Evaluation of SB 138 & Associated Proposed North Slope Natural Gas Commercialization Proposals

Presentation to House Finance

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Roger Marks - Background

- **<u>Since 2008</u>**: Private consulting practice in Anchorage specializing in petroleum economics and taxation
  - Clients include: State of Alaska Legislature, federal government, local municipalities, University of Alaska, oil and gas explorer/producers, pipeline companies, commercial/investment banks, private equity firms, hedge funds
- **<u>1983-2008</u>**: Senior petroleum economist with State of Alaska Department of Revenue Tax Division
  - Fiscal development
    - Statutory and regulatory design
    - Petroleum economic and commercial valuation of exploration, development, production, transportation, refining, marketing, taxation
    - Analysis of international competitiveness
    - Oil and gas valuation
  - North Slope gas commercialization
    - Economic valuation
    - International competitiveness
    - Pipeline financing
    - Taxation
    - Tariff design
- **<u>1977-1983</u>**: Petroleum economist with United States Geological Survey
  - Resource evaluation of unleased acreage on Alaska federal Outer Continental Shelf
  - Design of bidding systems
- **<u>Publications on Alaska petroleum taxation</u>**: Journal of Petroleum Technology, OPEC Review, Journal of Energy Finance and Development, Oil & Gas Financial Journal, Journal of Economic Issues, Journal of Legal Issues and Cases in Business

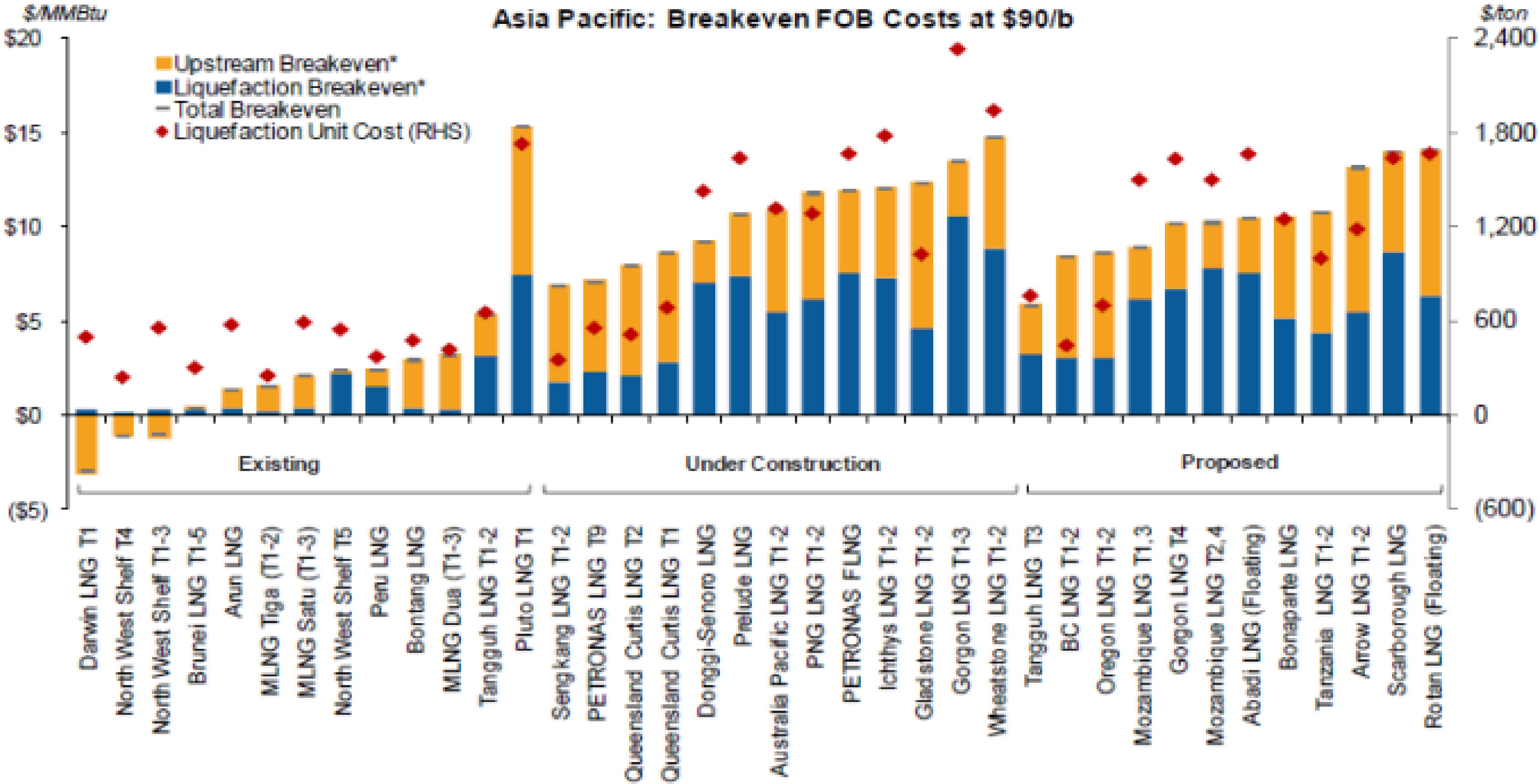
Outline

- 1. Introduction: Market and Timing Landscape
- 2. High-level Decisions
  - A. In-Kind Gas
  - B. Regulation
  - C. Ownership (and Partnerships)
- 3. Role of AGIA in Proposal

1. Introduction: Market Challenges

- Competition
  - Twice the amount of supply as there is demand in Asia in 2030
- Pricing
  - Prices appear to be falling
    - Buyers realize sellers were making windfalls at prices linked to high oil prices and increased competition among sellers
  - Compete based on cost
- Size Burden
  - Need to capture large incremental share of market in short amount of time
  - Higher breakeven price than much of the competition

New LNG Projects are Expensive



PFC Energy

Timing Landscape

- Terms set up today will determine
  - Risks to state
  - Cost of capital
    - Long-term gas revenues
    - What Alaskans pay for gas in the future
- Options: A modified deal which may take a few months to put together could create more long-term benefits to state

2. High Level Decisions under Proposal

- State takes its production taxes and royalties as in-kind gas
- Tariffs and expansions will not be regulated
- TransCanada (and perhaps SOA as partner) will own share of GTP and pipeline, and SOA will own share of LNG facilities, commensurate with state's share of gas (about 25%)
- Designed to amicably transition out of AGIA

A. In-Value vs. In-Kind Gas

- Helps out the economics of the project considerably
- If the state takes its royalties and taxes in value:
  - The producers pay for 100% of the capital cost, incur 100% of the capital risk, but only get 75% of the revenues
  - Producers pay to state in taxes and royalties an amount of money equal to 25% of the gas
  - They slowly recover over time the cost of the 25% of the capital costs they laid out for the state’s share through the tariff deduction
  - But at a midstream rate of return, which is lower than the upstream
  - This waters down their rate of return
- When the state takes its taxes and royalties as in-kind gas, the state assumes the capital commitment for its capacity either through ownership or taking on a firm transportation commitment with a third-party
- The state does not need to own the pipeline to take the gas in-kind

Firm Transportation Commitments

- When the state takes its taxes and royalties as in-kind gas, the state will take on a long-term firm transportation liability (debt) to TransCanada (on the portion of the 25% the state does not own)
- Ship or pay regardless of cost, market, reserves
- Used by pipeline company as collateral for financing
- TransCanada will have priority claims on project cash flows

Debt Capacity and In-Kind Gas

- State policy is for debt service to be no more than 8% of general fund unrestricted revenues
- Investing in the project will put the state 2-3 times over that amount
- It has been suggested that having TransCanada as a partner would reduce the debt service relative to state ownership
- The debt from taking the firm transportation commitment with TransCanada will have a greater impact on the state's debt capacity than debt used to finance ownership

Marketing the In-Kind Gas

- By taking gas in-value the state benefits from some of the best marketers in the world
- Consider linking in-kind provision with agreement by producers to market state's gas with their gas at the same price they get
    - Otherwise, risk that state may be marketing at prices considerably lower than producers, which could result in losing money

B. Regulation

- Proposal under HOA is for FERC to regulate under Section 3 of the Natural Gas Act
  - Mainly designed for licensing the siting, construction, expansion, and operation of LNG import or export terminals
  - Terminals include facilities used to transport and process gas
  - Appears this would be the only pipeline in the U.S. where tariff for consumers' gas is not regulated
- No regulation of tariffs or expansions
  - To get reasonable tariffs and expansions, state ownership necessary
  - Unclear what happens as in-state needs expand:

Example

Initial Gas Disposition (billion cubic feet per day)

Total Gas	2.4 bcf/d
State Share	25%
State Gas	0.6 bcf/d
To Fairbanks	(0.05 bcf/d)
State Gas to Asia	0.55 bcf/d

Benefit of Regulation of Monopoly

- Precedent for RCA to regulate in-state and export pipeline and gas treatment under AS 42.08
- Regulation is the trade-off for privilege of natural monopoly
- May enhance market efficiencies to have a transparent pipeline cost
- State may be conflicted as pipeline owner or partner to pipeline owner for accountability

C. Ownership and Partnership

- Need for ownership due to no regulation on tariffs and expansion, and for lower tariffs
- State does not necessarily need partner for expertise assistance
  - Producer expertise
  - AGDC expertise
  - TransCanada's expertise in gas treatment unclear
  - To the extent there is not a need for expertise, if the state needs a cash partner, it does not necessarily need a pipeline company partner, but a general investment partner

State Does Not Necessarily Need Partner for Cash or Lower Tariffs: 2011 Citigroup AGDC Financing Plan

- Possibility of 100% debt financing
  - Combination of revenue bonds and state backing
  - Appears to be less risky than ASAP plan
  - Possibility of deferring most cash outflows until gas starts flowing
  - May have short-term impact on credit rating that would reverse once gas revenues start coming in
- Possibility of tax-exempt bonds through Alaska Railroad
  - Directed at industrial development projects
  - Requires IRS private letter ruling
  - Reduces cost of debt about 25% relative to taxable debt
- Would require potentially no or little equity (cash) before gas starts flowing
- To the extent the state does not need a cash partner, its good credit rating and potential for tax-exempt debt could result in a lower cost of capital

Ownership: Risk of Failure to Sanction

- Sponsors could spend over $2 billion to get to FID and have a project not materialize, of which SOA would be responsible for 25%, regardless of whether it exercised ownership option with TransCanada
- Are producers better equipped to handle that risk?
  - Diversification – some of their other prospects will get sanctioned
  - Finite capital competing not only for gas, but for oil
  - Where other countries do share this risk, the takes are higher
- Will this money make a material difference to the viability of the project?
  - The more interested the producers are in the project, the less they need state money. The less interested they are, the more the state should avoid this risk.
- Balance:

How near tipping point	Probability of Project
Size of the prize	How material is $600 mm

- Could pursue arrangement with producers to buy in to project once it is sanctioned (or at least after pre-FEED) and re-pay feasibility costs with interest

3. Role of AGIA in Proposal

- Public comments by administration:
  - Aggressive time frame to get gas to market
  - Desire to avoid potential lengthy and costly legal fight over ending AGIA license
  - Proposal designed to end AGIA license amicably
- Appears plan was crafted (at least in part) around giving TransCanada a material role to avoid potential AGIA liabilities
- License project assurances (treble damages) clause in AGIA
- Could there be better terms if state was not so constrained by AGIA?

Areas Where State Could Possibly Have Better Terms If It Had No Partner

- Possibility of full ownership of 25% share of GTP/Pipe with 100% debt financing and possible tax-exempt debt
- Lower cost of capital: higher gas revenues/lower cost gas to consumers
- There is a misalignment of interests between shippers and non-shipper partners

Areas Where State Could Possibly Have Better Terms If It Had a Different Partner (or could re-negotiate MOU)

1) Sharing failure to sanction risk

2) Share in benefit of lower interest rates

3) Higher ownership share than 40% (of 25%)

4) Better cost of capital terms in tariff
   - TransCanada's terms are about the same as other Canadian pipelines
   - 100% or tax-exempt debt may be preferable
   - Given producer involvement, terms on existing pipelines may not be relevant

How Bound is State by AGIA?

- The easiest way out of AGIA is abandonment of the project as uneconomic (AS 43.90.240)
- Official project plan is still the pipeline to Alberta
- Uneconomic defined as:
  - "predicted costs of transportation at a 100 percent load factor, when deducted from predicted gas sales revenue using publicly available predictions of future gas prices, would result in a producer rate of return that is below the rate typically accepted by a prudent oil and gas exploration company for incremental upstream investment that is required to produce and deliver gas to the project."
- If parties disagree it is settled by arbitration
- If it is found uneconomic – treble damages no longer apply
- Economically, this would not be difficult to show

Fiscal Stability

- Producers have continually expressed necessity
- Some fiscal stability may be necessary
- SB 138 not stable
- Scope out producers intentions as to what constitutes adequate stability