

02/28/2018
Update:
Alaska LNG
Project

<TARGET><BILL></BILL><SUBJECT>02-28-2018 Update Alaska
LNG Project</SUBJECT><COMM>SRES30</COMM></TARGET>

February 22, 2018

Senator Cathy Giessel
Senator Anna MacKinnon
Alaska State Capitol
Juneau, Alaska 99801

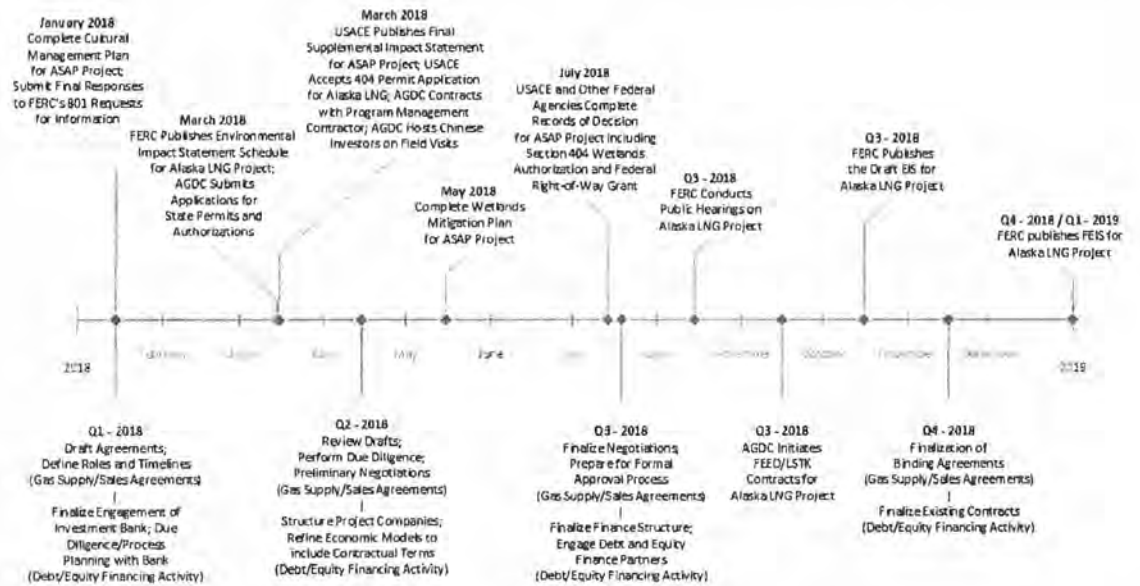
Dear Senator Giessel and Senator MacKinnon:

The Alaska Gasline Development Corporation (AGDC) appreciates the specific written questions you sent on January 29, 2018, following the Alaska LNG project update to a joint Senate Resources and Senate Finance Committee hearing on January 25, 2018. Since the AGDC team was not able to complete the full presentation, receipt of your questions presents an opportunity to convey additional information to you and other members of the Alaska State Senate. To that end we have restated your questions below followed our responses.

1. What is the current organizational structure (aka org chart) of AGDC? Can you send a copy of the current org chart for AGDC?

A current organizational chart, which includes all AGDC corporate personnel, is attached at the end of this letter.

2. Does AGDC have a status and benchmark chart for achievements scheduled for the calendar year 2018?



3. What is the total amount the State of Alaska funded to AGDC, to the Alaska Liquefied Natural Gas (LNG) Fund, the In-state Pipeline (ISP) Fund, and the purchase of Trans-Canada's role in the Alaska LNG Project? Simply, what is Alaska's all-in costs to date for the Alaska LNG Project and the Alaska Stand Alone Pipeline (ASAP) Project?

Expenditures \$-Millions Fiscal Year(FY)	Fund and Amount		
	In-State (Funds)	1235 AKLNG	Total
FY11	13.7	-	13.7
FY12	17.5	-	17.5
FY13	16.5	-	16.5
FY14	72.8	1.1	73.9
FY15	75.4	23.1	98.5
FY16	18.0	120.1	138.2
FY17	10.3	35.8	46.2
Total	\$ 224.3	\$ 180.1	\$ 404.4

Notes:

Expenditures from audited financial reports
with non-cash liabilities.

FY11 to FY14 AGDC operated under the authority of DOR/AHFC.

In-State Funds include Fund 1004, Fund 1213, and Fund 1229

Funds Appropriated \$-Millions		Fund and Amount		
Fiscal Year(FY)	Bill	In-State (Funds)	1235 AKLNG	Total
FY11	HB369	15.6	-	15.6
FY12	SB46	28.2	-	28.2
FY13	SB160	21.0	-	21.0
FY14	HB4	355.0	-	355.0
FY14	SB138	-	69.8	69.8
FY15	HB72 ₁	(9.0)	-	(9.0)
FY15	HB2001 ₂	(157.0)	-	(157.0)
FY16	SB3001 ₃	-	142.9	142.9
FY16	SB3001 ₄	(26.0)	26.0	-
FY16	SB3001 ₄	9.0	-	9.0
FY16	SB3001 ₅	1.3	2.9	4.2
Total		\$ 238.1	\$ 241.6	\$ 479.7

FY11 to FY14 AGDC operated under the authority of DOR/AHFC.

In-State Funds include Fund 1004, Fund 1213, and Fund 1229

Notes:

- 1) HB72 re-appropriated \$9.0-Million to DNR.
- 2) HB2001 re-appropriated \$157.0-Million to the Public Education Fund.
- 3) SB3001 appropriated \$64.4-Million for the Trans Canada acquisition and \$78.5-million to Fund 1235.
- 4) SB3001 transferred \$26-million from Fund 1229 to Fund 1235 and appropriated \$9.0-million to Fund 1229
- 5) SB3001 granted Program Receipt Authority from AKLNG JV to AGDC in the amount of \$4.2-million

4. What is the expected timeline to acquire the following major federal permits or approvals?

a. PHMSA natural gas pipeline permit/authorization

AGDC submitted applications for four special permits from PHMSA in April of 2017, and one special permit in September 2017, and expects to receive those permits in the first quarter of 2019.

b. Army Corps wetlands 404 permit

AGDC expects to receive a Clean Water Act Section 404 permit from the COE for the ASAP Project by August 2018. This will follow COE's issuance of a Preliminary Jurisdictional Determination on wetlands in March 2018, and distribution of the ASAP Final SEIS by April 2018.

AGDC expects issuance of the 404 permit for the Alaska LNG Project at the conclusion of the FERC led NEPA process. AGDC has requested a schedule from FERC that completes the NEPA process by the end of 2018; however, FERC has not responded to AGDC's request for a schedule. If FERC is able to meet this requested schedule, AGDC expects the COE would issue a Section 404 permit during the second quarter of 2019.

c. United States Coast Guard bridge permits

AGDC plans to apply for US Coast Guard bridge permits in the third quarter of 2018 and expects to receive those permits during the second quarter of 2019.

d. Department of Energy – Export License(s) transfer

The U.S. Department of Energy (DOE) office of Fossil Energy (FE) issued an *Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Proposed Alaska LNG Project in the Nikiski Area of the Kenai Peninsula, Alaska, to Free Trade Agreement Nations (DOE/FE Order No. 3554)* on November 21, 2014 and an *Order Conditionally Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Proposed Alaska LNG Project in the Nikiski, Alaska, to Non-Free Trade Agreement Nations (DOE/FE Order No. 3643)* on May 28, 2015. These DOE/FE export orders were issued to the Alaska LNG Project LLC as original applicant. AGDC is currently negotiating with the LLC for land rights and the transfer of the export orders to AGDC. Transferring the export order will require approval from the [US Administration]; AGDC also has the option to apply for new export authorization for the Alaska LNG project.

e. NMFS / NOAA Marine Mammal Protection Act – NEPA permit and permit authorizing take of Beluga whales

AGDC submitted a petition for the promulgation of incidental take regulations to NOAA Fisheries (formerly "NMFS") on November 13, 2017, with a request for a Letter of Authorization (LOA) for incidental take of marine mammals, including Cook Inlet beluga, for up to 5-years, which would cover the Alaska LNG construction period. NOAA Fisheries' review and adjudication of the application includes two formal public comment periods and ongoing consultation with NOAA Fisheries. Issuance of the LOA is expected by the third quarter of 2019.

5. If the pending initiative, 17 FSH 2, applied to just the 43-essential fish habitat crossing of a gas pipeline identified by AGDC on page 1 of 4 of the revised TABLE 10.4.3-1 filed with the Federal Energy Regulatory Commission (FERC) on January 22, 2018, and AGDC had to apply for fish habitat permits under section 4 of the initiative for each crossing:

- a. How long would it take AGDC to gather all the required information for each crossing area and file each of the 43 permits with ADFG?

AGDC believes it has the necessary information to apply for all 43 ADF&G Fish Habitat Permits in anadromous waters under the existing law.

Section 4 of 17 FSH 2 would establish a two-tier permitting system for Fish Habitat Permits in anadromous waters. If the ADF&G Commissioner determines AGDC's proposed activities will not result in significant impact to anadromous fish or their habitat, AGDC believes the Project's existing information will be sufficient to proceed with permitting process. If the Commissioner of ADF&G determines that Project activities will result in significant impacts to anadromous fish or their habitat, additional information may be required to proceed with the permitting process.

The length of time necessary to provide the additional information will vary depending upon the request. Agreement on additional mitigation measures may take less than a week, while additional sampling or surveys may require a field season to complete. The potential to impact the Project's schedule and the uncertainty of potential additional requirements is of concern to AGDC.

- b. How much would it cost AGDC to gather all the required information to be able to file and apply for each of the 43 permits with ADFG?

See the response to (a) above. It is not possible to estimate the increased costs resulting from the initiative at this time. In addition to the cost of collecting additional information required by the Commissioner of ADF&G, the Project may be impacted by schedule slippage and uncertainty resulting in higher construction costs.

- c. How long would it take for ADFG with existing staff to process and issue final decisions for each of the 43 permits?

This question would be better posed to ADF&G, as AGDC does not have an accurate understanding of ADF&G's current staffing levels and existing workload. In order to keep to its schedule, ADGC will need the permits from ADF&G prior to starting construction. ADF&G may need to increase staffing to accomplish this.

- d. Could an appeal and litigation over a single fish habitat permit required under the initiative potentially stop the entire gas line project?

Yes, an appeal of a single habitat permit could potentially stop the entire project, depending on the specific permit, and the construction sequencing.

6. What is the status of agreements that previously required legislative approval? Those agreements include the Fiscal Contract, the Firm Transportation Services Agreement (FTSA) (including Liquefaction Services), the Gas Supply and Balancing Agreement, the Field Cost Allowance Agreement, the Joint Venture Marketing or Other Gas Disposition Agreements, the Domestic Gas Agreements, the Byproduct Handling Agreement, and the Sales and Purchase Agreement.

Explanations for Agreements in the Context of Alaska LNG Project Structure

Under the previous AKLNG project structure, the State through DNR and DOR was negotiating several project agreements to which the State was a party; those agreements required legislative approval. There were also several project agreements to which AGDC was a party and the State was not a party that did not require further legislative approval.

Under the new project structure, the suite of necessary agreements has changed, and some of the agreements contemplated under the previous project structure are no longer necessary. As project lead, AGDC will be party to a majority of the project agreements. Although such agreements will not require further legislative approval, AGDC fully intends to keep the Alaska Legislature informed about the progress of those agreements as we work together to make Alaska's LNG Project a reality. As discussed in further detail below, the Legislature will also continue to play a central role in project development through its review and approval of key project elements.

Fiscal Contract

With producer companies not committing to a major capital investment in the project, the necessary fiscal assurances from the State are significantly reduced. As part of gas purchase and LNG sales agreements, AGDC may negotiate contractual "make-whole" provisions. These types of provisions are common in gas supply agreements for Cook Inlet and Prudhoe Bay gas, and do not bind future legislatures.

Members Agreement

Under the previous project structure, this agreement was envisioned to represent the venture governance and operating agreement of the Alaska LNG company (or companies). The parties to the Agreements at that time were ExxonMobil, BP, ConocoPhillips, and AGDC. This agreement did not require approval by the Legislature. A similar agreement will be necessary to provide for the governance of Alaska LNG Project Company under its future ownership. This agreement is not expected to bind the State of Alaska, and will not require legislative approval.

Contract Operator Services and Member Administrator Services Agreements

These agreements were meant to carry out the project management and administrative services necessary to carry out the project and the business of the Alaska LNG company. Alaska LNG Company would be contracting with one or more of its members to perform these functions. Under the current project structure, AGDC or, in the future, Alaska LNG Project Company will carry out these functions directly and through the hire of experienced LNG and pipeline industry contractors.

Firm Transportation Services Agreement (FTSA) (including Liquefaction Services)

The State of Alaska, through DNR, is no longer going to enter into an FTSA with a third party (e.g., TransCanada, AGDC). The new project structure contemplates AGDC purchasing natural gas from the producers, either directly or through an affiliated intermediary, and potentially from DNR (if RIK is selected), and entering into an FTSA with Alaska LNG Project Company. AGDC will contract for transportation of the gas it purchases from producers and potentially the State of Alaska, along with other potential capacity reservations on Alaska LNG from third parties. DNR will not be entering into a tolling agreement, and the State of Alaska is not expected to be liable for any payments associated with an FTSA. As a result, there is no longer a requirement for the Legislature to approve such a tolling agreement.

System Use Agreement

This agreement was necessary under a project structure where project owners each owned a separate portion of project capacity. Under current project structure, the project ownership will be joint, and capacity terms will be determined under tolling agreements between Alaska LNG Project Company and capacity holders, such as AGDC or a third-party tolling customer.

Gas Supply and Balancing Agreement

Under previous project structure, a gas supply and balancing agreement was required to balance upstream gas production with project ownership. Now, the gas balancing agreement within each field will be among the working interest owners of each unit. The gas balancing among the fields will be determined through the gas supply agreements concluded with AGDC as the counterparty. Having a gas purchaser and aggregator for the project can greatly simplify the previously difficult issues of balancing gas supply to a project owned by affiliates of upstream gas producers.

If the State of Alaska elects RIK, the gas sales agreement between DNR and AGDC will, like all long-term RIK sales agreements, need to be approved by the Legislature. The producers will not be a party to this RIK gas sales agreement.

Field Cost Allowance Agreement

The necessity or accountabilities for this agreement have not changed. DNR is engaged with producer counterparties to reach resolution on field cost allowances, and the agreement will need legislative approval.

Joint Venture Marketing or Other Gas Disposition Agreements

AGDC, on behalf of the project, will be marketing gas and LNG and entering into gas disposition agreements directly with gas providers. The State of Alaska is not expected to be a party to these agreements and legislative approval is not required. An exception to this may be the gas supply agreement for RIK gas between AGDC and DNR and the associated RIK best interest finding, if applicable, which will require legislative approval.

Domestic Gas Agreements

AGDC will also negotiate domestic gas sales agreements. The State of Alaska will not be a party to the domestic gas agreements, either as a gas seller or as a direct purchaser of natural gas. For purchases of gas from the project by utilities, the Regulatory Commission of the Alaska will provide oversight of the contracts.

Financing

There are a number of debt and equity agreements that will be necessary for FID and project financing. The first of these is the agreement with an investment bank that is in final stages of negotiations, and in consultation with AGDC's Independent Registered Municipal Advisor (Hilltop), contracted through Department of Revenue. The complete list of necessary agreements will be determined in 2018 through the work with the investment bank.

Property Tax Proposal

AGDC is exempt from property tax by statute. However, in anticipation of other potential project partners and in recognition that the host communities will experience impacts from this project, and should realize its benefits, AGDC has accounted for a construction and operating Payment-in-Lieu-of-Tax (PILT) estimate in the economics of the project. The State accountabilities for a property tax proposal and approval have not changed.

Byproduct Handling Agreement

AGDC may enter into a Byproduct Handling Agreement for the project with the Prudhoe Bay Unit working interest owners. This agreement will establish the terms under which the Prudhoe Bay Unit will accept off-unit by-products from the Gas Treatment Plant for re-injection. Any such agreement will not be executed by or bind the State, and will not require legislative approval. Appropriate State of Alaska agencies will, however, oversee the associated regulatory approvals of any such reinjection.

Sales and Purchase Agreements

AGDC, not DNR/SOA, will enter into LNG SPAs with LNG customers. The SPA's are not expected to require legislative approval.

7. Regarding slide 14 of AGDC's presentation: is there a cost breakdown of the \$2 billion in savings Fluor identified for the AK LNG Project?

AGDC contracted Fluor Corporation to evaluate targeted opportunities to optimize the design and execution of the Alaska LNG Project, and reduce overall cost. These evaluations were based on the Pre-FEED JVA Deliverables, but were executed under the assumption of a State-lead project model.

A Strategic Sourcing Study was completed by Fluor to identify potential opportunities for materials sourcing and equipment with a focus on the United States, Japan, Korea, and China. Sourcing opportunities were used to establish best country sourcing (BCS) to develop recommendations by materials and equipment categories, and identify the associated savings to the Pre-FEED JVA project cost

estimate. Through optimized sourcing of materials and equipment, Fluor identified a potential savings of approximately \$1B below the Pre-FEED JVA project cost estimate.

A Zero-Based Execution Study was also completed by Fluor to evaluate the project design, cost estimate, and execution plan for the Gas Treatment Plant (GTP), the pipeline and associated facilities (e.g. compressor stations), and the Liquefied Natural Gas (LNG)/Marine facility. The methodology used was a high-level review of potential significant cost and schedule reductions by senior personnel with world-class technical expertise. Fluor identified several specific opportunities to reduce cost and schedule with potential project costs savings totaling in excess of \$1B. Most cost reduction opportunities will be evaluated in further detail during the next phase of project engineering.

8. What will be the role of the Financial Advisor (FA)? What is the scope of work for the FA? When will a FA be selected by AGDC?

AGDC has engaged Hilltop Securities as its Independent Registered Municipal Advisor (IRMA). Hilltop and the State of Alaska Attorney General have assisted AGDC in the review of investment banks capable of raising debt and equity funding for the project.

The selected investment bank(s) will serve as a placement agent rather than “financial advisor,” so as to avoid a conflict with the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act, which potentially limits the service of a financial advisor to an advisory role. The Dodd-Frank Act and subsequent interpretation precludes a financial advisor to a municipal entity from engaging in underwriting and placement of any financing, which would necessitate the services of an additional investment banking firm.

Under guidance of legal counsel and the IRMA, the AGDC finance team has negotiated terms and services with several potential investment banks to secure the highest level of service at minimum cost to the project and its stakeholders. Though the process is ongoing, selection and retention of the investment bank is nearly complete.

The role of the investment bank(s) will be specifically defined in contracts and will encompass:

- analysis and consideration of various sources of debt, equity, or other financing arrangements;
- development of specific funding milestones and timelines;
- analysis of general finance and economic market;
- review of due diligence, as it relates to the project and potential investors; and
- assistance to AGDC and third parties throughout the underwriting and private placement process.

9. What progress has the Department of Transportation & Public Facilities (DOTPF) made on analyzing the impacts to the existing highways, bridges, and other infrastructure, from the project construction period?

DOT&PF has advised that the existing roadway structures can handle the increased loads the pipeline construction project will add. Heavy maintenance may be needed along certain sections of the Dalton Highway to maintain the gravel surfacing, but should have only minor delays to trucking materials along the route.

The Department has various projects identified in the Statewide Transportation Improvement Plan (STIP) that will improve the roadway near the pipeline corridor. These projects will support the gasline project buildout, which is a priority for DOT&PF.

A DOT&PF Gasline Project Map is attached at the end of this letter.

As part of this process, has the Knik Arm Crossing been considered in this analysis?

No. DOT&PF has advised the Knik Arm Crossing has been shut down.

10. Has AGDC conducted a risk/reward evaluation in pursuing institutional investors? If so, what was that evaluation?

AGDC is in the process of completing work product in a form and standard for the investment bank we will be working with. As an infrastructure project, AGDC is targeting infrastructure investors that will accept a lower, stable, long-term return on the required equity investment. AGDC will work with the investment banks to create a target group of investors who have the appetite for such a risk/reward profile.

11. How actively is AGDC pursuing an amendment to the 2004 Alaska Natural Gas Pipeline Act (ANGPA)? What provisions would AGDC be seeking with the passage of amendment(s) to ANGPA?

AGDC has had preliminary discussion with the Alaska Congressional Delegation whether amendments to ANGPA would be helpful, or possible, in the current Congress. While the passage of legislation since 2004 may have superseded some provisions of the law, access to the existing federal loan guarantee, available for a previously envisioned overland route to the Midwest, would be beneficial.

12. Specific to the Army Corps of Engineers (Corps) Section 404 wetlands permit, what is the estimated cost for mitigation of impacts to wetlands for the Alaska LNG Project?

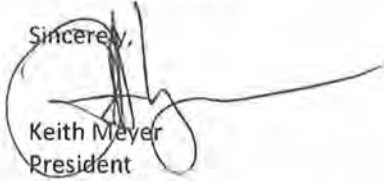
AGDC is actively engaged in discussions with the Corps regarding the mitigation costs for the ASAP Project that will pave the way for Alaska LNG. The approximate costs for ASAP wetlands mitigation will be known by the time the ASAP Draft Compensatory Mitigation Plan ("Draft Plan") is approved by the Corps, concurrent with issuance of the Section 404 permit. Comments from the Corps have indicated there may be regions along the route where mitigation will not be required. The final acreage requiring mitigation for ASAP will be calculated by the Corps following approval of the Draft Plan. The Draft Plan is anticipated to be completed by August 2018. Mitigation costs for the Alaska LNG Project will be larger than costs for ASAP primarily due to Alaska LNG's wetlands acreage being larger.

If AGDC is required to use existing third party mitigation programs (mitigation banks and in lieu fee programs), mitigation costs are expected to be approximately \$20,000 per acre. The final cost will depend on the value of the wetland and whether a mitigation ratio is mandated by the agency for a given area (the COE often applies a ratio multiplier, so for example, for every acre disturbed, four acres must be mitigated for). If no third party mitigation programs are available for the regions where mitigation will be required, AGDC must mitigate through permittee-responsible mitigation that may include restoration of portions of impaired watersheds, which may be considerably more expensive.

The Trump administration is providing new guidance to all agencies on mitigation requirements. AGDC is encouraged mitigation policies and potential costs may be less cumbersome and costly.

Please let me know if you have follow up questions or would like to discuss any of these responses further. I appreciate your time on January 25, 2018, and your commitment to responsible development of the infrastructure necessary to bring the North Slope's vast, proven natural gas resources to market for the benefit of all Alaskans.

Sincerely,

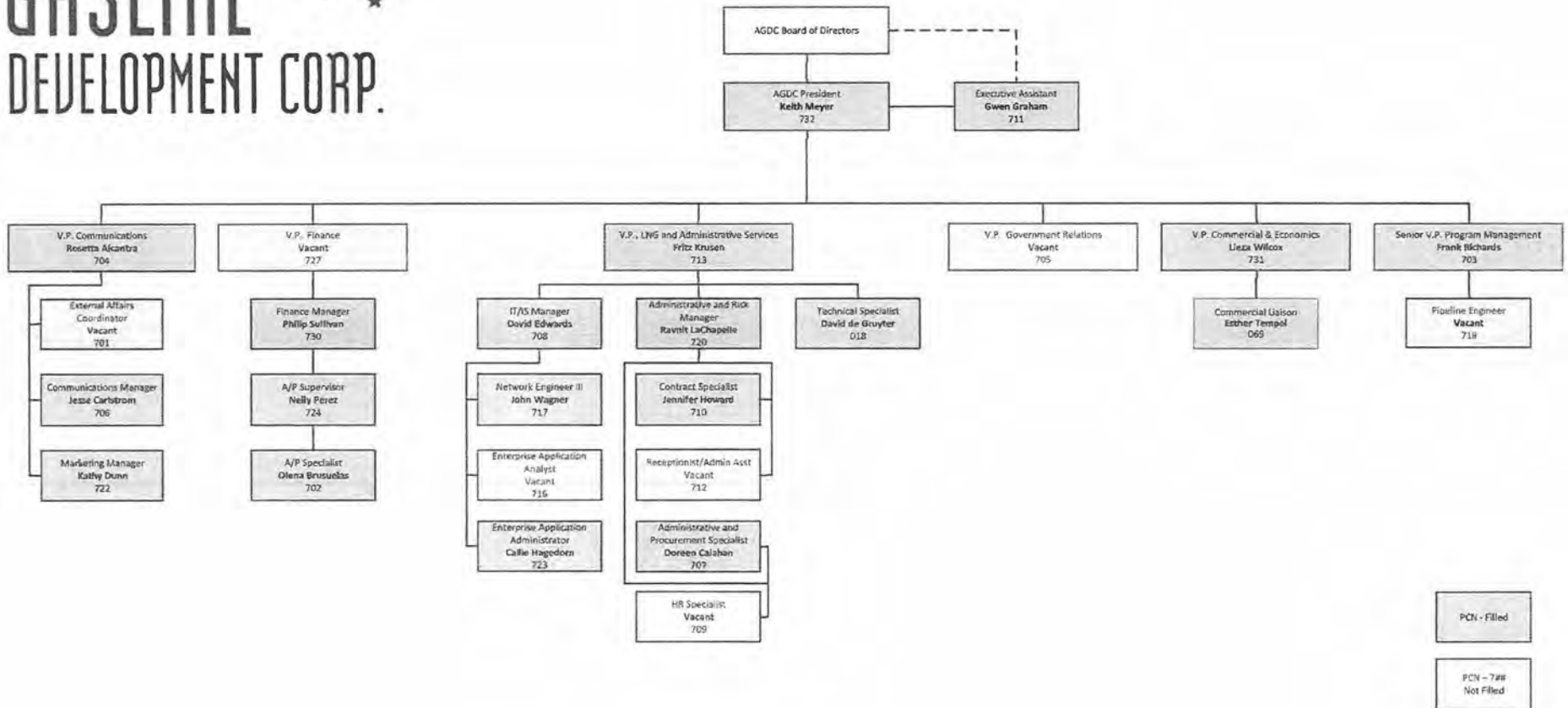


Keith Meyer
President

ALASKA GASLINE DEVELOPMENT CORP.



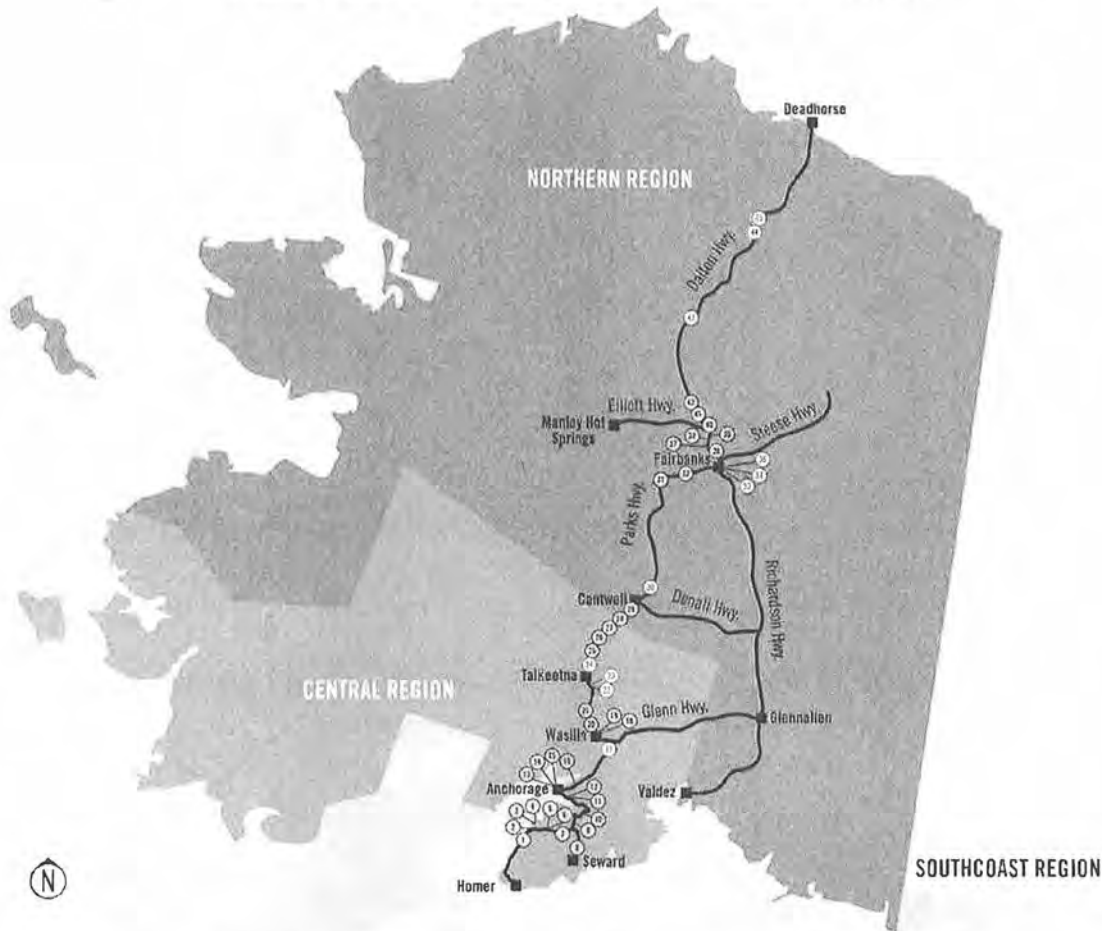
Alaska Gasline Development Corporation Corporate Organizational Chart



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ADOT&PF GASLINE PROJECT MAP



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|----|---|----|--|
| 1 | HSIP: Sterling Highway MP 97-118 Shoulder Widening | 24 | Parks Highway MP 99-123.5 Pavement Preservation |
| 2 | Kenai Spur Highway Rehabilitation Phase I | 25 | HSIP: Parks Highway Systematic Passing Lanes |
| 3 | Kenai Spur Highway Rehabilitation Phase II | 26 | Parks Highway 123 -163 Drainage and Culvert Improvements |
| 4 | Kenai Spur Highway MP 12-18 Pavement Preservation | 27 | Parks Highway MP 163-174 Rehabilitation |
| 5 | Sterling Safety Corridor Improvements | 28 | Parks Highway MP 174-183 Rehabilitation |
| 6 | Sterling Highway MP 57 Erosion Protection | 29 | Parks Highway MP 183-192 Reconstruction |
| 7 | Sterling Highway MP 45-60 Reconstruction | 30 | Parks Highway MP 231 Enhancements |
| 8 | Seward Highway MP 0-8 Pavement Preservation | 31 | Parks Highway MP 305-319 Reconstruction |
| 9 | HSIP: Seward Highway Passing Lanes MP 37-52 | 32 | Parks Highway MP 319-325 Reconstruction |
| 10 | Seward Highway MP 75-90 Rehabilitation | 33 | Steese Highway MP 4.5 Off-Ramp Bypass Lane |
| 11 | Seward Highway MP 100-105 Improvements | 34 | Steese Highway/Johansen Expressway Interchange |
| 12 | Seward Highway MP 105-107 Windy Corner | 35 | HSIP: Steese Highway/Chena Hot Springs Roundabouts |
| 13 | Seward Highway MP 114 to Dimond Blvd. Pavement Preservation | 36 | Elliott Highway MP 0-12 Reconstruction |
| 14 | Seward Highway - O'Malley to Dimond Blvd. Phase II | 37 | Elliott Highway MP 28-47 |
| 15 | Seward Highway Dowling Interchange Rehabilitation | 38 | Elliott Highway MP 47-69 Rehabilitation |
| 16 | Glenn Highway Airport Heights to Parks Highway | 39 | Elliott Highway MP 69-72 |
| 17 | Glenn Highway Eklutna to Parks Pavement Preservation | 40 | Dalton Highway MP 0-9 Reconstruction |
| 18 | Parks Highway MP 39.4 to 43.5 Preventive Maintenance | 41 | Dalton Highway MP 18-25 Reconstruction |
| 19 | Parks Highway and Wasilla Main Street Intersection Improvements | 42 | Dalton Highway MP 25-37 Reconstruction |
| 20 | Parks Highway MP 48.8 to 52.3 Reconstruction | 43 | Dalton Highway MP 109-144 Reconstruction |
| 21 | Parks Highway Houston to Willow Pavement Preservation | 44 | Dalton Highway MP 289-305 Reconstruction |
| 22 | Parks Highway MP 90-99 Rehabilitation | 45 | Dalton Highway MP 305-335 Reconstruction |
| 23 | Parks Highway Bridge Replacement, Montana Creek, Sheep Creek, and Goose Creek | | |

