HOUSE FINANCE COMMITTEE
April 5, 2016
1:32 p.m.

1:32:44 PM

CALL TO ORDER

Co-Chair Thompson called the House Finance Committee meeting to order at 1:32 p.m.

MEMBERS PRESENT

Representative Mark Neuman, Co-Chair
Representative Steve Thompson, Co-Chair
Representative Dan Saddler, Vice-Chair
Representative Bryce Edgmon
Representative Les Gara
Representative Lynn Gattis
Representative David Guttenberg
Representative Scott Kawasaki
Representative Cathy Munoz
Representative Lance Pruitt
Representative Tammie Wilson

MEMBERS ABSENT

None

ALSO PRESENT

Randall Hoffbeck, Commissioner, Department of Revenue; Martin Baily, Economist, McKinsey and Company; Senior Fellow, Brookings Institution; Craig Richards, Attorney General, Department of Law; Representative Mike Chenault; Representative Charisse Millett; Representative Craig Johnson.

SUMMARY

HB 224 PERM FUND: INCOME; DISTRIBUTION; PFD;

HB 224 was HEARD and HELD in committee for further consideration.

HB 245 PERM. FUND:DEPOSITS;DIVIDEND;EARNINGS

HB 245 was HEARD and HELD in committee for further consideration.

HB 303 PERM FUND: EARNINGS, DEPOSITS, ACCOUNTS

HB 303 was HEARD and HELD in committee for further consideration.

Co-Chair Thompson discussed the meeting agenda. He relayed that the committee would focus on HB 245.

#hb224
#hb245
#hb303

HOUSE BILL NO. 224

"An Act relating to the governor's submission of a projection of anticipated revenue and expenditures and proposal for enactment of an individual broad-based tax; relating to income of the Alaska permanent fund; relating to the disposition of income of the Alaska permanent fund; relating to the calculation of permanent fund dividends; relating to the dividend fund; and providing for an effective date."

HOUSE BILL NO. 245

"An Act relating to the Alaska permanent fund; relating to appropriations to the dividend fund; relating to income of the Alaska permanent fund; relating to the earnings reserve account; relating to the Alaska permanent fund dividend; making conforming amendments; and providing for an effective date."

HOUSE BILL NO. 303

"An Act relating to the Alaska Permanent Fund Corporation, the earnings of the Alaska permanent fund, and the earnings reserve account; relating to the mental health trust fund; relating to deposits into the dividend fund; and providing for an effective date."

1:33:50 PM

RANDALL HOFFBECK, COMMISSIONER, DEPARTMENT OF REVENUE, remarked that as the department put together its permanent

fund bill it had landed on a robust and sustainable package. He relayed that the department had submitted a request for proposal to advise on the use of the Permanent Fund earnings reserve. McKinsey and Company, Inc. had been awarded with the bid. He introduced the presenter.

1:37:09 PM

MARTIN BAILY, ECONOMIST, MCKINSEY AND COMPANY; SENIOR FELLOW, BROOKINGS INSTITUTION, provided a PowerPoint presentation titled "Ensuring a Sound Fiscal Future" dated April 5, 2016 (copy on file). He turned to slide 1:

> The Alaska Department of Revenue has sought an objective assessment of the financial model it built to evaluate an annual draw from the Earnings Reserve of the Permanent Fund, as outlined in the Alaska Permanent Fund Protection Act. The fact-based assessment of the financial model included in this document was conducted by McKinsey and Company, Inc. with support from expert Martin Baily.

Mr. Bailey discussed slide 2, "Context for this effort":

> The APFPA proposal would re-route oil revenues to the APFC to help stabilize State spending
>
> > The Alaska Permanent Fund Protection Act (APFPA) calls for directing a steady annual amount to the General Fund to mitigate the impact of oil price volatility on year-to-year budgeting. Specifically, the proposal recommends that:
> >
> > > 50 percent of oil royalty revenues and 100 percent of production tax revenues flow to the Alaska Permanent Fund Corporation (APFC) for investment
> > >
> > > A fixed annual draw of $3.3B (adjusted for inflation beginning in 2020) from the APFC to the General Fund to fund State expenditures; the amount would be methodically revisited every 4 years to ensure continued Fund sustainability
> > >
> > > Dividend payments be paid out of the remaining 50 percent of oil royalties

The APFPA seeks to improve budget stability

Given a rising budget deficit and declining oil production revenues, the APFPA seeks to:

Protect and grow the State's sovereign wealth to maximize long-term returns, acknowledging the rising importance of investment income in funding its budget

Delink public spending from volatile commodity prices and stabilize the budget by establishing a disciplined, formulaic approach to drawing from the State's wealth

State modeling proposes that a $3.3B draw should be sustainable

The Department of Revenue (DOR) has undertaken an extensive exercise to assess in a financial model what amount of annual draw will be sustainable (i.e., what draw amount can the State expect with greater than 50 percent confidence to maintain the starting asset's real value over time without depleting the Earnings Reserve)

Given the Earnings Reserve's current size and the $3B proposed transfer from the Constitutional Budget Reserve, the State can plan with 100 percent confidence to draw $3.3B annually for at least 4 years (at which point the draw amount will be reviewed)

The cumulative confidence level of being able to draw $3.3B annually falls to 95 percent over 10 years and to 69 percent through 2040. Revisiting the draw on a 4-year cadence will lend additional confidence (e.g., this safeguard has not been factored in to modeling)

The State sought an independent review of this model's rigor

The State sought an independent evaluation of (i) the soundness of the model's methodology and (ii) critical assumptions underlying the model (most

notably those related to expected oil revenues and investment returns)

Mr. Baily addressed slide 3, "Overview of conclusions":

The DOR model is sound in its methodology

The model tests whether a $3.3B annual draw will be sustainable

▪ The DOR used probabilistic analysis, including Monte Carlo simulations, to estimate confidence levels for (i) future oil prices and (ii) investment returns, as well as deterministic analysis to establish a base case scenario for oil production

▪ The approach taken is reasonable and the model's logic is generally robust in testing the likely impact of a $3.3B draw, based on a review of the model's structure, logic, conceptual soundness, and process for future updates

The assumptions that underlie the model are reasonable

Key assumptions on future crude oil selling price, oil production, and investment returns (total and statutory) were obtained from credible, objective sources

These assumptions are all within the range of reasonableness Assumptions on oil production and price are reasonable and, taken together, somewhat more conservative than most

Investment returns assumptions are reasonable, though were considered optimistic for the near-term by some members of the APFC investment staff and were higher than those projected by APFC's strategic partners (third-party asset managers)

Certain institutional investor best practices could help improve this plan's long-term sustainability

The State of Alaska could further strengthen the long-term viability of the APFC and the sustainability of its contributions to the General Fund by leveraging best practice learnings from other SWFs and investors, e.g.: Clear savings-and-spending rules and capital planning

Regular communication between investor and sponsor

Formal and informal investment education opportunities for government officials and board members

Board governance processes with appropriate composition, appointment expertise and roles

Well-designed strategy tied to Fund obligations and long-term investing

1:42:21 PM

Mr. Baily spoke to slide 5, "The scope of this assessment":

Overview

The Department of Revenue is seeking an objective assessment of its financial model which analyzes a $3.3B fixed annual draw from the Earnings Reserve of the Permanent Fund to finance General Fund spending

In scope:

Detailed review and vetting of the DOR financial model's methodology and construction, including appropriateness of use of Monte Carlo analysis

Assessment of the reasonableness of key baseline assumptions (oil price, oil production, investment returns) affecting the sustainable draw

Perspective on best practices of other SWFs which inform consideration of the proposed model

Not in scope:

Holistic evaluation of the proposed budget or budget deficit

Perspectives relating to current or future tax regimes (e.g., Petroleum Value model)

Assessment of the Permanent Fund's mandate or its investment management processes

Macroeconomic study of future market fundamentals

Recommendations for alternative funding models

Mr. Baily relayed that the study had looked at how sovereign wealth funds were managed and what the best practices were. He shared that it was not the task of the study to recommend what the policy should be. He wanted to be careful to make it clear the study focused on the validity of the model and whether it did what it was supposed to do. He moved to slide 6 and discussed other countries and how they had addressed the issue.

1:46:31 PM

Mr. Baily turned to slide 6, "SWFs benefit from establishing a clear set of disciplined saving and spending rules to invest for the long-term":

Establishes a clear set of disciplined saving and spending rules as well as a predefined capital plan

Singapore's SWF, GIC, has developed a proprietary internal model projecting 20-year sub-asset class level returns

Government of Singapore is allowed to spend 50 percent of the annualized 20-year expected returns giving Government flexibility on a year-by-year basis on how much to draw, but capping outflows at a low enough level to grow the corpus

The National Fund of Kazakhstan had previously suffered from discretionary draws from the corpus. Under 2010 reforms annual draw is fixed at $8 billion for use both to reduce budget deficits and for economic development. Government can adjust the annual draw by 15 percent (as it did in 2013)

If the balance of the National Fund falls below 20 percent of Kazakh GDP in a given fiscal year the Government must reduce the annual draw until the balance has returned to 20 percent of GDP

Norway has a bipartisan balanced budget consensus which limits government non-oil deficits to 4 percentage points. This prevents the government from drawing down the corpus of Norway's

Government Pension Fund Global unless Norges Bank Investment Management beats the long-run expected investment returns of 4 percent

Temporary increases in withdrawals are allowed under only limited circumstances, but requires a specific parliamentary resolution

Mr. Baily discussed slide 7, "The DOR model was built to establish and test the sustainability of a fixed annual draw from the Earnings Reserve":

What are the major inflows into the Fund?

Production tax revenues

Royalty revenues

Investment returns

What are the most important drivers of future inflows?

Oil production

Oil price

Investment returns (total statutory)

What is the projected spendable output based on cash flow projections?

Sustainable draw amount must ensure:

less than 50 percent confidence that real value of starting assets is preserved over time

Earnings Reserve durability (confidence that the annual draw can be taken from ER)

1:50:36 PM

Mr. Baily looked at slide 8, "The DOR conducted advanced probabilistic (“Monte Carlo”) modeling to better understand the Fund’s ability to sustain the draw." which showed three graphs for a high-level description of the DOR modeling process":

Step 1

Understand the critical revenue drivers of the model – in terms of restricted and unrestricted revenue sources

Step 2

Build a probabilistic model of expected oil price and investment returns fluctuations

Step 3

Understand impact on revenue flows into the Fund and Earnings Reserve available for the annual draw

Mr. Baily spoke to slide 9, "Over 4 weeks, a detailed review of the most critical elements of the DOR's modeling methodology and assumptions was conducted":

SWF Model

Assumptions and Methodology

The existing DOR sovereign wealth fund model was reviewed along 2 dimensions: methodology and assumptions

Oil revenues (oil price and production); Investment returns (total and statutory net income); Structure of model; Logic and conceptual soundness; Process

Key elements of the model were prioritized and pressure-tested using industry experts, third-party projections and proprietary modelling assessment framework

1:57:34 PM

Mr. Baily displayed slide 11, "The DOR model implies a 69 percent cumulative confidence that a $3.3B annual draw can be made from the Earnings Reserve each year through 2040":

Earnings Reserve acts as a buffer to short-term investment return and oil revenue volatility

$10B starting balance means near 100 percent confidence of being able to draw $3.3B per year for first four years even with negative investment returns

APFC has only had negative total investment returns four times in the past 30 years

Effects of cumulative volatility and declining oil production reduce confidence over time – but even in 2040 cumulative confidence that a $3.3B annual draw can be made from Earnings Reserve is 69 percent (confidence would be even higher if adjusted for periodic review)

Mr. Baily discussed slide 12, "The DOR model predicts that the Permanent Fund will be $96B in 2040 with an interquartile range of $34B and $196B":

Permanent Fund balance will grow or shrink in any given year because of volatility in investment returns and oil revenues

DOR goal is to maintain the real value of starting assets by seeing the median balance grow with inflation of 2.25 percent

Modelled output meets this threshold, predicting median balances rising to ~$96B in 2040 (nominal value)

Given expected volatility, 2040 ending balance is predicted to be between $34B and $196B with a 50 percent confidence level (the threshold set by DOR)

Mr. Baily moved to slide 14, "Review of the DOR model indicates that the assumptions and methodology underlying Fund projections are sound":

Conclusions from the review

- The DOR modeling assumptions and methodology are reasonable
    - Key assumptions on future oil price, oil production, and investment returns (total

and statutory) were obtained from objective sources and are within the range of reasonableness

- The methodological approach taken, including use of Monte Carlo simulations, is reasonable, and the model logic is generally robust in testing the likely impact of a $3.3B draw

Future iterations of the model could benefit from the following changes: Build functionality to account for second-order relationships (e.g., year-on-year correlation between variables1 and the impact on production of reaching certain breakeven prices for crude2)

Establish consistent process and ownership for model construction and sources

Assumptions may be periodically revisited based on changes to Fund strategy and investment management, or changes to the tax regime affecting Fund inflows

2:03:01 PM

Mr. Baily discussed slide 15, "The review considered the modeling methodology and assumptions behind critical drivers of inflows to the Fund":

Crude selling price

Explanation of DOR approach

DOR has employed a Monte Carlo analysis using ERG crude oil price projections to determine the likelihood of price evolution in the future based on a survey of expert forecasts

How approach was assessed

Comparison of projections with multiple third-party objective sources (e.g., Woodmac, Rystad)

Production volume

Explanation of DOR approach

DOR has employed a deterministic analysis using ERG oil production projections – this approach takes a fairly conservative approach (e.g., approach reflects the uncertainty of future production projects)

How approach was assessed

Comparison of projections with multiple third-party sources

Total return rate and Statutory net income rate

Explanation of DOR approach

DOR has relied on Monte Carlo analysis based on projections from Callan Associates (the third-party financial consultant that the Permanent Fund has used for 20+ years) to estimate the likelihood of future Fund performance based on current Fund strategy

How approach was assessed

Comparison of projections with historic performance and third-party projections

Interviews with Permanent Fund investors to understand view of projections and potential for change to future fund performance

Mr. Baily displayed slide 16, "Two types of analysis are used in the DOR model: “probabilistic” and “deterministic” analysis":

Deterministic

Explanation

Describes the outcome of some scenario given appropriate inputs (in this case, based on the average or median value and the degree to which that value varies over time)

When is it best used

When projections are based on an assumed trend given variance from that trend within certain standard deviation (e.g., use of a conservative baseline case for oil production)

Probabilistic “Monte Carlo”

Explanation

Monte Carlo analysis is a modeling technique that runs multiple trials and gives a distribution of potential outcomes. Running a Monte Carlo model creates a probability distribution that indicates the likelihood that an outcome will occur

When is it best used

When attempting to project highly volatile and less predictable drivers where the impact of “randomness” is important to understanding risk (e.g., oil price, investment returns)

2:08:51 PM

Mr. Baily moved to slide 17, "Model methodology is robust, with some potential opportunities for future improvement":

Structure

Check for errors

Explanation:
No major mechanical errors found

Potential steps to improve model:
None

Dependencies on other models

Explanation:
Petroleum Model model sub-optimally structured

Oil production projections are not linked to price projections

Potential steps to improve model:

Consider full audit of Petroleum Model (particularly in light of tax / royalty regime)

Wire model to account for price/production relationship in future model iterations

Single use of source

Explanation:
Sources consistently used with exception of some oil price inputs (e.g., median used in Petroleum Model vs. probabilistic price used in SWF model)

Potential steps to improve model:
Validate Petroleum Model for consistency in oil pricing (e.g., using probabilistic model vs. median)

Logic and conceptual soundness

Calculation of inputs

Explanation:
Underlying data sources are objective (e.g., Callan)

Does not account for impact of unrealized returns on Earnings Reserve balance)

Potential steps to improve model:

Consider impact unrealized returns that are apportioned to Earnings Reserve on the funds available for spend

Deterministic vs. probabilistic

Explanation:
Current use of Monte Carlo methods is defensible given behavior of oil price and investment returns

Potential steps to improve model:

None

Probabilistic methodology

Explanation:
Pert distribution of oil price (i.e., 3 points) is sufficient but highly sensitive to accuracy of underlying inputs to the distribution (P10, P50, P90)

Does not account for year-on-year correlations in oil prices (e.g., “gamblers dilemma”)

Potential steps to improve model:
Consider exploring more sophisticated probabilistic methodology (e.g., revisit accuracy of Delphi-style method used in PERT distribution)

Account for year-on-year correlations in probabilistic analysis

Process

Repeatable and consistent process

Explanation:
Informal construction process (partly driven by ongoing iterative policy process)

Governance procedures to ensure systematic auditing/updating not yet developed

Potential steps to improve model:

For future sustainable draw re-visitations, create set of rules / guidelines for timeline / triggers of update and develop design principles to guide construction

Ownership

Explanation:
Unclear future ownership (partly driven by unclear end use of model)

Potential steps to improve model:
For future sustainable draw re-visitations, articulate clear owner(s) with auditing / updating rights

2:13:30 PM

Mr. Baily turned to slide 18, "Each of the modeling methodology used by the DOR model to project critical fund inflow drivers is technically sound":

Crude selling price

Description of DOR model methodology:
Use of probabilistic analysis (PERT distribution) based on P10=$31/bbl, P50=$56/bbl, P90=$87/bbl

Rationale for methodology:
Probabilistic analysis accounts for volatility

Distribution method leverages preexisting DOR/ERG crude oil price projections

Production volume

Description of DOR model methodology:
Use of deterministic analysis based on conservative base case (e.g., assuming no new project-driven increase in production)

Rationale for methodology:
Not much volatility in the projections and hence no need for probabilistic analysis

Total return rate

Description of DOR model methodology:
Use of probabilistic analysis (normal distribution) based on 6.9 percent mean rate of return and 13.9 percent standard deviation

Rationale for methodology:
Objective and transparent methodology

Distribution method based on mean reversion methodology used by Callan

Statutory net income rate

Description of DOR model methodology:
Use of probabilistic analysis (PERT distribution) based on based on P10=3.7 percent, P50=6.01 percent, P90=8.14 percent

Rationale for methodology:
Probabilistic analysis accounts for volatility

Distribution based on data available from Callan statutory model (P10/50/90 distribution)

Mr. Baily spoke to slide 19, "Based on the recommendations that came out of the model review, a series of actions were executed":

Improvement identified:

Build Earnings Reserve sufficiency test into the master model (versus using separate models to test Fund balance and ER sufficiency)

Adapt fully objective, repeatable source for investment returns (versus prior use of blended projected and historic returns rates)

Update standard deviation of returns assumption to match Fund returns projections

Use most technically correct formulas and @Risk functions (e.g., calculation for geometric mean, @Risk and risk target function cross check)

Changes made to model

Expanded model to include ER sufficiency analysis

Changed source from a 50 percent historic/50 percent projected return to a 10 year deterministic projection from 3rd party (Callan)

Changed standard deviation from use of Power Cost Equalization Fund deviation to deviation matched to returns source (Callan)

Executed tactical improvements (e.g., updated the formula to calculate geometric mean, revised at risk function to calculate cumulative confidence)

Mr. Baily discussed slide 20, "Assumptions appear generally reasonable; returns projections are perhaps aggressive in the near term":

Crude oil price

Assumption

10th percentile @ $31/bbl
Median @ $56/bbl
90th percentile @ $87/bbl

Source

Annual expert conference held by DOR/ERG1

Explanation

Roughly in-line with third-party estimates, albeit conservative

Objective use of DOR/ERG projections

Crude production

Assumption

Declining from 500k bbl/day in 2017 to 112k in 2040

Source

Survey of O and G companies (with likelihood adjustments)

Explanation

In line with or below third-party estimates in short term; below 3rd parties in long-term due to AK LNG exclusion

Objective use of DOR/ERG projections

Total returns

Assumption

Mean 6.9 percent

Standard deviation 13.9 percent

Source

Callan deterministic model (Dec 2015)

Explanation

In line with other available projections (e.g., 6.4 percent historic returns, 7.45 percent alternative probabilistic projection)

Statutory net returns

Assumption

10th percentile at 3.7 percent
Median @ 6.01 percent
90th percentile @ 8.14 percent

Source

Callan probabilistic model (Dec 2015)

Explanation

Only viable estimate available (e.g., no other multi-year projections available)

Mr. Baily turned to slide 21, "Future iterations of the model could account more rigorously for future trends and second-order relationships":

Future shifts in fund target or mandate

Description

SWF proposal requires Permanent Fund to manage toward fixed stream of liabilities (i.e. like a pension fund)

Likely to entails shift in strategy and potentially returns projections

Observations on impact

Investment earnings are single largest driver of success of SWF (vs. O and G taxes and royalties)

Even small percentage changes in earnings therefore imply significant changes to fund value and sustainability

Future shifts in fund allocation strategies

Description

Permanent Fund will likely change investment strategies in due course

SWF proposal considers possibility of bringing more investment in-house

Observations on impact

Changes in investment strategy for a given asset class will alter risk/return distributions

Investing in-house will reduce fees

Liquidity constrains

Description

Clearer liability stream will allow for more appropriate level of liquidity

Liability driven investing may introduce greater leverage to portfolio

Observations on impact

Reduced levels of liquidity and/or higher leverage may exacerbate risk on extremes of market return distribution

New tax proposals

Description

Current proposal would amend the tax credit system and directly impact O and G revenues going to the State

Observations on impact

O and G revenues are a relatively small percent of revenue in SWF model

Short-term impact, however, could be significant to ensure stability of fund

2:18:24 PM

Co-Chair Neuman stated that there was currently $6.2 billion in the earnings reserve. He wondered if all of the modeling assumed a $3 billion transfer from the CBR to equal $10 billion.

Mr. Baily replied in the affirmative.

Co-Chair Neuman asked what would occur without the transfer.

Mr. Baily answered that the model could be run with different numbers. He stressed that the current model was run with $10 billion. He shared that a $7 billion model would exhaust the probability for the earnings reserve. He stressed that the 100 percent may be shortened by approximately one year. The draw must also be reduced in order to make the model sustainable in the long-term. He reiterated that adjustments could be made every four years.

Co-Chair Neuman noted that the model assumed there was $10 billion in the earnings reserve. He asked whether the model was based solely on the $10 billion in the earnings reserve at 6.9 percent to spend off $3.3 billion per year.

Mr. Baily replied in the affirmative.

Co-Chair Neuman asked wondered whether the model included the baseline of the Permanent Fund itself.

Mr. Baily replied that it was his understanding.

Co-Chair Neuman noted that the volatility in the Permanent Fund Dividend was approximately $50 billion, and wondered how that was considered in the Monte Carlo assessments on the payback of the $3.3 billion assessment.

Mr. Baily replied and deferred to Commissioner Hoffbeck for further detail.

Commissioner Hoffbeck explained that there was some additional modeling required without the $3.3 billion draw. He stated the draw would be reduced by approximately $150 million per year without the $3.3 billion. There would be a plateau approximately one or two years earlier off the 100 percent confidence. He stated that the total uncertainty in 2040 was between two and four percent different than what would occur with the $3.3 billion. He stated that the Permanent Fund Corporation published a report that indicated that their ten year forecast had reduced from 6.9 to 5.8 percent. He stated that Department of Revenue (DOR) had requested additional information from Callan to understand the basis of that reduction. He stated that the forecast was published at the end of January, at the time when the markets had dropped dramatically. He stated that there was a factor of seven months of low returns into the ten year forecast, so it reduced their ten year forecast based on the one year of low revenue. He remarked that the other nine years were still at the 6.9 percent, and furthered that the last five months of their analysis used their long term return rate. He shared that it was only a recognition of the period from FY 16 to FY 25, the lower rate of return was seen on the investments. He stressed that since the reports publication, the markets had recovered. He stressed that the current value of the fund was approximately $53 billion.

2:25:02 PM

Co-Chair Neuman asked if $3.3 billion could be "spun off" - theoretically, to understand that the Permanent Fund would "spin off" that revenue to replenish the earnings reserve.

Commissioner Hoffbeck answered that it was a combination of the permanent fund and oil and gas revenues could equal $3.3 billion per year.

Co-Chair Neuman asked if the oil and gas returns were calculated on the governor's new assumptions.

Commissioner Hoffbeck answered that it had used the probabilistic model, which had a range of prices.

Representative Gara spoke to oil prices projected at the $40 range. He asked how it did not impact the amount coming out of the new sovereign wealth fund.

Commissioner Hoffbeck replied that there were two separate processes. He shared that, within the sovereign wealth modeling, there was the probabilistic model - examining a range of prices throughout the life of the model. He stated that there was a deterministic number in the Revenue Sources Book, with a set data point each year.

Representative Gara stated that if the prices in the 10-year forecast - he surmised that it would impact the payoff from the fund somewhat dramatically.

Commissioner Hoffbeck answered that it would be accurate under the probabilistic model; best guess of what they thought, which was why to use the probabilistic model.

Mr. Baily replied that it showed the advantage of using the probabilistic model. Oil prices fluctuated and would continue to do so. It was not desirable to make changes to the program every six months.

Representative Gara queried the payout using the price forecast from the spring Revenue Sources Book. He recalled that, after the guaranteed dividend, the PFD would be in the $500 range. He queried the PFD by year three, assuming the oil price forecast in the spring.

Commissioner Hoffbeck replied that the dividend would be in the $450 to $500 range.

Representative Wilson asked looked at page two, and wondered whether the budget should be reduced in order to be covered.

Mr. Baily replied that the analysis was not trying to recommend a specific budget.

Representative Wilson queried the spending cap in the model.

Mr. Baily replied that the model did not include a spending cap. He explained that the model was designed to determine what was required to ensure a stable amount.

Representative Wilson observed that the state already had the system in the Permanent Fund. She remarked that a policy could be made to access the funds, with the same result.

Commissioner Hoffbeck replied that, by comingling the oil and gas revenue with the earnings reserve, there was an allowance to draw more than the deposit in years of low revenue.

Representative Wilson asked for verification that under the model they would not spend anything from the corpus of the fund.

2:35:28 PM

Vice-Chair Saddler believed that the state could withdraw without any restructuring of the Permanent Fund. He stressed that the legislature could make the calculations and make appropriations under current law.

Commissioner Hoffbeck replied that the calculation could occur without the legislation. He explained that the bill would provide a rules based ongoing process.

Vice-Chair Saddler noted that under one of the assumptions the production decline was a steady rate. He did not believe that the pipeline reduction was accurate, and wondered whether the assumption considered the technical challenges of a small amount of oil in the pipeline.

Mr. Baily replied that it was his understanding that there were technical difficulties if the flow fell below a certain level. He remarked that he was not an engineer, and would not want to challenge the assertions.

Vice-Chair Saddler felt that necessary additional investments to maintain oil flow would change the net cash revenue, and therefore change some of the model's assumptions about oil income. He remarked that the fund's

current returns, assumed the current investment guidelines for long-term capital growth. He noted that slide 21 said that the sovereign wealth proposal would shift to more pension-like strategy for investment, which meant more fixed investments that assumed less risk and therefore less return. He wondered if that clouded the model's conclusions.

Mr. Baily replied that the basis was that if there was a more stable funding process, the corporation could actually manage the investment funds that were more systematic if the plan went into effect. He relayed that the study had not done an analysis on the investment policy.

2:40:00 PM

Vice-Chair Saddler expressed caution about setting a specific amount to draw, which may affect the investment strategy. He remarked that the Permanent Fund Board of Directors was fairly independent when determining an investment strategy. He stressed that changing the permanent fund may influence the investment strategy. He queried models of other consumer price index inflation rates.

Mr. Baily replied that he did not model different inflation rates. He shared that most in Washington D.C. worried that inflation was too low, and could not reach 2 percent. He stated that the Federal Reserve target was 2 percent. He felt that 2.25 percent was higher than the target. He did not believe that the Federal Reserve would inflate the dollar.

Vice-Chair Saddler recalled that inflation could reach 2.5 percent.

Mr. Baily agreed.

Representative Munoz queried the impact on the model, if the same calculation was used with the 50 percent draw. She also queried the impact of changing the calculation from 21 percent average to a 10 percent average, but tied to the earning power of the corpus.

CRAIG RICHARDS, ATTORNEY GENERAL, DEPARTMENT OF LAW, replied that the impact of the sustainable draw would go from paying out approximately $700 million to approximately

$1.4 billion per year; which would impact the sustainable draw by about $400 million per year. He pointed out that maintaining an earnings based dividend was undesirable policy, when there was also earnings reserve revenues for the general fund. He explained that a dividend calculated on earnings was highly variable. He remarked that every time the dividend "jumps up" the share to the government was reduced.

2:45:12 PM

Representative Munoz clarified that there would be a 4400 million reduction in the current calculation.

Attorney General Richards agreed to follow up with the exact number.

Representative Munoz noted that the model assumed a $3.3 billion draw, and a continued tax revenue from existing taxes of approximately $850 million.

Attorney General Richards stated she was incorrect. He explained that the model assumed that, over time, the revenues would be highly variable.

Commissioner Hoffbeck furthered that there was approximately $850 million of other taxes available for government spending. He stated that the money was not put into the earnings reserve, because it was not volatile.

Representative Munoz wondered whether $4.285 billion was the total with existing revenue under the new model.

Commissioner Hoffbeck responded in the affirmative.

2:47:50 PM

Representative Guttenberg looked at slide 5. He felt that there were some things left out of the scope. He wondered if there was alternative modeling to proof the assumptions.

Mr. Baily replied that he had looked at only one model.

Representative Guttenberg wondered if there was an attempt to see if the model would not happen.

Mr. Baily responded affirmatively. He shared that creating this type of model resulted in various outcomes.

Representative Guttenberg commented that his concern was that although the state had done some modeling on taxes, but never believed that the current economic situation would occur.

Representative Edgmon supported the concept going forward. He commented that it seemed that the state was shifting the onus onto the Permanent Fund.

Mr. Baily did not believe it was the way the model was set up and did not believe it was undermining the Permanent Fund.

Attorney General Richards.

2:55:00 PM

Mr. Baily believed that the intent of setting up the fund was to create a sovereign wealth fund that would allow the benefits from the oil to be there in perpetuity.

Vice-Chair Saddler remarked on Mr. Baily's job for the analysis.

Mr. Baily answered that it was necessary to revisit the plan every three years.

Vice-Chair Saddler remarked on the state's flexibility.

3:01:04 PM

Representative Wilson asserted that the model showed a high amount of oil money, but was put into the earnings reserve. She stressed that the model required a lower dividend to work. She remarked that the model did not show the lower dividend amount impact to the state. She stressed that the model did not solve the budget problem. She hoped that the model would have shown the overall impact to the state as a whole.

Commissioner Hoffbeck remarked that there were other aspects that generated the $3.3 billion. He stated that, under the model, the dividend was a "pass through."

Representative Wilson stated that she did not understand what was different. She remarked that largest factor was the lower dividend.

Commissioner Hoffbeck answered that three things had changed: the size of the dividend, what revenues brought in, and how much would be spent.

Attorney General Richards added that it was true in the long-term, but not in the short term.

3:05:43 PM

Representative Wilson believed that the bill lowered the dividend substantially, with the hopes that the cuts would made with no guarantee. She announced that she did not support POMV.

Representative Gara noted that the Legislative Finance Division (LFD) model showed that, under POMV, savings would extend for a decade, with a period review of oil prices. He remarked that the PFD projections were high: $1800 to $2000. He remarked that maintaining the current formula for the PFD resulted in $1.2 billion into the dividend for an $1800 dividend. He surmised that the proposal was for a dividend based on oil revenue. He stressed that the forecasts showed that it would result in a PFD of approximately $500. He remarked that there was a presentation that asserted that there would be 900 jobs lost for every $100 million lost in the dividend. He queried more information about that assertion.

3:13:37 PM

Representative Gara noted that there was not a 4.5 percent draw from the fund, based on the expectation of future oil revenues. He remarked that the price and revenue forecasts did not yield the same result. He wondered if the forecast numbers were used in the mode.

Commissioner Hoffbeck replied the deterministic numbers were not used in the model.

Vice-Chair Saddler wondered whether it should be considered a lump sum.

Commissioner Hoffbeck replied in the affirmative.

Attorney General Richards furthered that $3.3 billion may not be considered alone in the governor's plan. He stated that the plan worked as a POMV. He explained that the POMV in the plan was 6 percent, rather than 4.5 percent, because the 1.5 percent difference was accounting for the petroleum revenues. He explained that there could be a fixed draw of 3.3 billion, or a POMV draw of 6 percent. He explained that, as long as the petroleum revenues were flowing into the fund, the math worked out the same.

Vice-Chair Saddler surmised that Attorney General Richards was only offering a separate way to examine the plan.

Attorney General Richards answered that the letter circulated the prior week did propose that the administration would work with the committee to adjust the fixed draw to a percentage draw.

Co-Chair Thompson thanked the presenters. He discussed the schedule for the following meeting.

#
ADJOURNMENT

3:17:25 PM

The meeting was adjourned at 3:17 p.m.