State of Alaska
Department of Revenue

Commissioner Bryan Butcher

SEAN PARNELL, GOVERNOR
333 Willoughby Avenue, 11th Floor
P.O. Box 110400
Juneau, Alaska 99811-0400
Phone: (907) 465-2300
Fax: (907) 465-2389

The Honorable Bert Stedman
The Honorable Lyman Hoffman
Co-Chairs, Senate Finance Committee
Alaska State Senate
Juneau, AK 99801

February 16, 2012

Re: Response to questions from Senate Finance Hearing on February 2, 2012

Dear Senators Stedman and Hoffman:

The purpose of this document is to respond to the follow-up questions raised by the Senate Finance Committee meeting on February 2, 2012.
The requests/questions and responses follow.

1) **Provide what information the Department of Revenue (DOR) has about facilities constraining oil production (i.e. lack of gas or water handling capacity).**

Most of the facilities on the slope are constrained by either available gas handling or water handling capacity or both. Gas handling constraints are the reason we see the large swings when comparing summer to winter production. This is because of ambient temperature fluctuations. Gas compressors are powered by gas turbines whose efficiency and power output vary significantly with the ambient temperatures. Colder ambient temperatures yield high horsepower outputs and increased gas compression capacities. Well oil production on the slope is optimized to an incremental GOR (gas oil ratio) and WOR (water oil ratio) based on facility handling constraints.

The department accounts for facility handling constraints in its production forecast on an individual well basis. The well history will include when the well was producing versus when the well was shut in based on facility handling constraints. In fitting a decline curve, the shut in periods of time are factored in and reflected in the forecast.

2) **Provide further breakdown of FY 13 / 14 / 15 expenditure forecasts as much as possible.**

The Department of Revenue is seeking clarification from the Department of Law on the extent to which it can disclose information about expenditure forecasts provided by companies.

3) What amount of expenditures is made by oil companies that are not deductible for purposes of the ACES tax?

The amount of expenditures that are not deductible for the ACES tax is not reported to the Department of Revenue. There are several expenditures that are specifically excluded from qualifying as lease expenditures under ACES at AS 43.55.165(e), such as costs for dismantlement, removal, surrender or abandonment of a facility, pipeline, or other property used for producing oil and/or gas. Costs for deferred maintenance are also disallowed as well as a limitation on capital expenditures (the "$.30 haircut" under AS 43.55.165(e)(18)).

Regulations detailing qualified lease expenditures are written to conform to allowable costs as provided for under most joint operating agreements (JOAs). Most JOAs (as well as our lease expenditures) allow direct costs of production as well as an allowance for overhead expenses. The state allows a fixed percentage of 4.5% of direct costs as an overhead allowance that may be deducted as lease expenditures. The statutes provide that only those costs that are related to exploring for, developing, or producing oil or gas may be deducted as lease expenditures. Therefore, expenditures that are related to research and development type costs are not allowed as lease expenditures since they are not expenditures related to exploring for, developing, or producing oil or gas.

4) How much production do the credits the state has issued translate out to?

Based on our understanding of the question, the intent is to translate production tax credits in each year to a certain amount of production for each year. To illustrate this concept, we present total credits in each year relative to lease expenditures per barrel in each year. The resulting calculation illustrates the number of barrels for which the costs would be covered by the total credits in each fiscal year. When viewing this data, note that many credits are issued to companies that are not producing oil, and also that many if not most credits represent investments in future production as opposed to current year production.

Illustration of Amount of Production that would be paid for by tax credits, FY 2007-FY 2012

	FY 2007 / Pre-2008 [1]	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Total Credits [2] ($ million)	$673	$509	$641	$773	$863	$533
Total Lease Expenditures ($ million)	$3,659	$3,848	$4,297	$4,659	$4,931	$5,322
ANS Production, bpd	734,000	716,000	693,000	644,000	603,000	574,000
Lease Expenditures per Barrel of Total Production	$13.70	$14.70	$17.00	$19.80	$22.40	$25.30
Total Credits / Lease Expenditures per Barrel	49,124,000	34,626,000	37,706,000	39,040,000	38,527,000	21,067,000

(1) To simplify this analysis all "pre-2008" credits are shown relative to FY 2007 production.
(2) Includes both tax credit certificates and credits applied against production tax liability. FY 2011 and FY 2012 are estimated pending final true-ups.

5) Provide history of year-forward forecasts (ie 2011 forecast for FY 12, 2010 forecast for FY 11, etc).

The following table presents the Fall forecasts for lease expenditures for the following year (ie Fall 2007 forecast for FY 2008, etc), for Fall 2007 through Fall 2011 forecasts. We also include the actual lease expenditures for the first four years.

Year-forward lease expenditure forecasts and actuals

Forecast	Year Forecasted	Forecast Opex ($ millions)	Actual Opex ($ millions)	Forecast Capex ($ millions)	Actual Capex ($ millions)	Forecast Total ($ millions)	Actual Total ($ millions)
Fall 2007	FY 2008	$ 2,149	$ 1,881	$ 2,188	$ 1,967	$ 4,337	$ 3,848
Fall 2008	FY 2009	$ 2,153	$ 2,085	$ 2,373	$ 2,212	$ 4,526	$ 4,297
Fall 2009	FY 2010	$ 1,996	$ 2,270	$ 2,505	$ 2,389	$ 4,501	$ 4,659
Fall 2010	FY 2011	$ 2,553	$ 2,614	$ 2,572	$ 2,317	$ 5,125	$ 4,931
Fall 2011	FY 2012	$ 2,579		$ 2,743		$ 5,322	

Source: Fall 2007-Fall 2011 Revenue Sources Book "Basic Data" tables

6) Break out credit for Cook Inlet.

See attached S FIN 2.2.12 credits.pdf

7) Update credit slides with FY 2013 projections.

See attached S FIN 2.2.12 credits.pdf

8) Provide information about the basis of our 10-year property tax forecast.

Property taxes are difficult to forecast for a variety of reasons. As such, in forecasting petroleum property taxes, the Department has adopted a simple model which takes the previous year assessed tax value, and projects it forward with assumptions that depreciation slightly offsets appreciation. This is a conservative estimate. The state's petroleum property tax forecast is outlined at the top of page 27 of the Department's Fall 2011 Revenue Sources Book.

9) Show municipal and state shares each year.

The property tax forecast is limited to the state's share. The Department does not forecast municipal property taxes. However, the Department does acquire current fiscal year property tax by municipality. The breakdown can be found on page 43 of the Department's Fall 2011 Revenue Sources Book. It is the Department's understanding that certain municipalities may conduct their own property tax forecasts, but the Department does not receive or review those forecasts.

10) Compare our forecast to expectations based on the Gleason decision.

The Department has not performed further property tax forecasting based on Judge Gleason's recent decision. Judge Gleason's decision is not yet "final" at the Superior Court level, and will likely get appealed to the Alaska Supreme Court for a final determination

11) Provide a history for CBRF (slide 4) of starting balance and fund flows.

See attached document named S FIN 2.2.12 CBRF Analysis Chart.pdf, which has been prepared in response to a question regarding the Constitutional Budget Reserve Fund cash flows. We started in 1991 with the appropriation into the CBRF. Each of the blue bars represents either a contribution or withdrawal into the CBRF. The investment income (represented by the green line) plus the cumulative amount contributed (represented by the light blue fill) equals the net asset value (represented by the black dotted line). We have also placed the various tax structures and price of oil on the graph so that a historical construct can be made around the CBRF inflow and outflows.

12) Provide a history of monthly cash flows for PCE… appropriations, earnings, payments out, and rates of return.

See attached document named S FIN 2.2.12 PCE Analysis – FY11 & FY12.pdf, which shows the monthly contributions, withdrawals and income or loss to the Power Cost Equalization fund along with rates of return. This information is updated monthly on the Department of Revenue's website http://www.dor.alaska.gov/treasury/programs/programs/other/ifr/index.aspx?2012

13) Make a recommendation for changes to PCE payout rates and rates of return.

The Power Cost Equalization Endowment (PCE) provides ongoing funding to assist in stabilizing electricity rates throughout the state as well as to make grants to improve state utility performance. The key operating assumptions set in statute are for the commissioner of revenue to invest the endowment to achieve at least a seven percent nominal return over time and for the endowment to provide for annual disbursements of seven percent based on the past 36 month endowment balance.

Since the PCE's expected long term return of 7% is equal to the 7% disbursement level, the fund and the purchasing power of disbursements can be expected to diminish with inflation over time absent additional state support. Many endowments are structured to payout current benefits while protecting future purchasing power to provide a similar level of future benefits. Funds are generally designed to accomplish this by targeting a rate of return that exceeds the payout level by the expected inflation rate.

The addition of $400 million to the PCE in July of 2011 provides the state with an opportunity to protect the endowment against inflation without requiring an increase in risk or a reduction from recent appropriations.

The endowment targets a nominal rate of return of at least 7% which necessitates a relatively high level of risk. This level of risk and return is reasonable since it is consistent with the long term ability of the endowment to bear risk.

To protect the endowment from inflation, I recommend decreasing the appropriation level. The long term expectation for inflation is 3%. Since the target return is 7%, this leaves 4% for appropriation. Over the long term, a 4% real rate of return for appropriation should be achievable.

As a result of the recent $400 million infusion, a 4% appropriation should result in disbursements increasing by 30% from $22.9 million in FY2011 to an estimated $29.8 million in FY2014. The additional capital is averaging into the appropriation calculation over a three year period between FY2012 and FY2014. To avoid a reduction in the level of recent appropriations, I would recommend transitioning to the 4% rate by fixing the appropriations for FY2012 and FY2013 at $25 million and $27.3 million. The following table provides the recent appropriations, the 4% estimates, and the recommendation:

Fiscal Year	(a) 36 Month Average Value	(b) Appropriation	(c) 4% Calculation	(d) Recommendation
FY2008	301,024,639	21,071,725		
FY2009	340,491,397	23,834,398		
FY2010	338,189,252	23,673,248		
FY2011	327,150,521	22,900,536		
FY2012 est.	*468,541,379*		*18,700,000*	*25,000,000 fixed $*
FY2013 est.	*606,523,926*		*24,300,000*	*27,300,000 fixed $*
FY2014 est.	*744,575,228*		*29,800,000*	*29,800,000 4%*

Protecting the Power Cost Equalization Endowment from the impact of long term inflation will help preserve the purchasing power of the endowment and allow for future benefits to increase with inflation. The current disbursement model is likely to result in either decreasing future disbursements or the need for additional state support. The state has a unique opportunity this fiscal year to move toward inflation-proofing this endowment without increasing risk or decreasing the level of recent appropriations.

14) Provide a report about the PF earnings reserve account over the past 5 years, balances, and how it was invested.

See attached document named S FIN 2.2.12 APFC earnings reserve.pdf

I hope the answers fully address your questions.

Sincerely,

Bruce Tangeman
Deputy Commissioner

Enclosures