March 26, 2013

The Honorable Chris Tuck
Alaska State Legislature
State Capitol, Room 422
Juneau, AK 99811

Dear Representative Tuck:

I am writing in response to the questions that you posed to the Department of Revenue in a letter dated February 22, 2013. As you know, in the weeks that followed the submission of your letter, SB 21 has passed the Senate with some significant changes. We understand that you prefer that we answer your questions with the oil tax legislation currently before the House, CSSB21(FIN)am. Additionally, many of the questions were best addressed by consultants EconOne and PFC Energy. Those questions will be addressed separately in another letter. Your questions of the Department of Revenue and our responses follow.

1. CSSB21(FIN)am prices would result in a total government take of about 60% at higher oil prices. Commissioner Butcher referenced a traditional three-way split of profits. If we were to amend HB72 to achieve a 67% (2/3) government take, how much progressivity would have to be added back in?

Answer: In CSSB21(FIN)am, a slightly progressive feature is included in the system by using a higher base tax rate that is offset by a per taxable barrel credit. As prices rise, the relative value of the per-barrel credit declines, resulting in a progressively higher effective tax rate under the production tax. Under the current version of the tax bill, a specific government take target can be reached by altering either the base tax rate or the per taxable barrel credit. Our answer to question #2 addresses the magnitude of change that would be needed to provide a 67% government take under CSSB21(FIN)am.

2. At $80, $100, $120, and $140 oil, how much additional production tax revenue would result by increasing total government take to 67%?

Answer: The following amounts of revenue would be required to increase the government take ("GT") under CSSB21(FIN)am to 67%. This example uses average transport and production costs, and production at the rate of 500,000 barrels per day.
ANS WC Oil Price | Additional revenue required to reach 67% GT | Total production tax revenue at 67% GT
--- | --- | ---
$80 | $500 million | $1,950 million
$100 | $600 million | $3,150 million
$120 | $700 million | $4,375 million
$140 | $800 million | $5,600 million

3. For the years covered by the fiscal note, how many additional barrels would be necessary to replace the revenue lost from passing CSSB21(FIN)am including the GRE provisions at $80, $100, $120, and $140 oil?

Answer: According to the Department's fiscal note, the fiscal impact of CSSB21(FIN)am through FY 2019 will be approximately $5.2 billion, assuming no new production. This number represents the midpoint of the range of estimated total fiscal impact for FY 2014 through FY 2019, as presented on page 4 of the fiscal note. Based on the Department's official price and production forecasts, we would need to develop approximately 30 million barrels per year during this period (180 million barrels total) to break even on revenues lost in real terms (current dollars). This is approximately the size of the Nikaitchuq field.

Additionally, the DOR fiscal note for CSSB21(FIN)am, on page 5, includes hypothetical examples of additional production. The additional production scenarios compare additional production under CSSB21(FIN)am to ACES without the additional production. At $90 per barrel, revenue is equal or greater than ACES with no additional production. At $100 per barrel, revenue is greater than ACES under “Additional Production Scenario B”, and at $120 per barrel, revenue is greater than ACES under “Additional Production Scenario C.” These scenarios are not intended as forecasts, but give a helpful illustration of the order of magnitude of new investment and production that would offset the reduction in government take under CSSB 21.

An additional analysis provided by EconOne examines the breakeven point over the next 30 years, again assuming no new production. EconOne estimated that it would take between 500-550 million barrels of new development during this period to break even on revenues. Spread over the 30 year period, that equates to 45,000 to 51,000 barrels per day. This analysis has not been refined to analyze multiple price points, though we would be happy to work with you and the Resources committee to refine the analysis as you consider this bill.

17. In ACES, the state at times could be indirectly paying 95% of a company’s spending in a new field. In CSSB21(FIN)am, this figure is reduced to 25%. Do you think it is appropriate for a larger state contribution if that helps encourage additional investment?

Answer: The administration believes that the best way to encourage marginal investments is to improve the overall economics of projects through lower overall government take. In the instances under ACES that would result in the state contributing 95% of a company’s spending, this contribution is based on a high progressive rate as well as credits. Both of these issues have been identified as problems with the current tax system. In CSSB21(FIN)am, the capital credits are eliminated because they create a liability for the state that exists at all oil prices, regardless of
whether the state can afford to fund those credits, and the credits do not require additional production. In CSSB21(FIN)am, progressivity has also been eliminated as this has been identified as a significant barrier to investment by limiting upside potential for companies and layering in a tremendous amount of complexity. The tax rate under CSSB21(FIN)am has been increased to 35%, and a $5 per barrel credit has been added. Even though the initial state contribution is lower under CSSB21(FIN)am in certain circumstances, the overall project economics improve which should lead to additional investment and production.

20. The response to question #25 looked at HB72 revenues going backwards to 2007, had it been the tax regime in place. A similar chart in a 2011 Revenue document compared ACES, PPT, and ELF. Would it be possible to put all four tax regimes side-by-side for the period 2007-2017?

Answer: We are happy to provide you with comparisons of ACES, PPT, ELF, and CSSB21(FIN)am on a historical basis. We are also happy to provide you with the requested forecast production tax revenue under ACES and CSSB21(FIN)am. Since PPT and ELF are irrelevant on a forecast basis, the information regarding PPT and ELF revenues on a forecast basis, from FY 2013 through FY 2017, has not been assembled.

![Estimated Production Tax Revenue under ELF, PPT, ACES and CSSB21(FIN)am, FY07-12 (est)](image-url)

Source: Historical forecast models. Does not include operating budget impacts of any of the production tax systems. Also assumes no changes in production levels due to the production tax system.
We hope that our answers have addressed your questions. Please do not hesitate to contact me if you have further questions.

Sincerely,

Bruce Tangeman
Deputy Commissioner