructure and, as demand and revenue permit, future expansions of the infrastructure needed to increase the natural gas availability and utilization in Interior Alaska.

The IEP Team and the AIDEA administration have determined that this project plan provides a path to lower the cost of natural gas to Interior residents and businesses.

Attachments

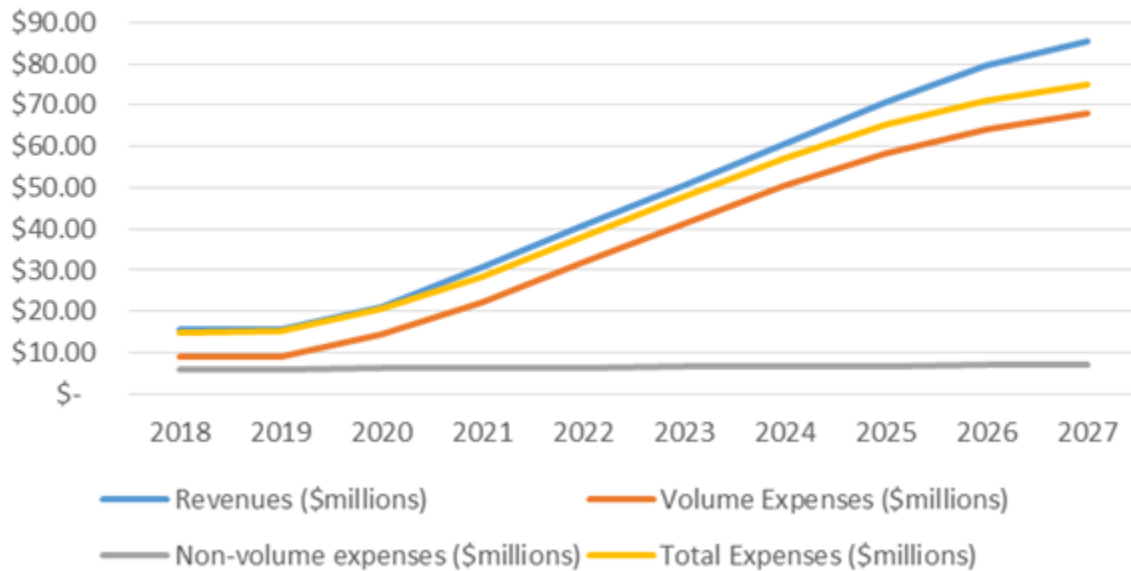
Attachment A: The development for the Titan 2 LNG plant expansion

Attachment B: Gas Sale Agreement between Titan Alaska LNG, LLC and Hilcorp Alaska

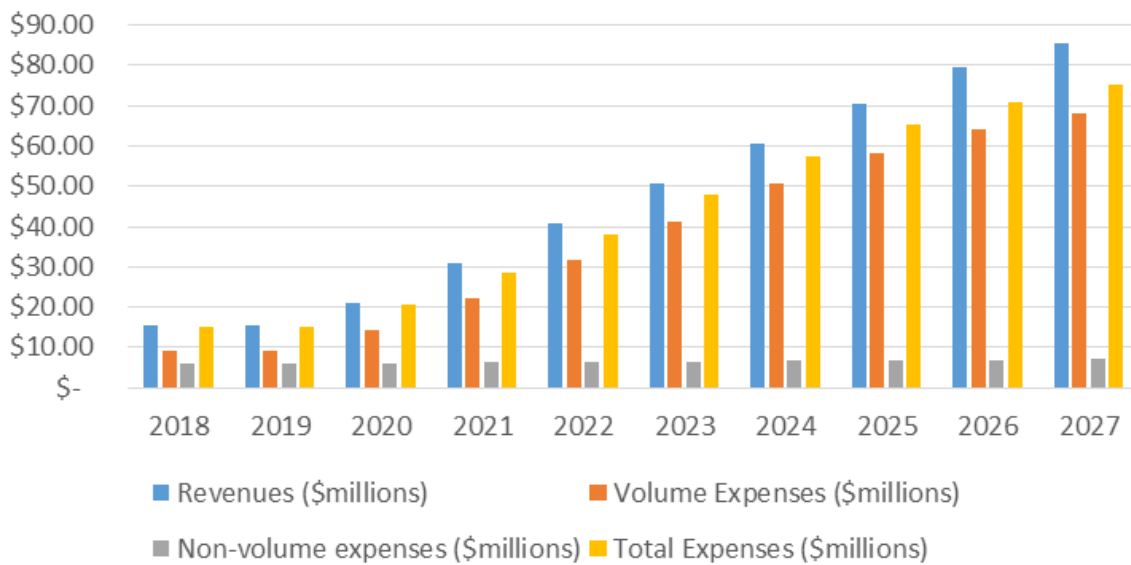
Attachment C: A summary of the large-capacity trailer pilot project results and projected costs

Attachment D: The development plan for expansion of LNG storage in Fairbanks

Projected
Revenues & Expenses (volume + non-volume)



Projected
Revenues & Expenses (volume + non-volume)



ALASKA INDUSTRIAL DEVELOPMENT AND EXPORT AUTHORITY

RESOLUTION NO. G17-13

**RESOLUTION OF THE ALASKA INDUSTRIAL
DEVELOPMENT AND EXPORT AUTHORITY APPROVING
AN HB 105-COMPLIANT PROJECT PLAN FOR THE
INTERIOR ENERGY PROJECT**

WHEREAS, the Alaska State Legislature authorized the Alaska Industrial Development and Export Authority (the “Authority”) to provide financing up to a principal amount of \$275,000,000 for the development, construction, and installation of, and the start-up costs of operation and maintenance for, a liquefied natural gas production plant and system and affiliated infrastructure and natural gas delivery and distribution systems that will provide natural gas to Interior Alaska as a primary market (the entire project is known as the “Interior Energy Project”);

WHEREAS, in 2015, the Alaska State Legislature passed chapter 39 of the 2015 Session Laws of Alaska (SCS CSHB 105(FIN) am S), hereafter referred to as “HB 105,” which concerned the Authority and the Interior Energy Project

WHEREAS, among other things required by HB 105, Section 9 of the law specified that in order for the Authority to deploy the financing approved for the Interior Energy Project the Authority had to approve by resolution a project plan;

WHEREAS, the staff of the Authority, working in conjunction with the Authority’s advisors, have developed a project plan for the Interior Energy Project, a complete copy of which with all attachments is appended to this Resolution;

WHEREAS, the proposed project plan for the Interior Energy Project meets all of the requirements of Section 9 of HB 105; and

WHEREAS, it is in the best interests of the Authority and in furtherance of the goals of the Interior Energy Project that the proposed project plan be approved.

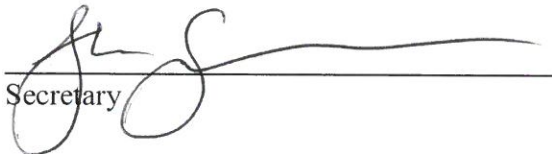
NOW, THEREFORE, BE IT RESOLVED BY THE ALASKA INDUSTRIAL DEVELOPMENT AND EXPORT AUTHORITY AS FOLLOWS:

The project plan for the Interior Energy Project that is appended to this Resolution is hereby approved.

Dated at Anchorage, Alaska, this 21st day of September 2017.




Chair


Secretary



Attachment B: IGU Resolution 2017-06R



Introduce on: June 20, 2017
Reconsidered on: December 5, 2017
Amended on: December 5, 2017
Approved on: December 5, 2017

Amended RESOLUTION # 2017-06R

**A RESOLUTION AUTHORIZING THE GENERAL MANAGER OF THE
INTERIOR GAS UTILITY TO EXECUTE A PURCHASE & SALES AND
FINANCE AGREEMENT WITH THE ALASKA INDUSTRIAL
DEVELOPMENT AND EXPORT AUTHORITY FOR THE ACQUISITION
OF PENTEX and FINANCING OF DEVELOPMENT OF THE INTERIOR
ENERGY PROJECT**

WHEREAS, the Fairbanks North Star Borough through Ordinance 2012-52 titled *An Ordinance Acquiring an Areawide Natural Gas Utility Power By Transfer From The Cities of Fairbanks And North Pole, Establishing the Interior Alaska Natural Gas Utility and Providing For Its Management* to action to create an areawide natural gas utility empowered to ensure its citizens affordable access to natural gas and/or propane; and

WHEREAS, the Interior Alaska Natural Gas Utility (IGU) 6-Year Plan dated May 20, 2014, states that the IGU mission is to provide low cost, clean burning, natural gas to the most people in the Fairbanks North Star Borough as soon as possible; and

WHEREAS, IGU Board through unanimous approval of Resolution 2017-01 titled *A Resolution Requesting Authorization for the General Manager of Interior Gas Utility to Execute a Non-Binding Memorandum of Understanding With the Alaska Industrial Development Export Authority for Acquisition of Pentex* authorized the General Manager to execute a non-binding Memorandum of Understanding (MOU) for the acquisition of Pentex Alaska Natural Gas Company, LLC (Pentex) and financing of development of the Interior Energy Project with Alaska Industrial Development and Export Authority (AIDEA), and to negotiate in good faith to finalize executable agreements with respect to the purpose of the MOU; and

WHEREAS, the MOU for the acquisition of Pentex and financing of development of the Interior Energy Project was executed by the IGU General Manager and Executive Director of the AIDEA on January 25, 2017; and

WHEREAS, the Fairbanks North Star Borough, through Ordinance 2017-25 titled *An Ordinance Amending FNSBC 11.04.020 Management of the Interior Alaska Natural Gas Utility*, took action clarifying the IGU enabling ordinance to expressly provide IGU with the power to borrow money, retroactive to the date of enactment; and further resolved that IGU has the authority to borrow money and, as evidence of that borrowing, to enter into loan agreements and issue bonds, notes or other obligations, and may pledge any of its assets or revenues to pay or secure the payment of any such borrowing; and

WHEREAS, the IGU and AIDEA negotiating teams have agreed to a LLC Membership Purchase and Sale Agreement, a Financing Agreement and other agreements for the acquisition

of Pentex by IGU and financing of associated development of the Interior Energy Project in conjunction with AIDEA. (Attachments No. 1 and No. 2.); and

Whereas, to facilitate closing under the Agreements, the date of conversion (expiration of Line Time Period and loan Maturity Date) under the Amended and Restated Loan Agreement Number 1314002 between AIDEA and IGU is to be extended to Closing on Agreements and the loan further modified to allow for Pentex acquisition due diligence and disclosure review expenses.

NOW, THEREFORE, BE IT RESOLVED BY THE IGU BOARD OF DIRECTORS AS FOLLOWS:

Section 1) The General Manager is authorized to execute the LLC Membership Purchase and Sale Agreement, the Financing Agreement and other related agreements with Alaska Industrial Development and Export Authority for the acquisition of Pentex Alaska Natural Gas Company, LLC and financing of the development of the Interior Energy Project.

Section 2) The Authorization to execute is contingent upon the IGU Amended and Restated Loan Agreement Number 1314002 being modified to:

- a) Extend the date of conversion (expiration of Line Time Period and loan Maturity Date) under the IGU Amended and Restated Loan Agreement Number 1314002 to Closing on Agreements; and
- b) Allow for use of proceeds to pay for due diligence and disclosure review expenses.

Section 3) This authorization further requires the General Manager to bring a Final Investment Decision (FID) recommendation to the Board at least 14 days prior to close. The FID recommendation shall outline: the status of the Conditions Precedent of the PSA and whether or not they have been satisfied; the status of the Disclosure Schedules and their acceptability; any occurrences of Material Adverse Effect; and any additional information necessary to support the recommended action. A vote of the IGU Board will be required to authorize the General Manager to execute the final purchase closing documents.


Michael Meeks - Chair, IGU Board

12/6/17
Date


David Prusak - Secretary to the IGU Board of Directors

12/6/17
Date

PO Box 70200
Fairbanks, AK 99707
907 374 4474
interiorgas.com



Attachment C: AIDEA Resolution G17-16A

ALASKA INDUSTRIAL DEVELOPMENT AND EXPORT AUTHORITY

RESOLUTION NO. G17-16A

**RESOLUTION OF THE ALASKA INDUSTRIAL
DEVELOPMENT AND EXPORT AUTHORITY
APPROVING THE SALE OF PENTEX ALASKA NATURAL
GAS COMPANY, LLC TO THE INTERIOR GAS UTILITY;
APPROVING A FINANCING AGREEMENT WITH THE
INTERIOR GAS UTILITY; AUTHORIZING THE
TRANSFER OF THE NORTH SLOPE PAD AND NORTH
SLOPE MATERIAL SALE CONTRACT TO THE INTERIOR
GAS UTILITY; AND AUTHORIZING THE EXTENSION OF
THE MATURITY DATE ON THE INTERIOR GAS
UTILITY'S EXISTING LINE OF CREDIT**

WHEREAS, in 2013 the Alaska State Legislature approved HCS CSSB 23 (“SB 23”), and in 2015 the Alaska State Legislature amended SB 23, to authorize the Alaska Industrial Development and Export Authority (“the Authority”) to provide financing for the development, construction, and installation of, and the start-up costs of operation and maintenance for, a liquefied natural gas (“LNG”) production plant and system and affiliated infrastructure and a natural gas delivery and distribution systems and affiliated infrastructure to serve Interior Alaska as a primary market;

WHEREAS, the project the Authority is authorized to finance under SB 23 is known as the Interior Energy Project;

WHEREAS, in furtherance of the Interior Energy Project, the Authority purchased Pentex Alaska Natural Gas Company, LLC (“Pentex”), a Delaware limited liability company that is the 100% owner of various subsidiaries, including Fairbanks Natural Gas, LLC (“FNG”), which is a natural gas utility for Fairbanks, Alaska, and Titan Alaska LNG, LLC, which is the operator of the LNG plant in the Matanuska Susitna Borough;

WHEREAS, in purchasing Pentex, the Authority expected to own the company only for a limited period of time, until Pentex could be transferred to a local control entity for the Fairbanks area;

WHEREAS, in Resolution No. G17-01, adopted January 11, 2017, the Board approved of the Authority entering into a non-binding Utility Integration Memorandum of Understanding

(“MOU”) that concerned the Interior Gas Utility (“IGU”) acquiring Pentex and the Authority providing financing to IGU;

WHEREAS, the Authority’s Executive Director and IGU’s General Manager signed the MOU on January 25, 2017;

WHEREAS, having IGU acquire Pentex, and having the Authority provide financing to IGU, furthers the goals of the Interior Energy Project by, among other things, facilitating the integration and the further development of the natural gas utility systems of IGU and FNG for the benefit of the ratepayers and the citizens of Interior Alaska;

WHEREAS, in Resolution No. G17-13, adopted September 21, 2017, the Board approved a project plan for the Interior Energy Project that satisfies the requirements of HB 105, and having IGU acquire Pentex and having the Authority provide financing to IGU, is consistent with project plan and one way in which the Authority can implement the HB 105 project plan;

WHEREAS, the Authority has negotiated with IGU for approximately 11 months to develop the definitive agreements contemplated in the MOU, and based on those negotiations, legal counsel has prepared two agreements, both of which have been provided to the Board: (1) the LLC Membership Purchase and Sale Agreement; and (2) the Financing Agreement;

WHEREAS, under the LLC Membership Purchase and Sale Agreement the Authority will sell the membership interests in Pentex to IGU for same amount the Authority paid to acquire those membership interests, \$54 million, plus a calculated return on that expenditure at the rate of 5.06% from the date the Authority acquired Pentex to the date of the closing on the sale to IGU;

WHEREAS, Pentex is an asset of the Revolving Fund and investments of the Revolving Fund are expected to earn a return, which enables the Authority to pay the statutorily mandated annual dividend to the State of Alaska;

WHEREAS, under the Financing Agreement the Authority will provide a \$125 million loan to IGU through the sustainable energy transmission and supply (“SETS”) development program and fund, with the loan being on special financial terms permitted under SB 23 that are not available from commercial lending sources;

WHEREAS, the special financial terms for the \$125 million SETS loan are meant to enable IGU to establish an investment grade natural gas utility, and these terms include a zero percent (0%) interest rate for the first 15 years with no payments due during that period, an interest

rate of only 0.25% thereafter for 35 years, and the ability to defer principal payments for an additional five years if the expected natural gas demand is not realized;

WHEREAS, under the Financing Agreement the Authority may also issue bonds for IGU's benefit in the amount of \$150 million, which bonds may be moral obligation debt of the State of Alaska;

WHEREAS, the purchase price for Pentex would be paid to the Authority from the SETS loan and from the remaining balance of the FY2014 capital budget appropriation made to the Authority by the Alaska State Legislature;

WHEREAS, the staff of the Authority has consulted with and been advised by the local governments of the areas where the facilities affected by the proposed Pentex sale are located, specifically the Fairbanks North Star Borough, the City of Fairbanks, and the Matanuska Susitna Borough;

WHEREAS, in pursuing the Interior Energy Project, the Authority obtained from the Alaska Department of Natural Resources a Right-of-Way Lease for North Slope Natural Gas Pipeline and LNG Facility (ADL 419409), dated July 31, 2014, with the intent to use the leased premises to develop a North Slope LNG plant to supply Interior Alaska;

WHEREAS, the Authority had a gravel pad constructed on the leased premises using gravel obtained under the Material Sale Contract (ADL 419991) entered into with the Alaska Department of Natural Resources, dated May 2, 2014, and the Authority used funds from the FY2014 capital budget appropriation to pay for the gravel and the construction work;

WHEREAS, the Authority subsequently cancelled the development of an LNG plant on the North Slope and instead determined that natural gas from the Cook Inlet area would be used to supply the Interior Energy Project;

WHEREAS, IGU has asked that the Authority transfer to IGU the Right-of-Way Lease, the North Slope pad, and the Material Sale Contract as valuable assets that IGU can use to support its efforts to advance the development of an LNG plant and distribution systems to serve Interior Alaska as a primary market;

WHEREAS, the SETS line of credit the Authority provided to IGU in 2015 is expected to be superseded by the new SETS loan the Authority will make to IGU under the Financing

Agreement, but the 2015 SETS line of credit matures on December 31, 2017, which is before the expected closing date for the Financing Agreement;

WHEREAS, the maturity date for the 2015 SETS line of credit provided to IGU needs to be extended if the Authority and IGU sign the LLC Membership Purchase and Sale Agreement and the Financing Agreement;

WHEREAS, completing the transactions between the Authority and IGU as soon as possible is important to fulfilling the goal of the Interior Energy Project of providing the lowest cost natural gas to the ratepayers of Interior Alaska because delay in closing the transactions adds an average of approximately \$227,700 per month, or \$7,486.03 per day, to the Pentex purchase price and because delay causes unnecessary administrative costs for the Authority and IGU; and

WHEREAS, on October 26, 2017, in Resolution No. G17-16, the Board approved the LLC Membership Purchase and Sale Agreement and the Financing Agreement in the forms presented, and thereafter these proposed agreements were further refined through additional negotiations between the Authority and IGU.

NOW, THEREFORE, BE IT RESOLVED BY THE ALASKA INDUSTRIAL DEVELOPMENT AND EXPORT AUTHORITY AS FOLLOWS:

Section 1. The LLC Membership Purchase and Sale Agreement between the Authority and IGU, in the revised form presented to the Board for its December 7, 2017 meeting, is hereby approved. In the name of and on behalf of the Authority, the Executive Director is authorized to sign and deliver the LLC Membership Purchase and Sale Agreement, along with the appropriate disclosure schedules and exhibits to that agreement.

Section 2. The Financing Agreement between the Authority and IGU, in the revised form presented to the Board for its December 7, 2017 meeting, is hereby approved. In the name of and on behalf of the Authority, the Executive Director is authorized to sign and deliver the Financing Agreement, along with appropriate appendices and exhibits to that agreement, and necessary technical corrections. To the extent that any provision of the Financing Agreement, or any aspect of the procedure the Authority utilized with respect to the Financing Agreement, deviates from the requirements of the Authority's SETS regulations (3 AAC chap. 101), those requirements of the SETS regulations are hereby waived pursuant to Section 11(d) of SB 23.


Section 3. The Authority's transfers to IGU of the Right-of-Way Lease for North Slope Natural Gas Pipeline and LNG Facility (ADL 419409), the North Slope pad, and the Material Sale Contract (ADL 419991), are approved. The transfers shall not be effective until the closings on LLC Membership Purchase and Sale Agreement and the Financing Agreement occur. In the name of and on behalf of the Authority, the Executive Director is authorized to sign and deliver all agreements and other documents necessary to accomplish the transfers.

Section 4. If the Authority and IGU enter into the LLC Membership Purchase and Sale Agreement and the Financing Agreement, the 2015 SETS Amended and Restated Loan Agreement entered into by the Authority and IGU shall be amended to extend the maturity date on the Line of Credit Note until the closings on LLC Membership Purchase and Sale Agreement and the Financing Agreement occur, or until the closings are cancelled. In the name of and on behalf of the Authority, the Executive Director is authorized to sign and deliver an amendment to 2015 SETS Amended and Restated Loan Agreement with IGU to so extend the maturity date.

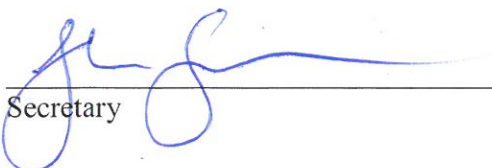
Section 5. Once binding agreements with IGU regarding the matters described in Sections 1 through 4 of this Resolution are entered into, the Executive Director is authorized and directed to sign all documents and to take all actions necessary or convenient for the Authority to perform its obligations under those agreements.

DATED at Anchorage, Alaska this 7th day of December, 2017.

ALASKA INDUSTRIAL DEVELOPMENT
AND EXPORT AUTHORITY


Chair




Secretary