

Scope of Work

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Scope of Work

Our proposal to advise the State Legislature covers five work-streams:

1. Training on foundational concepts of gas and LNG
2. Develop a detailed financial model for the LNG project
3. Assist the legislature in weighting different pathways regarding LNG
4. Analyze oil and gas fiscal systems
5. Advise the legislature throughout the 2014 Legislative Session

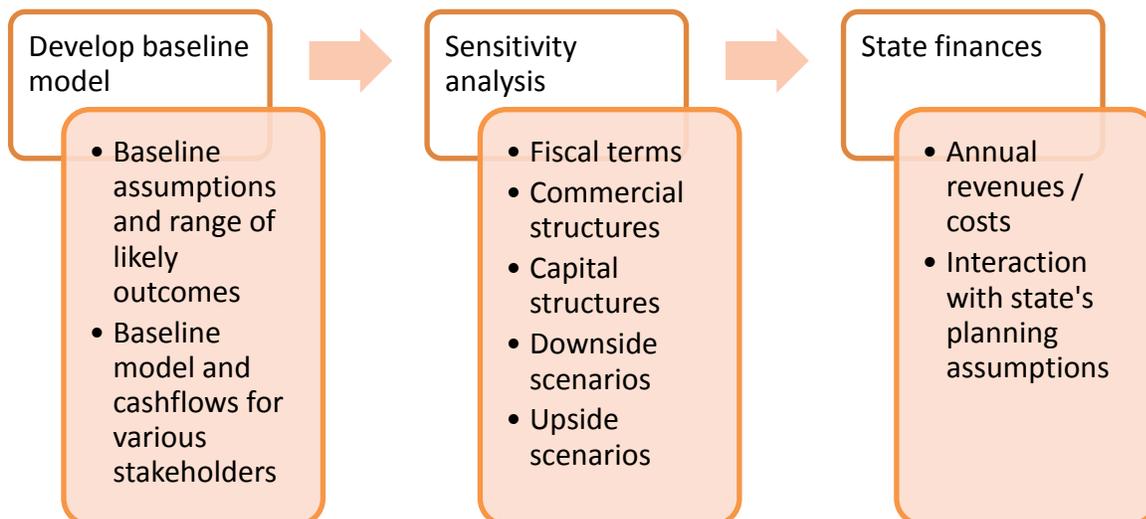
Work-stream #1: Training on foundational concepts of gas and LNG

In order for the Alaskan Legislature to assess the relative merits of different approaches to enabling the large-scale commercialization of gas from the North Slope, it is important that everyone has a solid foundational understanding of how large-scale gas and LNG projects are developed and how their success depends on factors that differ from oil. In that spirit, we propose to develop a slide deck that explains:

- A. A brief overview of the state of the LNG market
- B. Core ideas about large-scale gas commercialization, and in particular LNG
- C. An overview of the different ways that LNG projects are structured
- D. An overview of the economics an LNG project as it applies to Alaska

Work-stream #2: Develop a detailed financial model for the LNG project

At the core of the questions that legislators will need to come to terms with in the coming session are matters of gas fiscal terms, and of the impact of different commercial and capital structures for a gas commercialization project. In order to adequately assess the impact to the state of different options over the broadest range of potential scenarios, it will be necessary to build a detailed financial model for a combined upstream, gas processing, pipeline and gas liquefaction project, capable of assessing the economic costs and benefits for all the different stakeholders.



Our proposed financial model will:

- A. Develop a baseline set of assumptions in consultation with the various stakeholders in the project and agree on a range of reasonable variations in those assumptions;
- B. Develop a model to quantify the project revenues for the state treasury under a baseline scenario;
- C. Develop alternative scenarios to quantify the impact on state revenues of changes in either fiscal terms (e.g. tax and royalty rates, type of royalty payment), or commercial structures (e.g. the state as a supplier or the state as an equity participant in different parts of the value chain);
- D. Quantify the impact on the project's and thus the state's revenues due to varying capital structures that are typical in LNG projects (buyer participation, export credit agencies, debt financing etc.) and associated changes in transfer prices or tariffs;
- E. Stress test the baseline scenario by quantifying the impact on project and, thus, state finances, of adverse shocks that other LNG developments in the world have faced in the past. Examples include cost escalation, delays in start-up, less than 100% reliability, buyer pressure for price renegotiations, market shocks that increase or decrease demand;
- F. Quantify various upside scenarios and understand the revenue distribution between the various stakeholders in the project depending on how the project is structured (for example, a demand shock that pushes up prices in the short term, a spike in oil prices, a supply-shock that also pushes up prices; arbitrage between different markets);
- G. Assess long-run revenue impacts relative to the Department of Revenue's long-term forecasts. Analysis could include the importance of gas-related revenues / spending at any given year relative to other revenue expectations / commitments; it could also focus on the impact of different commercial structures on the state's broader financial metrics such as debt.

Work-stream #3: Assist the legislature in weighting different pathways regarding LNG

Having developed a detailed financial model, we will then focus on several likely pathways and/or decision ranges that the state might consider; for example:

- A. Should the state take its royalty gas in kind or in value?
- B. Should the state take an equity stake in the upstream and if so, what size stake?
- C. Should the state take an equity stake in the pipeline and if so, what size stake?
- D. Should the state take an equity stake in the liquefaction and if so, what size stake?
- E. Should the state finance any equity stake through its own funds or through debt?
- F. Should the state provide any other tax incentives or other guarantees to the project?

Work-stream #4: Analyze oil and gas fiscal terms

Following on from the extensive work that has already been done on fiscal terms over the course of the last two legislative sessions, we will:

- A. Provide ongoing advice and analysis on any legislative proposals for further changes or refinements to the oil fiscal system that may be raised during the course of the session
- B. Review previous work undertaken for the legislature and by other consultants on fiscal systems for North Slope gas
- C. Review any proposals by the Administration on fiscal systems for North Slope gas

- D. Examine the interaction between LNG and pipeline project economics, forms of state participation in a project, and oil and gas fiscal systems to determine how the state can best ensure its share of value from the LNG project, while ensuring the project remains as economically competitive as possible

Work-stream #5: Advise the legislature during session through April 20

Throughout the legislative session, we will be available in Juneau to consult and advise legislators and staff. In particular, we will supplement the quantitative element of our analysis with both testimony and one-on-one sessions with legislators that help legislators understand:

1. How are expectations of the different players in the global LNG market changing? We will focus in particular on the preoccupations of project developers, the concerns of buyers, and the expectations of different participants about how LNG projects ought to look.
2. With whom is Alaska competing, and how does Alaska fit into the global picture in terms of price competitiveness and risk structure?
3. How are states securing their interests in LNG projects and how have states dealt with cases where they were dissatisfied with their share of the revenue after a project started?
4. What type of commercial structures could Alaska adopt, and how would these impact the likelihood that the project gets developed and how would these bring to the state of Alaska different costs and benefits?

By maintaining an extended on-the-ground presence in Juneau for the course of the session, we believe we can have the greatest possible impact in assisting legislators as they grapple with these complex issues, which for many will require coming to terms with a largely new set of concepts related to international gas markets and LNG and pipeline commercial structures.

Beyond simply being available for testimony, we would consistently host individual meetings with legislators to talk them through core concepts, provide detailed analysis and advice, and help build confidence with and understanding of these issues beyond the sometimes-restricting confines of the committee environment.

Deliverables & Timetable

Content	Timing
Training on foundational concepts of gas and LNG	Presentation and slide deck at the beginning of session (late January 2014), but materials might be refreshed and presented again throughout the session as needed.
Develop a detailed financial model for the LNG project	Model and an executive summary with the conclusions to be presented within two weeks of the start of the Legislative Session.
Assist the legislature in weighting different pathways regarding LNG	Starting in February after completion of the modeling work; support throughout the Legislative Session as needed
Analyze oil and gas fiscal terms	Throughout the Legislative Session as needed
Advise the legislature throughout the 2014 Legislative Session	Throughout the Legislative Session as needed

Financial Terms

The fees for this scope of work are as follows:

Janak Mayer professional fees.....	\$250,000
Janak Mayer expenses	\$13,000
Nikos Tsafos professional fees.....	\$250,000
<u>Nikos Tsafos expenses</u>	<u>\$13,000</u>
Total.....	\$526,000

Payments for the professional fees will be billed on a monthly basis, in 5 even increments as follows:

- At contract commencement on January 1: 20%
- February 1: 20%
- March 1: 20%
- April 1: 20%
- May 1: 20%

Payments for the expenses will be made in a lump-sum on January 1, 2014 and will cover the entire period of the 2014 regular legislative session.

After the scheduled end of regular session on April 20, 2014, any additional requested analysis will be performed on a daily-rate basis as agreed with the State Legislature, under the following rates:

- Daily rate for Janak Mayer: \$3,000
- Daily rate for Nikos Tsafos: \$3,000

Travel time for work performed after April 20, 2014 will be charged at half of the daily rate amount.