

Petroleum Profits Tax (PPT)  
Implementation Status Report

Alaska Department of Revenue  
August 3, 2007

## PPT IMPLEMENTATION STATUS REPORT

### I. Purpose of the Report and Conclusions:

In August 2006, the Alaska Legislature passed HB 3001 containing a new oil and gas production tax system called the Petroleum Profits Tax (PPT). The new profits-based tax replaced the previous production tax based on gross value, generally referred to as the “Economic Limit Factor” (ELF) tax system. Debate and passage of HB 3001 was contentious, with questions raised on the propriety of a profits-based tax and on the appropriate tax rate. The controversy escalated earlier this year with the handing down of federal indictments against several legislators that centered on potential corruption involving the PPT deliberations and votes.

The Governor tasked the Commissioner of Revenue with evaluating whether the PPT was meeting expectations with respect to state revenues and industry’s reinvestment in Alaska. The Commissioner of Revenue formed a Production Tax Team, staffed with members from the Department of Revenue, Division of Tax and the Department of Natural Resources, Division of Oil and Gas to review various aspects of PPT implementation. Based on the information provided by the Production Tax Team, the initial conclusions of the Department of Revenue are:

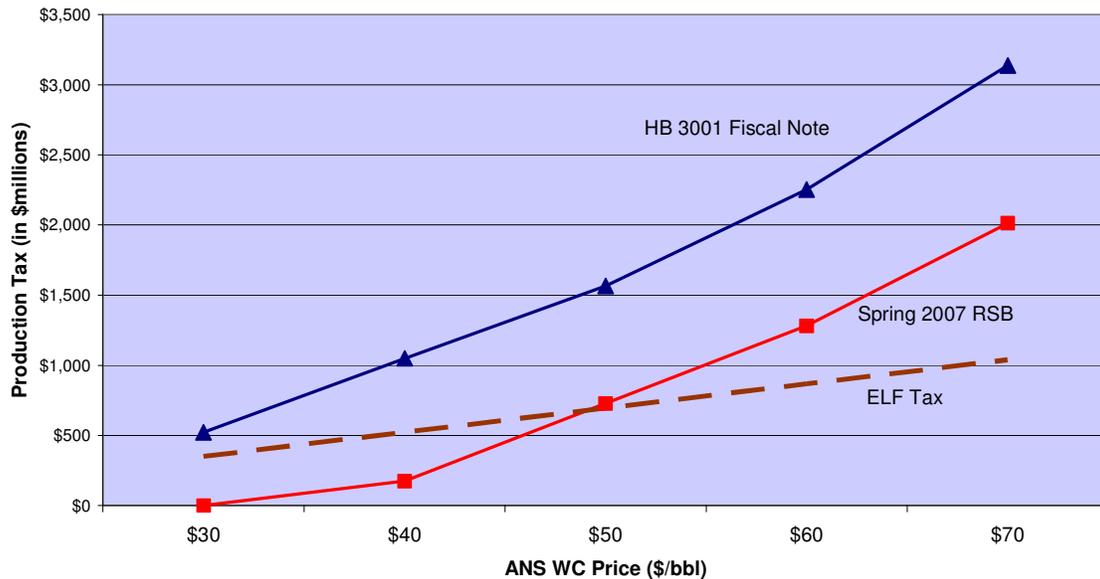
- 1) At current prices, the state is collecting more production tax revenues under PPT than it would have under the ELF system. However, those revenues are falling far short of what was expected when PPT was passed.
- 2) Operating and capital costs are substantially higher than were forecasted in the PPT fiscal note provided to the legislature.
- 3) The value of PPT credits may not be fully realized for exploration companies new to Alaska, given the small market for resale among “producers.”
- 4) The crossover oil price point where the state receives more revenue under the PPT than under the ELF system has moved from the \$26/barrel predicted in the PPT fiscal note to \$48/barrel.
- 5) The activation of the progressive surcharge has shifted from a market price of \$55 to over \$60 a barrel.
- 6) DOR faces significant challenges in implementing the PPT as currently structured.

## II. Discussion:

1) Production tax revenues are falling far short of expectations. The following graph shows the differences in modeling results for FY 2008 production tax revenues; this graph compares initial modeling for FY 2008<sup>1</sup>, as prepared for the House Bill 3001 (PPT) fiscal note [SCS HB3001(NGD)], with current modeling, as prepared for the *Spring 2007 Revenue Sources Book*, and with the tax revenue that would have been generated under the ELF system. The tax revenue expectations for FY 2008 are significantly lower than the revenue forecasted when the fiscal note was drafted. This is primarily due to the significantly higher costs being reported as compared to what was estimated in the fiscal note, as noted below.

In FY 2008, based on forecasted price and production levels, the PPT is expected to generate about \$250 million over that which would have been generated under the ELF system. However, this is more than \$800 million less than what was predicted in the PPT fiscal note.

**FY 2008 Production Tax Estimates: HB 3001 (24th Legislature) Fiscal Note and Spring 2007 Revenue Sources Book PPT Forecasts; and ELF Tax**



**Note:** Above estimates are based on most current taxpayer-submitted expenditure forecasts and do not reflect any changes in spending due to increases or decreases in oil price.

<sup>1</sup> Because of the unexpected disruptions to revenues and costs caused by the gathering line failures in the Prudhoe Bay Unit in FY 2007, the Department is using FY 2008 as the comparison year to eliminate one-time aberrations. In addition, the HB 3001 Fiscal Note and ELF Tax models have been adjusted to reflect current production estimates.

2) Operating and capital costs are substantially higher than were forecasted in the PPT fiscal note. The substantial and unanticipated increase in costs is the primary reason revenues are falling short of expectations. Throughout the latter half of 2004 and 2005, DOR officials gathered information from confidential tax documents, annual reports, private consultant analyses, and the industry about the costs of producing petroleum on the North Slope. DOR modeled the PPT revenue forecasts using these cost data and the results of this modeling were provided to the legislature to aid their consideration of the PPT.

Based on the cost data received by the Department for 2006 and 2007 since passage of PPT, the Department has increased by almost 100% taxpayer operating and capital cost estimates for FY 2008 in its Spring 2007 Revenue Source Book revenue projections. In discussions with taxpayers, DOR has been told that these higher costs levels for 2006 and 2007 are not aberrations caused by unique events, such as the Prudhoe Bay shutdown, and that we should anticipate costs remaining at these levels for the foreseeable future.

**North Slope Production and Costs FY 2008,  
per HB 3001 Fiscal Note and Spring 2007 Forecast**

	HB 3001 Fiscal Note	Spring 2007 Forecast
<b>FY 2008</b>		
<b>Production</b> (barrels per day)	802,000	764,000
<b>Costs</b>		
Operating costs (\$millions)	\$1,076	\$2,160
Capital costs (\$millions)	\$1,052	\$1,900
<b>Total Costs</b>	<b><u>\$2,128</u></b>	<b><u>\$4,060</u></b>
Total Costs per Barrel	\$7.27	\$14.56
Operating costs per barrel	\$3.68	\$7.75
Capital costs per barrel	\$3.59	\$6.81

High oil and gas prices since 2005 are frequently cited as the cause of these cost increases. Projects around the world that were once only marginally economic, are now considered very viable, and are now placing increased demands on limited supplies of engineering, procurement and construction services and on raw construction materials. The Upstream Capital Costs Index, developed by Cambridge Energy Research Associates (CERA), shows that costs for oil and gas production equipment, facilities, construction materials and personnel have increased 53% since 2005. CERA expects cost escalation to continue through 2007, although at a slower pace. Fluor Corporation estimates that prices for fabricated structural steel have increased 60-70% from 2003 to 2006, and that delivery times for these materials increased by 18-20 weeks from their previous levels. The same company reports that prices for seamless and welded pipe used in petroleum production have increased 80-160% from 2003 to 2006, and expects increases of another 15-50% by 2009.

It is too early to tell whether all of the costs reported under PPT thus far are properly deductible. Also, it is too early to know whether the increase in reported industry spending in the state will result in increased future production, or whether the increase in spending can be attributed to changed behavior as a result of the incentives included in PPT. What we do know is that the costs used in the modeling for the PPT fiscal note have proven inaccurate.

3) The value of PPT credits may not be fully realized for exploration companies new to Alaska given the small market for resale among “producers.”

Under PPT, tax credits earned by investors and explorers may be transferred and sold to other taxpayers who have a production tax liability. Companies that have been issued credit certificates above and beyond the \$25 million that can be refunded by the state would presumably sell their certificates to the highest bidder. In the first year that the PPT has been in place, however, companies holding credit certificates report that there have been few buyers for the certificates, and that those offering to buy them are doing so at large discounts.

4) The oil price crossover point where the state receives more revenue under the PPT than under the prior ELF system has moved from \$26/barrel to \$48/barrel.

The ELF system “crossover point”—that is, the Alaska North Slope - West Coast (ANS WC) oil price whereby the PPT generates more revenue than the ELF system—was the focus of some attention during the 2006 legislative session. Primarily due to the increase in the cost estimate, the currently estimated crossover point is substantially higher than was projected in 2006.

5) The activation of the progressive surcharge has shifted from a market price of \$55 to \$60-63 a barrel. Because the surcharge is not activated until the taxpayer’s net income per barrel exceeds \$40, higher costs have depressed taxpayer net income, thus delaying the price at which the surcharge kicks in. In addition, as production declines, the price at which the progressive surcharge is activated will move higher as costs are spread over fewer barrels. Although the level differs for each individual taxpayer, the North Slope average progressivity trigger is now estimated to be somewhere between \$60 and \$63 per barrel.

6) DOR faces significant challenges in administering the PPT as currently structured.

a) Regulations- The second phase of PPT regulations has been delayed as a result of the challenge of accurately describing the allowed and disallowed lease expenditure deductions.

b) Revenue Forecasts- The Department has been severely hampered in its ability to provide the administration and the legislature with accurate revenue forecasts because the department lacks future capital and operating expenditure information. The Department is in the process of rectifying this problem by requiring operators to provide forward-looking cost data, when and as provided to the unit working interest owners.

Statutory changes may be required to fortify and focus these requests for unit cost information.

c) Audits- With the passage of PPT, the department was authorized to hire eight auditors and one tax technician to assist with the additional audit requirements of the new tax structure. To date, the department has successfully filled the three most senior auditor positions, and has reduced the skills requirements for the remaining junior level auditor positions in light of the challenges of matching competitive pay with the more senior level skill sets.

The complexity of auditing production tax has increased several fold under the PPT, and the PPT increased the number of determinations an auditor must make. The provisions in the PPT which are intended to simplify and streamline these determinations through reliance upon unit owners' auditing of unit operators may assist this process, but we have not yet been through an audit cycle to assess the efficacy of this approach.

### III. Conclusion

The state's experience with PPT puts a spotlight on the risks associated with a net profit-based tax system. The new system introduced the added variable of costs into the oil revenue equation. While it is a risk that is inherent in the decision to approve a net profit-based tax, the question is whether the magnitude of the risk was fully understood by the legislature given the information provided to them. While costs would be expected to increase, the dramatic difference between what was predicted and what has actually been experienced brings into question whether the legislature made its decisions based upon appropriate information.

Another aspect of PPT, the tax credits given for capital expenditures, has been significantly reduced in value due to the lack of an efficient market for those new exploration companies looking to sell their credits to those who have current production. This deficiency is particularly troubling because these new exploration companies are the ones that provide the state with the greatest opportunity to encourage new production that might not otherwise occur.

Clearly, there are aspects to PPT that should be re-examined by the legislature. In particular, the legislature should reassess whether the state is getting its fair share of oil and gas revenues, and whether the credits are designed optimally to provide the maximum impact on the state's goal of encouraging investment that leads to more oil and gas production.