OIL & GAS COMPETITIVENESS REVIEW BOARD

Observations & Recommendations - October 15, 2014
Reviewed October 30, 2014 – Latest Revision November 13, 2014

This document contains individual board members' observations and recommendations for how to proceed in the future with both board meetings and actions. It is important to stress that these are individual recommendations; there is no action as a board being advocated in this document. That is also important to note because these observations and/or recommendations may seem at odds with one another.

SHORT TERM OBSERVATIONS

- The rhetoric around the recent ballot referendum on Proposition 1, determining whether Senate Bill 21 should be either repealed or upheld, gave the impression that the production tax is the overarching factor for a company's decision to invest in Alaska's oil and gas (O&G) sector. Though the production tax is an important factor, it is one of several factors companies weigh when considering investment decisions.

- The leading economic indicator for the O&G industry is the number of development wells currently being drilled, and those planned for drilling.

- The volatility of oil prices is something that Alaska must acknowledge as a fact and also something the state cannot control. Investments in O&G for exploration, development, and production, often span several price cycles.

- Alaska's primary O&G fields are aging, requiring additional reservoir stimulation techniques to generate additional O&G production.

- The cost of producing O&G in Alaska is higher than in North Dakota, Texas or the Middle East. Higher costs lead to less income, which in turn reduces the amount of revenue Alaska receives.

- The take from O&G revenues by the federal government is both substantial and non-negotiable; Alaska must derive a relatively small portion of revenues once this is taken into account. A material portion of any reduction in government take given up by the State of Alaska goes to the federal government, not to the producer of the oil.

- Industry would welcome a regulatory system that is consistent, fair and able to withstand legal challenges. This is a significant variable when comparing Alaska to potential competitors.

- State agencies have a wealth of information. The Alaska Oil and Gas Conservation Commission (AOGCC), the Department of Revenue (DOR), and the Department of

Natural Resources (DNR) can all be called upon for the expertise they and the people within those agencies possess.

- State regulatory agencies should be staffed and equipped to issue consistent permits, determinations or findings that withstand judicial challenges.

- Aside from fiscal factors, the board's report should devote substantial time towards other factors that affect investment decision in Alaska and, thereby, its competitiveness. Those factors include: O&G potential; operating, labor and transportation costs; access; infrastructure; permitting; land status challenges; climate issues; Alaska Native rights issues; fish-wildlife issues; environmental impacts; and the policies of non-governmental organizations (NGOs).

SHORT TERM RECOMMENDATIONS

The Regulatory and Permitting Structure

- Agencies should offer their ideas on improving the regulatory process. However, the idea should be supported by evidence rather than simply asserted. Well-intended proposals in the past to reform the regulatory and permitting structure actually resulted in creating further obstacles.

- It is important to get feedback as quickly as possible from the interested parties (producers, support industry, etc.) on potential changes to the regulatory and permitting environment. The board has a compressed timeframe and gathering this information is necessary. Without it, the board does not have as complete of an assessment as it should on how the status quo operates, and where improvements can be made.

The Status of the Labor Pool

- The board should learn what are the manpower projections by type, for all work associated with new drilling rigs or other planned capital projects.

- Building on the briefing from the Department of Labor & Workforce Development (DOWLD) at the October 15^{th} meeting, the board should specifically request the preparation of data to support workforce development efforts now. DOWLD should also present its plans on requesting legislative support next session.
  (This bullet has been put in long term as well.)

- The board should explore the definition of a skilled labor force in O&G to a deeper level, what occupations this field encompasses, and what is being done to ready and grow that labor force.

- Industry, labor organization, non-labor apprentice programs, DOWLD and other vocational programs should provide input on the development of the workforce.

- In addition to working with DOWLD, the board should work with the University to identify programs that support O&G investment activity and the entire value chain of oil and gas exploration, transportation and production.

Public and Private Infrastructure

- The board should consider hiring a third party firm to conduct an in depth survey from O&G industry members on its assessment of Alaska's infrastructure. This will avoid issues of individual companies not wishing to divulge information that would put it at a competitive disadvantage, and aggregate the information more quickly and efficiently.

- The board should schedule a meeting with Commissioner Pat Kemp of the Alaska Department of Transportation (DOT). The meeting should consist of an overview of what infrastructure projects have been funded, planned, researched or considered to facility resource development in Alaska. Examples include the Roads to Resources Project, the James Dalton Highway, and port improvements. Infrastructure deficiencies on the state's part for O&G should be explained. Comparing projects in the past against those being proposed in the future is helpful to better understand the state's role as a facilitator for industry.

- The board should have a thorough assessment of the rigs in the North Slope: what types these rigs are, how many are there and in which fields.

- The board should have a summary of infrastructure on the North Slope, if possible, by field and type. How much of this infrastructure is planned to be modified.

Competitiveness

- First and foremost, the board should clearly and quickly identify who is in Alaska's immediate competitive group. The board should use the DOR handout from the October 15th meeting, which listed the "Alaska Oil and Gas Fiscal Regime Report" dated January, 2012, to identify those competitors. By going down the list and removing the geographically irrelevant international competitors, this board can be more narrowly focused.

- The board should make use of all the reports generated by previous consultants to the state (including PFC Energy, Van Meurs Corp., etc.) to identify this peer group, distill the metrics to a simple and easily comparable level, and transpose those findings onto graphs and/or pie charts. This can be applied to tax components of various regimes as well.

- Industry input in identifying the competitive peer group would be helpful.

- Included in that peer group summary, formulate a “similarity score” to identify which peers are most similar to Alaska, making the comparison and, by extension, comparative analysis on competitiveness that much more focused.

- Once identified, there should be a tabular summary of the peer group.

- The board should receive guidance from the Canadian competitive review board on how it identified its peers, and what metrics it used.

- The report the board produces can rely on Tim Ryherd’s October 15th presentation to the board in the following ways:

    - Utilizing a peer cost comparison chart (page 55).
    - Utilize the graphs (pages 61-65), which shows the distinction between investment levels in green field versus brown field projects.
    - Craft a chart similar to page 33, which would be constructed to show the divisible and indivisible incomes generated by a given volume of petroleum sales. Government take, costs, and operator take should be reflected in percentages. This should be done in 2014 prices and variables, an average of operating costs and revenue splits under Senate Bill 21.
    - A pie chart, similar to page 34, illustrating the proportionate breakdown of government take, should be included. Particular emphasis should be on the federal take.
    - A table should be used to compare the costs and government take at different wellhead prices, as well as under either Senate Bill 21 or Alaska’s Clear and Equitable Share Act (ACES). The form can follow the charts on pages 48-50, but with an emphasis on optics and readability, particularly for laymen. In other words, this is a tabular comparison.

- Identify the regressive and progressive thresholds for Senate Bill 21 at various wellhead prices, costs, etc.

- Any third party survey that assesses Alaska's continual pursuit of competitiveness should be split between existing producers and new entry participants/explorers. The survey should ask about permitting hurdles, the fiscal system's durability, leasing and unit issues, manpower development, infrastructure needs, and how those are or are not being met by Alaska.

- An update on the Alberta activity levels after implementing the recommendations of its competitive review board would be very helpful.

LONG TERM OBSERVATIONS

- The cost of transporting O&G to market is a significant element of the cost of production and although some basins in Alaska have world class infrastructure, new basins may not. Factors that increase the cost of transportation should be identified and their impact monitored and forecasted.

- Existing O&G leases have elements that, though they vary from one lease to another, cannot change for the duration of the lease. These elements include lease bonuses, rents, and royalties. Despite the limitations with existing O&G leases, the board may wish to offer advice on future lease terms, to the extent changes there may still influence Alaska's competitiveness.

- Though Alaska has tremendous gas resources to be produced, the operational expenditures (OPEX) and capital expenditures (CAPEX) required for exploration, development, and production are much higher than in the continuous United States. Shale gas, though expensive, enjoys massive production numbers, in turn driving down the price of gas, making Alaskan natural gas extremely uneconomic in the "lower 48" market.

- Asian markets have seen the price of natural gas rise dramatically in the last 5 years. This is in stark contrast to prices in the American market, and present Alaska with a competitive opening to export.

LONG TERM RECOMMENDATIONS

The Regulatory and Permitting Structure

- Compare Alaska's metrics on permitting and its regulatory paradigm with other North American producing areas.

The Status of the Labor Pool

- Building on the briefing from the Department of Labor & Workforce Development (DOWLD) at the October 15th meeting, the board should specifically request the preparation of data to support workforce development efforts now. DOWLD should also present its plans on requesting legislative support next session.

Public and Private Infrastructure

- The board should find out how much production each field and rig is generating, given the current infrastructure. Furthermore, the board should study what is the estimate of new rigs on the North Slope in the mid-term future (1-2 years out), what impact that will have on production, and what are the requirements for the infrastructure around those expansions.

- Similar assessments should be conducted for the Cook Inlet.

- An assessment of the differences in infrastructure needs from a green field project to a brown field project would be very useful. Alaska currently has both, and understanding those nuances would benefit the board.

Competitiveness

- The metrics used to assess a baseline of Alaska's competitiveness should be updated quarterly. Factors such as production, the number of new wells coming on line, the comparative price of ANS crude versus WTI and Brent, as well as future projects that have received financial commitments, should be included.

    - Further factors include the duration of processing permits, the number of applications overall, the number of issues as to why applications are delayed, and the number of individuals working on permit processing should be included in the report.

    - The Department of Labor and Workforce Development (DOWLD) should update its job force numbers for O&G positions on a quarterly basis to the group as well.

- Providing an update for 2013, 2014, and 2015 plans by operator and field would be useful to the board in its analysis.

Report Layout

- The board's presentations and reports should be simple, with easily discernible graphics. This report should not be directed just towards one specific stakeholder group, but to the general public as well. For more detailed information, use appendices.

- The board's website should create a dashboard to track and report trends from the starting point. The dashboard should include:

    - Historical ANS crude spot price from 2012-present. The start of 2012 is useful because it offers a comparative analysis of ACES vs. Senate Bill 21.
    - Production trends.
    - Tax credits allowed to producers.
    - Breakdown of Alaska employment numbers in O&G, and their growth projections.

Further Considerations by Board

- Does the board have the resources it needs to accomplish its task? If not, what would it ask for: staffing, budgetary increases, etc.

- The Board should consider the role financing and access to capital plays in creating a competitive environment. Highlighting:
    - Recent legislative changes to the assignment of tax credits support financing.
    - Activity by AIDEA to finance oil and gas projects with case studies:
        - Endeavor jack-up rig
        - Mustang
        - Interior Energy Project