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

X	CAPITAL	E	EXPENSE
TITLE:	FY23 Alaska LNG Project	AFE#	23-001
Start Date:	July 1, 2022	Original Authorization:	\$6,324,000
Completion Date:	June 30, 2023	Rev #	0
Responsible Manager:	Frank Richards	TOTAL	\$6,324,000

Budgeted – Yes/No	Yes				
		Q1	Q2	Q3	Q4
		FY22	FY22	FY22	FY22
EXPENDITURE FLOW (\$000s):		\$1,581	\$1,581	\$1,581	\$1,581

SUMMARY OF ESTIMATED COSTS (\$000s)		
Items/Description	FY21	
(1) Venture Development	\$1,852	
(2) Core PMT & Systems	\$2,817	
(3) ERL	\$1,655	
TOTAL	\$6,324	

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 leading the development of the Alaska 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, and the Strategic Plan has been updated annually since, through Revisions 1 and 2.

Several major accomplishments have been achieved for the Alaska LNG Project since 2020, 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 Environmental Impact Statement 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 Fiscal Year 2021, Fiscal Year 2022, and Fiscal Year 2023.
- 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.
- Signed a formal agreement with a world-class pipeline company to lead the pipeline subproject.
- Continued to defend permits and authorizations from third-party litigation against the U.S. Department of Energy (DOE) and FERC.
- Completed a comprehensive greenhouse gas lifecycle analysis for the Project including upstream and downstream emissions.
- Developed compliance management system to identity and track legal obligations.
- Facilitated an update of the third-party competitiveness analysis and cost of supply for the Project.

- Developed an economic decision model representing total Alaska take as a result of building the Project.
- Initiated a hydrogen transition plan to represent future proofing of the Project in the emerging clean energy transition.

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:

- 1. Lead Project development on behalf of Alaska and provide overall coordination for the Project through transition to the private sector.
- 2. Secure private sector funds for project development activities.
- 3. Develop and sign project development agreements with Lead Parties to advance Project through FEED to Final Investment Decision (FID).
- 4. Achieve the maximum benefit from the Project to Alaskans, while minimizing ongoing AGDC spend.
- 5. Maintain a common Project Economic Model in association with Strategic Parties and validate the integrated Alaska Total Value Model with the Alaska Department of Natural Resources and Alaska Department of Revenue and inform key stakeholders and policy makers.
- 6. Leverage the Project by leading the Alaska Hydrogen Hub proposal to the DOE and execute the program within a new AGDC hydrogen subsidiary upon successful award.

The overall AGDC Work Program & Budget (WP&B) for Fiscal Year 2023 (FY23) covers the period between July 1, 2022, through June 30, 2023. 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 was approved by the Board of Directors for FY23 prior to this Authorization for Expenditure (AFE) request and was included in the Governor of Alaska's FY23 budget passed by the Legislature. This scope of this AFE is associated with the baseline capital expenditures for the Alaska LNG Project outside of corporate operations.

(1) Scope of Work

1.1 – Venture Development

Primary Budget Items:

- 1. Contractors (Embedded Staff)
- 2. Contractors (Policy Support)
- 3. Contactors (Market Investment/Outreach)
- 4. Contractors (Third Party Analysis)
- 5. Legal Support
- 6. Other Direct Costs

Contractors (Embedded 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, attracting third party capital, and eventually transitioning the project to third-party majority ownership. 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 Front-End Engineering and Development (FEED).

AGDC embedded staff 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 FEED entry.

AGDC will support a FEED entry stage gate targeted in 2023. At the time of FEED entry, it is expected that Strategic Parties will execute Purchase Option Agreements for an ownership stake in 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.

Contractors (Policy Support)

AGDC will continue to lead the development of State of Alaska and federal support for the Alaska LNG Project during the FY23 period and will utilize specialty contractors to support the efforts. These support opportunities include a lower cost approach to addressing property tax, federal loan guarantees for debt financing of the Project, supporting third-party fiscal stability to reduce Project risk, coordination with the US Export-Import Bank, 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.

Contractors (Market Investment/Outreach)

AGDC will continue to engage industry consultants and financial advisors for financing the Alaska LNG Project during the FY23 period and will utilize specialty contractors to support the efforts.

Contractors (Third Party Analysis)

AGDC will continue to model the economics of the Alaska LNG Project during the FY23 period through the Joint Economic Model. AGDC will utilize specialty contractors to conduct third party analysis, as necessary, to validate project economics and sensitivities to key inputs.

Legal Support

AGDC has continued to entice new parties to join the Strategic Party group with a focus on identifying an LNG Lead Party. 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. Specialized commercial legal support contractors will be utilized in this effort.

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 embedded staff will be responsible for drafting and final approval of a form 8-Star Equity Option Agreement that will be offered to strategic parties. Finally, AGDC

embedded staff will develop the optimal longer-term equity structure of 8-Star and will finalize ownership structure and designation of a Project sponsor(s).

Other Direct Costs

Other direct costs will be incurred in FY23 to support Strategic Party field tours and conferences.

1.2 - Core PMT & Systems

Primary Budget Items:

- 1. Contractors (Embedded Staff)
- 2. Contractors (Optimization Studies)
- 3. Contractors (Alaska H2Hub Proposal)
- 4. Legal Support
- 5. Other Direct Costs

Contractors (Embedded Staff)

AGDC's PMT will maintain an embedded staff of owner representatives with project management and technical subject matter experts (SMEs) sufficient to achieve the program objectives and maintain viability of the Alaska LNG 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 embedded 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.

Contractors (Optimization Studies)

AGDC will utilize contracted SMEs to support optimizations studies, as needed, during FY23. Strategic Parties have agreed to continue supporting AGDC with SMEs and technical expertise under various agreements. Technical interface with these companies at the single-point-of-contact (SPOC) level will be the responsibility of the Alaska LNG Project Manager. The objective of optimization studies will be to add value to the Alaska LNG Project as opportunities arise and in close alignment with the efforts of AGDC's Venture Team.

Contractors (Alaska H2Hub Proposal)

The DOE Hydrogen Program will be soliciting proposals for funding of 4-6 regional clean hydrogen hubs, in accordance with the Infrastructure Investment and Jobs Act (Infrastructure Act). The Infrastructure Act authorizes appropriations of \$8 billion over 5 years for the development of regional clean hydrogen hubs that demonstrate the production, processing, delivery, storage, and end-use of clean hydrogen. Alaska is uniquely positioned to be awarded regional hydrogen hub funding due to our tremendous natural gas resource, ability to export hydrogen in the form of ammonia, world-class carbon sequestration potential,

and ample renewable energy potential. A DOE regional hydrogen hub award to Alaska will provide up to \$2B for hydrogen hub infrastructure planning, design, and construction.

To compete against other states and regions of the country for a regional hydrogen hub award under this program, Alaska must develop a robust and thorough proposal over a DOE solicitation process that will consume the fiscal year. A team consisting of industry partners, state corporations, state agencies, and the University of Alaska will prepare a winning proposal that represents Alaska strengths and potential in the emerging hydrogen economy. AGDC will lead proposal development and rely on partners and consultants to provide the strategy, expertise, and content required in the very detailed proposal DOE will expect. In this role, AGDC will monitor the concurrent hydrogen private sector projects already underway, identify public and private consortium partners that will be required for DOE cost share, conduct routine meetings with partner single points of contact, coordinate requests for information from supporting partners, manage proposal budget and contracting, and provide updates to Administration and Legislature.

Legal Support

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. The transition of 8-Star governance, corporate policies and procedures, and Enterprise Resource Planning (ERP) systems that conform to Lead Party agreements will require legal support to execute. Specialized corporate legal support contractors will be utilized in this effort.

Other Direct Costs

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.

AGDC maintains the Nikiski Seismic Monitoring Station through a Reimbursable Support Agreement (RSA) with the University of Alaska, Fairbanks. AGDC plans to conduct a full-project field tour for Lead Parties in FY23 and has included estimated costs to execute this effort.

1.3 – Environmental, Regulatory, and Lands (ERL)

Primary Budget Items:

- 1. Contractors (Embedded Staff)
- 2. Contractors (Major Permitting & Approvals)
- 3. Contractors (Cultural Resources Program)
- 4. Contractors (Field Program)
- 5. Legal Support
- 6. RSA Expenses

- 7. Permit Fees & Land Lease
- 8. Other Direct Costs

Contractors (Embedded Staff)

AGDC's ERL team will maintain an embedded staff with regulatory, lands, and stakeholder expertise sufficient to achieve the program objectives and maintain viability of the Alaska LNG 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.

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).

Contractors (Major Permitting & Approvals)

AGDC will continue to maintain the active major permits and approvals previously obtained for the Alaska LNG Project. The LNG Facility air permit is in process and AGDC will be responding to agency input and requests from the Alaska Department of Environmental Conservation (ADEC), as needed, until the permit is issued. Specialized contractors will be utilized for the LNG Facility air permitting effort in FY23.

ROW use conflict assessments and feedback are anticipated as a baseline activity throughout FY23. This work involves looking at conflicting applications for land use, evaluating potential impacts on the project, and providing feedback to agencies/stakeholders, as appropriate, under AGDC's official policy.

Contractors (Cultural Resources Program)

The Cultural Resources Program is an ongoing activity that will continue through the construction of the project. This work program includes implementing the Cultural Resources Management Plan, and when FEED proceeds - generating an Annual Work Plan, issuing an Annual Report and conducting an Annual Meeting, North Slope Borough Cultural Resources Team interaction, developing site-specific treatment plans for impacted areas, and conducting a required Cultural Resources Field Program. Cultural resources work will be paced to fit with expected construction schedules. Specialized contractors will be utilized for the Cultural Resources Program in FY23.

Contractors (Field Program)

This budget item is planning, permitting, and implementation of a 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. This program is currently a contingency line item with no budget and will be planned and executed depending on the engagement of Lead Parties during FY23. Specialized contractors will be utilized for the field programs in FY23 if funded through a revision of this AFE.

Legal Support

With the FERC Final Order issued in 2020, interveners have initiated legal challenges. In addition, issuance of DOE's export license to non-free trade agreement countries has been challenged. 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. Specialized litigation legal support contractors will be utilized in this effort.

RSA Expenses

AGDC directly funds various agency RSAs associated with ongoing permitting and approvals for the Alaska LNG Project. These RSAs include the U.S. Bureau of Land Management (BLM), the Alaska Department of Natural Resources, the U.S. National Park Service (NPS), and the ADEC.

Permit Fees & Land Lease

AGDC is required to pay ongoing permit and land lease fees to maintain active status for use by the Alaska LNG Project. These recurring annual fees include BLM right-of-way rent, NPS right-of-way rent, and ADEC air permit fees.

Other Direct Costs

AGDC will incur costs for stakeholder engagement travel and outreach activities related to major permits, lands, and cultural resources.

(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 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 previously evaluated the option to complete a Phase One early works program to accelerate the creation of jobs and cash flow into the Alaska economy in FY22. This expenditure was dependent on federal infrastructure funding but was unfortunately not successful in being included in the Bipartisan Infrastructure Act passed in 2021.

The FY23 WP&B breakdown from the scope above in Section 1 is as follows:

ALASKA LNG PROJECT				
FY 2023 WORK PROGRA	M & BUDGET (WP&B)			
Sub-Program	Budget Item	Basis Detail		FY 2023 Total
	6655 Contractors (Embedded Staff)	See Tab "FY 23 Embedded Staff Plan"	\$	737,500
	6655 Contractors (Policy Support)	Brownstein Hyatt Farber Schreck, LLP	\$	120,000
	6655 Contractors (Market Investment/Outreach)	C3; Diamond; KNV	\$	190,000
6650 Venture Development	6655 Contractors (Third Party Analysis)	Gas Strategies	\$	280,000
	6660 Legal Support	Holland & Hart; Jones Day	\$	504,000
	6675 Other Direct Costs	Project Site Visits/Conference Expenses	\$	20,000
		Subtotal	\$	1,851,500
6700 Core PMT & Systems	6710 Contractors (Embedded Staff)	See Tab "FY 23 Embedded Staff Plan"	\$	1,705,000
	6710 Contactors (Optimization Studies)	Contingency: Perform Prepare for FEED Optimization Studies	\$	200,000
	6710 Contractors (Alaska H2Hub Proposal)	DOE H2Hub Proposal; legislative (\$250K) & Governor (\$375K) funding portion of \$1,000K total estimated budnet.	\$	625,000
	6715 Legal Support	Contingency: Transition to Lead Parties within 8 Star Alaska, LLC Governance	\$	50,000
	6780 Other Direct Costs	Documentum; FirmEx; Nikiski Seismic UAF; Technical Field Tour Expenses.	\$	237,500
		Subtotal	\$	2,817,500
	6855 Contractors (Embedded Staff)	See Tab "FY 23 Embedded Staff Plan"	\$	600,000
	6855 Contractors (Major Permitting and Approvals)	Wetlands CMP, Air Permitting Support; DNPP Revegetation Plan Work; SEIS Technical Review and Comments	\$	260,000
	6855 Contractors (Cultural Resources Program)	Annual Work Plan - Including Indirect APE Assess; Annual Report and Meeting; NSB Cultural Resources Team Interaction; Site-Specific Treatment Plans for Impacted Areas; Cultural Resources Field Program	\$	200,000
	6855 Contractors (Field Program)	Contingency: Caribou Baseline Monitoring; Multi-Disciplinary Field Team; Eagle and Fish Surveys	\$	-
6850 Environmental, Regulatory, & Lands (ERL)	6860 Legal Support	Greenberg Traurig through DOL	\$	200,000
	6865 RSA Expenses	(\$50,000) ADEC LNG Air Permit RSA; (\$25,000) ADNR ROW & Cultural RSA; (\$35,000) NPS Reimbursement Revegetation Plan Work; (\$25,000) BLM Cost Reimbursement Material Sales Agreements	\$	135,000
	6870 Permit Fees & Land Lease	(\$227,000) BLM ROW Rent Yr 2 Phase In; (\$11,000) NPS ROW Rent; (\$2000) ADEC GTP and LF Air Permit Fee.	\$	240,000
	6875 Other Direct Costs	Travel (stakeholder engagement activities directly related to ERL permits and approvals, such as SES outreach; cultural resource activity engagement)	\$	20,000
		Subtotal	\$	1,655,000
AFE TOTAL				6,324,000

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

The requested funds are aligned 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 to 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 FY23 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 additional funds are made available to AGDC from Strategic Parties or from a DOE clean hydrogen hub grant, a revised AFE will be submitted for Board approval.

(7) Resources

Required resources will be provided by existing AGDC Venture Development, Core PMT & Systems, 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 strong definition of scope for FY23.

(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:		