



HB 111 Oil and Gas Production Tax and Credits Responses to Questions and Bill Analysis

Presentation to House Resources Committee

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February 17, 2017



What We're Talking About Today

- 1. Answers to questions raised in committee and additional background**
- 2. Bill analysis by section**
- 3. Fiscal Note**
- 4. Lifecycle scenario analysis (separate presentation)**

Answers to Questions

Question: Government Take

Since TAPS, in years 1978 - 2016, Alaska has received \$141 billion in petroleum revenue

Since the switch to Net, in years 2007 – 2016, Alaska has received \$64 billion

On February 3, Robin Brena testified the state share should be 33% (Hammond: 33 / 33 / 33)

Essential question is: 33% of what?

- Market Value? Likely too high
 - Market value of all Alaskan oil was \$527 billion
 - State averaged **27%** 1978 – 2016
 - All costs would come out of company's portion

Question: Government Take

- Wellhead Value? Likely a little too low
 - Wellhead value of all Alaska oil was \$347 billion
 - State averaged **41%** 1978 – 2016
- Profits? Likely much too low
 - Data only available since 2007 (switch to “net”)
 - Divisible profit (value less costs) of all Alaska oil was \$111 billion
 - State averaged **57%** 2007 – 2016
 - SB21 passed based on “total government take” estimates of about 65% or so at a wide range of prices. That suggests a 2/3 to 1/3 split, but-
 - The Federal share can never approach 33%

Question: Government Take

What's that about federal tax rates?

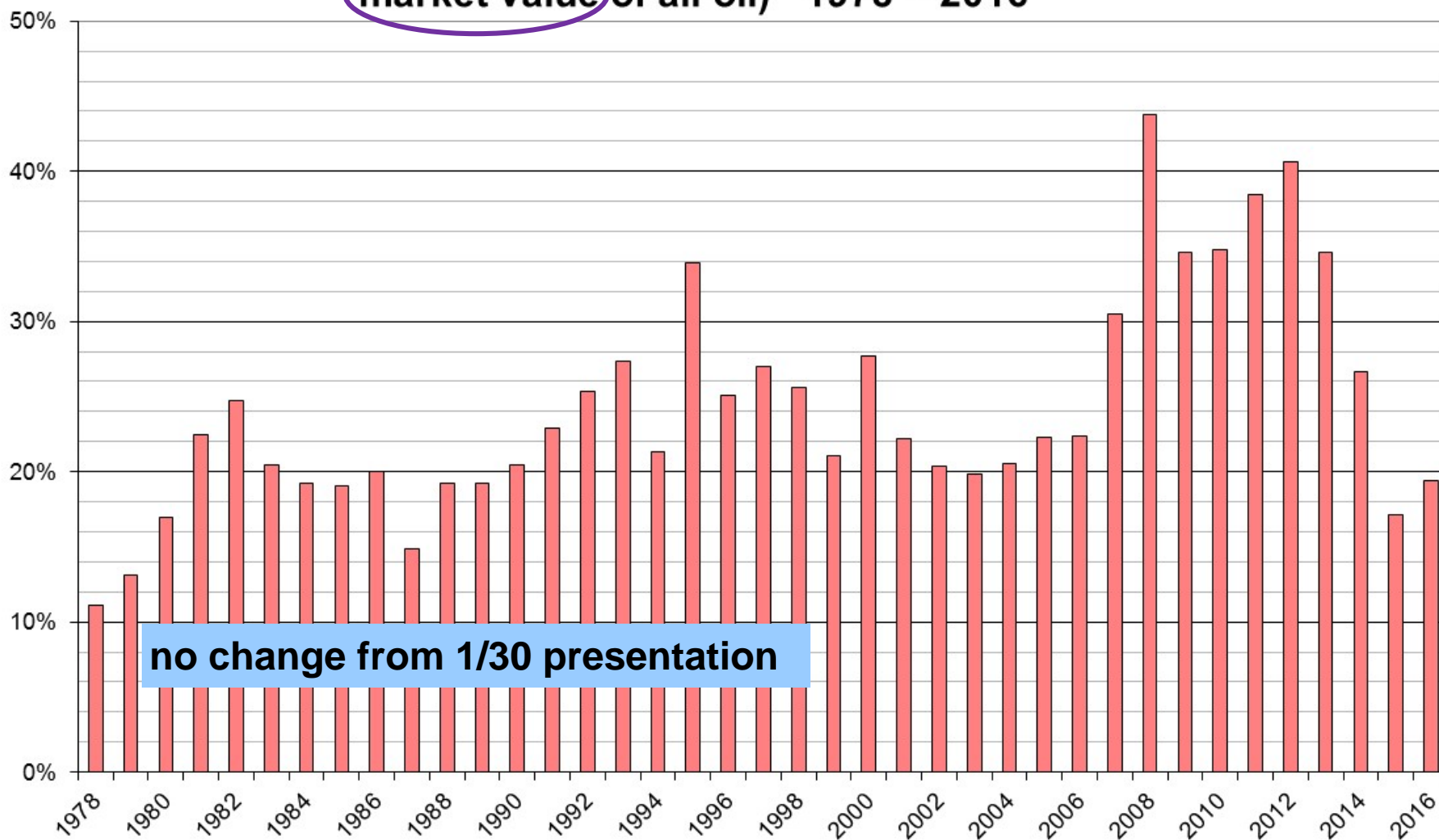
- Before 1987 (second Reagan tax cut) top federal corporate tax rate was 46%.
 - If the state got 33% of profits, that meant that the feds got almost half of the remaining 67%.
Something close to 33/33/33 was possible in theory
- Since 1987, top rate is only 35%
 - To reach a 67% “total government take”, the state would need to take 49%
(35% of the remaining 51% is 18%; $49+18=67$)
- Few companies actually pay the 35% rate
 - Average for large companies 2008-2012 was 14%
(Gov't Accountability Office)
- Unknown tax changes from new administration

Question: Government Take

- Complicating the answer, we found a formula error in the “state take” data set we used in our 1/30/17 presentation.
- This understated the state share of Gross (wellhead) value over time.
- The corrected information is in the subsequent slides

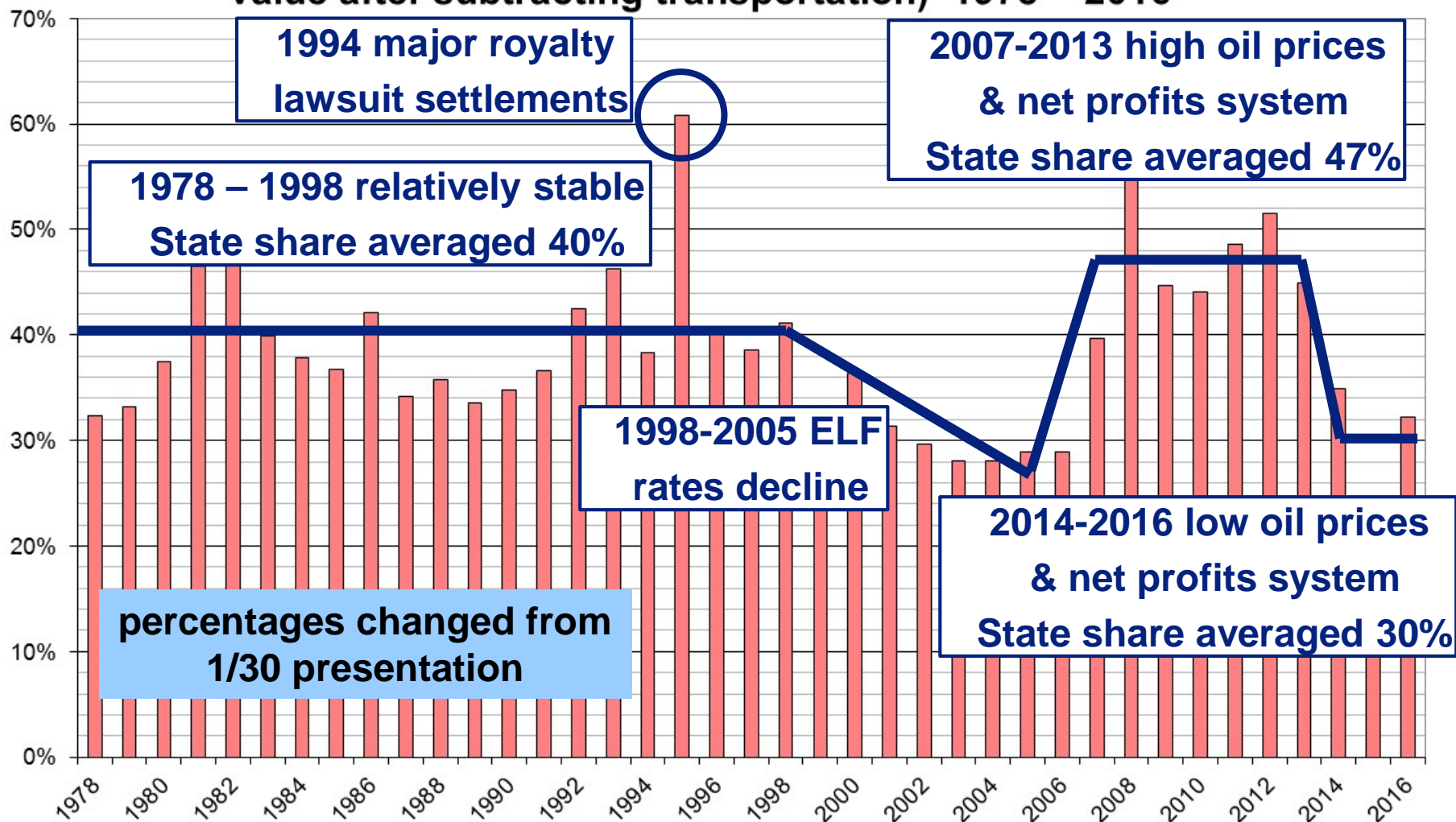
Question: Government Take

Approximate State Share of Petroleum Revenue:
(Total state Unrestricted and Restricted, as a portion of
market value of all oil) 1978 -- 2016



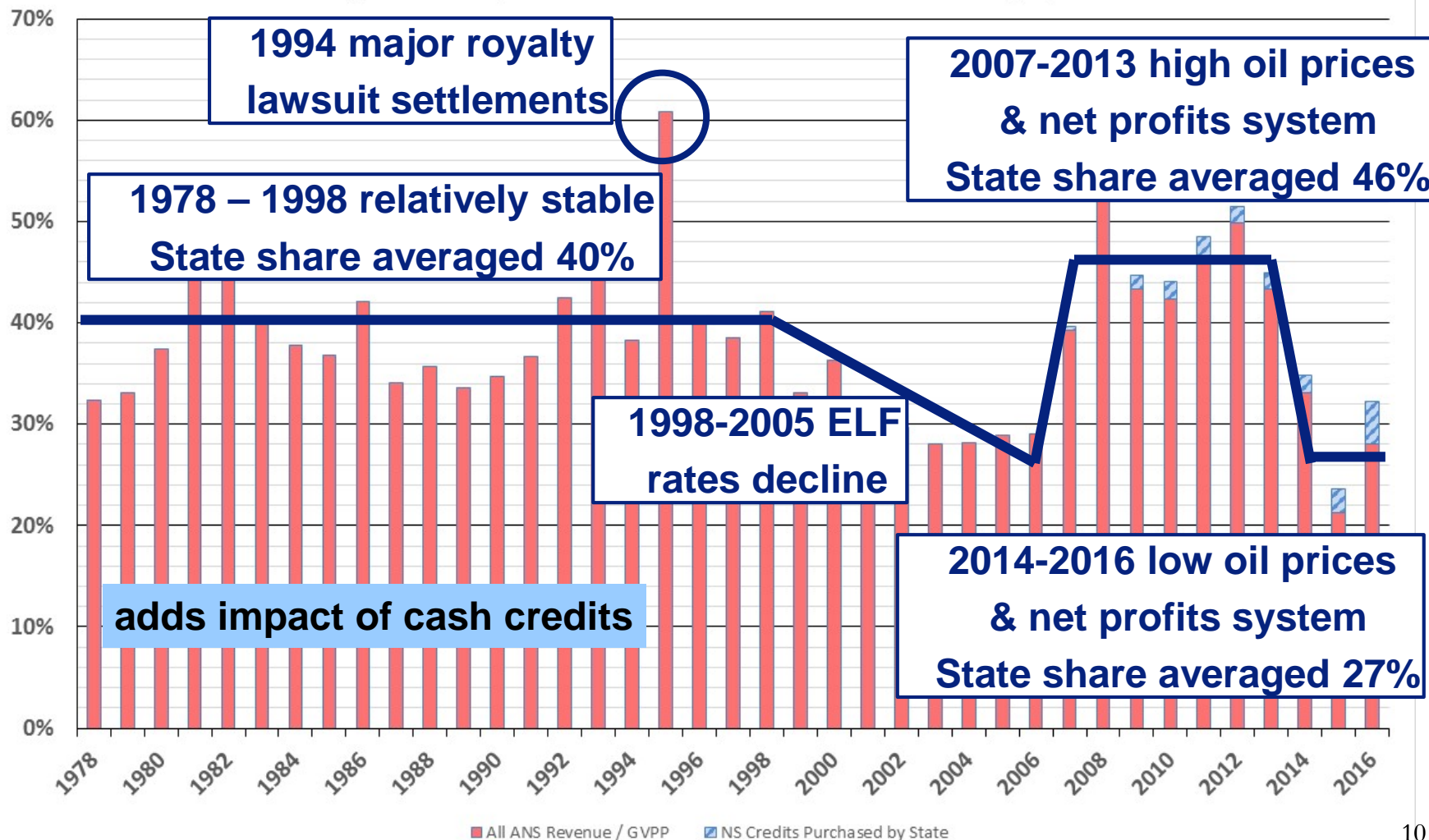
Question: Government Take

Approximate ANS State Share of **GVPP Total Value:**
(State revenue from North Slope as a portion of wellhead value after subtracting transportation) 1978 -- 2016



Question: Government Take

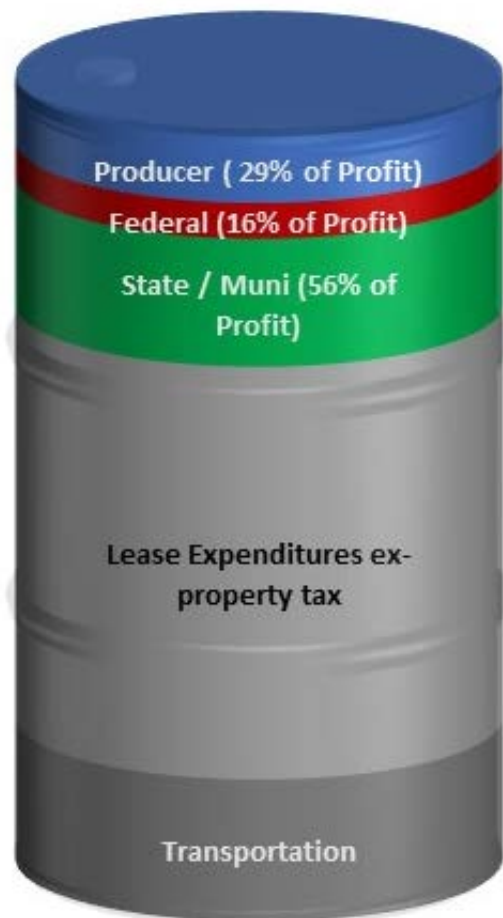
Approximate ANS State Share of **GVPP Total Value**: (State Revenue from North Slope as a portion of wellhead value after subtracting transportation, offset by state repurchased credits from North Slope) 1978-2016



Question: Government Take

FY2018 Allocation of Revenue and Profit on a barrel of oil (at \$54 / bb)

Status Quo



HB111



Question: Government Take

What does “percent of value” translate to?

- 185 million NS barrels produced in a year
 - If oil is \$50 / bbl, that's \$9.25 billion;
1% of total value is about \$90 million
 - At \$50 oil, wellhead value is about \$40; that's \$7.4 billion. **1% of wellhead value is about \$75 million**
- 160 million NS “taxable” (non royalty) barrels
 - **\$1/ bbl in added tax (or reduced credit) is \$160 million**
 - At \$50 oil, **1% increase to a “gross tax” is about \$65 million**
 - Each \$1 / bbl above “break even” is \$160 million in divisible profits. **Each 1% “take” is \$1.6 million per dollar above the break even**

Question: *ELF Multiplier Decline 1998-2006*

Fiscal Year	Estimated ANS Taxable Barrels (millions)	Wellhead Value (\$ / bbl)	ANS Portion of Statewide Production	Statewide Production Tax (\$ millions)	Estimated ANS ELF Production Tax (\$ millions)	Estimated ANS ELF Effective Tax % of GVPP	"Lost" ELF Production Tax Revenue (\$ millions)
1995	573.78	\$ 11.04	97.4%	769.8	749.9	11.8%	
1996	539.48	\$ 12.77	97.3%	771.7	750.5	10.9%	
1997	512.46	\$ 16.28	97.4%	907.0	883.5	10.6%	
1998	465.38	\$ 11.23	97.5%	564.4	550.3	10.5%	30.2
1999	424.86	\$ 8.88	97.3%	358.6	348.8	9.2%	70.1
2000	378.81	\$ 19.87	97.2%	693.2	673.5	8.9%	162.2
2001	361.72	\$ 22.56	97.2%	694.4	674.7	8.3%	231.3
2002	368.65	\$ 17.04	96.8%	486.7	471.2	7.5%	226.4
2003	361.72	\$ 23.42	97.1%	589.8	572.8	6.8%	367.9
2004	356.48	\$ 27.46	97.5%	642.7	626.5	6.4%	460.5
2005	332.52	\$ 40.12	97.8%	854.9	836.2	6.3%	645.3
2006	306.60	\$ 56.69	97.9%	1,191.7	1,166.3	6.7%	763.9
ELF Effective Tax Average 1995-1997					11.1%		
ELF Effective Tax Average 1998-2006					7.8%		
"Lost" Average ELF Production Tax Differential					3.3%		
"Lost" ELF Production Tax Revenue (\$ millions)					\$ 2,957.7		

Question: Credits Prior to 2006

Before PPT passed in 2006, Alaska had a “gross” production tax system

- Exploration Incentive Credit (AS 38.05.180(i)) goes back to the 1980s. Repealed 2016 in HB247
 - Credit against royalty for a portion of qualified spending
- Education tax credit (AS 43.55.019) goes back to 1987. Still in effect
 - Offset to tax liability for contributions to qualifying institution or purpose
- Alternative Credit for Exploration (AS 43.55.025) passed 2003. Sunset 2016 (Middle Earth 2022)
 - First “modern” production tax credit
 - Could be applied to liability, carried forward, or transferred (sold) to another taxpayer

Question: Tax Credit Fund Appropriations

Oil and Gas Tax Credit Fund:

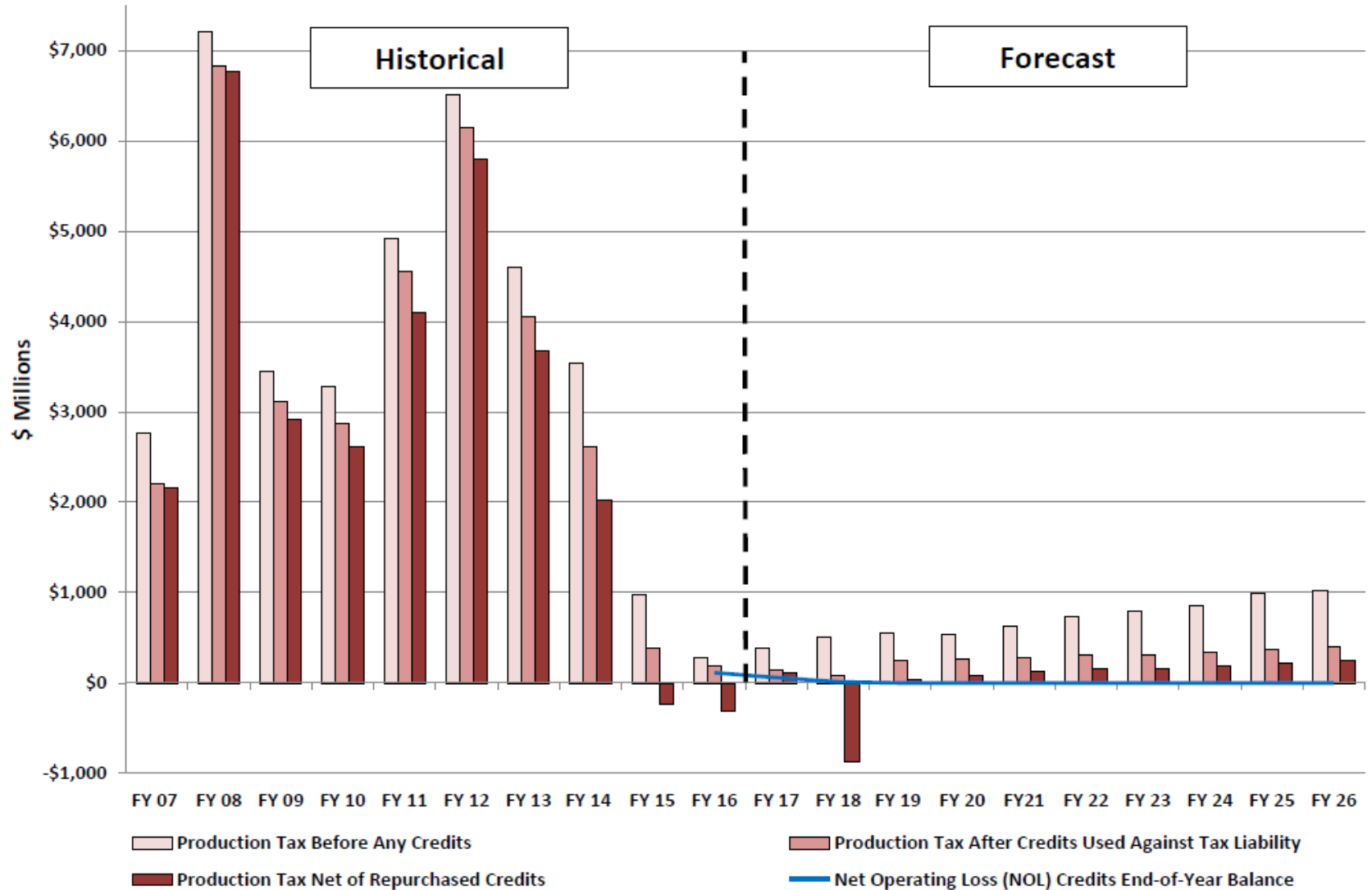
Budgeted vs. Actual vs. Statutory Tax Credit Fund Formula

(Beginning with the first budget cycle after the passage of ACES in November 2007)

Fiscal Year	Original Appropriation (\$million)	Actual Claimed Credits (\$million)	Actual Production Tax (\$million)	Plus Credits Against Liab (\$million)	AS 43.55.011 Revenue (\$million)	Oil Price Per Spring 16 Forecast	Credit Cap per AS 43.55.028(c)	End Year Fund Balance
Actual								
FY09	not to exceed \$175	\$193	\$3,101	\$334	\$3,435	\$85.73	\$343	\$150
FY10	unspec **	\$250	\$2,861	\$412	\$3,273	\$65.70	\$327	\$228
FY11	est. \$180	\$450	\$4,543	\$361	\$4,904	\$73.32	\$490	\$268
FY12	est. \$400	\$353	\$6,137	\$363	\$6,500	\$94.70	\$650	\$565
FY13	est. \$400	\$369	\$4,043	\$550	\$4,593	\$110.44	\$459	\$655
FY14	est. \$400	\$593	\$2,589	\$919	\$3,508	\$109.61	\$351	\$413
FY15	est. \$450	\$628	\$363	\$664	\$1,027	\$95.24	\$103	(\$112)
FY16	est. \$700	\$500	\$144	\$70	\$214	\$39.99	\$32	(\$580)

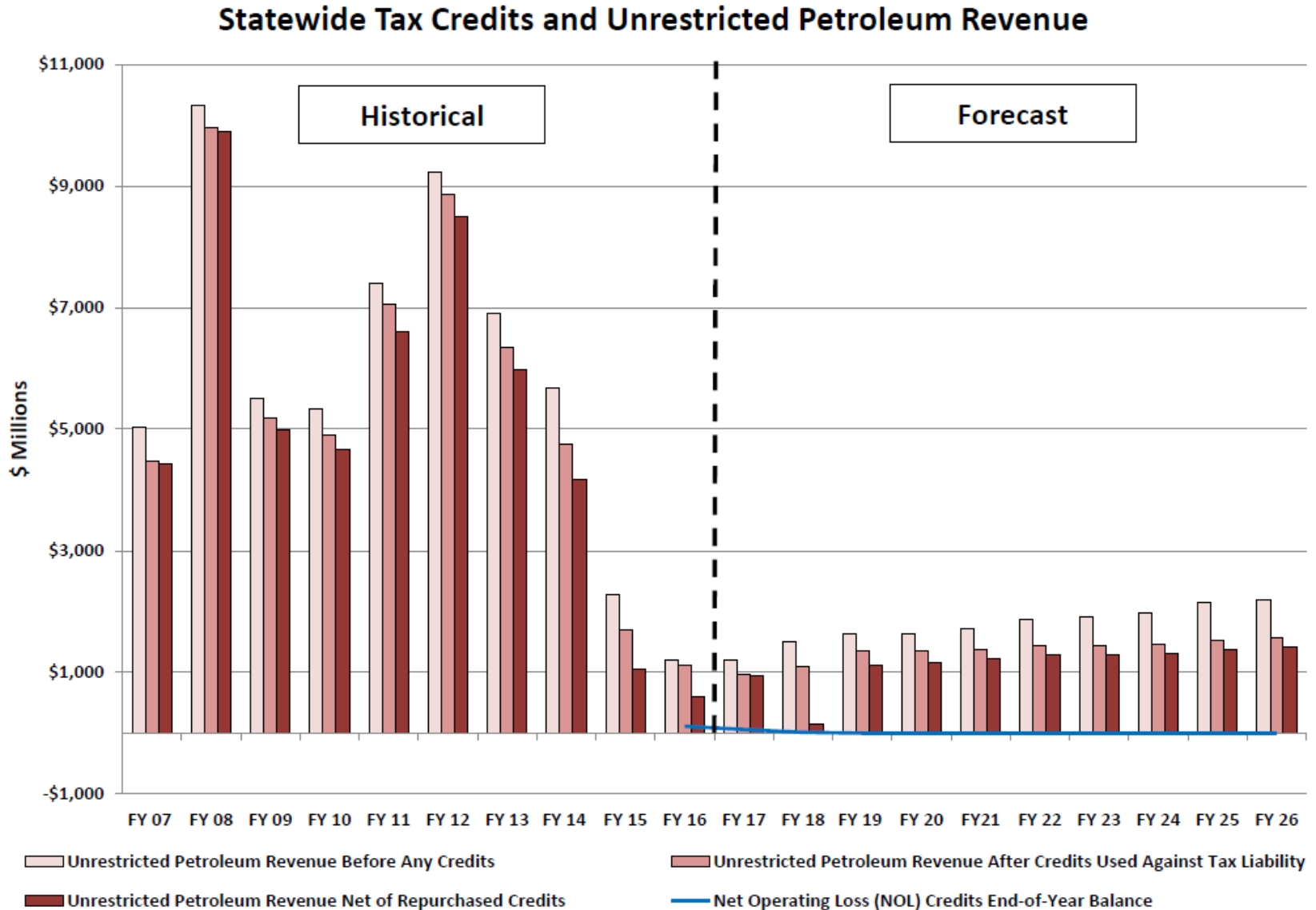
Question: Update Revenue and Credit Graphs

Statewide Tax Credits and Unrestricted Petroleum Revenue



Note: Repurchased credits in the Fall 2016 RSB assume that all credits available for repurchase are funded in FY 18 and beyond.

Question: Update Revenue and Credit Graphs



Note: Repurchased credits in the Fall 2016 RSB assume that all credits available for repurchase are funded in FY 18 and beyond.

Bill Analysis

Origins of Bill Concepts in HB 111

Most issues have been previously debated

Sec. 1 (Interest)	HB 5005 Gov SS
Sec. 2 (Minimum tax 5%)	HB 247 Gov Orig
Sec. 3 (Floor harden)	HB 247 Gov Orig
Sec. 3 (Migrating Credit)	HB 247 Gov Orig
Sec. 5 (NOL Rate)	HB 247 House (25%)
Sec. 6 (Cash for NOLs)	New
Sec. 7 (Per-bbl credit)	SB 21 Senate (2013)
Sec. 9 (Cash limits)	HB 247 House
Sec. 10 (GVPP < 0)	HB 247 Gov Orig

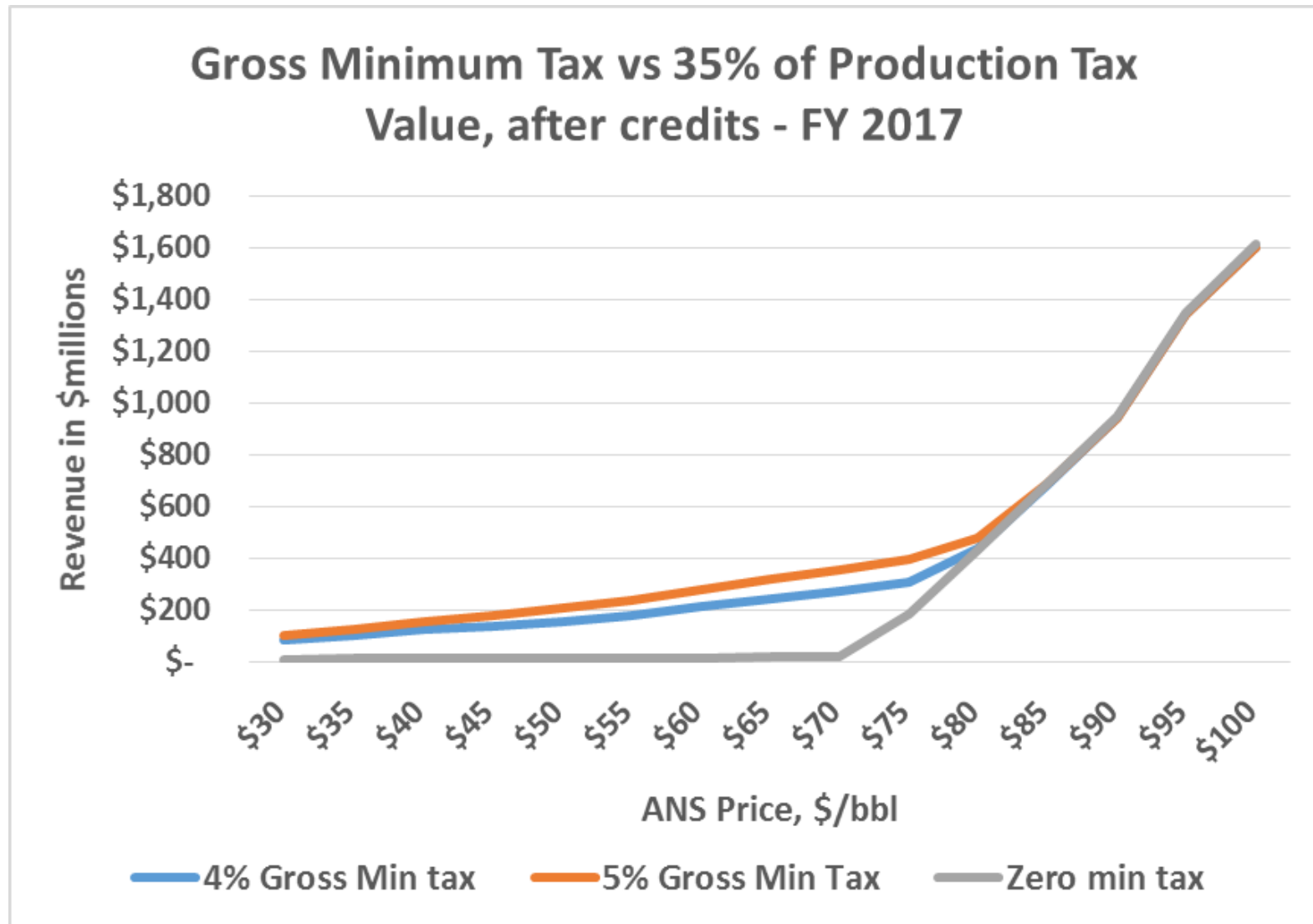
Bill Analysis: Section 1 (interest rates)

Interest rates were amended in HB247

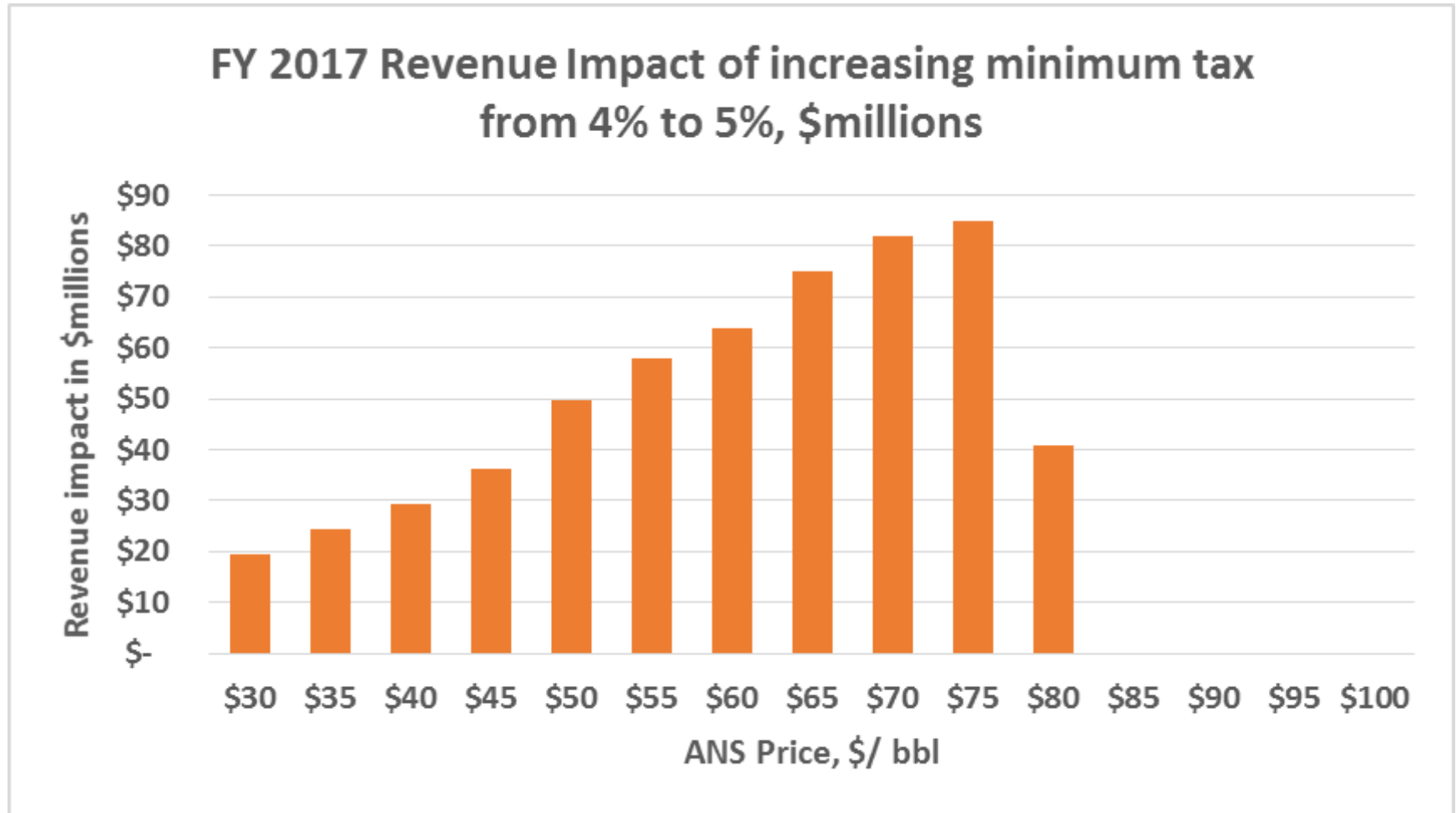
- DOR expressed concern when Senate Finance CS introduced the “zero interest after 3-year” provision
- Makes it very hard to settle tax disputes
- Sought to get it removed in Conference Committee
- Proposed removing it in HB 5005 (July session)
- Currently, doesn't impact any actual interest calculation until 2020 so can be retroactive to 1/1/17

Concern with bill: HB 247 separated the O&G Production Tax interest rate from all other taxes for the first time. HB 111 does not fix this.
We would prefer all taxes to use the same interest

Bill Analysis: Section 2 (minimum tax)

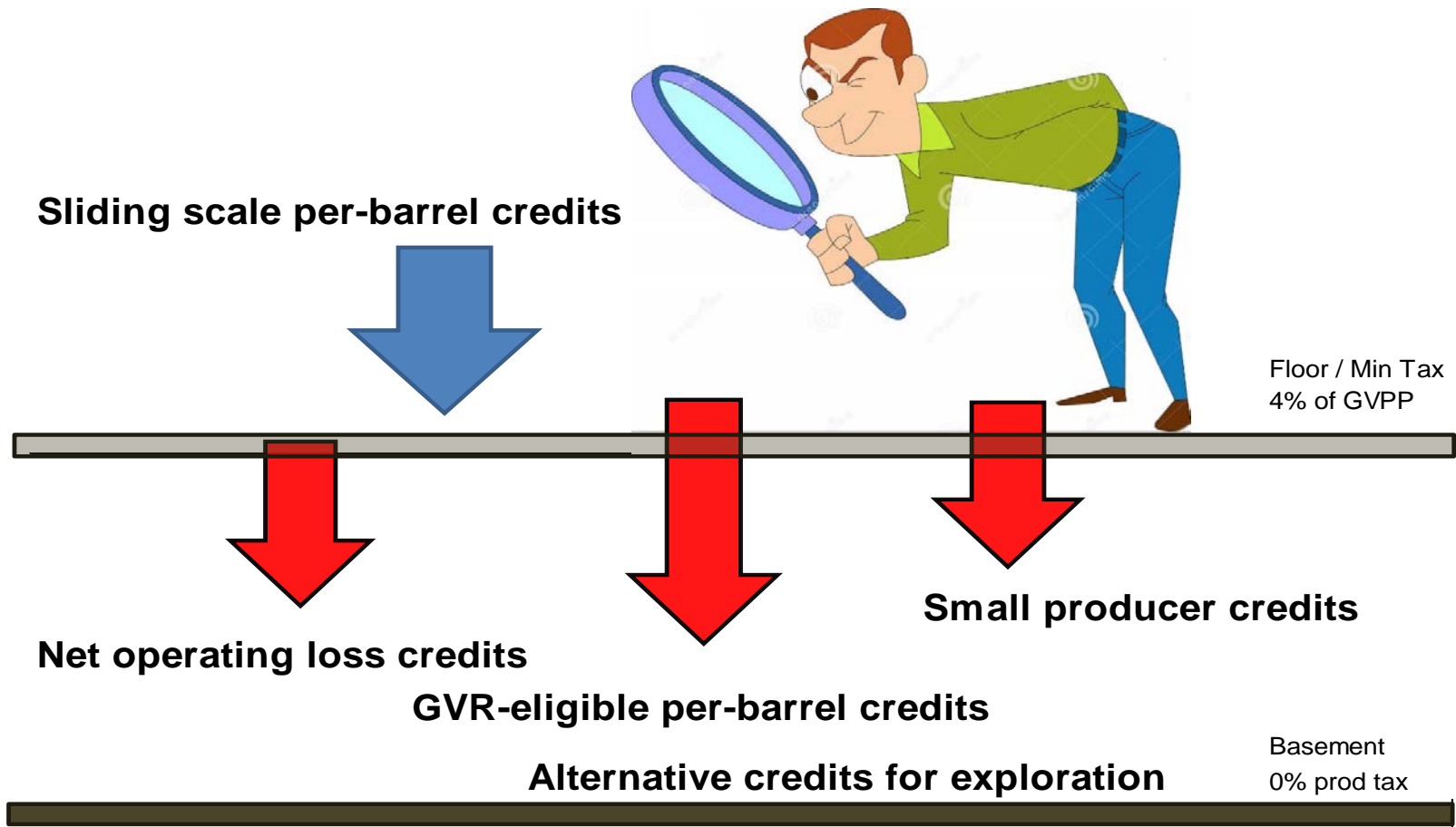


Bill Analysis: Section 2 (minimum tax)



Bill Analysis: Section 3 (harden floor)

Which credits can break through the floor under current law?



Bill Analysis: Section 3 (harden floor)

- Current law allows all credits other than the sliding scale per-barrel credits for legacy oil to reduce taxes below the minimum tax (also called the “floor”)
- If a company is using any sliding scale credits, no other credits can be used below the floor
- HB 111 seeks to prevent all other credits in AS 43.55 from reducing taxes below the minimum tax
 - Small producer credits
 - GVR-eligible per-barrel credits
 - Net operating loss credits
 - Alternative credits for exploration

Bill Analysis: Section 3 (harden floor)

This is really three different issues / policy questions

All of these only pertain to the North Slope:

1) Small Producer Credits

(Should everyone, not just major producers, pay a minimum tax?)

2) Per-Barrel Credits for GVR “New” Oil

(The GVR is now for only a limited duration. For those years, should the tax on production from new fields be allowed to go to zero?)

3) Net Operating Loss for producers not eligible for refundable credits

(Should the major producers ever be able to pay below the minimum tax?)

Bill Analysis: Section 3 (harden floor)

How GVR-eligible per-barrel credits can reduce taxes below the minimum tax (\$60 oil):

Minimum Tax and 20% and Legacy Production and GVR-Eligible Production*		
	Legacy	GVR- Eligible
West Coast Price (\$/tax bbl)	\$60	\$60
Transportation (\$/tax bbl)	<u>-\$10</u>	<u>-\$10</u>
Wellhead Value (\$/tax bbl)	\$50	\$50
Lease Expenditures (\$/tax bbl)	<u>-\$36</u>	<u>-\$36</u>
Net Value (\$/tax bbl)	\$14	\$14
Gross Value Reduction Rate (%)	<u>x 0%</u>	<u>x 20%</u>
Gross Value Reduction (\$/tax bbl)	\$0	\$10
Net Value after GVR (\$/tax bbl)	\$14	\$4
Base Tax Rate (%)	<u>x 35%</u>	<u>x 35%</u>
Base Production Tax before Credits (\$/tax bbl)	\$4.90	\$1.40
GVR Credit per-Tax-Barrel (\$/tax bbl)	\$8	\$5
Base Production Tax after credits (\$/tax bbl)	\$0.00	\$0.00
Minimum Tax Rate (%)	4%	4%
Wellhead Value (\$/tax bbl)	<u>x \$50</u>	<u>x \$50</u>
Minimum Tax (\$/tax bbl)	\$2.00	\$2.00

This is the amount paid.
Legacy fields pay minimum
tax of \$2 while GVR-eligible
fields pay zero.

*Current assumptions include transport costs of \$10 per barrel and deductible lease expenditures of \$36 per taxable barrel, that are typical but will not match exactly Fall 2015 assumptions. For this table, net value is the same as "production tax value," defined in AS 43.55.160.

Bill Analysis: Section 3 (harden floor)

NOLs and Major Producers

- Currently, companies producing over 50,000 bbl / day are not eligible to receive cash for tax credits. They must carry them forward to use in a future year
- NOLs for explorers and developer are simply their allowable expenditures. They don't have revenue
- NOLs for producers occur when their spending exceeds their revenue. This can be due to low prices, new investment, or a combination of both
- At least one major producer had an operating loss in 2015 and others possibly in 2016
 - This can be seen in the RSB, table 8-4 on page 80: \$107 million worth of NOL credits are estimated to be used against liability between FY2017 and 2019

Bill Analysis: Section 3 (harden floor)

Thoughts on hardening the floor

- Was a recommendation of the Fall 2015 report from the Senate Resources working group
- If law is changed so that NOL credits cannot be used below the floor, those credits will “roll forward” to be used against future year taxes
- Last spring when we forecast large multi-year losses from the major producers, hardening the floor resulted in close to \$1 billion carried forward

Concern with bill: Awkward contradiction between Sec. 3 “(minimum tax) may not be reduced by ... a credit” and several places in existing law where a credit may not be used “to reduce... below zero.” Would prefer amending the various actual credit statutes for consistency.

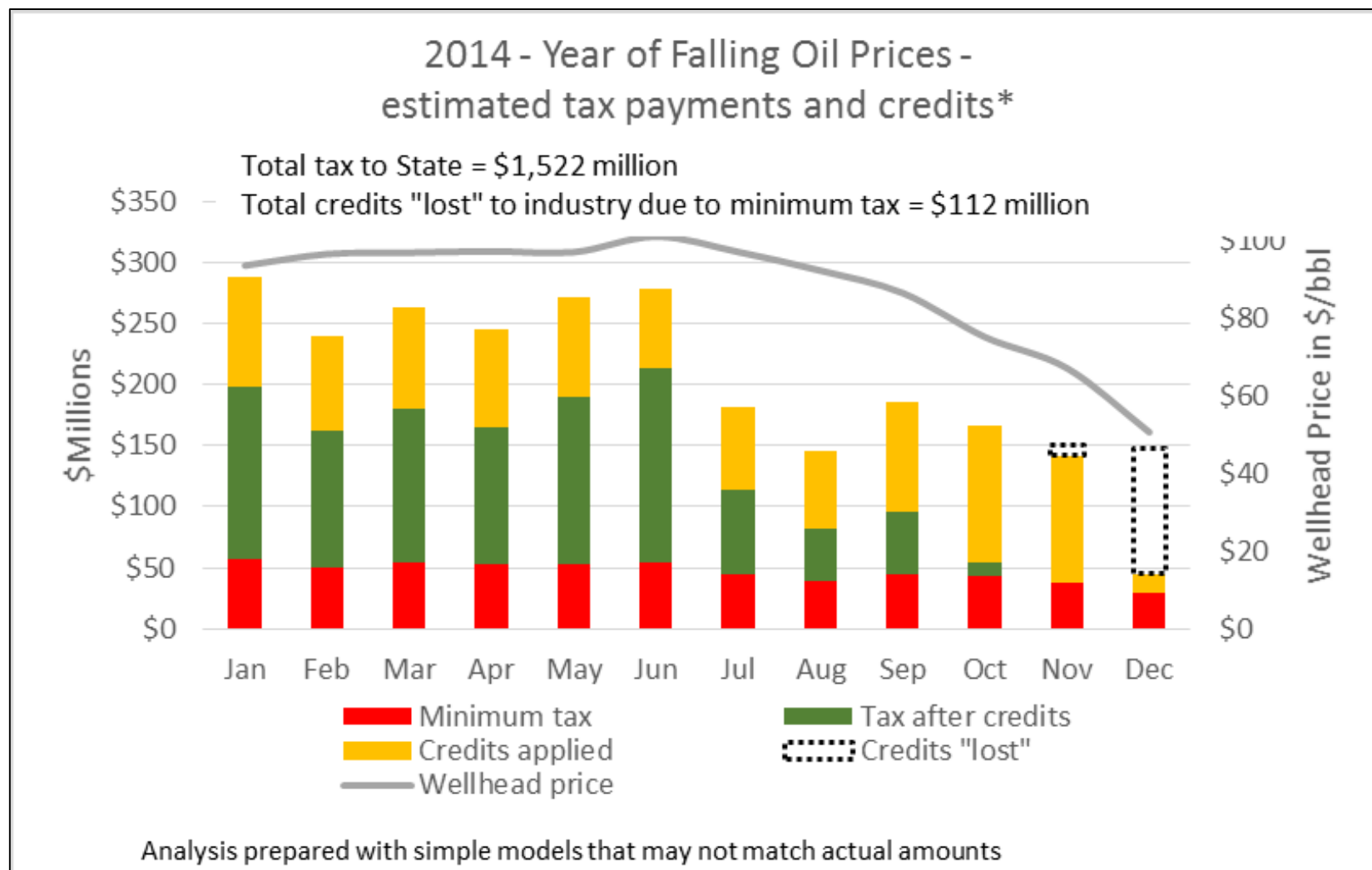
Bill Analysis: Section 3 (migrating credits)

Preventing per-taxable barrel credits from being used in another month other than the month earned

- In a low price month, the per-barrel credits are only used until the tax liability reaches the 4% minimum tax. Any additional per-barrel credits are “lost”
- Current law allows sliding scale credits “lost” to the minimum tax to be recovered at annual true-up under certain conditions
- This reduces the “upside” potential for the State in a year with moderate oil price volatility
- ACES progressivity was a monthly calculation with no annual true-up
- If sliding scale credits were intended to be a form of “reverse progressivity,” then the calculation would similarly be monthly with no annual true-up

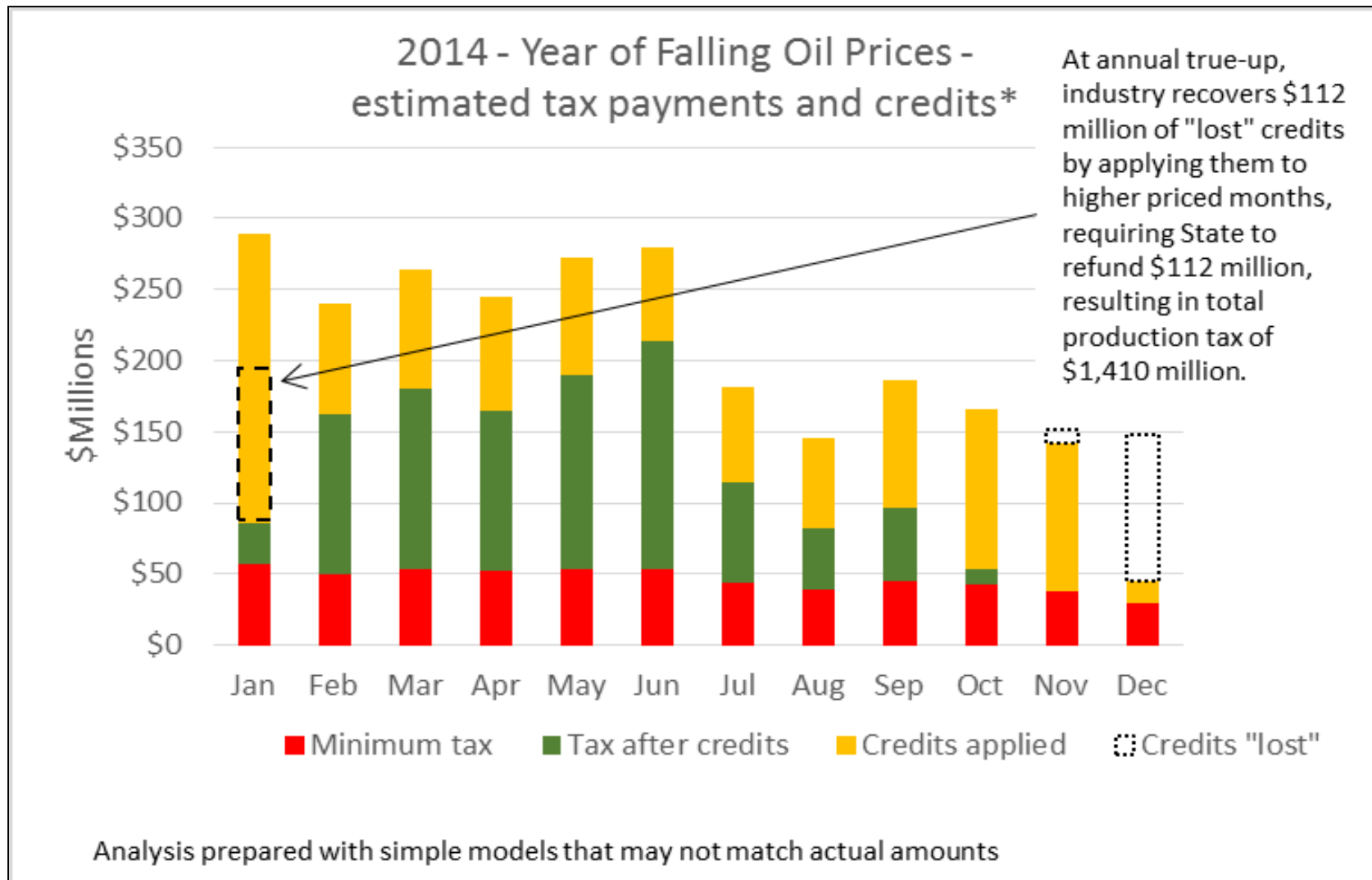
Bill Analysis: Section 3 (migrating credits)

Credits “lost” to the minimum tax before annual true-up



Bill Analysis: Section 3 (migrating credits)

“Lost” credits recovered at annual true-up



Bill Analysis: Section 3 (migrating credits)

- This is only relevant in a calendar years where some month result in a tax collection above the minimum tax, and other months are below. Like 2014
- In years with greater oil price volatility, credit recovery can take a larger share and could reduce State production tax collection to the minimum tax
- This occurs because the minimum tax is an annual tax, and credits that cannot be used within a particular month can be recovered at year's end
- At extreme: in a year with otherwise low prices, several months of a major price spike due to a global event, and the state only gets the 4% minimum tax on production from those months

Bill Analysis: Section 5 (NOL rate)

Evolution of the North Slope NOL Credit Rate:

- **2006-2007: 22.5% (PPT)**
- **2007-2013: 25% (ACES)**
- **2014-2016: 45% (SB21 transitional)**
- **2016+ 35% (SB21)**

ACES: NOL rate tied to the base tax rate.

Progressivity added to the base rate.

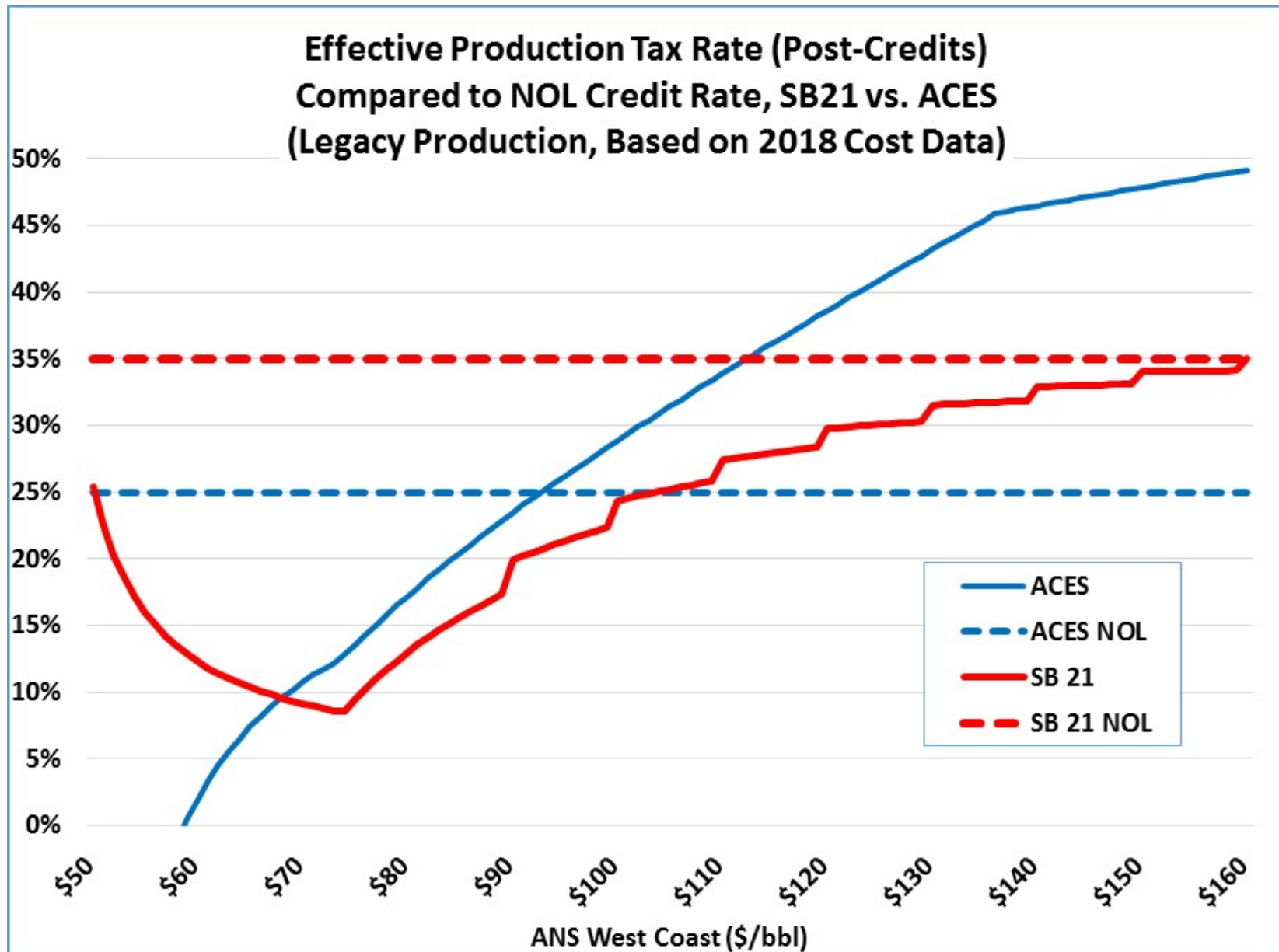
With progressivity, effective tax rate was often higher than the NOL rate

SB21: NOL rate is still tied to the base tax rate.

But progressivity is by subtraction (the per barrel credit).

So the effective tax rate is always lower than the NOL rate

Bill Analysis: Section 5 (NOL rate)

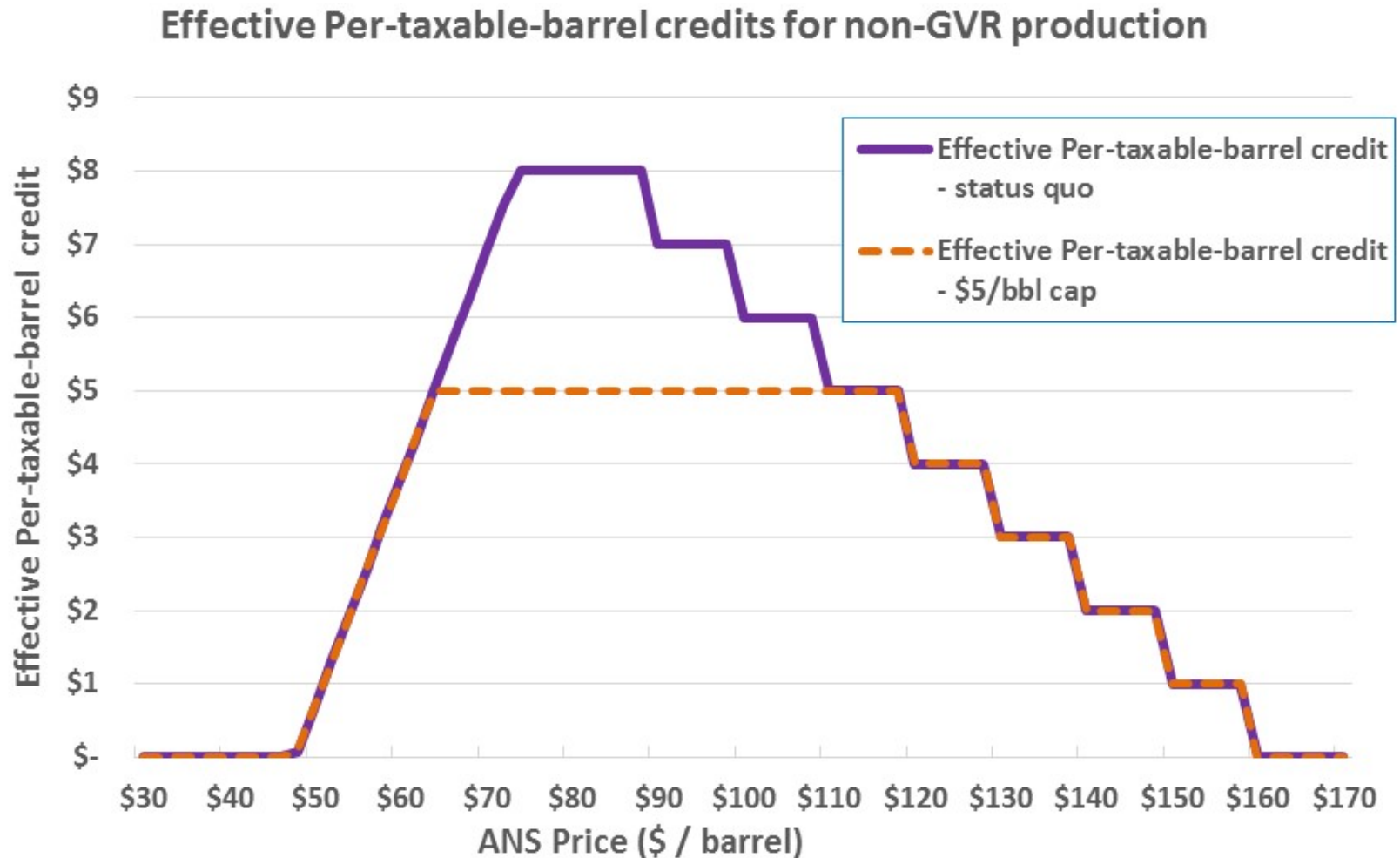


Bill Analysis: Section 6 (NOL certificate)

Amends the statute that describes how a taxpayer may apply for a transferrable tax credit certificate

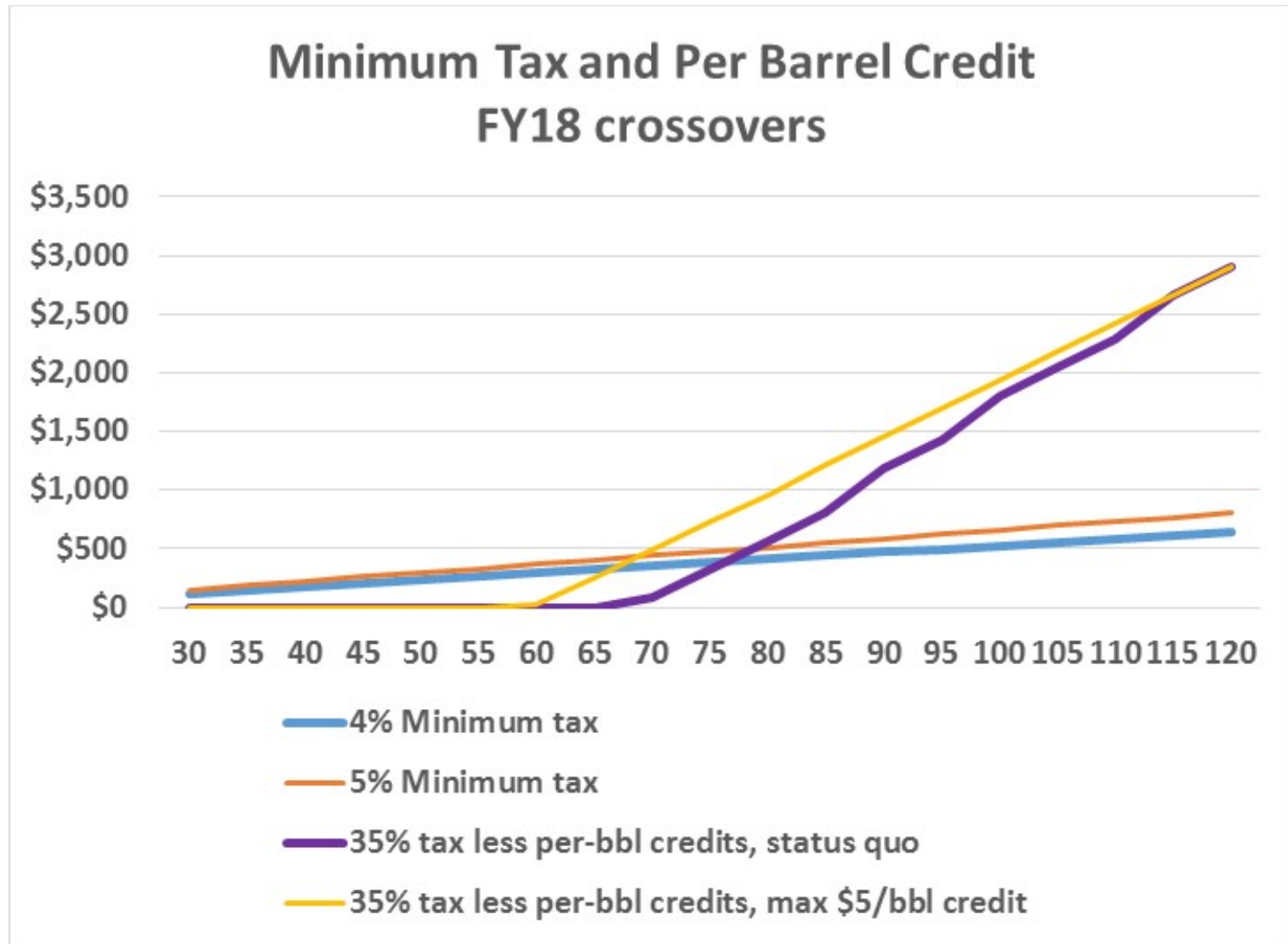
- Certificates can be transferred to another taxpayer to use against that company's taxes
- Currently, certificates can also be sold to the state, if funds are available
- This section specifically restricts NOL credits, so they aren't eligible for state repurchase

Bill Analysis: Section 7 (per barrel credit)



Source: Fall 2016 Revenue Sources Book Appendix E-3, based on aggregate assumptions for FY 2018

Bill Analysis: Section 7 (per barrel credit)



Bill Analysis: Section 8 (NOL certificate)

Amends the statute that describes the tax credit repurchase fund

- This conforms with the change in Sec. 6
- This section specifically restricts NOL credits, so they aren't eligible for state repurchase
- Remaining credits eligible for repurchase:
 - Qualified Capital Expenditure and Well Lease Expenditure credits (only in Middle East after 2017)
 - Exploration credits (only in Middle East after 2016)
 - LNG storage and Refinery Infrastructure credits (corporate income tax credits that aren't earned by oil producers)

Bill Analysis: Section 9 (cash limits)

Amends the statute that describes limits on cash for credit

- Reduces per-company, per-year limit from \$70 million to \$35 million
- Reduces eligibility for cash to producers below 15,000 bbl / day, from the current 50,000

Concern with bill: Much of this language may be superfluous due to Sec. 6 & 8. If NOLs are not eligible for cash, only the remaining Middle Earth credits are. Explorers in Middle Earth are not likely to approach the \$35 million limit, and none have any current production.

Bill Analysis: Section 9 (cash limits)

Notes on large annual credits

Over the 2007-2016 history of the tax credit program:

- There has only been **one** instance of a company who ever received **> \$200** million in a single year
- **Five** times ever when one company received between **\$100 - \$200** million in one year
- **11** times ever when one company received between **\$50 - \$100** million in one year

Of the \$500 million existing unpurchased certificates:

- **Three** different companies are holding **\$100 million+**

Bill Analysis: Section 10 (GVPP below zero)

- HB 111 would prohibit the Gross Value at the Point of Production from being less than zero
- GVPP is the market price less transportation
- This was possible in early 2016 when oil prices dropped to \$30 per barrel and below
- Only relevant in unusual circumstances; there are few properties that have transport costs approaching \$30 per barrel
- If prices were to go lower than \$20 per barrel, more properties could be affected

Bill Analysis: Section 10 (GVPP below zero)

Jan. 2017 TAPS and feeder pipeline tariffs (these are before adding the \$3.13 marine transport cost)

TAPS Weighted Average Tariff \$5.80

Badami Unit Tariffs	\$ 5.80	TAPS
	\$ 2.08	Badami Connection
	\$ 1.10	Badami Pipeline
Badami Unit	\$ 8.98	Total

Milne Point Unit Tariffs	\$ 5.80	TAPS
	\$ 0.17	Kuparuk - Milne Point Conn
	\$ 0.63	Milne Point Pipeline
Milne Point Unit	\$ 6.60	Total

Colville River Unit Tariffs	\$ 5.80	TAPS
	\$ 0.23	Kuparuk Pipeline
	\$ 0.72	Alpine Tariff
Colville River Unit	\$ 6.75	Total

PT Thomson Unit Tariffs	\$ 5.80	TAPS
	\$ 2.08	Badami Connection
	\$ 1.10	Badami Pipeline
	\$ 17.56	Pt. Thomson Pipeline
PT Thomson Unit	\$ 26.54	Total

Duck Island Unit Tariffs	\$ 5.80	TAPS
	\$ 3.27	Endicott Pipeline
Duck Island Unit	\$ 9.07	Total

Northstar Unit Tariff	\$ 5.80	TAPS
	\$ 1.14	Northstar Pipeline
Northstar Unit	\$ 6.94	Total

Kuparuk River Unit Tariffs	\$ 5.80	TAPS
	\$ 0.23	Kuparuk Pipeline
Kuparuk River Unit	\$ 6.03	Total

Bill Analysis: Section 10 (GVPP below zero)

Example of gross value potentially going below zero

West Coast Price (\$/bbl)	\$28.00
Point Thomson Unit Tariffs (\$/bbl)	\$26.54
Marine Transportation (\$/bbl)	\$3.13
Wellhead Price (\$/bbl)	-\$1.67

Annual Oil Production (bbls)	2,000,000
Royalty Oil Production (bbls)*	250,000
Taxable Oil Production (bbls)	1,750,000

Wellhead Price from above (\$/bbl)	-\$1.67
Taxable Oil Production from above (bbls)	1,750,000
Gross Value at Point of Production	-\$2,922,500

*Royalty rate of 12.5% assumed: actual royalty rates may differ from those shown in this analysis

This negative GVPP could be used to offset positive values from elsewhere on the North Slope, resulting in a tax reduction of 35% of the difference (about \$1 million)

Fiscal Note

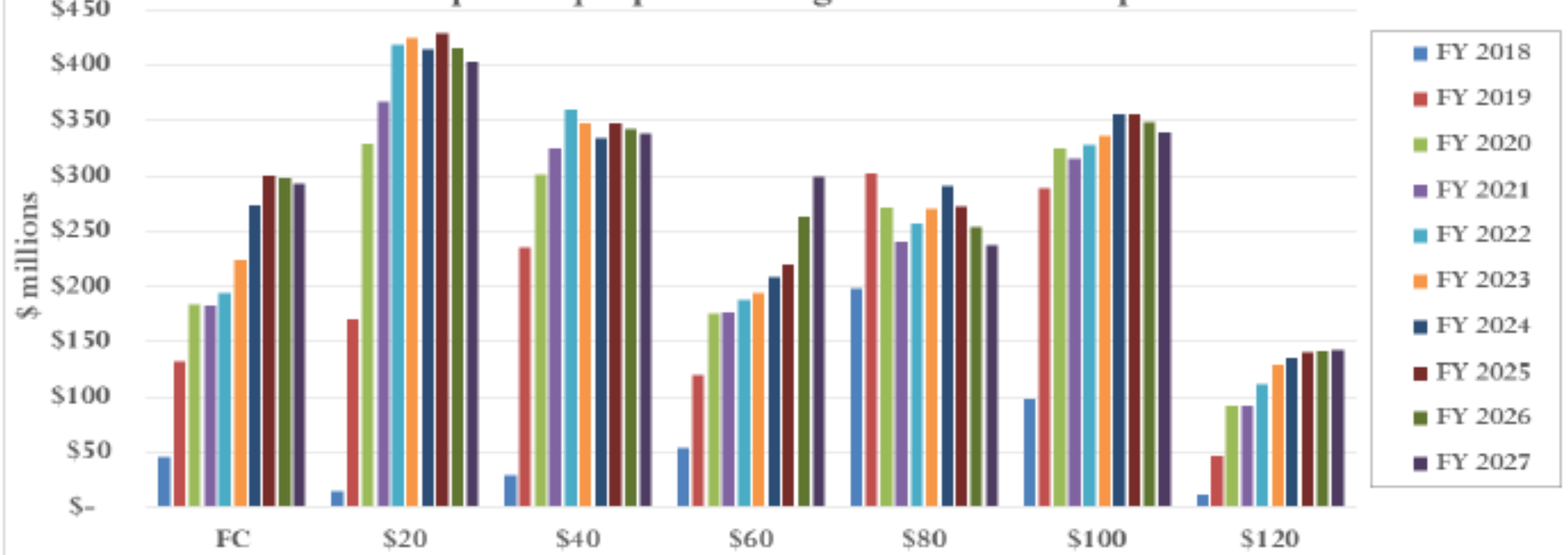
Fiscal Note: Bill Elements

Provisions in **HB 111 \O** and their Estimated Fiscal Impact based on Fall 2016 Forecast (\$millions) - **Fall 2016 FORECAST PRICE**

Description of Provision	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
1. Operating loss credit reduction from 35% to 15% effective 1/1/18 for North Slope.	\$0	\$0	\$0	\$0	\$0
2. No credits can reduce tax below the minimum tax effective 1/1/18.	\$20	\$15	\$0	\$0	\$0
3. Minimum tax increased to 5% of GVPP at all prices, effective 1/1/18.	\$25	\$75	\$60	\$60	\$65
4. No cash repurchase available for net operating loss credits based on expenses incurred after 1/1/18 (for purposes of this fiscal note, assumes all outstanding credits are funded in FY 2018).	\$0	\$0	\$0	\$0	\$0
5. State purchase of credits limited to \$35 million per company per year, and only companies with less than 15,000 BTU-equivalent barrels of production, effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
6. Per-taxable-barrel credits limited to maximum of \$5 per barrel, effective 1/1/18.	\$0	\$0	\$15	\$20	\$20
7. Gross value at point of production (GVPP) cannot go below zero effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
8. Interest on delinquent taxes continues to accrue after 3 years.	Indeterminate - like				
9. No true-up of excess per-taxable-barrel credits effective 1/1/18.	No impact under forecast - could				
Additional impact of implementing above provisions together vs standalone	\$0	-\$15	-\$15	-\$20	-\$20
Total Revenue Impact	\$45	\$75	\$60	\$60	\$65
A. Budget impact of operating loss credit reduction from 35% to 15% effective 1/1/18 for North Slope.	\$0	\$25	\$60	\$65	\$70
B. Budget impact of No credits can reduce tax below the minimum tax effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
C. Budget impact of minimum tax increase effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
D. Budget impact of no cash repurchase for net NOL credits earned after 1/1/18.	\$0	\$45	\$110	\$120	\$130
E. Budget impact of new limits to credit repurchase eligibility, effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
F. Budget impact of limiting per-taxable-barrel credits to \$5 per barrel, effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
G. Budget impact of GVPP cannot go below zero effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
H. Budget impact of Interest on delinquent taxes continues to accrue after 3 years.	\$0	\$0	\$0	\$0	\$0
I. Budget impact of No true-up of excess per-taxable-barrel credits effective 1/1/18.	\$0	\$0	\$0	\$0	\$0
Additional impact of implementing above provisions together vs standalone	\$0	-\$10	-\$50	-\$65	-\$70
Total Budget Impact	\$0	\$60	\$120	\$120	\$130
Total Fiscal Impact - (does not include potential changes in investment)	\$45	\$135	\$180	\$180	\$195
Non-refundable carry-forward credits balance at fiscal year end - current law	\$14	\$0	\$0	\$0	\$0
Non-refundable carry-forward credits balance at fiscal year end - proposed	\$20	\$75	\$120	\$155	\$225
Change in year-end balance due to proposal	\$6	\$75	\$120	\$155	\$225

Fiscal Note: Price Sensitivity

Net fiscal impact of proposed changes at various ANS prices





Thank You!

Contact Information

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