

**04/16/15  
PRESENTATION  
AK LNG END  
OF SESSION  
UPDATE BY  
ENALYTICA**

<TARGET><BILL></BILL><SUBJECT>04-16-15 PRESENTATION AK  
LNG END OF SESSION UPDATE BY  
ENALYTICA</SUBJECT><COMM>SRES29</COMM></TARGET>

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AK LNG

# END OF SESSION UPDATE

**Presentation to Senate Resources Committee  
Juneau, Alaska > Thursday, April 16, 2015**

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	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Project Stage</b>	Pre-FEED		FEED			Construction				Online			
<b>Investment (Entire Project)</b>	\$400–\$500 mm		\$1,500–\$2,000 mm (Equity)			\$45–65 billion (Debt and equity)				O&M Met from cash flow			
<b>Investment (State of Alaska)</b>	\$50–\$125 mm		\$200–\$500 mm (Equity)			\$6–\$15 billion (Debt and equity)				O&M Met from cash flow			

## FROM PRE-FEED TO FEED: THE NEXT 12-18 MONTHS

<b>Technical</b>	Conceptual design, route selection, narrowing of cost estimate, risk management
<b>Regulatory</b>	Export approvals, FERC permitting and input process from stakeholders
<b>Commercial</b>	Domestic gas, off-take and balancing, transportation services, LNG disposition, financing
<b>Organizational</b>	FEED-stage joint-venture agreements, governance agreements, lease modifications
<b>Fiscal</b>	Fiscal agreement, property tax

# HOW DO COUNTER-PARTIES LOOK AT LNG PROJECTS?

**WILL THE GAS SUPPLY BE RELIABLE?**

- How much gas do the sponsors have?
- What is the technical complexity of the resource?
- What is the gas quality (level of processing needed)?
- What factors might interrupt supply (technical or political)?

**ARE THE SPONSORS CREDIBLE?**

- Do they have the technical capacity to execute project (track-record, complexity)?
- Do they have access to sufficient internal and/or external funds?
- Are they organizationally committed within their portfolios?
- What partnerships or commitments do they have (buyers, financiers, contractors)?

**IS THERE STAKEHOLDER BUY-IN?**

- Does the sovereign support this project?
- Is the support durable and demonstrated tangibly?
- Does the local community support it (project footprint, engagement, NGO activity)?
- Is there a clear, speedy, and transparent regulatory and judicial review?

**DOES THE ECOSYSTEM SUPPORT DEVELOPMENT?**

- Can the government manage approvals, negotiate contracts, corruption)
- Is there a physical risk to the infrastructure (personnel and assets)?
- Is there sufficient existing infrastructure (roads, ports, pipelines)?
- Is there a strong labor pool (visa restrictions) and auxiliary industries (local content)?

**IS THE PROJECT COMMERCIALY VIABLE?**

- What is the project's estimated cost relative to price expectations?
- What is the fiscal burden (government take and fiscal stability)?
- At what stage of development is the project?
- Do the project rewards offset the project risks?

# RISK ASSESSMENT: AK LNG

AK LNG

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# RISK ASSESSMENT: 'PLAN B' PROJECT (STANDALONE)

'PLAN B'

**WILL THE GAS SUPPLY BE RELIABLE?**

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# RISK ASSESSMENT: CONCURRENT DEVELOPMENT

		AK LNG	'PLAN B'
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	What is the technical complexity of the resource?		
	What is the gas quality (level of processing needed)?		
	What factors might interrupt supply (technical or political)?		
<b>ARE THE SPONSORS CREDIBLE?</b>	Do they have the technical capacity to execute project (track-record, complexity)?		
	Do they have access to sufficient internal and/or external funds?		
	Are they organizationally committed within their portfolios?		
	What partnerships or commitments do they have (buyers, financiers, contractors)?		
<b>IS THERE STAKEHOLDER BUY-IN?</b>	Does the sovereign support this project?		
	Is the support durable and demonstrated tangibly?		
	Does the local community support it (project footprint, engagement, NGO activity)?		
	Is there a clear, speedy, and transparent regulatory and judicial review?		
<b>DOES THE ECOSYSTEM SUPPORT DEVELOPMENT?</b>	Can the government manage approvals, negotiate contracts, corruption)		
	Is there a physical risk to the infrastructure (personnel and assets)?		
	Is there sufficient existing infrastructure (roads, ports, pipelines)?		
	Is there a strong labor pool (visa restrictions) and auxiliary industries (local content)?		
<b>IS THE PROJECT COMMERCIALY VIABLE?</b>	What is the project's estimated cost relative to price expectations?		
	What is the fiscal burden (government take and fiscal stability)?		
	At what stage of development is the project?		
	Do the project rewards offset the project risks?		

# PURSUING TWO PROJECTS IN PARALLEL IMPERILS BOTH

## GENERAL ISSUES

The AK LNG partners are unlikely to sustain current spending levels if state is not committed  
Almost impossible to advance two projects at the cost of one  
The state will need more resources—and will need to balance between projects

## REGULATORY WORK AND APPROVALS

Hard to secure approvals (FERC, DOE) for two projects at the same time  
Parallel community engagement will create confusion and complications

## TECHNICAL AND DESIGN WORK

Competition between the projects likely to raise costs (suppliers, labor)  
Ownership of assets and intellectual property point to the need for two independent efforts

## MARKETING GAS

Buyers will be very suspicious of seller marketing the same gas from two different projects  
Hard to see the state signing firm sales contracts while title to the gas remains unclear  
Hard for 'Plan B' to secure the gas while the AK LNG partners are marketing that same gas

## SELECTING PARTNERS

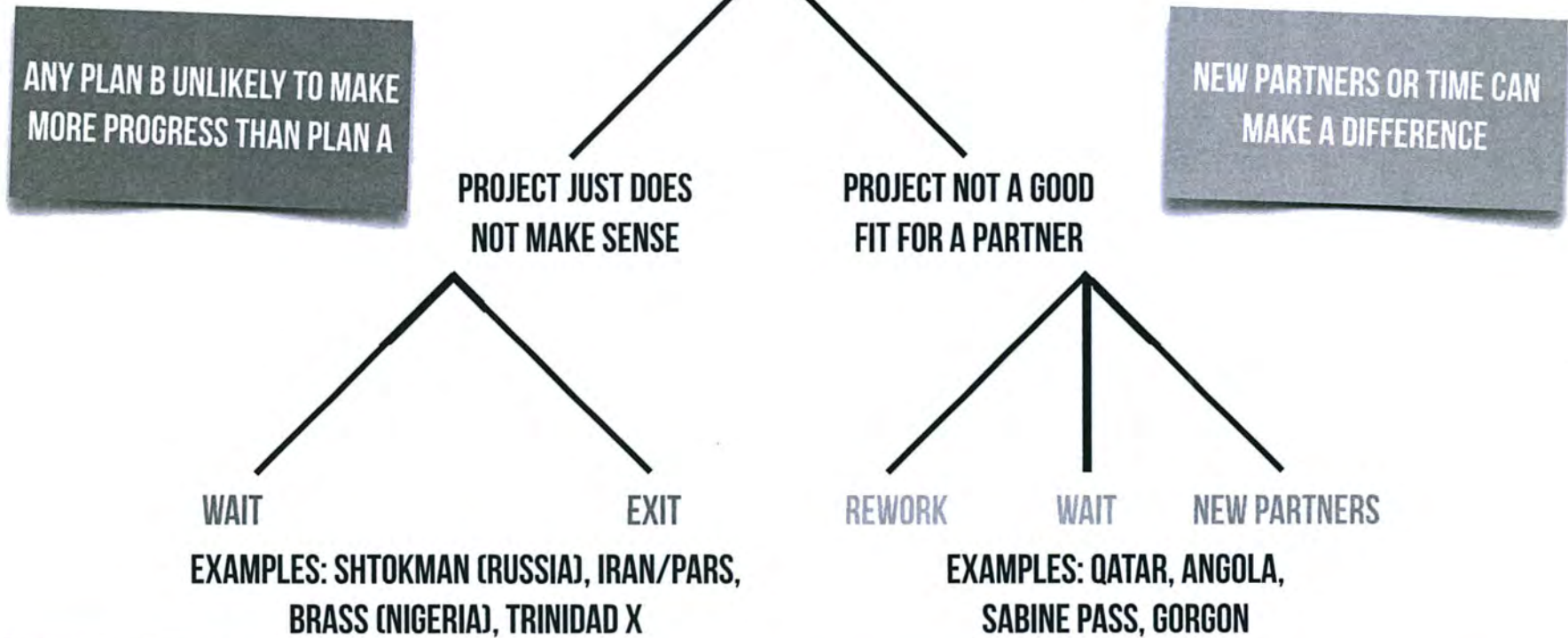
List of likely partners is different (partial investor versus project sponsor)  
Very few projects are majority owned by the buyers—atypical project structure  
Almost no project where large IOCs with sizable resources sell at the wellhead

## SECURING FINANCE

Financial discussions are unlikely to advance much before all other risks have been mitigated  
Lack of clarity about finance will limit ability to advance other aspects (investors, buyers, etc.)

# IS THERE A BETTER WAY FOR ALASKA TO DEVELOP PLAN B?

WHAT DO SPONSORS DO IF LNG PROJECT IS STALLED?



*It makes more sense for the State of Alaska to develop one robust project and if it fails to advance because it doesn't meet the sponsors' financial needs, then the state could facilitate a change in ownership to push the project past the finish line*

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