Oil & Gas Industry Update
Sarah Erkmann - Alaska Oil & Gas Association
June 2, 2016
AOGA Member Companies
Industry facing economic struggles, Alaska not exempt

<table>
<thead>
<tr>
<th>April 2016 avg. ANS Price</th>
<th>$41.80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downstream Costs</td>
<td></td>
</tr>
<tr>
<td>ANS Marine Transportation</td>
<td>($3.28)</td>
</tr>
<tr>
<td>TAPS Tariff</td>
<td>($6.41)</td>
</tr>
<tr>
<td>Other</td>
<td>($0.87)</td>
</tr>
<tr>
<td>Total Transportation Costs</td>
<td>($10.56)</td>
</tr>
<tr>
<td>Royalty</td>
<td>($5.63)</td>
</tr>
<tr>
<td>Lease Expenditures</td>
<td></td>
</tr>
<tr>
<td>Operating Expenditures</td>
<td>($18.48)</td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>($17.68)</td>
</tr>
<tr>
<td>Total Lease Expenditures</td>
<td>($36.14)</td>
</tr>
</tbody>
</table>

**ESTIMATED FY16 COSTS OF PRODUCTION BEFORE TAXES**

($52.33)

Source: DOR, Fall 2015 RSB
OIL PRODUCTION: WHERE ARE WE & WHERE ARE WE HEADED?

TAPS Throughput Historical & Forecasted
(thousand barrels/day)

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall 2013 Forecast</th>
<th>Spring 2016 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>487.6</td>
<td>517.7</td>
</tr>
<tr>
<td>2017</td>
<td>482.7</td>
<td>507.1</td>
</tr>
<tr>
<td>2018</td>
<td>459.5</td>
<td>488.8</td>
</tr>
<tr>
<td>2019</td>
<td>429.1</td>
<td>484.4</td>
</tr>
<tr>
<td>2020</td>
<td>399.6</td>
<td>454.1</td>
</tr>
<tr>
<td>2021</td>
<td>368.8</td>
<td>418.6</td>
</tr>
<tr>
<td>2022</td>
<td>340.1</td>
<td>387.1</td>
</tr>
<tr>
<td>2023</td>
<td>312.9</td>
<td>356.8</td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td>327.0</td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td>300.0</td>
</tr>
</tbody>
</table>

Source: DOR Spring 2016 RSB
Industry Trends in North America

**Low Prices**
- Unprecedented drop in oil price; lower than mid-80s

**High Costs**
- O&G development costs grew 90% since 2000, greater than 2x inflation

**Significant Losses**
- Companies filing for bankruptcy, leaving regions (e.g., AK), laying off workers, cutting spend, deferring projects and stopping drilling
- Changing tax policy only makes it worse vs increasing taxes

Sources
1. Price: Brent Crude (EIA)
2. Cost: Upstream Capital Cost Index (IHS / CERA)
3. Inflation: Consumer Price Index (US Department of Labor)
Oil & Gas Revenue Primary Contributor to State Government

Petroleum Revenue has constituted ~85% of the state’s unrestricted revenue since statehood

TOTAL COLLECTED: $141 Billion

Royalties: $51 billion (36%)
Production Tax: $56 billion (40%)
Other: $34 billion (24%)

Source: DOR Fall 2015 RSB
Is it competitive?
Does it provide stability?
Will it provide predictability?
Why does Alaska offer credits?

Organizations throughout the Railbelt are making plans to deal with a potential natural gas shortfall this winter. While it’s not considered likely, all agree that it is important to be prepared. Nobody wants to be caught unprepared on a cold, dark winter evening. That’s why the electric utilities in the Railbelt, ENSTAR, the Municipality of Anchorage, and the Kenai Peninsula and Mat Su Boroughs have been working together on a collective approach to the situation.

**ENERGY WATCH**

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>MEANING</th>
<th>CUSTOMER ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Stable</td>
<td>Use energy wisely; be conservation minded.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your utility can provide tips on saving energy.</td>
</tr>
<tr>
<td>Yellow</td>
<td>Caution</td>
<td>Set thermostat to 65 degrees in living areas, and 40 in the garage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower water heater setting to “warm” or “vacation.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minimize usage of natural gas range.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Postpone doing laundry and dishes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Turn off unnecessary lights and electronics.</td>
</tr>
<tr>
<td>Red</td>
<td>Alert</td>
<td>Set thermostat at 60 degrees in living areas (55 if away).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Turn water heater gas valve to “PICU.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do not use natural gas fireplaces, decorative heaters or gas grills.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consolidate household activities into as few rooms as possible.</td>
</tr>
</tbody>
</table>

*EVERY LITTLE BIT COUNTS. TOGETHER WE CAN MAKE A DIFFERENCE.*
How tax credits work

**TAX CREDITS**

**HOW DO OIL & GAS COMPANIES EARN THEM?**

1. **PLANNING**
   - LAND OF OPPORTUNITY
   - NEW WELLS
   - COMPANY CREATES PLANS

2. **INVESTMENT & WORK**
   - EXPLORATION
   - HIRE ALASKANS
   - PRODUCE NEW OIL

3. **STATE BENEFITS**
   - ALASKA ECONOMY GROWS VIA DOLLARS INVESTED

4. **CREDIT APPLICATION**
   - COMPANY APPLIES FOR CREDIT

5. **CREDIT EARNED**
   - STATE ISSUES CERTIFICATE ON APPROVED EXPENSES
   - STATE BENEFITS:
     - NEW JOBS
     - NEW TAX REVENUE
     - NEW ROYALTIES (for PFD)
     - MORE OIL

**ALASKA OPEN FOR BUSINESS?**
Tax credits: Investing in the future

- Designed to attract investment dollars to Alaska
- Goal: level the playing field to bring more companies to Alaska
- Good news: They worked!
Cook Inlet oil production up 102%
Governor’s Oil & Gas Tax Credit Bill (HB 247) Components*

- Increases minimum tax by at least 25%
- Net Operating Loss tax credits lose value
- Sets limits on credits
- Cook Inlet credits eliminated
- Interest rates increase significantly
- Confidentiality provisions waived
- Change of application of Gross Value at the Point of Production

*From text of original bill, not subsequent versions
Industry Update

• Point Thomson has begun production
• ConocoPhillips’ CD-5 now in production in NPR-A
• Hilcorp in permitting phase for Liberty opportunity
• BlueCrest first commercial sale of oil from Cosmo
Alaska LNG project

- Legislature authorized TransCanada buy-out and $160 million funding
- Requires healthy oil industry
Will this lead to greater production and more investment and jobs in Alaska? First, do no harm.
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