Alaska’s Oil and Gas Taxation- Status Report

Presentation to House Resources Committee
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Alaska Department of Revenue

January 30, 2017
What I’m talking about today

Update on Alaska’s oil and gas taxes

➢ Background- how we got here
  ▪ Money- how oil has funded the state in the past
  ▪ Transition- how we’ve adapted to falling prices
  ▪ Credits
    ○ what we know, what has accrued
    ○ what happened last year with HB247
  ▪ Future
    ○ pros and cons of today’s system
    ○ looming problems
    ○ modeling available from the Dept. of Revenue
    ○ tax audit status update
History of Oil and Gas Taxes in Alaska

Four Main Sources of State of Alaska Oil Revenue

Property Tax ($0.1 billion in FY12, $0.1 billion in FY16)
- Pipeline, Equipment, Facilities
- Numbers are state share; $0.4 is shared with local governments

Royalty ($2.9 billion in FY12, $1.2 billion in FY16)
- Landowner’s share, usually 12.5%. Most North Slope production is on State land. At least ¼ of royalties go to the Permanent Fund

Production Tax ($6.1 billion in FY12, $0.2 billion in FY16)
- Based on net profits; most of the conflict in recent years is over this tax.
- North Slope 35% less a variable “per taxable barrel” credit

Corp. Income Tax ($0.6 billion in FY12, $0.0 billion in FY16)
- Taxes remaining profit after production tax
- Global asset apportionment; 9.4%, but effectively closer to 7%

Total dropped from $9.7 billion to $1.5 billion in 4 years
Property tax statutes are relatively unchanged since the 1970s, although some property assessments (notably TAPS) were litigated nearly every year.

Royalties are set by contract (lease)
- We get full amount only from work on state land
- State owns most of Central North Slope
- Alaska is unique in the amount of state land
  - 100 million+ acres granted in Statehood Compact
  - We own and can’t sell the subsurface mineral rights
  - Expected to support state on resource wealth
  - Constitution Art. VIII, Sec. 2: “maximum benefit” clause
Royalties (continued)

- Older leases are 12.5%; many newer ones 16.67%
- Most states the royalty goes to private landowner (rates vary widely - up to 30%)
- Future development likely to have less state royalty:
  - NPRA: 50% of federal royalty shared with state
  - ANWR: 90% of federal royalty shared with state
  - Offshore 3 to 6 miles: 27% of federal royalty shared with state
  - Offshore beyond 6 miles Alaska gets no direct revenue
  - Private land, 5% tax on private royalty

Many shared federal royalty funds have restrictions
History of Oil and Gas Taxes in Alaska

• **Corporate Income Tax** for oil and gas used “separate accounting” 1978-1981 but has been relatively stable since then
  
  o Apportionment formula tied to worldwide earnings and the Alaska share of sales, property, and extraction

Production (or “Severance”) Tax is where all the focus has been in recent memory

One limitation in any tax conversation is that nearly all information related to a specific company is considered confidential
History of Oil and Gas Taxes in Alaska

The Stable Period (1977 - 2005)

• Early / Cook Inlet production taxed at 1%
• ELF (1977) was a 15% gross tax (10% on gas) with a multiplier (0 to 1) to help challenged fields.
• ELF formula modified in 1989 to increase multiplier in Prudhoe, reduce on smaller fields
  o Based on per-well production for each field, with the idea that the “economic limit” of 300 barrels/day the tax would drop to zero
  o Rate dropped as more wells were drilled over time
  o By 2005 most fields including Kuparuk were paying less than 1% tax
• 2000-2006 various Legislative efforts to reform oil taxes for “fair share”
History of Oil and Gas Taxes in Alaska

The Volatile Period (2005 - 2017)

1. 2005: Gov. Murkowski aggregates Prudhoe Bay satellite fields for ELF calculation

2. 2006: Petroleum Production Tax “PPT” changed from taxing gross revenue to net profits (needed for Gov. Murkowski’s “stranded gas act” gasline)

3. 2007: Alaska’s Clear and Equitable Share “ACES” corrects revenue shortfalls due to bad cost estimates in PPT. Major tax increase

4. 2010: Cook Inlet Recovery Act “CIRA” provided additional credits outside the North Slope targeted at southcentral gas supply issues

5. 2013: SB21 was a tax cut primarily impacting higher prices and providing “new oil” benefits

6. 2016: HB247 began tax credit reform, phasing out Cook Inlet credits and limiting “new oil” benefits
History of Oil and Gas Taxes in Alaska

The Volatile Period (2005 - 2017)

1. 2005: Gov. Murkowski aggregates Prudhoe Bay satellite fields for ELF calculation
   - Done by administrative order (reinterpreted a regulation)
   - Satellite fields were made part of the main Prudhoe calculation; increased the “multiplier” for these fields
   - Increased revenue by roughly $150 million
   - Was only in effect for 15 months due to subsequent tax change
   - Appealed and then contested in court
   - Alaska Supreme Court decided in the state’s favor Dec. 16, 2016; if we lost we would have had to pay back nearly $500 million with interest
The Volatile Period (2005 - 2017)

2. 2006: Petroleum Production Tax (PPT) - HB3001
   - The big switch- from “gross” to “net”
   - Introduced as a flat rate tax; legislature added “progressivity”
   - Added tax credit for capital spending
   - Multiple special sessions- bill passed in August
   - All fiscal notes were based on older studies that underestimated actual company spending
   - Expected to be a small tax increase
   - However, when first annual returns were filed revenue was $800 million below estimates
History of Oil and Gas Taxes in Alaska

The Volatile Period (2005 - 2017)

   - Gov. Palin called special session Oct-Nov
   - Debate on “progressivity” focused on encouraging reinvestment of profits
   - Final bill used PPT framework; higher / steeper rates
   - During this session oil prices were in the $70s. Unexpected windfalls following price spike to the $140s in summer 2008
   - Beginning of era of large structural budget surpluses, restoration of CBR and increasing other savings accounts from roughly $3 billion to $19 billion
   - Created tax credit repurchase “fund” and formula for annual appropriations
   - Passed House 26-13 by a bipartisan coalition
The Volatile Period (2005 - 2017)
4. 2010: Cook Inlet Recovery Act – HB 280
   • Did not change North Slope (ACES) taxes
   • Added tax credit for Cook Inlet gas storage
   • Multiple other benefits to encourage drilling in Cook Inlet: Well Lease Expenditure credit, broadened ability to use existing credits
   • Encouraged dramatically increased investment in exploration and development
   • By FY2014 more than half of repurchased credits were outside the North Slope
History of Oil and Gas Taxes in Alaska

The Volatile Period (2005 - 2017)

5. 2013: SB21

- North Slope only tax change, replacing ACES
- Intended to increase investment in new production
- Eliminated “progressivity,” with most revenue impact at very high prices
  - Most modeling looked at impacts between $80 and $120
- Eliminated North Slope capital credit, replaced with per-barrel production credit
- Introduced a tax break specifically targeted at new oil, called the “Gross Value Reduction” (GVR)
- Bill passed with oil over $100; prices fell dramatically in late 2014
- Referendum vote August 2014 failed 47-53; Would have restored ACES statute
The Volatile Period (2005 - 2017)

6. 2016: HB247 began tax credit reform, phasing out Cook Inlet credits and limiting “new oil” benefits

- Left fundamental North Slope (SB21) tax calculations intact (tax rate, per barrel credits, etc.)
- Phased out credits in Cook Inlet; all will be gone by 2018
- Extended current “tax caps” for Cook Inlet and added $1 / bbl oil tax
- Added sunset / “graduation” provisions to GVR
- Annual caps on per-company credit cash
- Limited “transparency” on who receives cash for credits
- Technical cleanup and loophole closing
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  - modeling available from the Dept. of Revenue
  - tax audit status update
Petroleum Revenue Over Time

• Since 1978 (first fiscal year of TAPS), Alaska has received $141 billion in petroleum revenue
  o Market value of all Alaskan oil was $527 billion (27%)
  o Wellhead value of all Alaska oil was $403 billion (35%)
• Highest single year was 2008: $11.3 billion
• In high price / high revenue years, oil has provided 90% or more of state UGF revenue
• FY2017 estimated at 67% of revenue
  o In FY2017 oil revenues are only covering 22% of the budget. About 2/3 is being paid out of savings
Petroleum Revenue Over Time

Approximate State Share of Petroleum Revenue:
(Total state Unrestricted and Restricted, as a portion of
market value of all oil) 1978 -- 2016
Approximate ANS State Share of GVPP Total Value: (State revenue from North Slope as a portion of wellhead value after subtracting transportation) 1978 -- 2016
Petroleum Revenue Over Time

Approximate ANS State Share of GVPP Total Value:
(State revenue from North Slope as a portion of wellhead value after subtracting transportation) 1978 -- 2016

- 1978 – 1998 relatively stable
  State share averaged 32%

- 1994 major royalty lawsuit settlements

- 1998-2005 ELF rates decline

- 2007-2013 high oil prices & net profits system
  State share averaged 41%

- 2014-2016 low oil prices & net profits system
  State share averaged 26%
What does “percent of value” translate to?

• There are about 185 million total barrels produced from the North Slope in a year
  o If oil is $50 / bbl, that’s $9.25 billion; Each 1% of total value is about $90 million
  o At $50 oil, wellhead value is about $40; that’s $7.4 billion. Each 1% of wellhead value is about $75 million

• About 160 million of the barrels are “taxable.” The rest are royalty barrels
  o Each $1/ bbl in added tax (or reduced credit) is $160 million
  o $50 oil, $40 wellhead, $6.4 billion in value
  o Each 1% increase to a “gross tax” is about $65 million
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## Net Profits Tax is very Volatile to Price

North Slope Lease Expenditures (from Producing fields) Per Produced Barrel since Switch to “Net”

<table>
<thead>
<tr>
<th>Year</th>
<th>Spending ($millions)</th>
<th>Production / day (000)</th>
<th>Production / Year (million)</th>
<th>Per Barrel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tarriff &amp; Transport</td>
</tr>
<tr>
<td>2007</td>
<td>3,201</td>
<td>734.2</td>
<td>268.0</td>
<td>$5.40</td>
</tr>
<tr>
<td>2008</td>
<td>3,560</td>
<td>715.4</td>
<td>261.1</td>
<td>$6.05</td>
</tr>
<tr>
<td>2009</td>
<td>3,688</td>
<td>692.8</td>
<td>252.9</td>
<td>$6.38</td>
</tr>
<tr>
<td>2010</td>
<td>3,525</td>
<td>642.6</td>
<td>234.5</td>
<td>$6.01</td>
</tr>
<tr>
<td>2011</td>
<td>3,858</td>
<td>599.9</td>
<td>219.0</td>
<td>$6.67</td>
</tr>
<tr>
<td>2012</td>
<td>2,975</td>
<td>579.3</td>
<td>211.4</td>
<td>$8.37</td>
</tr>
<tr>
<td>2013</td>
<td>4,442</td>
<td>531.6</td>
<td>194.0</td>
<td>$9.76</td>
</tr>
<tr>
<td>2014</td>
<td>5,212</td>
<td>530.4</td>
<td>193.6</td>
<td>$10.42</td>
</tr>
<tr>
<td>2015</td>
<td>5,615</td>
<td>501.0</td>
<td>182.9</td>
<td>$9.72</td>
</tr>
<tr>
<td>2016</td>
<td>4,842</td>
<td>514.9</td>
<td>187.9</td>
<td>$9.88</td>
</tr>
</tbody>
</table>
A Net Profits Tax is very Volatile to Price

SB21 Tax Calculation (legacy / non-GVR oil)

- **Gross** ("GVPP" or "wellhead") value obtained by subtracting transportation costs
- State receives royalty share in kind or in value
- Lease expenditures subtracted from Gross value of taxable barrels to get “Production Tax Value” ("PTV" or "Net")
- Calculated Tax is 35% of PTV
- Subtract per barrel credit of between $0 and $8 depending on price (credit increases as prices decrease; $8 at all oil below about $90)
- Minimum Tax “floor” is 4% of Gross (GVPP)
- Amount paid is the higher of these two calculations (35% of Net less per-bbl credit, or 4% of Gross)
## A Net Profits Tax is very Volatile to Price

### SB21 Tax Calculation At Different Prices

per one barrel of taxable oil; FY17 costs per Spring 16 RSB

<table>
<thead>
<tr>
<th>Price</th>
<th>$40</th>
<th>$60</th>
<th>$80</th>
<th>$100</th>
<th>$120</th>
<th>$140</th>
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</thead>
<tbody>
<tr>
<td>GVPP</td>
<td>$30.67</td>
<td>$50.67</td>
<td>$70.67</td>
<td>$90.67</td>
<td>$110.67</td>
<td>$130.67</td>
</tr>
<tr>
<td>Lease Expend</td>
<td>$30.88</td>
<td>$30.88</td>
<td>$30.88</td>
<td>$30.88</td>
<td>$30.88</td>
<td>$30.88</td>
</tr>
<tr>
<td>PTV (net)</td>
<td>-$0.21</td>
<td>$19.79</td>
<td>$39.79</td>
<td>$59.79</td>
<td>$79.79</td>
<td>$99.79</td>
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<tr>
<td>Tax at 35%</td>
<td>-$0.08</td>
<td>$7.52</td>
<td>$15.12</td>
<td>$22.72</td>
<td>$30.32</td>
<td>$37.92</td>
</tr>
<tr>
<td>Per-BBL Credit</td>
<td>$8</td>
<td>$8</td>
<td>$8</td>
<td>$6</td>
<td>$4</td>
<td>$2</td>
</tr>
<tr>
<td>Tax per Net</td>
<td>-$8.08</td>
<td>-$0.48</td>
<td>$7.12</td>
<td>$16.72</td>
<td>$26.32</td>
<td>$35.92</td>
</tr>
<tr>
<td>Minimum Tax</td>
<td>$1.23</td>
<td>$2.03</td>
<td>$2.83</td>
<td>$3.63</td>
<td>$4.43</td>
<td>$5.23</td>
</tr>
<tr>
<td>Higher Of</td>
<td>$1.23</td>
<td>$2.03</td>
<td>$7.12</td>
<td>$16.72</td>
<td>$26.32</td>
<td>$35.92</td>
</tr>
<tr>
<td>Tax as % of Price</td>
<td>3%</td>
<td>3%</td>
<td>9%</td>
<td>17%</td>
<td>22%</td>
<td>26%</td>
</tr>
<tr>
<td>Tax as % of GVPP</td>
<td>4%</td>
<td>4%</td>
<td>10%</td>
<td>18%</td>
<td>24%</td>
<td>27%</td>
</tr>
<tr>
<td>Tax as % of PTV</td>
<td>-584%</td>
<td>10%</td>
<td>18%</td>
<td>28%</td>
<td>33%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Important take-aways from previous slide:

When the price of oil falls by half from $120 to $60

- Wellhead value declines by 54% ($110.67 to $50.67)
- Taxable “net” declines by 75% ($79.79 to $19.79)
- Production taxes paid declines by 92% ($26.32 to $2.03; or for a full year over $4 billion to $325 million)
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➢ **Credits**
  - what we know, what has accrued
  - what happened last year with HB247

- **Future**
  - pros and cons of today’s system
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  - tax audit status update
History of Oil and Gas Production Tax Credits

Types of Credits

• Exploration Credits- AS 43.55.025; 2003-2016
  o Added as a new incentive during ELF era
  o 20-40% of seismic work and exploration drilling

• Capital Expenditure Credit- AS 43.55.023(a) and (l)
  o 20% credit added 2006 as part of PPT
  o Expanded outside North Slope to include 40% “well lease expenditure” credit in 2010
  o Repealed on North Slope with passage of SB21 in 2013
  o Cut in half 2017, repealed in Cook Inlet 2018 in HB247

• Carried Forward Annual Loss Credit- AS 43.55.023(b)
  • “NOL” refunds a percentage of a company’s losses
  • Currently 35% on North Slope- main remaining credit
  • Was 25% in Cook Inlet, now 15%, phased out 2018
  • “Stackable” with Exploration and Capital credits
History of Oil and Gas Production Tax Credits

Types of Credits (cont’d.)

• Small Producer Credit- AS 43.55.024(c)
  o Tax reduction of up to $12 million for first nine years
  o Qualification ended in 2016; gradually phasing out
  o Can’t be cashed, transferred, or carried forward

• Per-Taxable Barrel Credit- AS 43.55.024(i) and (j)
  o Subtracted from taxes as part of SB21 calculation
  o Can’t be cashed, transferred, or carried forward

• Credits against corporate income taxes (AS 43.20)
  o Gas storage, LNG storage, Refinery investment

To qualify for credit “repurchase” a producer must produce less than 50,000 bbl/day. Larger companies must carry forward to use against future year’s taxes

Refundable tax credits are unique to Alaska
History of Oil and Gas Production Tax Credits

FY 2007 thru 2016, $8.0 Billion in Credits

North Slope

- $4.4 billion credits against tax liability
  - Major producers; mostly 20% capital credit in ACES and per-taxable-barrel credit in SB21

- $2.3 billion repurchased credits
  - New producers and explorers developing new fields

Non-North Slope (Cook Inlet & Middle Earth)

- $0.1 billion credits against tax liability
  - Another $500 to $800 million Cook Inlet tax reductions (through 2013) due to the tax cap still tied to ELF

- $1.2 billion repurchased credits (most since 2013)
Providing some detail out of confidential data:

Of the nearly $3.5 billion in state-repurchased credits through the end of FY16:

- $1.5 billion went to eight North Slope projects that now **have** production
- $0.8 billion went to 11 North Slope projects that **do not have** any production. Some of these are abandoned, and some are in process
- $0.9 million went to eight non-North Slope projects that **have** production
- $0.3 million went to eight non-North Slope projects that **do not have** any production
North Slope Repurchased Credits

• Between FY07-FY16 spent $1.5 billion supporting seven producing projects
• Total production from these producers through end of 2015 is 63 million barrels
• Total credits = $24 / barrel
  o Doesn’t include payments to non-producing projects
  o This number will decrease over time due to additional production from these fields
• Lease expenditures for these projects, through FY15, were $6.0 billion
  o Credit support was 25% of lease expenditures
Cook Inlet Repurchased Credits

- Between FY07-FY16 spent $900 million supporting eight producing projects
- Total production through end of FY15 is 73 million BOE (much of this was gas)
- Total credits = $13 / BOE or about $2.10 / mcf
  - Doesn’t include payments to non-producing projects
  - This number will decrease over time due to additional production from these fields
- Lease expenditures for these projects, through FY15, were $2.3 billion
  - Credit support was 40% of lease expenditures
Why the Need for Reform?
(because we just can’t afford it)
Why the Need for Reform?

(because we just can’t afford it)
Credit appropriation formula AS 43.55.028(b) and (c)

- Based on a percentage of production tax revenue (before subtracting credits that are taken against liability)
  - Forecast price below $60: 15%
  - Forecast price above $60: 10%
- Was never used in previous years’ budgets before FY17
- Earlier years would have generated large appropriations that would have exceeded the demand for credits, “endowing” the fund
- Recent years would have spent down any past surpluses; reducing the fund to zero by 2016
- We’d be in the same place now- only there wouldn’t be the expectation that we’d provide unlimited funding
Credits Outstanding, Impact of Partial Payment

- FY2009-2015 Legislature used “open ended” appropriation language. All credit certificates presented were purchased.

- FY16 Appropriation Capped at $500 million
  - $498 million paid out by end of June
  - About $211 million North Slope, $287 million non-NS

- FY17 Governor proposes $1 billion to clear credit liability as part of reform package and full fiscal plan
  - Legislature appropriated $460 million towards expected demand of $775 million
  - Governor vetoed all but $30 million (formula calc.)
  - Funds were paid first in-first out; most went to Cook Inlet capital and well lease expenditure claims
Credits Outstanding, Impact of Partial Payment

- $600 million in certificates have been issued in FY17.
  Of these, about $100 million have either been:
    - Paid (from the roughly $30 million available funds);
    - Transferred (to be used against another company's tax liability); or
    - Are ineligible for repurchase
- Total remaining awaiting repurchase $500 million
- Applications in-hand about $200 million
  - $50 million “023” credits (NOL and Cook Inlet drilling)
  - $150 million “025” credits (Exploration)
- So total known demand is roughly $700 million
- Additional $400 million forecasted for FY18
Per AS 43.55.028, formula-generated appropriation is 10% of production tax levied, before credits, when ANS price forecast is $60 or higher. Formula appropriation is 15% of production tax levied, before credits, when ANS price forecast is below $60. Does not include changes in company behavior or credit transfers beyond FY 2018 as a result of only making minimum appropriation.

Source: Department of Revenue - Revenue Sources Book Fall 2016
Options for companies holding credit certificates

1. Wait for production (use against own taxes)
2. Wait for additional funding (tax credit obligations are not state “debt” and do not incur interest)
3. Sell to a company with a tax liability
   - Limited demand with low oil prices - the major producers are forecasted to have relatively low liability
   - .023 credits can only offset 20% of a company’s taxes
   - No restriction on use of .025 credits to offset taxes. The bulk of large .025 credits will be issued next spring
Cook Inlet
• Complete phase-out of NOL, QCE, and WLE by 2018
• Extends “tax caps” on gas indefinitely, adds $1 / bbl oil tax
• Municipal utility pro-ration of costs

Middle Earth
• Reduces the NOL, QCE, and WLE credit rates
• Extends “Frontier Basin” exploration credit to July 2017

North Slope
• GVR “Graduation” provision after three to seven years
• GVR can’t be used to increase the amount of an NOL

Statewide
• $70 million per company per year cap ($61 with discount)
• Interest rates increased for 3 years, then drops to zero
• Transparency, local hire, state obligation offsets, surety bond
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Impact of change to SB21

Overall impact of SB21 on industry behavior is very difficult to determine

- Industry expressed strong opposition to ACES due to high marginal rates and “windfall profits” elements. Strongly supported SB21 despite limited practical difference at current prices.

- Projects have multi-year development cycles so it is hard to pin down credit and tax change impacts on investment and production.

- Large recent investments primarily appear to be driven by high oil prices and generous system of cashable credits (funded by surplus revenues). Neither is directly related to which oil tax system was in place.

- ACES generally incentivized capital spending; SB21 incentivized production of lower cost oil.
Impact of change to SB21

Estimated Production Tax under PPT, ACES, and SB 21, FY07-FY18FC (does not include impact of repurchased credits)

*In FY15 - FY18, all 3 tax systems would have generated excess credits, some of these credits could be refunded and some would be carried forward to be applied in a future period.

FY14 actual production tax revenues were approximately $2.6 billion, due to half the year being under ACES and one half the year being under SB 21 tax systems.

Source: DOR historical forecast models for FY07-16 and Fall 2016 forecast model for FY17-18.
Impact of change to SB21

FY 2018 Estimated ANS Production Tax Revenue based on Fall 2016 Forecast

Source: DOR Fall 2016 forecast model. Does not include impact of repurchased tax credits.
Impact of change to SB21

FY 2018 Estimated ANS Production Tax Revenue based on Fall 2016 Forecast (less excess ANS credits)

Source: DOR Fall 2016 forecast model. Chart presents ANS production tax revenue, less estimated new credits from ANS activity generated but not able to be applied against a liability.
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Remaining concerns with tax and credit system

- Hybrid system with a net tax above $80, a gross tax between $45 and $80, and a net tax (via the NOL credit) below $45
- Possible multi-billion dollar future liability for large new discoveries
- Possible ability to use carried forward operating loss credits to zero out all taxes (“hardening the floor”)
- Equity between major producers and new explorers if major changes made to operating loss credits
- High per barrel credit keeps us in the 4% “minimum tax” at up to nearly $80 oil
- Less “upside” to the state during price spikes, making it harder to replenish our savings
- High volatility and complex administration of a net profits tax system
Remaining concerns with tax and credit system

From July, 2016 Special Session
HB/SB 5005 was a smaller, more targeted credit reform and minimum tax package than HB247

- Mainly: addressed “North Slope NOL” issue by eliminating all loss credits
- Re-introduced several smaller parts of HB247 that did not pass in that legislation
- Increased the minimum tax at certain prices
- Technical fixes to HB247 sections that may have implementation issues
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  - what happened last year with HB247

Future

- pros and cons of today’s system
- looming problems

- modeling available from the Dept. of Revenue
- tax audit status update
“Fiscal Note” - type modeling

Proposal: Reduce and harden minimum tax for North Slope NOL credits
Revised 11-25-16 by Department of Revenue

NOTE: The fiscal impact of this proposal is an estimate based on the Fall 2016 forecast. The estimates shown here are draft / preliminary based on our interpretation of possible changes, and do not include any changes in company behavior as a result of this proposal. We expect to make additional modifications to estimates for any forthcoming fiscal notes.

Provisions in HB XXXX and their Estimated Fiscal Impact based on Fall 2016 forecast (Some are estimates)

<table>
<thead>
<tr>
<th>Description of Provision</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>FY 2024</th>
<th>FY 2025</th>
<th>FY 2026</th>
<th>FY 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduce NOL credit rate for North Slope from 35% to 25% effective 1/1/18.</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>2. NOL credits may not be used to reduce liability below 4% of GVP effective 1/1/18.</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
<td>$20</td>
</tr>
<tr>
<td>Additional impact of implementing above provisions together vs standalone</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Revenue Impact</td>
<td>$20</td>
<td>$20</td>
<td>$10</td>
<td>$5</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of Provision</th>
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<th>FY 2025</th>
<th>FY 2026</th>
<th>FY 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Budget impact of reduce NOL credit rate for North Slope from 35% to 25% effective 1/1/18.</td>
<td>$0</td>
<td>$15</td>
<td>$30</td>
<td>$35</td>
<td>$35</td>
<td>$35</td>
<td>$35</td>
<td>$35</td>
<td>$40</td>
<td>$40</td>
</tr>
<tr>
<td>2. Budget impact of NOL credits may not be used to reduce liability below 4% of GVP effective 1/1/11.</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$-5</td>
<td>$-15</td>
<td>$-30</td>
<td>$-45</td>
<td>$-55</td>
<td>$-55</td>
<td>$-55</td>
</tr>
<tr>
<td>Additional impact of implementing above provisions together vs standalone</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Revenue Impact</td>
<td>$0</td>
<td>$15</td>
<td>$30</td>
<td>$30</td>
<td>$20</td>
<td>$10</td>
<td>$5</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Fiscal Impact - (does not include potential changes in investment)</td>
<td>$20</td>
<td>$35</td>
<td>$40</td>
<td>$35</td>
<td>$20</td>
<td>$10</td>
<td>$5</td>
<td>$-10</td>
<td>$-30</td>
<td>$-10</td>
</tr>
</tbody>
</table>

Non-refundable carry-forward credits balance at fiscal year end - current law
Non-refundable carry-forward credits balance at fiscal year end - proposed
Change in year-end balance due to proposal

Net fiscal impact of proposed changes at various prices

$0

$-50

$100

$150

$200

FC $20 $40 $60 $80 $100 $120

ANS oil price

FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027

SAMPLE - NOT AN ACTUAL TAX PROPOSAL
Cash flow with credits for a 120,000 bbl/day field at $80 oil

**Life Cycle** modeling

**Life Cycle Totals**

<table>
<thead>
<tr>
<th>Description</th>
<th>$Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Tax Credits Cashed</td>
<td>2,797</td>
</tr>
<tr>
<td>Production Tax Paid</td>
<td>5,972</td>
</tr>
<tr>
<td>Net Production Tax</td>
<td>3,176</td>
</tr>
<tr>
<td>Production Tax NPV 6.15%</td>
<td>-58</td>
</tr>
<tr>
<td>Total Annual State Losses</td>
<td>2,520</td>
</tr>
<tr>
<td>Total Annual State Gains</td>
<td>13,868</td>
</tr>
<tr>
<td>Net State Gain (Loss)</td>
<td>11,348</td>
</tr>
<tr>
<td>State NPV 6.15%</td>
<td>2,660</td>
</tr>
<tr>
<td>Total Producer Cash Out</td>
<td>5,258</td>
</tr>
<tr>
<td>Total Producer Cash In</td>
<td>19,772</td>
</tr>
<tr>
<td>Net Producer Cash Flow</td>
<td>14,514</td>
</tr>
<tr>
<td>Producer Cash NPV 6.15%</td>
<td>2,803</td>
</tr>
</tbody>
</table>
Long term scenario modeling

Hypothetical ANWR Production Profile - base case

Note: These scenarios are constructed for purposes of calculations in this presentation and do not represent DOR forecasts or predictions.
What I’m talking about today

Update on Alaska’s oil and gas taxes

- Background - how we got here
- Money - how oil has funded the state in the past
- Transition - how we’ve adapted to falling prices
- Credits
  - what we know, what has accrued
  - what happened last year with HB247

Future
- pros and cons of today’s system
- looming problems
- modeling available from the Dept. of Revenue

tax audit status update
**Tax Audit Status Update**

- Revenue from production tax audit assessments is not General Fund- it goes to the Constitutional Budget Reserve (CBRF)

- ACES extended the statute of limitations for production tax audits from three to six years
  - Taxing “net” is a much more complex system to audit with far more information about “upstream” spending
  - Tax returns due 3/31 of following year, so deadline is X years after that date

- 2006 audits were completed in March, 2010; the 2007 audit was not completed until early 2014
  - In the interim, staff adapted to massive increases in credit applications, complex new regulations, and developed a new tax management software system
**Tax Audit Status Update**

**Total Assessments from Recent Tax Audits**

- **2007** (hybrid PPT / ACES):
  - $387.3 million assessed; $181.5 million tax and $205.8 million interest

- **2008** (ACES):
  - $264.4 million assessed; $151.5 million tax and $112.8 million interest

- **2009** (ACES):
  - $132.0 million assessed; $83.4 million tax and $48.6 million interest

Most assessments are either paid, or are in some stage of the appeals process.
Tax Audit Status Update

Upcoming Audits

• **2010** are near completion
  o Should be done in February

• **2011s** will be complete in roughly May, 2017
  o Will move nearly a full year off the “statute of limitations”

• **2012 and 2013s** to be completed in 2018

The 2010-2013 audits are very important because of the high revenues and “progressivity” in the former ACES system
Thank You!

Contact Information

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(907) 465-8221