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From the desk of

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[Via E-Mail]

April 9, 2012

**Re: CSSB 192(RES) and CSSB 192(FIN)**

Senator Joe Paskvan, Co-Chair  
Senate Resources Committee  
120 Fourth St., State Capitol, Room 3  
Juneau, Alaska 99801

Dear Senator Paskvan:

Although PFC Energy charts correctly call attention to the different economics of new and existing fields and the effects of progressivity at oil prices above (way) \$140/bbl. (West Coast market price), I think the focus on percentage of net revenue take unfortunately diverts attention from important factors such as:

- (1) effective federal income tax rates (rather than nominal rates);
- (2) control of TAPS (and North Slope feeder pipelines; and
- (3) the in-field distinction between facility owners and facility users; and, above all,
- (4) the difficulty of harnessing the necessary data for comparisons.

I would like to know whether PFC Energy is using measurement of state capital credits as the defining characteristic of effective taxes, as implied by the charts of April 4. To try to understand exactly what PFC Energy was doing, I focused on the FY 23013 data for ACES at prices in PFC Energy's April 4 (2<sup>nd</sup> Session) presentation. By cross-referencing PFC Energy's revenue figures at \$20 price intervals with ADOR *Revenue Sources Book* production cost data, I concluded that PFC Energy was using the nominal 35% federal tax rate. I put the numbers on three simplified charts that shows that the difference between the nominal (35%) tax rate and an effective tax rate of 21% was far more significant than the \$400 million capital credits. The three charts attached also show that when effective federal tax rates and capital credits are plugged in, the percentage of government take shifts, falling well below the high-70's percentage level that is talked about all the time.

By extension, I believe the complexities of the factors at play provide insight into the reasons that each company in a given field is liable to have a different economic outcome, depending on the particulars of its economic situation.

While I seldom have anything good to say about Revenue Commissioner Bryan Butcher, I was very impressed April 6 with the reasons he gave for not putting the proposed PIMS within the Revenue Department.

With all the talk about Norway, I think it is important to understand that Norway's government operates with a an institution framework that is very different from ours. I presume that most of you who went to Norway last fall know more about this than I do, but – like the attached he Norwegian system includes two governing entities of particular note:

- A government pricing board that sets the oil price quarterly (four times a year). This government unit's mission is to assure fair pricing for transfer transactions by corporate entities in situations similar to Alaska marketing. (Pipeline costs – presumably from offshore platforms to an onshore marketing terminal – are also included.)
- A national independent audit organization, established by the Norwegian constitution in 1816 provides auditing services for that country's oil and gas activities.

If these thoughts are obvious to you and I'm re-inventing wheels while you're rolling down to the wire, please accept my apologies. But I thought these points were too important to pass up if I was correctly following the discussion in Senate Finance last week.

In closing, I believe the issues that accompany these numbers support the concerns I laid out in my April 2 letter to Senate Finance in opposition to CSSB 192. I'm sending this letter to four of you – Paskvan, Wielechowski, French and Thomas – in hopes that one of you may be able to determine immediately whether or not these concerns need to be brought forward, or whether you are all on top of these points and they can be set aside.

With thanks again for your hard work, time and attention, I am

Sincerely,

Richard A. Fineberg

*Attachments: 3 worksheets on Regime Competitiveness*

Cc: Sen. Hollis French  
Sen. Joe Thomas  
Sen. Bill Wielechowski

1. ADJUSTING FY 2013 REGIME COMPETITIVENESS DATA  
TO SHOW EFFECTIVE FEDERAL INCOME TAX EFFECTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>From: PFC Energy (Apr. 4, 2012, 2nd Session, Slide 5)</b>						<b>Estimated from Alaska Dept. of Revenue Data*</b>				
<b>Oil Price FY 2013)</b>	<b>ACES Revenue</b>	<b>Total State Take</b>	<b>State + Federal Take</b>	<b>Cash to Com- panies</b>	<b>Total Take (Cols. 4+5).</b>	<b>Million Barrels (FY 2013)</b>	<b>Gross Revenue</b>	<b>Total Production Costs</b>	<b>Cost per bbl.</b>	<b>Federal Income Tax Rate</b>
40	(233)	1,413	1,616	378	1,994	203	8,106	6,112	\$30.16	35%
		70.9%	81.0%	19.0%	100.0%					
60	513	2,989	4,060	1,988	6,048	203	12,159	6,111	\$30.16	35%
		49.4%	67.1%	32.9%	100.0%					
80	1,736	5,002	6,787	3,314	10,101	203	16,213	6,112	\$30.16	35%
		49.5%	67.2%	32.8%	100.0%					
100	3,628	7,629	9,913	4,241	14,154	203	20,266	6,112	\$30.16	35%
		53.9%	70.0%	30.0%	100.0%					
120	6,073	10,761	13,367	4,840	18,207	203	24,319	6,112	\$30.16	35%
		59.1%	73.4%	26.6%	100.0%					
140	8,550	13,922	16,841	5,420	22,261	203	28,372	6,111	\$30.15	35%
		62.5%	75.7%	24.3%	100.0%					
160	10,730	16,813	20,138	6,175	26,313	203	32,425	6,112	\$30.16	35%
		63.9%	76.5%	23.5%	100.0%					
180	13,049	19,830	23,518	6,849	30,367	203	36,478	6,111	\$30.16	35%
		65.3%	77.4%	22.6%	100.0%					
200	15,506	22,974	26,980	7,440	34,420	203	40,532	6,112	\$30.16	35%
		66.7%	78.4%	21.6%	100.0%					

**Revising PFC Energy April 4, 2012 Net Revenue Take  
To Reflect 21% Avg. Effective Federal Income Tax Rates \***

40	(233)	1,413	<b>1,535</b>	<b>459</b>	1,994
		70.9%	<b>77.0%</b>	<b>23.0%</b>	100.0%
60	513	2,989	<b>3,632</b>	<b>2,416</b>	6,048
		49.4%	<b>60.0%</b>	<b>40.0%</b>	100.0%
80	1,736	5,002	<b>6,073</b>	<b>4,028</b>	10,101
		49.5%	<b>60.1%</b>	<b>39.9%</b>	100.0%
100	3,628	7,629	<b>8,999</b>	<b>5,155</b>	14,154
		53.9%	<b>63.6%</b>	<b>36.4%</b>	100.0%
120	6,073	10,761	<b>12,325</b>	<b>5,882</b>	18,207
		59.1%	<b>67.7%</b>	<b>32.3%</b>	100.0%
140	8,550	13,922	<b>15,673</b>	<b>6,588</b>	22,261
		62.5%	<b>70.4%</b>	<b>29.6%</b>	100.0%
160	10,730	16,813	<b>18,808</b>	<b>7,505</b>	26,313
		63.9%	<b>71.5%</b>	<b>28.5%</b>	100.0%
180	13,049	19,830	<b>22,043</b>	<b>8,324</b>	30,367
		65.3%	<b>72.6%</b>	<b>27.4%</b>	100.0%
200	15,506	22,974	<b>25,378</b>	<b>9,042</b>	34,420
		66.7%	<b>73.7%</b>	<b>26.3%</b>	100.0%

**Calculating Notes:**

**Col. (7)** = 555,227 bpd x 365 = 202,657,850 bbls.

(Fall 2011 Revenue Sources Book, Fig. 4-6).

**Col. (8)** = Col. 7 \* Col. 1.

**Col. (9)** = Col. (8) - Col. (6).

**Col. (10)** = Col. (9) / Col. (7).

**Col. (11)** = [Col. (4) - Col. (3)] / [Col. (4) - Col. (3) + Col. (5)].

The 35% figure in Col. (11) indicates that PFC Energy used a nominal 35% federal income tax to calculate federal income tax payments, included at Col. (6).

North Slope oil companies typically pay federal income tax at a 21% average (40% below the nominal 35% rate).\* Although individual company payment rates differ, the industry-wide average can be calculated and shown by transferring 40% of the reported federal tax share from Col. (4) to Col. (5). These estimates and their effects on shares of the petroleum revenue take are shown in the panel at the left.

On the following worksheets, these figures will be adjusted to show state capital credit and TAPS effects.

\* Federal income tax rate data from R. A. Fineberg, *The Profitability and Economic Viability of TAPS North Slope and Associated Pipeline Operations*, pp. 56-59 (April 27, 2005).

**2. ADJUSTING FY 2013 REGIME COMPETITIVENESS DATA FOR CAPITAL CREDITS  
(WITH EFFECTIVE FEDERAL INCOME TAX)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>From: PFC Energy (Apr. 4, 2012, 2nd Session, Slide 5)</b>						<b>Estimated from Alaska Dept. of Revenue Data*</b>				
<b>Oil Price FY 2013)</b>	<b>ACES Revenue</b>	<b>Total State Take</b>	<b>State + Federal Take</b>	<b>Cash to Com- panies</b>	<b>Total Take (Cols. 4+5).</b>	<b>Million Barrels (FY 2013)</b>	<b>Gross Revenue</b>	<b>Total Production Costs</b>	<b>Cost per bbl.</b>	<b>Federal Income Tax Rate</b>
40	(233)	1,413 70.9%	1,616 81.0%	378 19.0%	1,994 100.0%	203	8,106	6,112	\$30.16	35%
60	513	2,989 49.4%	4,060 67.1%	1,988 32.9%	6,048 100.0%	203	12,159	6,111	\$30.16	35%
80	1,736	5,002 49.5%	6,787 67.2%	3,314 32.8%	10,101 100.0%	203	16,213	6,112	\$30.16	35%
100	3,628	7,629 53.9%	9,913 70.0%	4,241 30.0%	14,154 100.0%	203	20,266	6,112	\$30.16	35%
120	6,073	10,761 59.1%	13,367 73.4%	4,840 26.6%	18,207 100.0%	203	24,319	6,112	\$30.16	35%
140	8,550	13,922 62.5%	16,841 75.7%	5,420 24.3%	22,261 100.0%	203	28,372	6,111	\$30.15	35%
160	10,730	16,813 63.9%	20,138 76.5%	6,175 23.5%	26,313 100.0%	203	32,425	6,112	\$30.16	35%
180	13,049	19,830 65.3%	23,518 77.4%	6,849 22.6%	30,367 100.0%	203	36,478	6,111	\$30.16	35%
200	15,506	22,974 66.7%	26,980 78.4%	7,440 21.6%	34,420 100.0%	203	40,532	6,112	\$30.16	35%

**Revising PFC Energy April 4, 2012 Net Revenue Take  
To Reflect 21% Avg. FIT + \$400MM State Capital Credits \***

40	(233)	<b>1,025</b> 51.4%	<b>1,228</b> <b>61.6%</b>	<b>766</b> <b>38.4%</b>	1,994 100.0%
60	513	<b>2,601</b> 43.0%	<b>3,325</b> <b>55.0%</b>	<b>2,723</b> <b>45.0%</b>	6,048 100.0%
80	1,736	<b>4,614</b> 45.7%	<b>5,766</b> <b>57.1%</b>	<b>4,335</b> <b>42.9%</b>	10,101 100.0%
100	3,628	<b>7,241</b> 51.2%	<b>8,693</b> <b>61.4%</b>	<b>5,461</b> <b>38.6%</b>	14,154 100.0%
120	6,073	<b>10,373</b> 57.0%	<b>12,018</b> <b>66.0%</b>	<b>6,189</b> <b>34.0%</b>	18,207 100.0%
140	8,550	<b>13,534</b> 60.8%	<b>15,367</b> <b>69.0%</b>	<b>6,894</b> <b>31.0%</b>	22,261 100.0%
160	10,730	<b>16,425</b> 62.4%	<b>18,501</b> <b>70.3%</b>	<b>7,812</b> <b>29.7%</b>	26,313 100.0%
180	13,049	<b>19,442</b> 64.0%	<b>21,736</b> <b>71.6%</b>	<b>8,631</b> <b>28.4%</b>	30,367 100.0%
200	15,506	<b>22,586</b> 65.6%	<b>25,071</b> <b>72.8%</b>	<b>9,349</b> <b>27.2%</b>	34,420 100.0%

**Calculating Notes:**

**Col. (7)** = 555,227 bpd x 365 = 202,657,850 bbls.  
(Fall 2011 Revenue Sources Book, Fig. 4-6).

**Col. (8)** = Col. 7 \* Col. 1.

**Col. (9)** = Col. (8) - Col. (6).

**Col. (10)** = Col. (9) / Col. (7).

**Col. (11)** = [Col. (4) - Col. (3)] / [Col. (4) - Col. (3) + Col. (5)].

The upper panel remains unchanged; in the lower panel, the 21% federal income tax (FIT) from Worksheet 1 is retained as a starting point for calculating the producer gains from ACES capital credit deductions of \$400 million.

State losses in Column (3) are estimated at \$388 million; this figure represents \$400 million capital credit payments, reduced by \$12 million recovered by the state in increased state income tax (estimated here at an effective rate of 3%); this figure is carried over to Columns (4) and (5), where the \$388 million state reduction is partially offset by the increased FIT payment of \$61.5 million (21% of \$388 million) in Col. (4), netting the producers a gain of \$306.5 million. Col. (6) remains unchanged from the upper panel.

Note that estimating the correct federal income tax (shown on the preceding sheet) has a far greater effect on net revenues than the capital credit gains shown on this worksheet – and that outcomes for individual producing companies will vary widely.

3. ADJUSTING FY 2013 REGIME COMPETITIVENESS DATA FOR TAPS  
(WITH FED. INCOME TAX, STATE CAPITAL CREDITS)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>From: PFC Energy (Apr. 4, 2012, 2nd Session, Slide 5)</b>						<b>Estimated from Alaska Dept. of Revenue Data*</b>				
<b>Oil Price FY 2013)</b>	<b>ACES Revenue</b>	<b>Total State Take</b>	<b>State + Federal Take</b>	<b>Cash to Com- panies</b>	<b>Total Take (Cols. 4+5).</b>	<b>Million Barrels (FY 2013)</b>	<b>Gross Revenue</b>	<b>Total Production Costs</b>	<b>Cost per bbl.</b>	<b>Federal Income Tax Rate</b>
40	(233)	1,413 70.9%	1,616 81.0%	378 19.0%	1,994 100.0%	203	8,106	6,112	\$30.16	35%
60	513	2,989 49.4%	4,060 67.1%	1,988 32.9%	6,048 100.0%	203	12,159	6,111	\$30.16	35%
80	1,736	5,002 49.5%	6,787 67.2%	3,314 32.8%	10,101 100.0%	203	16,213	6,112	\$30.16	35%
100	3,628	7,629 53.9%	9,913 70.0%	4,241 30.0%	14,154 100.0%	203	20,266	6,112	\$30.16	35%
120	6,073	10,761 59.1%	13,367 73.4%	4,840 26.6%	18,207 100.0%	203	24,319	6,112	\$30.16	35%
140	8,550	13,922 62.5%	16,841 75.7%	5,420 24.3%	22,261 100.0%	203	28,372	6,111	\$30.15	35%
160	10,730	16,813 63.9%	20,138 76.5%	6,175 23.5%	26,313 100.0%	203	32,425	6,112	\$30.16	35%
180	13,049	19,830 65.3%	23,518 77.4%	6,849 22.6%	30,367 100.0%	203	36,478	6,111	\$30.16	35%
200	15,506	22,974 66.7%	26,980 78.4%	7,440 21.6%	34,420 100.0%	203	40,532	6,112	\$30.16	35%

**Adding TAPS Data to Worksheet Revisions Showing 21% Avg. FIT + \$400MM State Capital Credits**

<b>Annual TAPS Increments == &gt;</b>	<b>State, 88</b>	<b>Total Gov. 237</b>	<b>Company 266</b>	<b>Totals 503</b>	
40	(233)	1,113 44.6%	1,466 <b>58.7%</b>	1,031 <b>41.3%</b>	2,497 100.0%
60	513	2,689 41.0%	3,562 <b>54.4%</b>	2,989 <b>45.6%</b>	6,551 100.0%
80	1,736	4,702 44.3%	6,004 <b>56.6%</b>	4,600 <b>43.4%</b>	10,604 100.0%
100	3,628	7,329 50.0%	8,930 <b>60.9%</b>	5,727 <b>39.1%</b>	14,657 100.0%
120	6,073	10,461 55.9%	12,255 <b>65.5%</b>	6,455 <b>34.5%</b>	18,710 100.0%
140	8,550	13,622 59.8%	15,604 <b>68.5%</b>	7,160 <b>31.5%</b>	22,764 100.0%
160	10,730	16,513 61.6%	18,739 <b>69.9%</b>	8,077 <b>30.1%</b>	26,816 100.0%
180	13,049	19,530 63.3%	21,974 <b>71.2%</b>	8,896 <b>28.8%</b>	30,870 100.0%
200	15,506	22,674 64.9%	25,308 <b>72.5%</b>	9,615 <b>27.5%</b>	34,923 100.0%

TAPS data at left are estimates based on state property and income tax, federal income tax and company TAPS net revenue estimates from 2004, (reduced by 17% to match decline in annual tariff revenue between 2004 and 2011).

To include TAPS profits and government revenue in the Alaska petroleum revenue take estimates, add 2004 TAPS estimates in columns (3), (4) and (5), above, to each "take" estimate from \$40 to \$200 per barrel at left.

The totals at left, showing higher industry revenue and a lower percentage of total overnment take, delineate partial returns to the three major North Slope producers, who also own approximately 95% of TAPS.  
(These totals do not include off-book items, such as the pre-collected funds for eventual TAPS dismantling, removal and restoration [DR&R]).

- TAPS data from R. A. Fineberg, *The Profitability and Economic Viability of TAPS North Slope and Associated Pipeline Operations*, Figure III-14, p. 60 (April 27, 2005).