Alaska’s Production Tax in a State of Change

by Jonathan E. Iversen

Alaskans are blessed with bountiful natural resources and an iconic landscape. The state is known for having “great rocks,” and although that expression inspires thoughts of rugged and majestic mountain peaks, it’s also a reminder that we are blessed with highly productive hydrocarbon and mineral resources.

It’s no secret that Alaska’s economic health and revenue are dependent on the oil industry. What may not be as evident — particularly to those who do not track Alaska’s budget concerns — are the effects that not only oil prices and production, but also the frequent changes to Alaska’s fiscal regime have on the state’s economic health. This is particularly true when it comes to Alaska’s oil and gas production tax, which has been at the center of the debate for the last 12 years and has been changed multiple times during that period. It seems that the debate will continue during the 2018 legislative session, and the industry will continue to grapple with the uncertainty that brings.

The Revenue Picture

Alaska’s revenue streams are characterized as unrestricted and restricted. Restricted revenues are used for a specific purpose or for reserves. Unrestricted revenues are available to fund general state operations and capital projects, and thus have historically been the focus of the budget debate. Unrestricted revenues are primarily driven by petroleum taxes and royalties. Therefore, to understand Alaska’s revenue picture — how it may look moving forward, and the debates and legislative activity that will continue — it is helpful to have some insight into oil price volatility.

The table below shows average monthly Alaska North Slope West Coast (ANS) oil prices and reflects extreme volatility over just the last five years, during which prices have ranged from $123 per barrel in 2012 to $30 in 2016. This table reflects an almost $90-per-barrel range of average oil prices over the last five years. Figure 1 shows average quarterly ANS prices over the same period and illustrates how dramatic these price shifts have been.

Narrowing the conversation to just the last few years is also telling. Comparing state revenues for fiscal 2016, which spanned July 1, 2015, to June 30, 2016, and included several months of oil prices in the $30- to $40-per-barrel range, to fiscal 2014 shows the volatility in Alaska’s revenue streams that accompanied shifts in oil prices. Total state revenues for these two years are shown in Figure 2.
### Alaska North Slope West Cost Average Spot* (dollars per barrel)

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<td>January</td>
<td>$53.90</td>
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<td>$48.87</td>
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<td>$51.37</td>
<td>$44.17</td>
<td>$48.26</td>
<td>$101.78</td>
<td>$110.57</td>
<td>$110.79</td>
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<tr>
<td>September</td>
<td>$44.51</td>
<td>$48.83</td>
<td>$96.05</td>
<td>$110.48</td>
<td>$111.94</td>
<td>$111.94</td>
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<tr>
<td>October</td>
<td>$49.39</td>
<td>$48.20</td>
<td>$84.91</td>
<td>$104.82</td>
<td>$107.30</td>
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<td>$37.15</td>
<td>$60.90</td>
<td>$108.19</td>
<td>$108.19</td>
<td>$107.31</td>
</tr>
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*See ANS West Coast Average Spot Price, Alaska Department of Revenue — Tax Division.

**Figure 1.**
Alaska North Shore West Coast Price per Barrel*

*See ANS West Coast Average Spot Price, Alaska Department of Revenue — Tax Division.
It is telling that overall revenues were $17.2 billion in fiscal 2014 and $5.9 billion in fiscal 2016, and that unrestricted petroleum revenues were a lower percentage of overall revenue in the later year. This reflects the proportionately greater drop in oil revenues compared with other revenue sources. The results have been substantial budget deficits over the last few years (around $3 billion) that lawmakers have been covering with reserves, downgrades of Alaska’s credit rating, and debates over spending cuts and revenue sources to fund government services.

Ironically, the constitutionally mandated Permanent Fund has seen good investment returns and recently reached a total value of $60 billion. Although the Permanent Fund Earnings Reserve can be appropriated for any purpose with a majority vote of the Legislature, an appropriation of the $47 billion principal would require an amendment to the Alaska Constitution.

Unrestricted petroleum revenues come from oil and gas royalties (including bonus bids, lease rentals, and interest) and three types of taxes:

- **Petroleum property tax:** an ad valorem tax of 20 mills (2 percent) levied on the assessed value of oil and gas exploration, production, and pipeline transportation properties in the state. Municipalities and boroughs receive proceeds based on their mill rates, with the remainder to the state.  
- **Corporate income tax:** a net income tax of up to 9.4 percent on an oil and gas corporation’s Alaska taxable income, determined by apportioning its worldwide income to Alaska relative to the rest of the world based on tariffs and sales, oil and gas production, and oil and gas property.  
- **Oil and gas production tax:** a production (severance) tax levied on oil and gas

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3. Alaska Stat. section 43.56.010, et seq.
produced in the state with a base tax rate of 35 percent of the net revenues of production.\(^5\)

Again, comparing these revenue sources from fiscal 2014 to fiscal 2016 provides insight into the impact of oil prices. Figure 3 shows the dollar amounts and relative slices of the Alaska unrestricted petroleum revenue pie.

The petroleum property tax was relatively stable during these years, but the other petroleum revenue sources showed greater volatility. Royalties from state lands are based on oil and gas leases and are generally required to be no less than one-eighth (12.5 percent) of production in kind or value, which is affected by oil prices.\(^6\) The oil and gas corporate net income tax — which is based on taxable income — was negative in fiscal 2016 due to refunds of payments of prior-year estimated taxes combined with low estimated fiscal 2016 taxes.\(^7\) Oil and gas production tax revenue also dropped substantially. Because it has been a topic of recent and historical debate, the remainder of this article will focus on the production tax.

**Introduction to the Production Tax**

The oil and gas production tax structure is a critical consideration for oil and gas explorers and producers in Alaska due to its impact on project economics. The tax has been, and will likely continue to be, an area of debate and uncertainty. It is helpful to have a basic understanding of the structure of the production tax and its terminology and evolution, to gain insight into contentious issues and where this tax regime might be headed.

Alaska’s oil and gas production tax regime is found at Alaska Statutes sections 43.55.011-43.55.900. The structure, including tax rates and credits, varies depending on the area of the state that is the focus of the exploration, development, or production activity.

Unlike other states that levy a severance tax on the gross value at the point of production or wellhead value, Alaska’s production tax is levied on the net revenues of oil and gas production from leases or properties in the state, except for the federal and state royalty share and oil and gas used in drilling or production operations, or for repressuring.\(^8\) At a high level, the calculation starts with destination value, generally the higher of the sales price or a calculated prevailing value.\(^9\) The costs of pipeline and marine transportation are subtracted from the destination value to obtain the gross value at the point of production.\(^10\)

Upstream operating and capital costs, known as lease expenditures, are subtracted from the gross value at the point of production to reach net revenue, known as production tax value.\(^11\) Lease expenditures, as allowed by the Department of Revenue by regulation, are essentially the ordinary and necessary and direct costs of exploration, development, or production upstream of the point of production (generally the first point that oil and gas are accurately metered and in a condition of pipeline quality), plus an overhead allowance of 4.5 percent of those costs.\(^12\)

The tax rate is then multiplied by production tax value and the result is reduced by credits. In its most basic form, the calculation can be shown as follows:

\[
\text{Production Tax Liability} = \left( \text{GVPP} - \text{Lease Expenditures} \right) \times \text{Tax Rate} - \text{Credits}
\]

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\(^5\) Alaska Stat. section 43.55.011, et seq.
\(^6\) See Alaska Stat. section 38.05.180(f)(3).
\(^7\) Alaska Department of Revenue, Tax Division, Revenue Sources Book n.1 (Spring 2017).
\(^8\) Alaska Stat. section 43.55.011(e); Alaska Stat. section 43.55.020(e).
\(^10\) Alaska Stat. section 43.55.150.
\(^12\) Alaska Stat. section 43.55.165. 15 Alaska Admin. Code section 55.271 provides the percentage of the overhead allowance.
Evolution of the Production Tax

To understand the current state of the production tax, and how uncertainty around its structure has affected the oil and gas industry, it is important to understand how the tax has evolved over time, particularly over the last 12 years.

The production tax was enacted in 1955 and was substantially revised over time, including through the introduction of the Economic Limit Factor (ELF) in 1977. The theory behind the ELF was to limit the tax burden so that it would not cause a field to shut down as production declined toward the economic limit. The ELF was a fraction between 0 and 1 that applied to a nominal tax rate of 12.25 percent of the gross value at the point of production. This evolved further in 1981 and 1989, with the latter changes including a field size factor in the ELF formula.13

In 2006 the Alaska Legislature repealed the ELF tax regime and moved the production tax away from a tax on gross value at the point of production and replaced it with the first iteration of the net-based tax structure described in the preceding section. The new law, called the petroleum production tax,14 represented a sweeping change from a gross tax into a tax on net revenues and included dramatic changes to tax rates and credits, including:

- a base tax rate of 22.5 percent of production tax (net) value;15
- a progressivity component that was added to the base tax rate so that the tax rate increased when production tax value exceeded $40 per barrel.16

13 Further discussion regarding other historical changes can be found at the Alaska Department of Revenue, Tax Division website.
14 H.B. 3001 (Alaska 2006).
15 Alaska Stat. section 43.55.011(e).
16 Alaska Stat. section 43.55.011(g). The formula for this component was: (Production Tax Value per Barrel – $40) x .0025.
• a minimum tax on the gross value at the point of production based on ANS oil prices;\textsuperscript{17} and
• transferable and rebatable credits for annual losses and capital expenditures, and a credit for small producers to apply against annual tax liability.\textsuperscript{18}

In 2007 the Legislature again overhauled the production tax regime through the passage of what was called Alaska’s Clear and Equitable Share.\textsuperscript{19} Although this tax kept the net-based tax structure, it changed several core components, including:

• raising the base rate to 25 percent of production tax value;\textsuperscript{20}
• amending the progressivity component to apply when production tax value exceeded $30 per barrel;\textsuperscript{21}
• introducing a tax ceiling for gas produced and used in the state;\textsuperscript{22}
• increasing rates for specific tax credits;\textsuperscript{23} and
• creating an oil and gas tax credit fund for the state to purchase specific tax credits.\textsuperscript{24}

In 2010 the Legislature passed two bills to encourage oil and gas exploration and development in Cook Inlet to alleviate fears of seasonal gas shortages in south-central Alaska, which includes Anchorage. These bills included tax credits for expenditures for offshore exploration drilling with a jack-up drilling rig, construction of gas storage facilities, and exploration and development drilling and seismic work.\textsuperscript{25}

In 2012 legislation was enacted to encourage exploration and development of areas of the state outside Cook Inlet and south of the North Slope, including a tax ceiling rate on oil and gas produced from those areas, as well as tax credits for seismic exploration and exploration drilling in particular basins in the state.\textsuperscript{26}

The tax regime was again recalibrated in 2013 to encourage production from the Alaska North Slope.\textsuperscript{27} These changes included:

• adding production-based credits per barrel of oil produced;\textsuperscript{28}
• introducing a 20 percent reduction to the gross value at the point of production for specific categories of new production;\textsuperscript{29}
• amending the base tax rate to be 35 percent of production tax value and repealing the progressivity component;\textsuperscript{30} and
• phasing out the credit for capital expenditures.\textsuperscript{31}

In 2016 the Legislature returned its attention to Cook Inlet — this time to phase out tax credits for expenditures and losses and to repeal sunset dates for tax ceilings.\textsuperscript{32} This legislation dramatically changed the criteria for obtaining rebates for credits from the state, and imposed a sunset date for some ANS production-based incentives.\textsuperscript{33}

In July the Legislature again passed a group of production tax changes.\textsuperscript{34} This legislation was aimed at ending the system of rebatable credits in Alaska, which will now be available only for expenditures incurred before July. The Legislature also repealed the annual loss credit for all areas of the state, and created a carried-forward loss to be applied against taxes in later years. This legislation adds new complexity to an already complex system, and the department is crafting regulations to implement the new law. This bill also established a legislative working group to continue to analyze the state’s fiscal regime — a sign that the debate will continue.

\textsuperscript{17} Alaska Stat. section 43.55.011(f).
\textsuperscript{18} Alaska Stat. section 43.55.023; AS 43.55.024.
\textsuperscript{19} H.B. 2001 (Alaska 2007).
\textsuperscript{20} Alaska Stat. section 43.55.011(e).
\textsuperscript{21} Alaska Stat. section 43.55.011(g). The formula was amended to: (Production Tax Value per Barrel – $30) x .004.
\textsuperscript{22} Alaska Stat. section 43.55.011(o).
\textsuperscript{23} Alaska Stat. section 43.55.023(b); and Alaska Stat. section 43.55.025.
\textsuperscript{24} Alaska Stat. section 43.55.028.
\textsuperscript{25} H.B. 280 (Alaska 2010); and S.B. 309 (Alaska 2010).
\textsuperscript{26} S.B. 23 (Alaska 2012).
\textsuperscript{27} S.B. 21 (Alaska 2013).
\textsuperscript{28} Alaska Stat. section 43.55.024(i), (j).
\textsuperscript{29} Alaska Stat. section 43.55.160(f).
\textsuperscript{30} Alaska Stat. section 43.55.011(e).
\textsuperscript{31} Alaska Stat. section 43.55.023(a), (b).
\textsuperscript{32} H.B. 247 (Alaska 2016).
\textsuperscript{33} Alaska Stat. section 43.55.028; and Alaska Stat. section 43.55.160(f)-(g).
\textsuperscript{34} H.B. 111 (Alaska 2017).
On the Horizon

The next article will include an additional dive into the most recent changes and the regulations that the department will be issuing to implement the new law. This debate has become chronic — Alaska’s oil and gas industry and its economy and fiscal system seem plagued by uncertainty. Given the importance of the industry to the state’s economy, it will be something that those doing business in the state will be watching.