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November 14, 2013

Mr. Mark Davis, Deputy Director  
Alaska Industrial Development and Export Authority  
813 West Northern Lights Blvd.  
Anchorage, AK 99503

Re: Spectrum LNG, LLC Final Term Sheet and other requirements

Dear Mr. Davis,

Spectrum LNG, LLC herein submits its final Term Sheet and Exhibit A Position Statement and Exhibit B Pro forma Financial Data. The Term Sheet and Position Statements are identical to the versions submitted to AIDEA on November 12, 2013 with the exception of updating the dates and minor grammatical revisions. Exhibit B provides the items requested in your November 13, 2103 letter *re: Northern Gas Supply Plant*. Specifically, Exhibit B contains:

- The entire capital Cost of the NGSP – see document Capital Expenditures
- The capital structure of the NGSP – see Capital Structure
- The estimated annual operating cost of the NGSP – See Operating Expenses

Sincerely,

A handwritten signature in blue ink, appearing to read "Ray Latchem", is written over a faint, larger blue signature graphic.

Raymond R. Latchem  
President

Enclosures: Spectrum LNG, LLC Term Sheet  
Exhibit A - Position Statement  
Exhibit B Pro forma Financial Data



**SPECTRUM-AIDEA TERM SHEET  
(11-14-2013)**

- 1. Borrower: Spectrum Alaska, LLC (“Spectrum”)**
- 2. Sponsor Parties: Spectrum Alaska, LLC (“Spectrum”)**
- 3. Lender: Alaska Industrial Development & Export Authority (“AIDEA”)**
- 4. Project Description**

The North Slope Gas Plant (“NSGP”) will be an LNG production facility located in the Prudhoe Bay Unit on the North Slope. The Plant will be developed to the following requirements:

**NSGP Capacity Requirements**

- First gas targeted for September 1, 2015
- Initial 9 Bcf annual capacity
- Minimum of 7.5 Bcf available plant capacity for preferred customers
- Acceptable capacity to handle swing load requirements for heating utilities, as mutually defined by the parties, up to 7.5Bcf on a daily rate

**LNG Availability Requirements**

- System designed, built & operated to industry standards common to the North Slope
- Redundant production capacity
  - At least 2 trains, each with its own amine unit.
  - At least 2 truck loaders
- Storage capacity of 280,000 gallons

**LNG Site Requirements**

- Development plan adequate for ultimate 12-18 Bcf annual production system capacity at minimum
- Prudhoe Bay Unit Owner site standards/approval. Approvals, permitting, site development in time for Q3 2015 gas

**Propane Availability**

- If (i) NSGP has reached 90% of its 9 Bcf capacity, (ii) feed gas composition is at least 4% propane, and (i) mutual determination that cost of propane delivered to Fairbanks would be less than imported propane, propane skid will be constructed for capacity of at least 3% of LNG capacity.

## 5. Timing

**Prior to the First Closing:** Spectrum and AIDEA each will be responsible for its own transaction costs, except as provided below.

**First Closing:** Following selection of Spectrum for the project and general consensus on the term sheet, the parties will develop the following documents to be executed within 30 days after selection (“First Closing”):

- **Exclusivity and Reimbursement Agreement:** The parties agree to work exclusively with one another on the development of the NSGP. If the parties fail to conclude the Second Closing by March 7, 2014, AIDEA will pay to Spectrum a break-up fee of \$2.25 million and reimburse Spectrum for all of its documented out-of-pocket legal, accounting, other professional fees and costs incurred in negotiating, drafting documents, and developing cost and price models, and any further project development expenses incurred by Spectrum not directly related to the site improvements or permitting for the site (plus a 15% margin) on the NSGP project subsequent to November 19, 2013. Payment due within 30 days of Spectrum’s invoice. Additionally, Spectrum will have the option to purchase up to 20,000 gpd of capacity from the NSGP at the lowest price sold to any of its customers.
- **Pad Site Development and Sale Agreement:** Spectrum will continue site development, including plans for fill, utilities, camp, shop, pipeline, and utility buildings improvements. If the parties fail to conclude the Second Closing by March 7, 2014, AIDEA shall have the option to purchase the site, improvements, and permits (or, at AIDEA’s option, 100% of the membership interest in Spectrum) to AIDEA for \$2.855 million plus all of Spectrum’s documented out-of-pocket costs (plus a 15% margin), including engineering costs, permitting costs, and offsite mitigation for permits, incurred subsequent to November 19, 2013, in developing the pad site or obtaining permits for the operation of the NSGP project. AIDEA shall have up to 60 days to exercise the option; closing to be no later than 30 days after exercise. If AIDEA fails to substantially develop the site for use as the NSGP by September 1, 2015, Spectrum shall have an option to re-acquire the site from AIDEA for \_\_\_% of the price paid to Spectrum, plus the actual costs paid by AIDEA under the State Right-of-Way Lease during the interim period.

**Second Closing:** Following the First Closing, the parties will work to develop the Project Disbursement Agreement, Project Development Agreement, and other loan, financing, lease, and construction definitive documents discussed below to be executed no later than March 7, 2014 (“Second Closing”).

**Third Closing:** Following completion of construction, within 30 days after start-up of the NSGP, the parties will execute [*take-out loan documents*] (“Third Closing”).

## 6. Funding – Capital Stack

**Spectrum Equity:** Spectrum will contribute no less than \$20 million of equity capital as specified below.

**AIDEA Loan:** AIDEA will provide up to \$125 million of SETS loan funds as specified below.

**Bank Loan:** Although Spectrum’s current projections do not call for more than \$145 million for the project (including construction reserve and working capital), Spectrum shall have the right prior to start-up of the NSGP to obtain third-party loan funds (“Bank Loan”) which shall have the rights and preferences specified below.

## 7. Spectrum Capital Contribution

- On or before the Second Closing, Spectrum will be capitalized by its parent company with a minimum of \$20 million equity (inclusive of escrowed funds from sale of pad and permits) for use exclusively on the NSGP.
- The arrangements under which the capital investment is raised will not be subject to disclosure.
- Spectrum will receive a fixed rate of return from its equity investment sufficient to yield an after-tax rate of return of 15% based upon the highest marginal federal individual income tax rate then in effect. Distributions would have priority specified in #8 below.

## 8. AIDEA SETS Financing

### Terms:

- Principal of \$115 million to \$125 million based upon project needs (including construction reserve and working capital)
- 30 year term
- 3.00% annual interest
- First five years after Third Closing: No principal payments; interest will be deferred and capitalized on the 5<sup>th</sup> anniversary of Third Closing
- Following the fifth anniversary of Third Closing: Level debt service amortized over 25 year

### Cash Flow Priority:

- First: NSGP operational costs (including AIDEA Sublease payments as required under ADL 419409).
- Second: Bank Loan debt service.
- Third: Spectrum (cumulative) fixed return on equity.
- Fourth: Deposits into reserves (to be mutually agreed under the definitive agreements signed at the Second Closing)

- Fifth: AIDEA debt service.
  - If cash flow is insufficient during any year to cover AIDEA debt service, default will not occur; accrued interest will be deferred and capitalized with new balance re-amortized over remaining loan term.

**Security in Spectrum’s Interest in NSGP Assets:**

- First: Bank Loan
- Second: Spectrum’s Equity Contribution
- Third: AIDEA Loan

**Early Partial Debt Retirement Option:**

- In order for AIDEA to bear the market risk of constructing the second train, at any time between the 5<sup>th</sup> and 10<sup>th</sup> anniversary after plant startup, Spectrum shall have the option to assign all of its rights, title and interest in the second LNG train to AIDEA in exchange for a \$72 million credit against the then outstanding SETS debt balance. AIDEA can remove and sell or relocate the train.

**Final Debt Retirement:**

- Upon final payment of the AIDEA SETS loan, AIDEA shall transfer its entire right, title and interest in the NSGP (or, at Spectrum’s option, 100% of the membership interest in the AIDEA SPV) to Spectrum and all agreements with AIDEA relating to the NSGP shall terminate. No prepayment penalty.

**9. Site Conditions**

**Pad Development and Permits:**

- After the First Closing, Spectrum will continue to develop the pad site as specified in the Pad Site Development and Sale Agreement.
- After the Second Closing, Spectrum will continue to develop and improve the pad site as specified in the definitive documents signed at the Second Closing.
- Spectrum will obtain all required permits.
- AIDEA will provide permitting assistance as requested with AIDEA’s permitting work paid out of SB 23 funds.

**Transfer of Pad and Permits:**

- At the Second Closing Spectrum will sell and assign to an AIDEA SPV the lessee’s rights under the State Right-of-Way Lease (ADL 419409), all improvements and improvement plans and contract rights, and transfer to the AIDEA SPV the permits related to the site or the project (or, at AIDEA’s option, assign to AIDEA 100% of the membership interest in Spectrum) for \$2.855 million plus all of Spectrum’s documented out-of-pocket costs (plus a 15% margin), including engineering costs, permitting costs, and offsite mitigation for permits, and a project management fee of \$2,500 per day

incurred subsequent to November 19, 2013, in developing the pad site or obtaining permits for the operation of the NSGP project.

- The sale proceeds will be placed into a construction escrow account and will be credited toward Spectrum's equity contribution.
- At the Second Closing, AIDEA will sublease the site to Spectrum (or a new company organized by Spectrum's parent if AIDEA acquires 100% of the membership interest in Spectrum) for construction and operation of the NSGP. Sublease payments to AIDEA will be limited to pass through of actual costs to AIDEA under the State Right-of-Way Lease.

## **10. Development Process**

- At Spectrum's request, AIDEA will advance-fund the purchase of certain equipment.
- The NSGP will be developed by Spectrum in conformance with a Plan of Development adopted by Spectrum as approved by AIDEA in the relevant financing agreements and Project Development Agreement executed at the Second Closing.
- AIDEA shall be available to assist and guide Spectrum in determining the development process, specific plant configuration and elements, etc., but Spectrum shall have the authority to make final decisions surrounding these matters.

## **11. Escrow/ Disbursement of Project Funds**

- AIDEA and Spectrum at the Second Closing will enter into a Project Disbursement Agreement which will provide, in pertinent part, that AIDEA financing and Spectrum investment will be escrowed in a Project Disbursement Fund.
- Spectrum funds will be drawn and exhausted prior to drawing upon the AIDEA funds.
- If Spectrum obtains construction loan funds from a different source, the AIDEA funds will not be drawn upon until the Third Closing.

## **12. Project Completion Reserve**

- AIDEA will require financial commitments that ensure that the project funds will be sufficient to complete the project.
- In order to assure Spectrum's commitment to project completion, AIDEA will require at the Second Closing project fund commitments totaling the estimated total project cost plus a completion reserve of at least \$10 million.
- Following completion, the unused portion of the completion reserve will be retained for up to five years after the Third Closing to fund any shortfall in covering the first four listed priorities in item #6 above. Upon reaching the fifth anniversary of the Third Closing, any remaining completion reserve will be applied to the balance on the AIDEA loan.

### **13. Operation Standards Agreement and Pricing Report**

- The NSGP will be operated by Spectrum in accordance with an Operating Standards agreement to be negotiated between Spectrum and AIDEA. Under the agreement, Spectrum will provide AIDEA annually with a price target compliance report that includes Spectrum fixed rate of return on its equity investment on plant operations. Prices will be set based upon a utility rate model to be developed by the parties and included in the definitive agreements signed at the Second Closing.

### **14. Spectrum Covenants**

- Spectrum will agree that AIDEA must approve any Spectrum change of control that affects NSGP terms, conditions, obligations and rights. AIDEA will agree to commercially reasonable change of control approval terms and conditions.
- No party affiliated with Spectrum will provide goods or services to Spectrum at a price higher than the goods or services could be obtained on the open market from an unrelated party.
- No financial transparency or return limit would be applicable to any affiliate that purchases LNG so long as the price being paid is no less than being offered to buyers for the same level of commitment. The affiliate would not hold any advantage over other buyers of liquefaction capacity.

### **15. Supplying Preferred Customers**

The NSGP and Spectrum will offer Liquefaction Services FOB the NSGP to preferred customers up to 7.5bcf in the following priority:

1. FNSB LDC(s) for residential and commercial space heating;
2. GVEA or other Interior Alaska utilities for electric utility purposes based upon appropriate volume and term commitments;
3. Regulated utilities (LDCs and electric) outside of the FNSB;
4. Interior Alaska industrial customers (refineries, mines); and
5. Others - as long as excess capacity remains after meeting demands above.

Liquefaction Services in excess of 7.5bcf are not subject to any preferential restrictions imposed by AIDEA.

All propane produced will be made available to preferred customers on the same priority basis as LNG.

### **16. Price Transparency**

LNG liquefaction capacity will be sold to customers FOB at the LNG plant. Each preferred customer will make its own arrangements for the purchase of the commodity. The liquefaction processing fee applicable to volumes that preferred customers purchase



will be determined under a utility pricing model to be incorporated into the definitive agreements signed at the Second Closing. The utility model will fix the return on equity and adjust prices to achieve the return target on a transparent basis. The price for certain customer may be fixed or flexible (i.e., given the utility model, the price may start at one point to guarantee Spectrum's return, then fall as other customers begin to take capacity from the plant). Customers that agree to take or pay commitments may be entitled to certain price guarantees.

Spectrum will annually report to AIDEA its actual rate of return, revenues, and operating expenses associated with the production and operation of the LNG plant. Spectrum also will provide to AIDEA a report for the upcoming year projecting its rate of return, revenues, and operating expenses.

SPECTRUM will agree to disclose its pricing structures to preferred customers on an annual basis to AIDEA. Spectrum welcomes AIDEA's assistance in setting prices.

### **17. Expansion to Supply Preferred Customers**

Spectrum has the option to finance and expand the NSGP with approval from AIDEA.

AIDEA has the option to finance and expand the NSGP plant to ensure adequate capacity to provide LNG sales to preferred customers with approval from Spectrum.

### **18. Other Spectrum Revenue**

Spectrum may apply for and receive the benefit of any applicable federal or state tax credits, deductions, depreciation treatment, or payments, as well as pursue sales to non-preferred customers.

### **19. Alternative Gas Supply**

The initial definition of Alternative Gas Supply will be a supply which:

- Brings a long-term, substantial supply of natural gas to FNSB, more than sufficient to meet the requirements of utilities that have or are purchasing LNG from the plant.
- Otherwise meets the SB23 and other public policy objectives being addressed by the NSGP.

Spectrum and AIDEA will make an annual determination whether there is significant probability that an Alternative Gas Supply will become available at a known future date. In the event of an Alternative Gas Supply Determination, Spectrum would have a one-time option to terminate its future participation in NSGP.

Based on an Alternative Gas Supply Determination, and on the election of Spectrum to terminate future participation, the AIDEA financing agreements will provide that:

- The first two priorities on cash flow in Item #8 (operating expenses and Bank Loan debt service) would continue

- The second priority on cash flow in Item #8 (return on investment distributions to Spectrum) would continue based upon Spectrum's declining capital investment
- The 4<sup>th</sup> and 5<sup>th</sup> priorities on cash flow in Item #8 (replacement reserve contributions and payments on the AIDEA SETS loan) will be suspended
- All remaining available cash flow would be paid to Spectrum as a return of capital until all of its capital investment has been returned

If Spectrum elects against future participation, Spectrum's ownership in NSGP and all related rights and obligations will terminate at the point that all Spectrum equity investment has been repaid. At that time, Spectrum would transfer to AIDEA all project assets in exchange for a release of all AIDEA debt, including interest.

If Spectrum elects to continue future participation, all existing operations agreements, lease agreements, contracts, loan agreements, loan covenants and conditions between Spectrum and AIDEA will remain in effect.

## **20. Right of first offer**

AIDEA will have a right of first offer to purchase Spectrum's interest in the NSGP in the event that Spectrum seeks to sell its interest in the plant.

## **21. Default**

The NSGP financing agreements will include customary default conditions as well as provision for the treatment and effect of cross-defaults under any other relevant agreements. Without limitation, such defaults will include:

- Payment default (i.e., failure to apply cash flows under specified priorities)
- Non-payment covenant default
- Destruction or abandonment of the Project
- Cessation of operation of the Project

Failure to satisfy a Conditions Subsequent may constitute an event of default depending upon the nature of the specific condition.

In the event of an uncured default following notice and opportunity to cure, customary remedies will be available to non-defaulting parties.

## **22. Conditions Precedent to Second Closing**

Customary conditions precedent to the Second Closing, including but not limited to:

- Negotiated Project Development Agreement including a Plan of Development
- Negotiated AIDEA/Spectrum financing agreements
- Completion of mutual due diligence
- Site secured

### **23. Conditions Subsequent**

None currently identified.

### **24. Transfer restrictions/Change of Control**

Neither AIDEA nor Spectrum may transfer its interests or obligations related to the NSGP without approval of the other party, which will not be unreasonably withheld.

### **25. Laws & Jurisdiction**

All AIDEA financing agreements and any related agreements will be governed by Alaska law. Jurisdiction for all disputes under the agreements will be the Third Judicial District of Alaska at Anchorage.

### **26. Agreement List**

To be determined.

#### **EXHIBITS:**

- A. Position Statement of Spectrum LNG, LLC
- B. Cost and Capital data requested in AIDEA's letter of 11-13-13

**Position Statement  
Spectrum-AIDEA NSGP  
November 14<sup>th</sup>, 2013**

This statement is submitted to AIDEA by Spectrum LNG, LLC and its wholly-owned subsidiary, Spectrum Alaska, LLC (collectively, "Spectrum") to address several matters related to the North Slope Gas Project and to explain the thinking behind several terms reflected in the attached revised term sheet for the North Slope Gas Project.

There are many issues involved with bringing gas to the Interior from Prudhoe Bay. Fortunately, Spectrum has ample relevant experience to overcome the technical issues. This statement addresses the more challenging commercial issues.

Spectrum is confident in its ability to fully develop the LNG production portion of the delivery chain. Spectrum has the most cost effective method of doing so, and doing so in a timely manner. To use an RCA term, Spectrum views itself as the most fit, willing, and able to become the LNG utility in the State.

Spectrum is confident that it can meet AIDEA's September 2015 date for LNG production if the parties proceed under the time line reflected in the term sheet.

**Market Risk**

Spectrum is willing to forgo its normal business model in order to accommodate AIDEA's goal of providing low cost gas to consumers in Fairbanks and interior Alaska through the use of the low cost funding AIDEA has to offer. However, Spectrum is unwilling to assume the market risk given the proposed size of the production facility and the absence of any off take commitments. Therefore, Spectrum has attempted to incorporate into the term sheet features similar to the Spectrum term loan concept that had been earlier discussed.

Spectrum is willing to cap its economic return from this project to be strictly a return on equity model, much like the RCA utility model. Spectrum welcomes the addition of Ms. Barnett to the discussion and looks forward to working with her to develop the utility model. The cost of service utility model provides the transparency and results AIDEA seeks.

While the State has targeted a certain price for gas delivered to the homeowner, if the volumes don't materialize the rates might have to be adjusted in order for the project to remain solvent. Under the terms reflected in the term sheet, the market could easily accept the small increase in the burner tip price necessary for the LNG production link to remain solvent and still provide substantial savings to the customers.

Spectrum believes it has developed terms under which it could proceed with project development without a GVEA off take agreement. Further, once AIDEA concludes the selection process by selecting Spectrum as the developer and operator for the NSGP,

Spectrum hopes and expects that GVEA and others (including FNG) will sign up. But even if they do not enter into off take agreements, the NSGP's success will be assured.

While AIDEA and Spectrum believe it appropriate for the customers to agree to long term take or pay agreements, the prospective customers may believe the State assumed the risk under the NSGP legislation. Whatever the reason, there is no assurance that any customer will commit to an off take agreement. Therefore, whether or not legislatively mandated, the State needs to assume the risk.

The form under which AIDEA assumes the market risk is to subordinate its SETS loan debt service to the return on the project developer's equity contribution. Spectrum believes subordination to the developer's return on equity is the only way (short of someone stepping forward with very large take or pay commitments) that AIDEA will be able to find a fit, willing and able party to develop and operate the NSGP.

Spectrum is the most fit, willing and able party. Spectrum is willing to contribute its equity capital, build a plant with the desired level of capacity without any off take commitments, and cap its rate of return on its equity contribution based upon a utility model. But Spectrum is not willing also to subordinate the return on its equity to AIDEA's debt service. In order for AIDEA to meet the State's goal of providing low cost gas to consumers in Fairbanks and interior Alaska, AIDEA must accept that its debt service will be junior to the developer's return on equity.

While Spectrum's contribution is termed as equity, given its fixed rate of return and AIDEA's ownership of the site and certain improvements, Spectrum's capital contribution could be viewed as being more in the nature of unsubordinated debt.

Further, the value of Spectrum's contribution is much more than just their \$20MM equity contribution. It is through its entrepreneurial efforts that its development is in a position to meet the State's schedule. Importantly, there is a significant CAPEX differential between the AIDEA plant and the Spectrum plant. The economic benefit to the State of this reduced CAPEX far outweighs the subordination of AIDEA's loan. While the State would subordinate its debt to Spectrum's \$20MM, the State would save over \$60MM in CAPEX by selecting Spectrum as the developer.

### **Virtual Pipeline Service**

Spectrum believes the best interest of all parties would be served by maximizing both the volume of gas delivered to customers and the number of customers that have gas made available to them. To that end, Spectrum has secured a JV partner that is willing to participate in the installation and operation of numerous LNG Satellite facilities throughout the State. Virtual Pipeline Service (VPS) can be made available to every city and town in Alaska that is connected by the highway system. Spectrum is prepared to implement the VPS under a similar cost of service/return on equity economic model used for natural gas LDCs in Alaska.

The VPS will have substantial value to AIDEA. Not only does it reduce the excess capacity risk discussed above, it also spreads the benefits from SB23 to many more Alaskans. Not only do these other customers enjoy substantial cost savings and other benefits from gas service, their purchases will reduce the cost to all LNG users under the utility pricing model.

The cost of service price to more distant towns like Seward and Glennallen is expected to be higher than Fairbanks, but will be much lower than the cost of diesel.

Should IGU be successful in its efforts at the RCA, we suspect it will find VPS a very attractive solution to their gas supply strategy.

### **Satellite Facility**

Key to advancing the project absent a commitment from GVEA is the development of a Satellite in the Fairbanks/North Pole area. Spectrum is optimistic that GVEA would permit the use of their site. Whatever the specific location, Spectrum would like to develop the Satellite concurrent with the development of the LNG plant in Prudhoe Bay to assure its completion in a timely manner. Spectrum believes the best way to ensure the success of the overall project is to sell as much gas as possible.

Once the Satellite is installed and connected to the existing FNG system, FNG would likely begin purchasing either LNG or natural gas. If FNG declines to purchase the commodity, then an opportunity would exist for a gas marketer to step in and market gas from the new Satellite directly to the customers in the FNG service area, paying FNG its \$2.06/MCF tariff rate to transport the gas from the new Satellite to the customer. Either way, this would fulfill the promise made by the State in SB23 and the cost of gas to existing customers will substantially fall.

### **Second Train**

While Spectrum will be committed to developing the Alaska market for LNG/gas, the prudent course would be to have an option in the case of disappointing results. Perhaps, the second train represents excess capacity. While Spectrum shares and appreciates AIDEA's optimism with respect to the market, the term sheet includes an option under which Spectrum could reduce capacity by transferring the second train back to AIDEA with a corresponding reduction in AIDEA's loan balance.

A pipeline finally coming through Fairbanks or a number of other fact scenarios would dampen the demand for LNG. However, there will still be other customers that will continue to need LNG, just not enough to justify having the second train.

### **CAPEX**

Spectrum has shown to AIDEA its plant design that is more efficient, reliable, and costs less to build. A large portion of the reduced cost is due to Spectrum's use of direct drive compression versus using electric drive that requires a separate power plant. There are several other differences that help reduce the CAPEX.

The total CAPEX, including initial years' negative cash flows and required reserves comes in just under \$145MM, which is approximately \$60MM below the AIDEA budgeted amount. Given the cap on return on equity, this will result in lower cost of production. Additionally, since the NSGP can be developed using only the Spectrum capital contribution and the SETS loan funds, the balance of the grant funds can be used elsewhere in the effort to reduce the cost of energy to the Interior.

### **OPEX**

Differences in OPEX between the Spectrum plan and that which AIDEA published is whether fuel gas is included or not and the amount of labor needed to operate the plant. Later this week Keith Hand can meet with Nick Szymoniak to review the details of the OPEX.

### **Gas Supply Contracts**

Spectrum is well aware of the Governor's price goal and understands that without larger participation from the electric utilities, that meeting the price goal will be challenging. However, absent GVEA's participation, another gas supply contract will have to be negotiated.

Given the current referendum for the repeal of SB21, the time is ripening for the producers to assist with the Interior Energy Project effort by agreeing to sell their gas for a more reasonable price. One producer currently sells gas for \$2.00/MMBtu, while the price being charged by other producers is much higher. In recent years, gas sold for as little as \$1.00/MMBtu.

Spectrum's management has many years of experience in successful negotiations for the purchase of gas from Prudhoe Bay producers beginning in 1987. In fact, Spectrum's team has executed more Prudhoe Bay gas purchase agreements than anyone else. With respect to the present project, Spectrum has been patient while others rushed to get a gas contract. Spectrum believes there has been entirely too much attention paid to the less than desirably priced gas supply contracts. Once AIDEA has selected Spectrum, it will be in a better position to be taken more seriously by the producers and expects to negotiate a much more favorable supply agreement than currently exists.

It should be noted that a wellhead price reduction of \$1-2 per MMBtu will go a long way in addressing any price increase due to reduced volumes. Just as Spectrum can provide creative thinking on how to increase the volume of gas sold, it also can do better on the purchase price of the commodity. There should be no better time to negotiate a gas supply contract than the first quarter of 2014.

### **Schedule**

Spectrum has already purchased materials and equipment that are staged in Fairbanks. While these are not major components, they are critical to maintaining the project's timely development.

Spectrum plans to pre-fabricate the VSMS for the feed gas pipeline in February 2014 (welding begins in 90 days) for transport and installation at the site in March/April. This work has to be done in the winter so gas can be available to the site by August of 2014. Spectrum intends to use fuel gas for onsite power generation and heating in lieu of diesel fuel as normally used on other NS construction projects. The temporary fuel gas skid is already in Prudhoe Bay. The pad, camp, control room, and shop will all be installed in the summer/fall of 2014.

Having the above mentioned improvements in place prior to LNG plant components arrival and installation in 2015 will make for a much more orderly flow of project development. Having the camp in operation ahead of the main construction effort improves efficiency by being able to house the construction crew on site. Having the shop available during the plant construction process further improves production efficiency of the construction effort.

### **Summary**

1. Spectrum has agreed to operate the NSGP for a relatively small cost when compared to the value of the enterprise.
2. Spectrum's investment position will have higher priority than AIDEA's loan, but for a relatively small amount, much less than the overall savings that Spectrum's methods and experience bring to the project.
3. Spectrum is in a much better position to accomplish the project in a timely manner due to its earlier high risk investments.
4. Spectrum has much more experience in developing LNG projects than any other contender.
5. Today, Spectrum produces more LNG than any other contender.
6. Spectrum has developed innovative marketing plans to insure the overall project success by increasing sales volumes.
7. Spectrum's VPS plans will provide gas service to more people in more locations.
8. Spectrum can begin construction in January of 2014.



**SPECTRUM LNG  
NORTHERN GAS SUPPLY PLANT  
CAPITAL EXPEDITURES**

**INFRASTRUCTURE**

Site Improvements	\$2,425,000
Control room and trucker lounge	\$900,000
Shop	\$2,000,000
Camp	\$2,192,000
Yard Equipment & Trucks	\$450,000
15% Contingency	\$1,195,050
<b>INFRASTRUCTURE TOTAL</b>	<b>\$9,162,050</b>

**PLANT MAJOR PROCESS COMPONENTS**

	<u>TRAIN 1</u>	<u>TRAIN 2</u>
Professional, Engineering and Management Fees	\$14,850,000	
Inlet metering skid	\$1,500,000	
Amine plant	\$5,259,489	\$5,259,489
Mole sieve skid	\$3,200,000	
Direct fired heater	\$467,510	\$467,510
Cold box	\$2,000,000	\$2,000,000
SCADA	\$500,000	\$500,000
MR skid	\$800,000	\$800,000
Main compressor	\$7,700,000	\$7,700,000
Waste heat unit	\$1,100,000	\$1,100,000
Coolers	\$2,200,000	\$2,200,000
Tanks and truck loading	\$5,200,000	
Gas pipeline & tie-in	\$1,200,000	
Power plant	\$1,600,000	\$1,120,000
MCC	\$300,000	\$300,000
Propane Unit	\$5,900,000	
Pipe and wire mtl's for site install	\$2,000,000	\$1,000,000
Installation (Process equip only)	\$6,000,000	\$4,200,000
Freight	\$800,000	\$800,000
First fills	\$100,000	\$100,000
Startup support	\$500,000	\$250,000
15% contingency	\$9,476,550	\$4,169,550
<b>PLANT MAJOR PROCESS COMPONENTS TOTAL</b>	<b>\$72,653,549</b>	<b>\$31,966,549</b>

Construction financing 6%	\$4,908,936	\$1,917,993
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<b>CAPEX SUB TOTAL PER TRAIN</b>	<b>\$86,724,535</b>	<b>\$33,884,542</b>
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<b>PLANT AND INFRASTRUCTURE COMBINED CAPEX</b>	<b>\$120,609,077</b>
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First year's negative cash flow	\$3,820,656
Second year's negative cash flow	\$1,843,793
Third year's negative cash flow	\$0
Components of OPEX prior to start up	\$3,644,024

<b>GRAND TOTAL CAPITAL EXPEDITURES</b>	<b>\$129,917,550</b>
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**SPECTRUM LNG  
NORTHERN GAS SUPPLY PLANT  
CAPTIAL STRUCTURE**

TOTAL CAPITAL REQUIREMENT	\$129,917,550
CONSTRUCTION RESERVE	<u>\$10,000,000</u>
<b>ADJUSTED TOTAL CAPITAL REQUIREMENT</b>	<b>\$139,917,550</b>
SPECTRUM LNG CAPITAL CONTRIBUTION	\$20,000,000
SETS FINANCING	\$119,917,550
CAPITAL BUDGET APPROPRIATION	<u>\$0</u>
<b>TOTAL</b>	<b>\$139,917,550</b>

**SPECTRUM LNG  
NORTHERN GAS SUPPLY PLANT  
ANNUAL OPERATIONAL COSTS**

	<b>Post Start Up Annualized Cost</b>
<b>DIRECT OPERATIONAL COSTS - ONSITE AT PLANT</b>	
Onsite Labor (fully burdened):	
Onsite Plant Labor	\$1,216,877
Administration-on site	\$190,370
Supervision -on site	\$394,200
Total Onsite Labor	<u>\$1,801,447</u>
Camp and Subsistence	\$444,080
Transportation	\$231,800
Plant Maintenance	\$2,184,640
Pad lease payment	\$70,000
Onsite Equipment	\$50,000
<b>TOTAL DIRECT OPERATING EXPENSES</b>	<b><u><u>\$4,781,967</u></u></b>
<b>OTHER OPERATING EXPENSES:</b>	
Fuel Gas	\$1,437,188
Property tax	\$1,825,735
<b>TOTAL OTHER OPERATING EXPENSES</b>	<b><u>\$3,262,923</u></b>
<b>INDIRECT SUPPORT COSTS - OFFSITE</b>	
Offsite Support Labor (fully burdened):	
Management and Administrative Labor	\$625,000
Operations Support Labor	\$430,000
Total Support Labor - offsite	<u>\$1,055,000</u>
Office, Travel, Other General Administrative	\$150,000
Insurance	\$200,000
Professional Fees	\$45,000
<b>TOTAL INDIRECT SUPPORT COSTS - OFFSITE</b>	<b><u>\$1,450,000</u></b>
<b>SUBTOTAL</b>	<b><u>\$9,494,890</u></b>
<b>10% contingency on all of above</b>	<b>\$949,489</b>
<b>TOTAL ANNUAL EXPENSES</b>	<b><u>\$10,444,378</u></b>