

Addendum #1

**REQUEST FOR PROPOSAL (RFP)
COOK INLET GAS-TO-LIQUID ECONOMIC FEASIBILITY
STUDY**

#2010-AGDC-001

***Issued by: Alaska Gasline Development Corporation;
a subsidiary of Alaska Housing Finance Corporation***

Section 3.3 of the RFP provides interested parties the opportunity to submit questions to AGDC and for AGDC to distribute its response to the questions:

“DEADLINE FOR SUBMITTING QUESTIONS:

The Offeror shall carefully review this RFP for defects and questionable or objectionable material.

Questions must be delivered to the AGDC Contracting Officer listed in Section 3.2 of this RFP in writing only (by email or fax) on or before 4:00 pm (local Anchorage time) on July 22, 2010.

AGDC will not respond to verbal questions. A summary of questions received by the Contracting Officer, along with a written response from AGDC, will be distributed via e-mail or fax to all parties who have either registered with the AGDC Contracting Officer or who have submitted written questions to the AGDC Contracting Officer.”

The sole purpose of Addendum #1 is to provide interested parties with a copy of the questions received by AGDC and AGDC’s answers to the same. All other provisions of the RFP remain the same.

A Reminder: Offerors will be required to acknowledge receipt of any/all addenda to the RFP when submitting their respective proposals.

Question: *In Section 7.1, Study Assumptions, the location of ... “the GTL facility is assumed to be: 1) located at tidewater in Cook Inlet near the Alaska railroad and highway infrastructure,.....”*

Since the size of this facility will require dedication of several hundred acres of land to industrial purposes, and there is not such a parcel of land in the immediate Anchorage area of that size, it would appear that the only region where this facility could be located would be on the north side of Knik Arm, in a region served by the Alaska railroad near Wasilla, which is not actually on tidewater. A tidewater location, per se, would be deemed unsafe and uninsurable for the plant, due to the possibility of storm tides and other severe oceanic events, as well as the manifold difficulties of containment of product oil spills near a marine environment. Is it the intention that the product be exportable by a short product pipeline to a nearby marine terminal, and that the plant location itself be located adjacent to the railroad and the highway in the region north of Knik Arm, but away from the shoreline?

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *Following up on the location decision, is it the intention that the towers inherently present in the GTL plant be far removed from the flight paths of aircraft using the Anchorage International Airport and also the Elmendorf Air Force Base?*

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *Again considering the location decision, the region seemingly defined by these parameters is one in which, in 1964, there was an earthquake of magnitude 9.2, and considerable damage to most of the structures in the region. For a GTL plant with an estimated economic life of at least 50 years, and considering that the previous severe earthquake took place 46 years ago, and the continuing plate tectonic movement, it is highly likely if not virtually inevitable that a major earthquake will take place again at some time during the operating life of the GTL plant and in the location specified. Is it thus the intention to design the plant to withstand the ground accelerations associated with the possible magnitude 9.2 earthquake event, or to accept the destruction of the GTL plant investment during such an earthquake, thus negatively affecting the product cash flow and the repayment of the plant investment to bond holders and equity owners? Is there a plan to attempt to find insurance coverage for the GTL plant against earthquake damage, and should the cost of this insurance be included in the financial evaluation of the GTL project?*

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *Regarding the plant design, previous studies (such as the Hatch report) have shown that the cost of a plant producing ultra-low-sulfur diesel/jet fuel can be lowered if a combination of natural gas and coal feedstocks are used. Put into terms of this project, the limitation of the feedstock of natural gas to 1000 MMscfd places a limitation on the quantity of valuable product per day from the plant, whereas, if the possibility of a parallel feedstock of coal were included in a plant design, then the output capacity of the plant might be increased by a factor of perhaps two or three times higher. A plant with a combined CTL/GTL feedstock, consisting of one segment handling natural gas and producing synthesis gas, and another segment handling coal and also producing synthesis gas, can have their two synthesis gas outputs be combined together to feed the downstream process units which condition the synthesis gas and then change it into ultra-low-sulfur*

product hydrocarbons. The larger output units may lead to economy of scale and lower plant costs per barrel of output. Coal is available at the proposed plant location and can be delivered by the Alaska Railroad to that site, and coal is known to have a very economical price relative to liquid and gaseous fossil fuels. The question is: Can a combined GTL/CTL plant be considered to be included in the scope of work of this project?

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *The requirement” of carbon mitigation, whether through capture/sequestration, or carbon credits”may involved the deliberate addition of classic amine capture of CO2 from all of the flue gas lines prior to release to the atmosphere, a process which has been regarded as uneconomic in nearly every fossil-fuel installation in the world. The cost of this process can, of course, be added to the plant capital and operating cost estimates if desired. However, an alternative also exists, in the case where the CTL/GTL plant design is used and the autothermal converter is the means of changing methane into synthesis gas; in that case, the hydrogen-lean synthesis gas from the coal conversion can be blended with the hydrogen-rich synthesis gas from the gas conversion, leading to the ideal ratio of carbon to hydrogen in the blended synthesis gas which can most efficiently be converted into hydrocarbon products in the Fischer-Tropsch reactor. In that case, carbon dioxide is separated by the synthesis-gas-cleaning-unit and is made available for export (e.g. into an oil field for enhancement of oil recovery) or for underground injection and permanent storage. Only minimal quantities of CO2 are released into the air at infrequent intervals with such a design, and no amine plant is necessary. The question is: Should, or may, the design options considered, include this strategy for carbon dioxide sequestration and the subsequent disposal options?*

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *The generation of electric power within a GTL or a CTL/GTL plant is normally included, to make the plant self-sufficient, electrically, and waste heat co-generation within the plant for this purpose is commonplace in such designs. The plant possibly can be designed to provide additional electric power to the grid, but the economics of the power costs are difficult to conceptually separate from the overall economics of the plant itself, as allocation of equipment costs to the*

hydrocarbon product stream and to the electric power sold, are somewhat arbitrary. It would perhaps be more appropriate to estimate the cost of electric power generation taking place elsewhere in the grid, from the normal combustion of natural gas, and use the average cost of power delivered from these other sources as the value of the electric power delivered from the GTL plant. Then, the costs of production of the liquid hydrocarbon products of the GTL plant can be put on a more firm foundation, as equipment costs and estimated revenue from electric power incidental sales can be known more accurately. Would this approach satisfy the paragraph 7.2.6 in the RFP?

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *The production of low-level waste heat from a GTL or GTL/CTL plant is one of the major benefits, insofar as it can be used. This is characterized easily as a large stream of hot water at a temperature in the range of 90 degree Celsius. In some locations around the world, the energy in this hot water stream is discarded, through the use of large evaporative coolers which can produce fog in the local environment, and in an Alaskan location, ice fog and ice accretion on nearby structures. In other plant designs, the energy in this large stream of hot water is discarded through the use of non-evaporative coolers which transfer the heat to the ambient air, which then rises and cools. There are at least two alternatives which lead to a greater efficiency for the plant design insofar as using the energy of this hot water. One alternative is to provide this hot water to a community for circulating-hot-water district heat, for buildings. Provision in such a system can be made for release of the heat to the ground during summer, when the building heat is not needed. The city of Reykjavik, Iceland, is heated in this manner (from hot water of geothermal origin). Of course, this presupposes the installation of a circulating water network in a city which is nearby, and which is rather densely populated. In the location being considered (paragraphs 1 and 2 above) the nearest such city seems to be Anchorage. A second alternative is to use the hot water to generate electricity, with special equipment such as has been successfully demonstrated at Chena Hot Springs, Alaska. The question is: Should, or may, these two options for utilizing the low-level waste heat of the GTL or CTL/GTL plant be included in the study, as they can affect the economics and also the environmental permitting of the project?*

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *The economic viability of a GTL or GTL/CTL project plan is dramatically determined by the forecast of the world oil price over the next 50 years of the life of the plant, since the world price of the product of the plant is mainly determined by the refining of crude oil and the subsequent desulfurization of the diesel/jet fuel products of a refinery. To establish confidence in the profitability of such a plant, the question is: What world oil price forecast for the next 50 years should be used in the calculations of economic viability for the plant?*

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *Page 4, Section 2: Overview of Professional Services Sought Through this RFP – first paragraph line 2. The RFP calls for a “small diameter instate natural gas pipeline”.*

We are concerned that a smaller sized (diameter) gas line will increase the cost of delivered natural gas to Southcentral which will have a direct impact on the economics of a Southcentral GTL plant.

- a. ***What definition (or size limitation) if any, has led AGDC to the above characterization of the size of the potential small diameter gas line?***

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Background information on the overall project assumptions and definitions may be found on the AGDC website under “Reports”.

<http://www.ahfc.state.ak.us/agdc/reports.cfm>

Question: *Page 4, Section 2: Overview of Professional Services Sought Through this RFP – third paragraph. The RFP calls for the evaluation of a GTL facility to be located near the terminus of the gas line in the Cook Inlet area.*

- a. ***Is the Offeror restricted from looking at GTL plant(s) located at a second location in addition to the terminus of the gas line in the Cook Inlet?***

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Background information on the overall project assumptions and definitions may be found on the AGDC website under “Reports”.

<http://www.ahfc.state.ak.us/agdc/reports.cfm>

Question: *Page 10, Section 7.1 Study Assumptions: For the purposes of this study the GTL facility is assumed to be: 1) located at the tidewater in the Cook Inlet near the Alaska railroad and highway infrastructure, 2) capable of providing the opportunity to transport GTL product via rail, truck, pipeline and marine tanker vessels to potential markets in Alaska and the Pacific Rim, and 3) producing a maximum throughput of 1,000 MMscfd.*

- a. *By this definition it would appear that any location in the Cook Inlet not very close to the Alaska Railroad cannot be considered.*
- b. *Does this exclude the Kenai? - Nikiski?*
- c. *Does this exclude Point MacKenzie? - Tyonek?*
- d. *What is the definition of “near”? 1 mile? 10 miles? 30 miles?*

Could “near” include a GTL location from where the GTL products can be transported from the GTL plant site to the rail road and or marine tanker vessels through a products pipeline, whether existing or new?

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Background information on the overall project assumptions and definitions may be found on the AGDC website under “Reports”.

<http://www.ahfc.state.ak.us/agdc/reports.cfm>

Question: *Page 11, Section 7.2.4 Identify Cook Inlet capacity for and the cost of carbon mitigation for a GTL plant at various throughputs.*

- a. *Has AGDC predetermined that carbon sequestering is the preferred way to treat CO₂ created during the GTL process.*
- b. *Does the term “Cook Inlet Capacity” mean reservoir capacity to sequester carbon or does Cook Inlet Capacity have a different meaning?*
- c. *Does Cook Inlet Capacity refer to volume or deliverability or both?*

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Background information on the overall project assumptions and definitions may be found on the AGDC website under “Reports”.

<http://www.ahfc.state.ak.us/agdc/reports.cfm>

Question: *Page 11, Section 7.2.7 Address whether a gas to liquid (GTL) project located near the Cook Inlet pipeline terminus could serve as an “anchor tenant”*

.....

- a. *Has AGDC determined the location of the terminus of the Cook Inlet pipeline as location choice can have an impact of GTL economics.*
- b. *What is the definition of “near”? 1 mile? 10 miles? 30 miles?*

AGDC Response: The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Background information on the overall project assumptions and definitions may be found on the AGDC website under “Reports”.

<http://www.ahfc.state.ak.us/agdc/reports.cfm>

Question: *Page 11, Section 7.3.1: Identify Technology Basis for Work Study – last paragraph. The successful Offeror and AGDC must agree on the recommended technology selection prior to commencing work on deliverables 7.3.2 through 7.3.7.*

- a. *This could imply that there are two Notices to Proceed. One at the award of the RFP and one at the Agreement of the Recommended Technology.*
- b. *How soon after the Offeror is awarded the RFP and given the (first) Notice to Proceed is AGDC available to meet to agree on the recommended technology?*
- c. *How much time is allocated to Offeror and AGDC to agree on a recommended technology?*
- d. *Will the Offeror be restricted to only one recommended technology?*
- e. *Does the 30 day period for the First Updated Work Plan begin at the (first) Notice to Proceed or after the Offeror and AGDC agree on the recommended technology?*
- f. *Does the timing of Project Deliverables “within three (3) months of Notice to Proceed” fall three months after the award of the RFP or three months after the agreement of the Offeror and AGDC on the recommended technology?*

AGDC Response:

Item a. This statement is meant only to be informational, as a brief description of how AGDC anticipates the work will progress.

If, as a result of this RFP process, AGDC identifies a firm that AGDC determines appropriately qualified to perform the work/services anticipated under the RFP, the successful Offeror will work closely with appropriate AGDC staff to determine the final scope of work/scope of services to be provided as well as the sequencing and scheduling associated with the deliverables.

Item b. In order to respond to this question, it is necessary to separate the contract award process from the contract administration process.

Contract Award Process: If AGDC elects to award a contract as a result of this RFP process, the successful Offeror will receive a Notice of Award from the Contracting Officer. Upon receipt of the Notice of Award, the successful Offeror is responsible for providing the Contracting Officer with the appropriate insurance certificates (See Section 5.5). Upon receipt of all required information, AGDC will enter into contract with the successful Offeror (See sample Contract/Agreement – Attachment B.)

Contract Administration Process: As soon as a contract between AGDC and the successful Offeror has been signed by the appropriate representative of both parties, the AGDC contract administrator and the contractor will begin working together. Discussions regarding the recommended technology may begin immediately.

After the AGDC contract administrator and the contractor have agreed to a final scope of work/scope of services and deliverable schedule; the final agreement will be documented as an amendment to the contract. The AGDC contract administrator may either elect to issue a single Notice to Proceed for all work and services to be provided by the contractor; or, in the alternative, the AGDC contract administrator may elect to issue a separate Notice to Proceed for each deliverable.

Item c. See answer to Item b.

Item d. Yes. However, the Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Item e. The 30 day period for the first updated work plan and status report begins on the date the appropriate AGDC representative signs the contract (the contract effective date). See page 8 of the sample contract – Attachment B. “This Contract takes effect on the date of its execution by AGDC.”

Item f. All project deliverables must be completed within three (3) months of the date the contract is amended (signed by both parties) documenting the final and agreed scope of work/scope of services, project schedule, and project deliverables.

Question: Page 14, Section 8.3.3 Notice of Award.

- a. *Is the Notice of Award different from the Notice to Proceed discussed above?*

AGDC Response: Yes.

The Notice of Award is issued by the Contracting Officer as a part of the RFP award process. One or more Notice(s) to Proceed may be issued by the AGDC Contract Administrator based upon an agreed scope of work/scope of services, project sequence, and project schedule.

Question: Page 9, Section 6.5 Contractual Agreement, sub section 6.5.1 Contract Approval.

- a. *Is the Contract Start date the date of Notice to Proceed, Notice of Award, or the date Offeror and AGDC sign the Contract?*

AGDC Response: The contract start date is the date the contract is signed by AGDC. See page 8 of the sample contract – Attachment B. “This Contract takes effect on the date of its execution by AGDC.”

Question: *Will AGDC provide a schedule for payment to potential Offeror prior to the awarding of the RFP?*

AGDC Response: No. The schedule for payment will be determined based upon the final and agreed scope of services, project schedule, and project deliverables.

Question: *What is the expected cost or budget for completing the work identified in the RFP?*

AGDC Response: The total cost will be determined based upon the final and agreed scope of services, project schedule, and project deliverables. This work is identified in HB 369 (on the AGDC website) as a task with a Fiscal Note associated with it in a not to exceed amount of \$500,000.

Question: *Has any consultant or contractor assisted AGDC to develop the above referenced RFP? If yes, please provide the names of companies that have provided advice to AGDC concerning this RFP.*

AGDC Response: The RFP was developed by key AGDC staff and the Contracting Officer.

Question: *Term of contract is 12 months with a project completion of 3 months – confirm that the additional time is to allow for additional to be scoped and proposed work.*

AGDC Response: The term of the contract begins on the date the contract is signed by AGDC. The final scope of services, project schedule, and project deliverables will not be fully defined on that date. There may be unforeseen circumstances that require that the contract be amended, provided that the additional or revised work is within the scope of services anticipated under this RFP.

Question: *Page 4 of 5 of the RFP Attachment A refers to three copies of economic feasibility studies – for a RFP response sent by email, is one electronic copy sufficient? Confirm that the requirements are actually three different studies per Section 5.3.9 of the RFP.*

AGDC Response: Section 5.3.9 of the RFP requires that the Offeror provide “Copies of at least three (3) economic feasibility studies completed by the Offeror firm within the last five (5) years.” Page 4 of 5 of Attachment A reads similarly: “The Offeror has attached at least three (3) copies of economic feasibility studies completed by the Offeror firm within the last five (5) year period.”

The Offeror may submit, via e-mail, at least three (3) different economic feasibility studies completed by the Offeror firm within the last five (5) years.

Question: *Will AGDC post all questions received and responses to all questions?*

AGDC Response: Yes. See Section 3.3. of the RFP. AGDC will distribute the information to parties who have either registered with the Contracting Officer or who have submitted written questions to the Contracting Officer.

AGDC will also post copies of the questions and answers on the AGDC web site.

Question: *Confirm that a screening study cost estimate accuracy of -30%/+50% (AACE Class 5 see attached matrix) is acceptable..*

AGDC Response: Yes. A copy of the matrix is attached at the last page of this document.

However, the Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *Confirm that cost estimate detail is limited to total capital cost with percentage breakdown by major plan blocks (Air Separation, Syngas Production, Liquid Synthesis (FT or M+MTG), Product Workup, Product Storage and Loadout, Utilities).*

AGDC Response: Cost estimate detail is not limited to total capital cost for an effective economic analysis.

The Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: *Does the RFP scope exclude specific site selection and marine shipping feasibility?*

AGDC Response: Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Background information on the overall project assumptions and definitions may be found on the AGDC website under “Reports”.

Question: *Are the export facilities part of the GTL facility?*

AGDC Response: Yes. See Section 7.1 of the RFP. “For the purposes of this study the GTL facility is assumed to be: 1) located at the tidewater in the Cook Inlet near the Alaska railroad and highway infrastructure, 2) capable of providing the opportunity to transport GTL product via rail, truck, pipeline and marine tanker vessels to potential markets in Alaska and the Pacific Rim, and 3) producing a maximum throughput of 1,000 MMscfd.”

Question: *Confirm that AGDC will provide specifications of the quantity of gas to be delivered to the GTL facility, operating pressure and NGL content.*

AGDC Response: Yes.

Question: *How much NGLs are expected to be in the natural gas feed?*

AGDC Response: Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder.

Question: *Confirm that AGDC will provide estimates of Cook Inlet regional gas demand outside of the GTL facility i.e. 1000 MMcf is pipeline capacity or GTL capacity?*

AGDC Response: Cook Inlet regional gas demand is based on the study entitled “In-State Gas Demand Study, Volume I: Report Prepared for TransCanada Alaska Company, LLC, January 2010”. This report is available on the AGDC website.

Question: *For Item 5.3.9, three copies of previous studies completed by the offeror are to be provided. To remain respectful of our confidentiality agreements with clients, is it acceptable by AGDC to provide the table of contents and cover page of 3 completed studies?*

AGDC Response: See Section 5.3.9 “Redacted copies are acceptable.” It is not possible to evaluate the quality of a feasibility study from the cover page and table of contents alone.

Question: *For Item 7.3.3, the title of this item asks to quantify the dependence between GTL facility costs and type of product produced. However, the paragraph below asks for a qualitative analysis. What is required for this item? qualitative or quantitative analysis?*

AGDC Response: Quantitative.

Question: What other potential markets are being considered for the gas delivered by the in-state pipeline?

AGDC Response: Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: For Item 7.3.5, how does AGDC propose to prepare the permitting schedule of this GTL facility considering the new owner has no control over the permitting scope or duration?

AGDC Response: Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

Question: For Item 7.4, it is stated that the ‘first updated work plan...be submitted to the AGDC contract administrator within 30 days of notice to proceed’. When is the first draft work plan to be submitted?

AGDC Response: Scope of Work section of this RFP describes elements of focus in order to help proposers understand the experience and skill sets required to allow AGDC to select the most qualified provider of the economic study requested. Once a contractor has been selected and engaged, the scope of work will be confirmed and modified, if necessary. Questions regarding the study assumptions and potential additional options to be studied will be evaluated with the successful Responder at that time.

This guideline reflects generally-accepted cost engineering practices. This addendum was based upon the practices of a wide range of companies in the process industries from around the world, as well as published references and standards. Company and public standards were solicited and reviewed by the AACE International Cost Estimating Committee. The practices were found to have significant commonalities that are conveyed in this addendum.

COST ESTIMATE CLASSIFICATION MATRIX FOR THE PROCESS INDUSTRIES

The five estimate classes are presented in figure 1 in relationship to the identified characteristics. Only the level of project definition determines the estimate class. The other four characteristics are secondary characteristics that are generally correlated with the level of project definition, as discussed in the generic standard. The characteristics are typical for the process industries but may vary from application to application.

This matrix and guideline provide an estimate classification system that is specific to the process industries. Refer to the generic standard for a general matrix that is non-industry specific, or to other addendums for guidelines that will provide more detailed information for application in other specific industries. These will typically provide additional information, such as input deliverable checklists to allow meaningful categorization in those particular industries.

ESTIMATE CLASS	Primary Characteristic	Secondary Characteristic			
	LEVEL OF PROJECT DEFINITION Expressed as % of complete definition	END USAGE Typical purpose of estimate	METHODOLOGY Typical estimating method	EXPECTED ACCURACY RANGE Typical variation in low and high ranges [a]	PREPARATION EFFORT Typical degree of effort relative to least cost index of 1 [b]
Class 5	0% to 2%	Concept Screening	Capacity Factored, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +30% to +100%	1
Class 4	1% to 15%	Study or Feasibility	Equipment Factored or Parametric Models	L: -15% to -30% H: +20% to +50%	2 to 4
Class 3	10% to 40%	Budget, Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: -10% to -20% H: +10% to +30%	3 to 10
Class 2	30% to 70%	Control or Bid/Tender	Detailed Unit Cost with Forced Detailed Take-Off	L: -5% to -15% H: +5% to +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take-Off	L: -3% to -10% H: +3% to +15%	5 to 100

- Notes: [a] The state of process technology and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.
[b] If the range index value of "1" represents 0.005% of project costs, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.

Figure 1. – Cost Estimate Classification Matrix for Process Industries

END OF ADDENDUM #1