Alaska Gas Line Development Corporation Project Name: Alaska LNG Project AUTHORIZATION FOR EXPENDITURE

X	CAPITAL	E	EXPENSE
TITLE:	FY21 Alaska LNG Project	AFE #	21-001
Start Date:	July 1, 2020	Original Authorization:	\$4,474,388
Completion Date:	June 30, 2021	Rev #	0
	Julie 30, 2021		
Responsible Manager:	Frank Richards	TOTAL	\$4,474,388

Budgeted – Yes/No	Yes				
		Q1 FY21	Q2 FY21	Q3 FY21	Q4 FY21
EXPENDITURE FLOW (\$000s):		\$1,066	\$1,066	\$1,171	\$1,171

SUMMARY OF ESTIMATED COSTS (\$000s)		
Items/Description	FY21	
(1) Venture Development	\$1,710	
(2) Core PMT & Systems	\$1,036	
(3) ERL	\$1,728	
TOTAL	\$4,474	

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 and is currently Alaska LNG Project (Project) Sponsor leading efforts to de-risk the Project, improve the economics of the Project, transition to a new market-led Project team, and maximize Project benefits for the State of Alaska.

This AFE is associated with the Economic Stage Gate Decision Support Package (DSP) separately provided to the Board of Directors for consideration.

The approved AGDC Strategic Plan establishes the strategy for AGDC through the June 30, 2021 period (end of Fiscal Year 2021). The 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 include:

- Maintain the maximum value of State of Alaska investment in the Alaska LNG Project, while minimizing ongoing AGDC spend.
- Effect the designation of a new Project Sponsor(s) by December 31, 2020.
- Achieve a positive transition by June 30, 2021 based on a FEED Stage Gate Decision Support Package (DSP), including a defined equity structure, defined financing structure, transition to the new Project Sponsor(s), and funding for ongoing WP&B, as appropriate.
- Manage alternative scenarios systematically, such as ongoing state equity participation, Project suspension/archive, and/or AGDC wind-down.

The overall AGDC Work Program & Budget (WP&B) for Fiscal Year 2021 (FY21) covers the period between July 1, 2020 through June 30, 2021. 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 the AGDC Corporate function were approved by the Board of Directors for FY21 prior to this AFE request. This scope of this AFE is associated with the Economic Stage Gate DSP and covers capital expenditure for the functions above.

(1) Scope of Work

1.1 – Venture Development

Primary Objectives:

- Economic Assessment
- Equity & Asset Structuring
- Transition to Project Sponsor and Successful FEED Entry

Project Sponsor Alignment

Venture development activities will continue to be the responsibility of the AGDC Venture Lead who will lead alignment of strategic parties engaged on the Alaska LNG Project. The core objective of these Project Sponsor Alignment activities will be to obtain increasing levels of commitment to the Project by the strategic parties. AGDC will be responsible for initial drafting and final approval of cooperation and funding agreements between strategic parties to cover the FY21 period. AGDC will advance this alignment 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.

Additional Project sponsors will be sought, as necessary, though a Request for Proposals (RFP) process in the second half of FY21.

8-Star Structuring and Ownership

8-Star, LLC (8-Star) was established as an AGDC subsidiary to provide a vehicle for AGDC to transfer Project ownership to the private sector. AGDC will establish an initial 8-Star Operating Agreement to guide transition activities during FY21.

AGDC's Venture Lead will work with the PMT to transfer, assign, and license Alaska LNG Project assets within 8-Star. AGDC will also work with the current members of the Alaska LNG Project, LLC (AKLNG LLC) to finalize an appropriate Purchase 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, 2020. 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, 2020.

AGDC will consolidate the base FEED Decision Support Package (DSP) by December 31, 2020 that will support a FEED entry stage gate targeted for June 30, 2021. At the time of FEED entry, it is expected that strategic parties will execute Purchase Option Agreements for 8-Star and the formal decision by owners to enter FEED will be taken. Funding levels by each optional owner will be defined in agreements.

Special Regulatory Approval

The Department of Energy (DOE) authorization to export LNG, currently held by Alaska LNG Project LLC, will require approvals in order to be transferred to 8-Star (or Alaska LNG Project LLC itself is transferred to 8-Star). AGDC will work with the DOE as this transition takes place to ensure the integrity of the export authorization.

The Committee on Foreign Investment in the United States (CFIUS) is an interagency committee authorized to review certain transactions involving foreign investment in the United States and certain real estate transactions by foreign persons, in order to determine the effect of such transactions on the national security of the United States. Since the Alaska LNG Project may lead to ownership by foreign entities, AGDC will work with strategic parties to complete the CFIUS process.

State and Federal Support

AGDC will lead the development of State Alaska and Federal support for the Alaska LNG Project during the FY2021 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.

1.2 – Core PMT & Systems

Primary Objectives:

- Owner's Management
- Project Sustainability
- Cost Control
- External Interface

Owner's PMT

AGDC's PMT will maintain an internal staff of owner representatives with project management and technical subject matter expertise (SME) 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, permitting and regulatory requirements, and the technical elements of the Alaska LNG Project. PMT staff will also continue to coordinate with venture functions and interface with BP and ExxonMobil 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 have a bias for being cloud-based and structured to support future transition.

Technical Interface

BP and ExxonMobil have agreed to continue supporting AGDC with FERC 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 Services Manager. Additional strategic parties may become included in this interface. 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, and technical work scope.

1.3 – Environmental, Regulatory, and Lands (ERL)

Primary Objectives:

- FERC Order
- Major Federal Permits
- State Permits
- Federal and State Right-of-Way (ROW)
- Compliance Assurance

FERC Support

FERC regulatory activities will continue to be the responsibility of the ERL Manager within the PMT. PMT 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 will require maintenance as the Alaska LNG Project progresses.

AGDC will conduct preliminary scoping and planning for optimal execution of FERC implementation plans during FEED under the direction of the ERL Manager. This effort will result in defined implementation plan criteria for handover to FEED and minimize FEED efforts to establish the optimal regulatory strategy for FERC requirements.

Major Federal and State Permits

AGDC's Federal and State permitting work will be focused on completing other major Federal and State permits under the direction of the ERL Manager to satisfy the FERC environmental review and construct the Alaska LNG Project. As part of the FERC Section 3 application, AGDC applied for several major Federal and State permits required to eventually receive the FERC Order. These major Federal permits will require continued maintenance and interaction with regulatory agencies.

Tactical State and Local Permitting

The major permits referenced above represent the highest priority permitting requirements, but 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 scope of work is to update the detailed Alaska LNG Project permitting plans for handover to FEED. Permit planning will continue to be the responsibility of the ERL Manager in the PMT. The ERL Manager will be supported by PMT staff, environmental SME contractors, and contract legal support where necessary.

Field Program

AGDC will plan, permit, and implement a spring 2021 field program focused on further investigation of cultural resource sites. The field program will be focused on gaps in current basic data for planned areas of disturbance on the Mainline Pipeline. This program will be planned and executed under the direction of the ERL Manager and will support the cultural resources permitting effort dictated in the Programmatic Agreement.

Land & ROW Management

AGDC will be completing the negotiation process for Federal and State ROW because of the FERC regulatory and major permitting process and update the detailed Alaska LNG Project land plans for handover to FEED. To support FEED entry, AGDC will align the LNG land and export license assets within 8-Star through use of a Purchase Option Agreement.

Recognizing there will be a resulting schedule impact during FEED, AGDC plans to defer acquiring remaining private land (real property) for the LNG Plant. This includes roughly another 200-220 acres to acquire and another 30-50 acres of established ROW and utility easements within the planned plant

property boundary, the KSH re-route ROW, and remaining portions of the Mainline Pipeline ROW (e.g. Ahtna, University of Alaska, Alaska Mental Health Trust, etc.). If actioned in a future scope of work, AGDC proposes additional property and ROW acquired will be titled in the Alaska LNG Project LLC to consolidate real property prior to a future Final Investment Decision (FID).

Approved Cost Reduction MOC ERL Actions

AGDC will complete the necessary Major Project Management of Change (MOC) actions for Project changes that result from the 4Q2019 Fluor Class 4 Cost Estimate Update. These changes may include alteration of major permits to minor adjustments in compliance assurance and will be under the direction of the ERL Manager.

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).

Legal Strategy

With the FERC Final Order issued in 2020, it is expected that interveners may initiate legal challenges. AGDC's President and ERL Manager will work with legal counsel to Identify potential intervener legal strategies and take preemptive actions to mitigate intervener delay or adverse effect to the Project.

(2) Review Process

The work scope detailed in this AFE has been developed internally within AGDC and reviewed and agreed to by Cost Sharing Agreement Leads from BP, ExxonMobil, and AGDC. The final AFE has been 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 beyond the Economic Stage Gate. No direction has been provided to suspend activities, so this option was not considered.

AGDC evaluated acquiring remaining private land (real property) for the LNG Plant. This includes roughly another 200-220 acres to acquire and another 30-50 acres of established ROW and utility easements within the planned plant property boundary, the KSH re-route ROW, and remaining portions of the Mainline Pipeline ROW (e.g. Ahtna, University of Alaska, Alaska Mental Health Trust, etc.). This

expenditure was not deemed critical to achieving AGDC's Strategic Objectives in FY21, and was therefore not included in the WP&B.

AGDC also evaluated the option to complete a technical program of approximately \$25.45 million to complete technical MOC resulting from the Class 4 Cost Estimate Update, complete further cost reduction studies, and complete FEED Preparation to be in a position to issue FEED contracts by July 1, 2021. This expenditure was not deemed critical to achieving AGDC's Strategic Objectives in FY21, and was therefore not included in the WP&B.

The final WP&B breakdown is as follows:

ALASKA LNG PROJECT FY 2021 WORK PROGRA	M & PLIDGET (WD&P)						
TT 2021 WORKT ROOKA	wa bobser (wi db)						
Sub-Program	Budget Item	Staff Cost		Contract Cost		FY 2021 Total	
	2.1. Project Sponsor Alignment	\$	436,076	\$	520,000	\$	956,076
1 Venture Development	2.2. 8-Star Structuring and Ownership	\$	139,544	\$	275,000	\$	414,544
Venture Development	2.3. Special Regulatory Approval	\$	17,443	\$	225,000	\$	242,443
	2.4. State and Federal Support	\$	17,443	\$	80,000	\$	97,443
	3.1. Owner's PMT	\$	500,905		-	\$	500,905
2. Core PMT & Systems	3.2. Project Management Systems	\$	366,520	\$	131,000	\$	497,520
	3.3. Technical Interface	\$	37,652		-	\$	37,652
	4.1. FERC Support	\$	117,600	\$	100,000	\$	217,600
	4.2. Major Federal and State Permits	\$	117,600	\$	125,000	\$	242,600
	4.3. Tactical State and Local Permitting	\$	117,600	\$	50,000	\$	167,600
3. ERL	4.4. Field Program	\$	-	\$	350,000	\$	350,000
S. ERE	4.5. Land & ROW Management	\$	196,000	\$	50,000	\$	246,000
	4.6. Approved Cost Reduction MOC ERL Actions	\$	47,040	\$	50,000	\$	97,040
	4.7. Compliance Assurance Process	\$	113,905	\$	122,500	\$	236,405
	4.8. Legal Strategy	\$	70,560	\$	100,000	\$	170,560
		\$	2,295,888	\$	2,178,500	\$	4,474,388

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

The requested funds are in-line with the Board-approved FY21 Operating Budget, legislative sanction through AGDC statute, and are in-line with the magnitude of financial support anticipated from cost sharing parties. There will be sufficient funds within AGDC's Alaska LNG Fund to cover AGDC's share of the work program and budget agreed to by the cost sharing parties.

(5) Risks of Delivery or Non-Delivery

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

- Megaproject failure due to the following:
 - Major cost overruns
 - o Major schedule delays
 - Major operational problems

Regulatory delays

- 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.
- Value of the LNG market compared to the Project cost.
- Alignment of major contracts to protect owner interests but viable for the contractor.
- Slippage in schedule due to lack of commercial contracts and funding or authorization of expenditure.
- Since the Project designed in the Pre-FEED phase may not meet the needs of the market, design premise may change, with associated engineering requirements and delay.
- Alaska Legislature can appropriate AGDC's funds to apply to other State priorities or can redefine AGDC's abilities through new legislation.

(6) Cost Phasing

The cash flow associated with this AFE is based on cost estimates in the FY21 WP&B. There are no phasing issues associated with the proposed scope. Contract commitment of funds will be need-driven during the Fiscal Year and obligated as needed in the period.

(7) Resources

Required resources will be provided by existing AGDC PMT staff and contractors, selected technical subcontractors with subject matter expertise, and BP and ExxonMobil SMEs. The AGDC President, Venture Lead, and PMT 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 FY20.

(9) Risks of Delivery and Mitigation

AGDC will mitigate risks of deliverability by managing AGDC work efforts through owner's representatives. The AGDC Venture Lead will provide overall leadership and governance for the authorized venture development work efforts. The AGDC PMT will provide overall leadership and governance for the authorized technical and regulatory work efforts. AGDC owner's representatives will be supported by leveraging the services of specialized contractors who have senior technical, management, 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:			