Alaska Gasline Development Corporation Project Name: Alaska LNG Project AUTHORIZATION FOR EXPENDITURE

X	CAPITAL	E	
TITLE:	FY22 Alaska LNG Project	AFE #	22-001
Start Date:	July 1, 2021	Original Authorization:	\$5,249,000
Completion Date:	June 30, 2022	Rev #	0
Responsible Manager:	Frank Richards	TOTAL	\$5,249,000

Budgeted – Yes/No	Yes				
		Q1	Q2	Q3	Q4
		FY22	FY22	FY22	FY22
EXPENDITURE FLOW (\$000s):		\$1,312	\$1,312	\$1,312	\$1,313

SUMMARY OF ESTIMATED COSTS (\$000s)					
Items/Description	FY21				
(1) Venture Development	\$1,644				
(2) Core PMT & Systems	\$1,625				
(3) ERL	\$1,980				
TOTAL	\$5,249				

Justification

The Alaska Gasline Development Corporation (AGDC) is an independent, public corporation of the State of Alaska, with a legal existence separate and distinct from the State of Alaska. AGDC currently has the overall responsibility of developing a project to monetize Alaska's vast North Slope natural gas. AGDC was originally formed to develop the Alaska Stand Alone Pipeline (ASAP) Project in 2010. The ASAP Project was idled following the completion of major permitting, and is not currently active. AGDC is presently the lead party for the Alaska Liquefied Natural Gas (LNG) Project.

An initial AGDC Strategic Plan was developed with the AGDC Board of Directors (Board) in early 2020. The Board approved the initial Strategic Plan (Revision 0) on April 9, 2020 through Resolution 2020-02. Several major accomplishments were achieved for the Project in 2020 and early 2021 including the following:

- Secured major federal and state permits and authorizations.
- Maintained the viability of project documentation, data, systems, and tools for transition to new private sector lead parties.
- Obtained the Notice of Availability of the Alaska LNG Project Final EIS from the Federal Energy Regulatory Commission (FERC).
- Interfaced with the Legislature to provide Project updates and request budget authorizations for the Operating Budget and Statutory Designated Program Receipt authority for FY2021 and FY2022.
- Completed Project cost reduction studies and an update of the Class 4 Project Cost Estimate to \$Q42019.
- Obtained the Section 3 Order authorizing construction of the Project from FERC.
- Completed an economic assessment review with Strategic Parties using the updated Joint Economic Model.
- Presented an Economic Stage Gate decision support package to the Board.
- The Board made a positive Economic Stage Gate decision indicating that the project has a potential to deliver LNG to markets at a competitive price.
- Established the 8-Star Alaska, LLC asset structure and transferred Project assets as directed by the Board.
- Completed an initial stage gate review with Strategic Parties to identify ongoing interest and alignment with the Project.
- The Board made a positive Strategic Party Stage Gate decision based on Strategic Party interest and participation.

The Board directed that the President review and amend the Strategic Plan on February 4, 2021 through Resolution 2021-01 to cover the period through June 30, 2022 (end of Fiscal Year 2022). Revision 1 of the Strategic Plan was reviewed by the Board and the President approved the plan effective March 15, 2021. The Strategic Plan addresses strategic planning elements as well as the tactical actions necessary to reach AGDC's objectives.

AGDC's objectives for the Alaska LNG Project in the current Strategic Plan include:

- Lead the Project development on behalf of Alaska, bring the Project to market, and provide overall coordination for the Project through transition to the private sector.
- Secure private sector funds for project development activities.
- Maintain the maximum value of State of Alaska investment in the Project, while minimizing ongoing AGDC spend.

- Pursue Federal infrastructure funding opportunities for an accelerated phase of construction of the Pipeline from the Point Thomson Unit (PTU) to a point near Fairbanks that will be led by a private sector lead party.
- Maintain a common Project Economic Model (Midstream) in association with Strategic Parties and develop an integrated Alaska Total Value Model for use by key stakeholders and policy makers.

The overall AGDC Work Program & Budget (WP&B) for Fiscal Year 2022 (FY22) covers the period between July 1, 2021 through June 30, 2022. The WP&B consists of major functions around (1) Venture Development; (2) Core Project Management Team (PMT) & Systems; and (3) Environmental, Regulatory, & Lands (ERL).

Operational expenditure for AGDC Corporate Operations were approved by the Board of Directors for FY22 prior to this AFE request and were included in the Governor of Alaska's FY22 budget request to the Legislature. This scope of this AFE is associated with the baseline expenditures to support a Front-End Engineering and Design (FEED) Stage Gate Decision Support Package (DSP) and covers capital expenditure for the functions above. AGDC staff have also programmed contingent AFE costs that would be presented to the Board for approval of a revision to this AFE in the event Federal infrastructure funds are received in FY22.

(1) Scope of Work

1.1 – Venture Development

Primary Objectives:

- 1.1.1 Owner's Venture Staff
- 1.1.2 Strategic Commercial Alignment
- 1.1.3 Strategic State Alignment
- 1.1.4 Alaska LNG & 8 Star Alaska Structuring
- 1.1.5 Early Gas Execution

Owner's Venture Staff

Venture development activities will continue to be the responsibility of the AGDC Venture Lead with a primary focus on aligning the Alaska LNG Strategic Parties. The core objective of these Strategic Party alignment activities will be to identify an LNG Lead Party and obtain the commercial commitments by the strategic parties sufficient to underpin funding FEED.

AGDC will consolidate the base FEED DSP by December 31, 2021 that will support a FEED entry stage gate targeted for June 30, 2022. At the time of FEED entry, it is expected that strategic parties will execute Purchase Option Agreements for 8-Star Alaska and the formal decision by owners to enter FEED will be taken. Funding levels by each optional owner will be defined in agreements.

Strategic Commercial Alignment

AGDC will invite new parties to join the Strategic Party group with a focus on identifying an LNG Lead Party to join the group. Efforts to attract the LNG Lead Party and additional Strategic Parties will include development of a classified investment document that will be presented to qualified LNG plant operators and potential investors with the capital resources to develop Alaska LNG. AGDC will lead efforts with the LNG Lead Party and other Strategic Parties to advance commercial alignment and executing the agreements necessary for the Strategic Parties and AGDC to approve FEED funding.

AGDC will advance commercial alignment with the Strategic Parties through established meetings, the use of an online Portal for collaboration and data sharing, and continuous, direct communication with strategic parties as necessary to align the Alaska LNG Project for a successful Front-End Engineering and Development (FEED) entry. AGDC will be responsible for initial drafting and final approval of cooperation and funding agreements between Strategic Parties to cover the FY22 period.

Strategic State Alignment

AGDC will lead the development of State Alaska and Federal support for the Alaska LNG Project during the FY22 period. These support opportunities include a lower cost approach to addressing Payment in Lieu of Taxes (PILT), Federal loan guarantees for debt financing of the Project, establishing fiscal stability in order to reduce Project risk, and accelerated depreciation or tax holidays to improve Project economics. AGDC will work closely with Strategic Parties to inform decision makers and establish the strategy required to reach desired support.

Alaska LNG & 8 Star Alaska Structuring

8-Star Alaska, LLC (8-Star) was established as an AGDC subsidiary to provide a vehicle for AGDC to transfer Project ownership to the private sector. AGDC has updated the LLC Agreement for 8-Star to guide transition activities during FY22.

AGDC's will continue to transfer, assign, and license Alaska LNG Project assets within 8-Star in order to support the divestment of interest in the project. AGDC will also work with the current members of the Alaska LNG Project, LLC (AKLNG LLC) to finalize an appropriate Equity Option Agreement with 8-Star for authorizations and real property held by AKLNG LLC.

AGDC will be responsible for drafting and final approval of a form 8-Star Equity Option Agreement that will be offered to strategic parties by December 31, 2021. Finally, AGDC will develop the optimal longer-term equity structure of 8-Star and will finalize ownership structure and designation of a Project sponsor(s) by December 31, 2021.

Early Gas Execution

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund an accelerated 8-Star Equity Agreement with the Pipeline Lead Party under a negotiated Project Development Agreement (PDA).

1.2 – Core PMT & Systems

Primary Objectives:

1.2.1 Owner's PMT Staff

- 1.2.2 Project Management Systems
- 1.2.3 Technical Interface
- 1.2.4 Early Works Planning
- 1.2.5 Material Site Mining
- 1.2.6 Line Survey
- 1.2.7 PHMSA Compliance Pipe Testing

Owner's PMT Staff

AGDC's PMT will maintain an internal staff of owner representatives with project management and technical subject matter experts (SMEs) sufficient to achieve the program objectives and maintain viability of the Project in future phases of development. The AGDC PMT oversees all technical work activities for the Alaska LNG Project assets.

The AGDC PMT will continue to staff highly qualified individuals with experience in managing megaprojects, as well as familiarity with Alaskan and arctic oil and gas projects, and the technical elements of the Alaska LNG Project. PMT staff will also continue to coordinate with venture functions and interface with Strategic Party regulatory and technical contacts. In the event of major decision points or transitions, the PMT will provide the structure and process to support major Project changes and transitions.

Project Management Systems

Project management systems are in-place within AGDC and will continue to be maintained to ensure the continuity of Project information and its efficient use across the PMT. These core systems include the Documentum System, Firmex Data Room, Transmittal Log System, Request for Information (RFI) System, Compliance Management System, ESRI GIS/Geodatabase, R Drive server files, Permit Tracking Tool, MOC Change Log, Project Control reports, and Project archives. Project management systems will continue to have a bias for being cloud-based and structured to support future transition.

Technical Interface

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund additional SMEs to support an accelerated early works program and transition with the Pipeline Lead Party. Strategic Parties have agreed to continue supporting AGDC with SMEs and technical expertise under various agreements. Interface with these companies at the single-point-of-contact (SPOC) level will be the responsibility of the Project Manager. The objective of the interface process will be to add value to AGDC's PMT and keep strategic parties updated on the status of permitting, regulatory, technical work scope, and to facilitate transition with the Pipeline Lead Party under an approved PDA.

Early Works Planning

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund Material Site Mining and Reclamation Plans, Material Site Invitation to Bid (ITB), Line Survey Scope of Work, Line Survey ITB, prior to transition with the Pipeline Lead Party under an approved PDA.

Material Site Mining

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund material site fieldwork for a nominal 25 material sites prior to transition with the Pipeline Lead Party under an approved PDA.

Line Survey

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund line survey fieldwork for the Phase One scope of work prior to transition with the Pipeline Lead Party under an approved PDA. Survey field teams will perform a centerline survey of the Phase One alignment, support wetlands survey staking, and survey other project features such as material sites, camp and pipe storage yard pads, access roads, and disposal sites.

PHMSA Compliance – Pipe Testing

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund a small scale line pipe testing program prior to transition with the Pipeline Lead Party under an approved PDA. The qualification of pipe mills through the testing program will provide compliance with Pipeline Hazardous Material Safety Administration (PHMSA) requirments and position the Pipeline Lead Party to place orders for line pipe for the Phase One scope.

1.3 – Environmental, Regulatory, and Lands (ERL)

Primary Objectives:

- 1.3.1 Owner's ERL Staff
- 1.3.2 FERC Order
- 1.3.3 Major Permits and Approvals
- 1.3.4 Tactical Permits and Approvals
- 1.3.5 Cultural Resources Program
- 1.3.6 Land & ROW Management
- 1.3.7 Compliance Assurance Process
- 1.3.8 Field Program
- 1.3.9 Legal Support
- 1.3.10 Agency Permitting Payments
- 1.3.11 Agency Early Works Payments

Owners ERL Staff

AGDC's ERL team will maintain an internal staff of owner representatives with regulatory, lands, and stakeholder expertise sufficient to achieve the program objectives and maintain viability of the Project in future phases of development. The AGDC ERL team will continue to staff highly qualified individuals with experience in permitting and regulatory requirements specific to the Alaska LNG Project.

FERC Order

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund Federal Energy Regulatory Commission (FERC) regulatory activities associated with the Phase One scope. PMT and ERL staff, the FERC regulatory contractor, environmental SME contractors, and contract legal support with specific expertise in FERC requirements and process will support the ERL Manager.

The FERC Section 3 Order was issued on May 21, 2020 and has significant required deliverables as the Alaska LNG Project progresses. This work will include development and submission of FERC Implementation Plans, FERC Order items "Required Prior to Construction," and the FERC Notice to Proceed (NTP) for the Phase One scope.

Major Permits and Approvals

The baseline item in the Major Permits and Approvals category is the LNG Facility air permit. AGDC is assessing the feasibility of submitting a permit addendum to improve efficiency of permit processing and address agency comments. Once the addendum is filed, AGDC will be responding to agency input and requests from the Alaska Department of Environmental Conservation (ADEC) as-needed until the permit is issued.

This WP&B budget item is mostly CONTINGENT on receiving Federal infrastructure funds and will fund additional Federal and State permitting work associated with Phase One scope under the direction of the ERL Manager. This work will include Alaska Department of Natural Resources (ADNR) Right-of-Way (ROW) & Grant Conversion, ADNR Notice to Proceed (NTP), U.S. Bureau of Land Management (BLM) NTP, the Alaska Department of Environmental Conservation (ADEC) Air Permit for line-wide activities, the U.S. Army Corps of Engineers (USACE) Wetland Compensatory Mitigation Plan, and the Alaska Eskimo Whaling Commission (AEWC) Conflict Avoidance Agreement (CAA) for the Phase One scope.

Tactical Permits and Approvals

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund tactical permitting for the Phase One scope. Major permits previously obtained do not address the entirety of permitting requirements at the Federal, State, and local levels. Secondary or "tactical" permitting will be completed in future phases of the Project such as FEED and Execution. This work includes obtaining Land Use Permits for survey & field programs, Mining Permits for gravel extraction, Alaska Department of Fish & Game (ADF&G) Stream Crossing Permits, Water Use Permits, North Slope Borough (NSB) permits, and Fairbanks North Star Borough (FNSB) permits. The ERL Manager will be supported by PMT staff, environmental SME contractors, and contract legal support where necessary.

Cultural Resources Program

The Cultural Resurces Program is an ongoing activity that will continue through the construction of the project. This work program includes finalizing the Cultural Resources Management Plan, generating an Annual Work Plan, issuing an Annual Report and conducting an Annual Meeting, NSB Cultural Resources Team interaction, developing site-specific treatment plans for impacted areas, and conducting a required Cultural Resources Field Program.

Land & ROW Management

ROW use conflict assessments and feedback will continue as a baseline activity throughout the year. This work involves looking at conflicting applications for land use, evaluating potential impacts on the project, and providing feedback to agencies/stakeholders as appropriate.

This WP&B budget item is primarily CONTINGENT on receiving Federal infrastructure funds and will fund BLM Material Site Permits, ROW for next landowner categories, and appraisals & other third party land services compliance assurance process for the Phase One scope.

Compliance Assurance Process

AGDC will maintain a comprehensive accounting of the legal requirements applicable to the Alaska LNG Project through a clearly defined Compliance Assurance Process under the direction of the ERL Manager. A compliance assurance process maintains current knowledge of what legal requirements apply to Project activities, what tasks need to be performed, who has responsibility for compliance tasks, and the controls used to maintain compliance. Legal requirements include federal, state, and local laws and regulations, enforceable agreements, agency orders, permits, and contractual requirements. The Compliance Assurance Process will support transition to new lead parties and major phases of Project development (e.g. entry to FEED).

Field Program

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund the planning, permitting, and implementation of a 2021/2022 field program focused on including required caribou baseline monitoring, eagle and fish surveys, and a multi-disciplinary field team to participate in the Line Survey (Task 1.2.6 above) for the Phase One scope. This program will be planned and executed under the direction of the ERL Manager and will support the 'prior to construction' requirements dictated in the FERC Order.

Legal Support

With the FERC Final Order issued in 2020, interveners have initiated legal challenges. AGDC's President and ERL Manager will work with legal counsel and technical resources as-needed to continue to identify potential intervener legal strategies and take preemptive actions to mitigate intervener delay or adverse effect to the Project.

Agency Permitting Payments

AGDC will maintain ongoing permitting processes requiring agency reimbursement including ADNR State Pipeline Coordinators Section (SPCS), ADEC air permit processing, and the BLM Annual ROW Fee.

Agency Early Works Payments

This WP&B budget item is CONTINGENT on receiving Federal infrastructure funds and will fund the agency reimbursable cost agreements associated with the Phase One scope. These include the Bureau of Land Management (BLM) Material Site Request processing, ADF&G permitting, eagle mitigation, and wetland compensatory mitigation.

(2) Review Process

The work scope detailed in this AFE has been developed internally within AGDC and reviewed and approved by the AGDC President.

(3) Options Considered

The Alaska LNG Project is the sole project being pursued by AGDC to commercialize North Slope natural gas. Funding of the Venture Development, Core PMT & Systems, and ERL functions represent the minimum budget required to complete the AGDC Strategic Roadmap tasks and reach AGDC's Strategic Objectives. Suspending these functions would essentially stop the Alaska LNG Project and not allow AGDC to implement the AGDC Strategic Plan further towards the FEED Stage Gate. No direction has been provided to suspend activities, so this option was not considered.

AGDC also evaluated the option to complete a Phase One early works program of approximately \$48.725 million to accelerate the creation of jobs and cash flow into the Alaska economy. This expenditure is dependent on Federal infrastructure funding and was therefore not included in the baseline WP&B. The Phase One early works program has been delineated in the Work Program and Budget (WP&B) breakdown in the event Federal infrastructure funds are received and the Board of Directors wish to approve a revision to this WP&B.

The FY22 WP&B breakdown is as follows:

ALASKA LNG PROJECT FY 2022 WORK PROGRA	M & BUDGET (WP&B)						
Sub-Program	Budget Item	Classification	Contracted ervices Cost	FY 2022 Baseline Total	0	FY 2022 Contingent Total	FY 2022 Total
	1.1.1 Owner's Venture Staff	Baseline	\$ 300,000	\$ 300,000	\$	-	\$ 300,000
	1.1.2 Strategic Commercial Alignment	Baseline	\$ 448,500	\$ 448,500	\$	-	\$ 448,500
	1.1.3 Strategic State Alignment	Baseline	\$ 185,000	\$ 185,000	\$	-	\$ 185,000
1.1 Venture Development	1.1.4 Alaska LNG & 8 Star Alaska Structuring	Baseline	\$ 710,000	\$ 710,000	\$	-	\$ 710,000
	1.1.5 Early Gas Execution	Contingent	\$ 1,100,000	\$ -	\$	1,100,000	\$ 1,100,000
	Subtotals		\$ 2,743,500	\$ 1,643,500	\$	1,100,000	\$ 2,743,500
	1.2.1 Owner's PMT Staff	Baseline	\$ 1,500,000	\$ 1,500,000	\$	-	\$ 1,500,000
	1.2.2 Project Management Systems	Baseline	\$ 125,000	\$ 125,000	\$	-	\$ 125,000
	1.2.3 Technical Interface	Contingent	\$ 1,000,000	\$ -	\$	1,000,000	\$ 1,000,000
	1.2.4 Early Works Planning	Contingent	\$ 500,000	\$ -	\$	500,000	\$ 500,000
1.2 Core PMT & Systems	1.2.5 Material Site Mining	Contingent	\$ 31,250,000	\$ -	\$	31,250,000	\$ 31,250,000
	1.2.6 Line Survey	Contingent	\$ 5,000,000	\$ -	\$	5,000,000	\$ 5,000,000
	1.2.7 PHMSA Compliance - Pipe Testing	Contingent	\$ 5,300,000	\$ -	\$	5,300,000	\$ 5,300,000
	Subtotals		\$ 44,675,000	\$ 1,625,000	\$	43,050,000	\$ 44,675,000
	1.3.1 Owner's ERL Staff	Baseline	\$ 1,045,000	\$ 1,045,000	\$	-	\$ 1,045,000
	1.3.2 FERC Order	Contingent	\$ 400,000	\$ -	\$	400,000	\$ 400,000
	1.3.3 Major Permits and Approvals	Baseline	\$ 100,000	\$ 100,000	\$	-	\$ 100,000
		Contingent	\$ 200,000	\$ -	\$	200,000	\$ 200,000
	1.3.4 Tactical Permits and Approvals	Contingent	\$ 400,000	\$ -	\$	400,000	\$ 400,000
	1.3.5 Cultural Resources Program	Baseline	\$ 450,000	\$ 225,000	\$	225,000	\$ 450,000
1.3 Environmental, Regulatory,	1.3.6 Land & ROW Management	Baseline	\$ 25,000	\$ 25,000	\$	-	\$ 25,000
& Lands (ERL)		Contingent	\$ 175,000	\$ -	\$	175,000	\$ 175,000
	1.3.7 Compliance Assurance Process	Baseline	\$ -	\$ -	\$	-	\$ -
	1.3.8 Field Program	Contingent	\$ 425,000	\$ -	\$	425,000	\$ 425,000
	1.3.9 Legal Support	Baseline	\$ 200,000	\$ 200,000	\$	-	\$ 200,000
	1.3.10 Agency Permitting Payments	Baseline	\$ 385,000	\$ 385,000	\$	-	\$ 385,000
	1.3.11 Agency Early Works Payments	Contingent	\$ 3,725,000	\$ -	\$	3,725,000	\$ 3,725,000
	Subtotals		\$ 7,530,000	\$ 1,980,000	\$	5,550,000	\$ 7,530,000
Sub-Program Totals			\$ 54,948,500	\$ 5,248,500	\$	49,700,000	\$ 54,948,500

(4) Spend Comparison to Overall Legislative Sanction and Current Year Fiscal Budget

The requested funds are in-line with the Strategic Plan and legislative sanction for AGDC pursuant to Alaska Statutes. There will be sufficient funds within AGDC's Alaska LNG Project Fund (1235) to cover the baseline WP&B.

(5) Risks of Delivery or Non-Delivery

The following major risks have been identified for the Alaska LNG Project:

- Megaprojects have increased exposure due to the following from major cost overruns, major schedule delays, major operational problems, and regulatory delays.
- Global competition from competing LNG projects.
- Alaska projects are more expensive and have higher execution risk than U.S. Gulf Coast equivalents because of difficult logistics and remoteness from needed services. These issues can amplify impacts of cost overruns and schedule delays.
- Overlapping regulatory oversight by Federal, State, and local agencies.
- Financing institutions putting pressure on new oil and gas investments in the Arctic.
- Slippage in schedule due to lack of commercial contracts and funding, delayed permitting/approvals, or authorization of expenditure.
- Alaska Legislature can appropriate AGDC's funds to apply to other State priorities or can re-define AGDC's abilities through new legislation.

(6) Cost Phasing

The cash flow associated with this AFE is based on cost estimates in the FY22 WP&B. There are no phasing issues associated with the proposed baseline scope. Contract commitment of funds will be need-driven during the Fiscal Year and obligated as needed in the period. In the event Federal infrastructure funds are received by AGDC, a revised AFE will be submitted for Board approval and will include cash flow phasing associated with an accelerated early works program.

(7) Resources

Required resources will be provided by existing AGDC Venture Development, PMT, and ERL staff and contractors, selected technical subcontractors with subject matter expertise, and Strategic Party SMEs. The AGDC President and staff will provide owner's representation and technical oversight of the work scope and interfaces between cooperating parties.

(8) Cost Contingencies

The budget for the scope of work has been built-up and spread on a monthly basis with no contingency included. A 10% cost contingency has not been added to this AFE per previous direction from the Board of Directors due to the relatively strong definition of scope for FY22.

(9) Risks of Delivery and Mitigation

AGDC will mitigate risks of deliverability by managing AGDC work efforts through owner's representatives. Individual leads for Venture Development, Core PMT & Systems, and ERL will provide overall leadership and governance for the authorized WP&B work efforts. AGDC owner's representatives will be supported by leveraging the services of specialized contractors who have senior technical, management, financial, and legal expertise. The risk of delivery will be mitigated by authorizing expenditure and expeditiously entering into appropriate key contractual relationships.

AGDC RECOMMENDATION/APPROVAL					
Originator & Financial Authority:					
Title: President	Date:				
BOD Approval:					
Title: Board Chair	Date:				