THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Revenue

COMMISSIONER'S OFFICE

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March 2, 2026

The Honorable Lyman Hoffman
Senate Finance Committee, Co-Chair
Alaska State Legislature
State Capitol, Room 518
Juneau, AK 99801

The Honorable Donald Olson
Senate Finance Committee, Co-Chair
Alaska State Legislature
State Capitol, Room 508
Juneau, AK 99801

The Honorable Bert Stedman
Senate Finance Committee, Co-Chair
Alaska State Legislature
State Capitol, Room 516
Juneau, AK 99801

Dear Co-Chairs Hoffman, Olson, and Stedman,

The purpose of this letter is to provide you with responses to the questions posed to the Department of Revenue (DOR) regarding the Order of Operations presentation to the Senate Finance Committee on February 16, 2026. Please see the questions in italics and our responses immediately below the questions.

To support the committee's questions regarding project economics and production tax policy, the department has prepared a brief analytical summary based on a representative large North Slope oil field using the Department of Revenue's Lifecycle Model.

The enclosed Oilfield Lifecycle Analysis provides an analytical framework supporting the department's responses. This approach allows for consistent illustration of the economic and fiscal effects of Alaska's production tax structure under current law and alternative scenarios requested by the committee.

1. ***Do you have modeling to show the economic impact of our current tax structure on incentivizing Willow and Pikka Projects?***

   Under current law, provisions including the Gross Value Reduction (GVR) improve modeled project-level economics relative to scenarios excluding the GVR. Comparative results show higher Net Present Values (NPV) and modestly higher Internal Rates of Return (IRR).

   As illustrated in the enclosed Oilfield Lifecycle Analysis, the magnitude of the NPV impact varies by producer profile. Modeled NPV impacts associated with inclusion or exclusion of the GVR are generally on the order of $100 to $200 million (Slides 11 - 12, 14 - 15).

   Consistent with these results, production tax revenues are lower under GVR scenarios, reflecting the trade-off between investment incentives and near-term state take.

   The DOR has published white papers with detailed field modeling for both Willow and Pikka, which are available on the department's website at www.tax.alaska.gov. These analyses are based on current law. In general, the improvements to NPV and IRR from the GVR, as shown in the generic Oilfield Lifecycle Analysis, would translate to the Willow and Pikka projects.

2. ***Do you have analysis on whether Willow and Pikka would have reached FID without those incentives?***

   Final Investment Decisions (FID) are made by project operators and depend on a range of commercial, technical, and strategic considerations beyond tax policy.

   Modeled sensitivities demonstrate that removal of incentive mechanisms such as the GVR reduces project economics, including lower NPV and IRR, which could influence investment timing or competitiveness. Whether a specific project would or would not have reached FID absent those provisions cannot be determined by the department.

3. ***Is there a way to show the economics of current projects under the previous tax structure (ACES)?***

   Yes. Comparative modeling under the former Alaska's Clear and Equitable Share (ACES) production tax structure is included in the enclosed Oilfield Lifecycle Analysis (Slides 13, 16).

   At current prices and costs, the economic analysis of a field under ACES shows a modest change in IRR for the producer compared to current law. ACES incentives would improve early project economics but take a higher share of profit later in field life.

Outcomes vary materially depending on oil price, project costs, and whether the producer is modeled as an incumbent or new entrant. The DOR would caution that this response presents one possible scenario within a broad range of possibilities; if the committee is interested in a detailed review of ACES or similar provisions, a more comprehensive set of scenarios including different price levels and field profiles could be made available.

4. ***Mr. Stickel mentioned during the hearing that the department has done some analysis of current project economics. Senator Kaufman would like to see that analysis and, if possible, get some modeling about the impact to those projects if GVR credits were to be changed and/or removed.***

   The enclosed Oilfield Lifecycle Analysis presents one scenario demonstrating current project economics. For this hypothetical field, company IRR ranges from 13.1 percent for a new entrant to 14.0 percent for an incumbent producer. Given risks of reservoir performance, cost overruns, price uncertainty, and fiscal uncertainty, these rates of return reflect a profitable but marginally economic project.

   Absent GVR, producer returns would decrease. The enclosed Oilfield Lifecycle Analysis demonstrates that the impact of the GVR differs by producer type. Observed NPV impacts are generally on the order of $100 to $200 million (Slides 10 - 11, 14 - 15).

Project-level economic results presented herein are based on department modeling assumptions, including fiscal terms, cost profiles, and royalty structures. Some project-specific elements, such as Overriding Royalty Interests (ORRIs), may not be explicitly reflected in all modeled scenarios.

Sensitivity testing indicates that inclusion of such elements reduces modeled Net Present Value (NPV) and Internal Rate of Return (IRR) but does not materially alter the directional conclusions of the analysis.

Please let me know if the department can be of further assistance.

Sincerely,

Janelle L. Earls
Acting Commissioner

Enclosure: Oilfield Lifecycle Analysis

cc: Jordan Shilling, Legislative Director, Office of the Governor
Lacey Sanders, Director, Office of Management and Budget

Follow-up for Senate Finance Committee: Oilfield Lifecycle Analysis

Department of Revenue

February 26, 2026

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Acronyms

ACES – Alaska's Clear and Equitable Share, passed in 2007, replaced 2013
ANS – Alaska North Slope
Bbl - barrel
Capex – Capital expenditures
CY – Calendar Year
DOR – Department of Revenue
FY – Fiscal Year
GVR – Gross Value Reduction
Opex – Operating Expenditures
PTV – Production Tax Value
SB21 – Senate Bill 21, passed in 2013

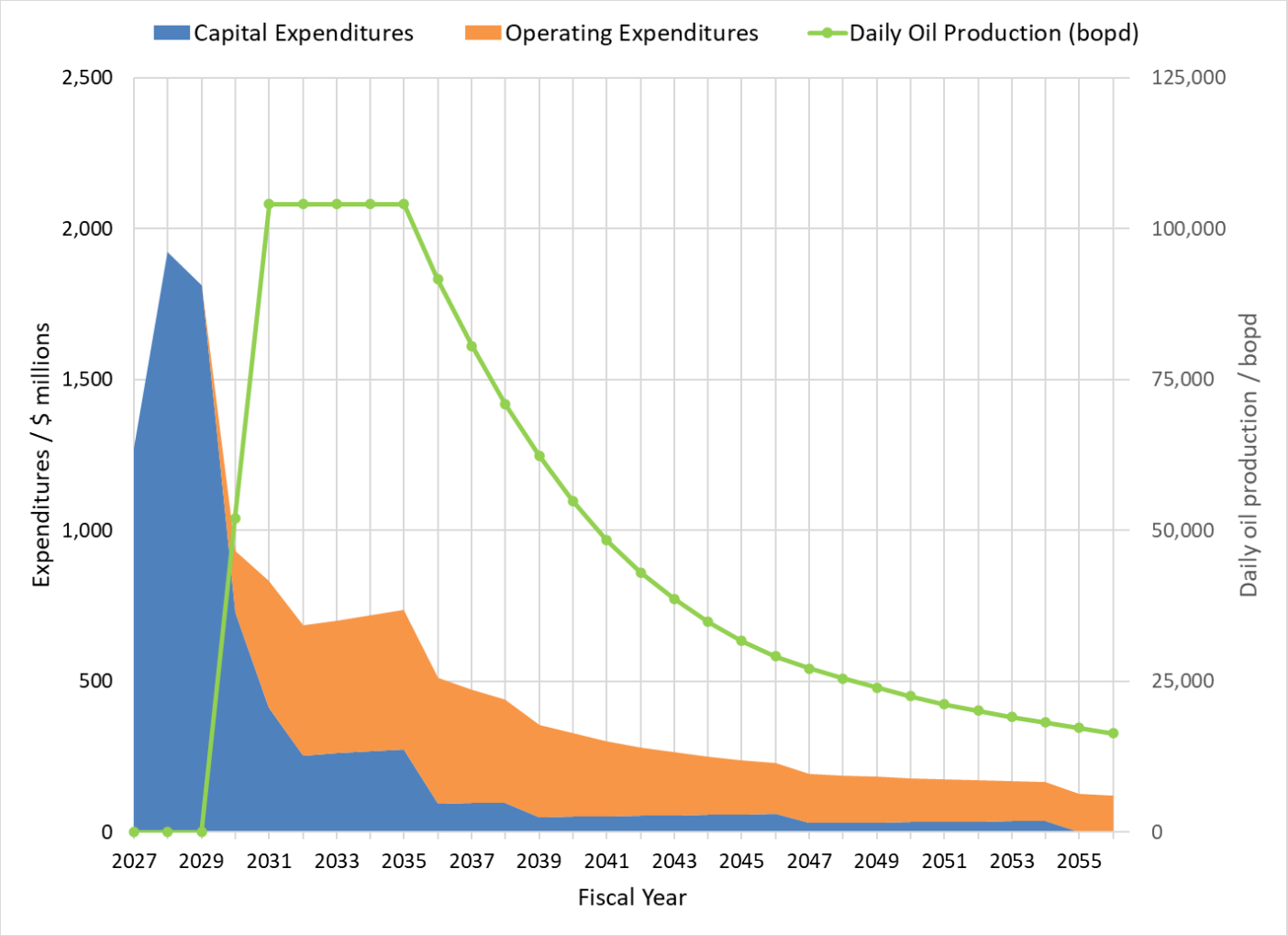
Introduction

- Goal is to understand fiscal impact of hypothetical tax changes on oil field development economics
- Department of Revenue (DOR) Lifecycle Model allows detailed financial analysis of a single oil development project
  - Forecasts revenue and net present value for state, municipality, federal government, and producer
  - Results in nominal dollars
  - Deterministic analysis, not probabilistic, using a single set of assumptions

Project Assumptions

- Hypothetical new oil field
  - Large 30-year, 1-pad to 3-pad development
  - 500 million barrels total production
- Production and cost profiles informed by DOR knowledge of typical industry practice and not based on a specific field
  - Total costs $25 per barrel, averaged over field life – low cost compared to North Slope average, but typical of recent large developments
- Project development begins July 2026 (start of FY 2027)
- Located 100% on state land
- If applying Gross Value Reduction (GVR), applied at 20%, with no producing area within the development qualifying separately for GVR later in field life

Production and Cost Profile



- First oil in year 4 (FY 2030)
- Peak production 104,000 barrels per day
- Most or all construction occurs prior to first oil
- Ongoing drilling maintains production plateau from year 5 to year 9
- Total costs $25 per barrel

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Cases Modeled

- Oil price and costs from Fall 2025 DOR Revenue Forecast
- Three tax regimes
  - Current tax law
  - Current tax law without GVR
    - Assumes no reduction of gross volume, and sliding-scale credit applies for all oil
  - ACES (prior production tax law)
- Incumbent producer vs. new entrant
  - Incumbent producer benefits from deducting lease expenditures when above the minimum tax floor.
    - Assumes 228 thousand barrels per day (200 thousand taxable barrels per day)
    - $14.23 capex plus $18.97 opex = $33.20 per barrel lease expenditures elsewhere on the North Slope (excluding the modeled field), based on North Slope average for CY 2025
  - New entrant has no production elsewhere on North Slope, so they carry forward all lease expenditures to deduct against production tax after production begins.

ACES Overview

- Prior production tax regime, replaced by SB21 from Jan 1, 2014
- Basic calculation:
  - Net tax = (gross value – costs) * tax rate
    - Net tax rate = 25% plus progressivity (up to 75% max rate)
    - Progressivity based on Production Tax Value (PTV) per barrel = oil price minus cost per barrel
    - 0% if PTV < $30/bbl, +0.4% for each dollar from $30/bbl to $92.50/bbl, then +0.1% for each dollar above $92.50/bbl
  - Min tax = 4% of gross value (soft floor, so credits could take tax below it)
  - Tax before credits = net tax or min tax, whichever is higher
  - Credits reduce tax
    - 20% Qualified Capital Expenditures credit
    - 25% Carried-Forward Annual Loss credit
    - Other credits, generally smaller in value
  - Tax could not go below zero, but credits could be sold, transferred or carried forward to be applied in subsequent years.
    - In this analysis, credits are assumed to be carried forward.

State Revenue Summary

- Revenue in $ millions (nominal)
- “Positive net tax from:” represents first fiscal year that cumulative production tax impact from the project is positive
  - Production tax impact can be negative early in field life under both current tax law and ACES
- Just one set of analyses - results are highly variable with inputs

		Prod tax excluding project	Prod. tax including project	**Prod. tax from project**	**State Revenue from Project**	Company IRR	Positive net tax from:
New Entrant	**Current Tax Law**	0	1,654	**1,654**	**6,701**	13.1%	2037
	No GVR	0	2,020	**2,020**	**7,053**	12.4%	2030
	ACES	0	3,506	**3,506**	**8,475**	12.3%	2038
Incumbent	**Current Tax Law**	6,379	7,429	**1,049**	**6,334**	14.0%	2032
	No GVR	6,379	7,585	**1,206**	**6,487**	13.6%	2030
	ACES	352	1,701	**1,349**	**6,619**	14.3%	2038

Observations

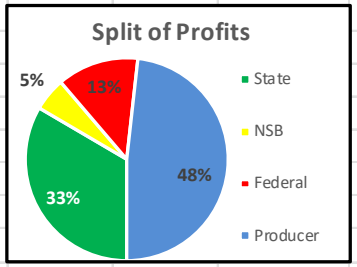
- Credits from GVR and ACES improve project economics, but can significantly delay revenue
- Carry-forward lease expenditures reduce tax under current law and ACES
  - Donut hole provides complication under current law
- State production tax revenue from ACES likely much lower than SB21 under current oil price and cost forecast
  - Tax rate = 25% for all forecast years, with large amount of capex credits
  - Under ACES, projects can have negative production tax impact
  - At very high oil prices, ACES would generate more production tax revenue
- Alternative scenarios could look very different, for example with higher project costs:
  - Lower production tax, especially under ACES
  - Development could be uncommercial
  - Incumbent producer could be subject to donut hole, so unable to deduct all costs
- Production tax revenue is very sensitive to oil price

Appendix

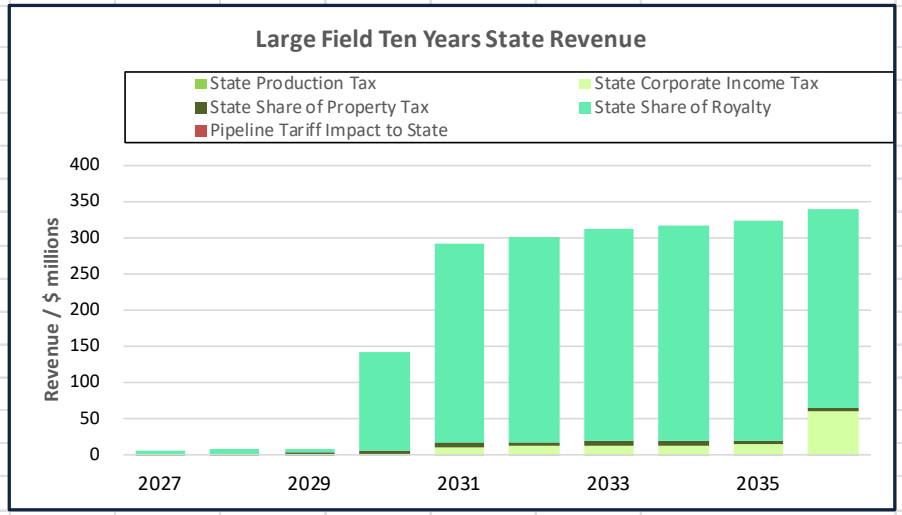
Model Dashboards

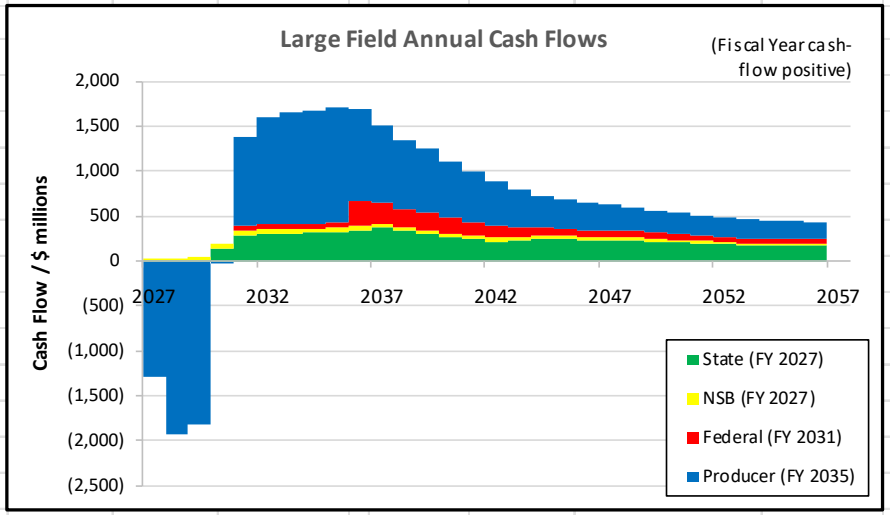
New Entrant, Current Tax Law

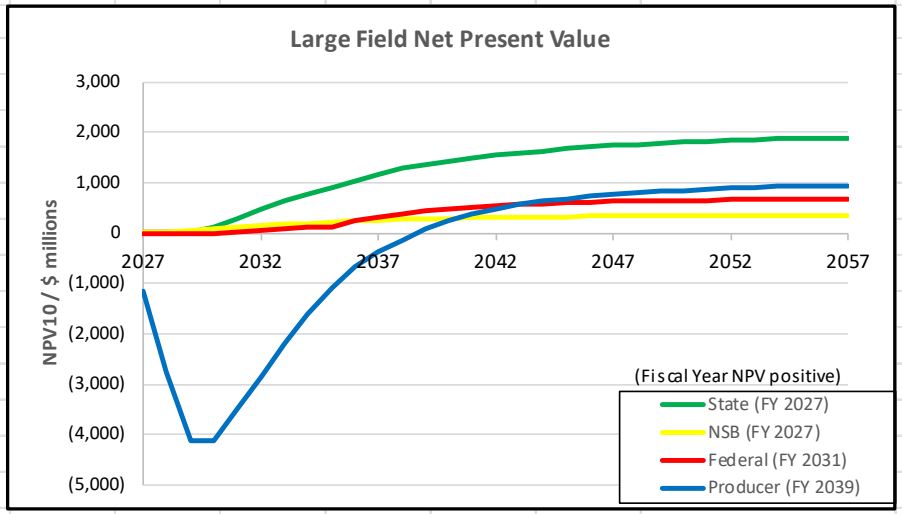
Assumptions	
Field	Large Field
Location	State lands
Company	New Entrant
Cost per barrel	$25.00
PTB credit	Status Quo
Min tax	Status Quo



Lifecycle Totals	
Prod. Tax (company total) ($M)	1,654
Prod. tax total if no project ($M)	0
Prod. tax (net impact of project) ($M)	**1,654**
Total State Annual Losses ($M)	0
Total State Annual Gains ($M)	6,701
Net State Gain (Loss) ($M)	**6,701**
State NPV @ 10% ($M)	1,889
Total Producer Annual Losses ($M)	(5,041)
Total Producer Annual Gains ($M)	14,708
Net Producer Gain (Loss) ($M)	**9,667**
Producer NPV @ 10% ($M)	**942.26**
Producer IRR	**13.1%**

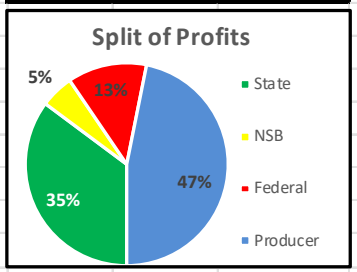




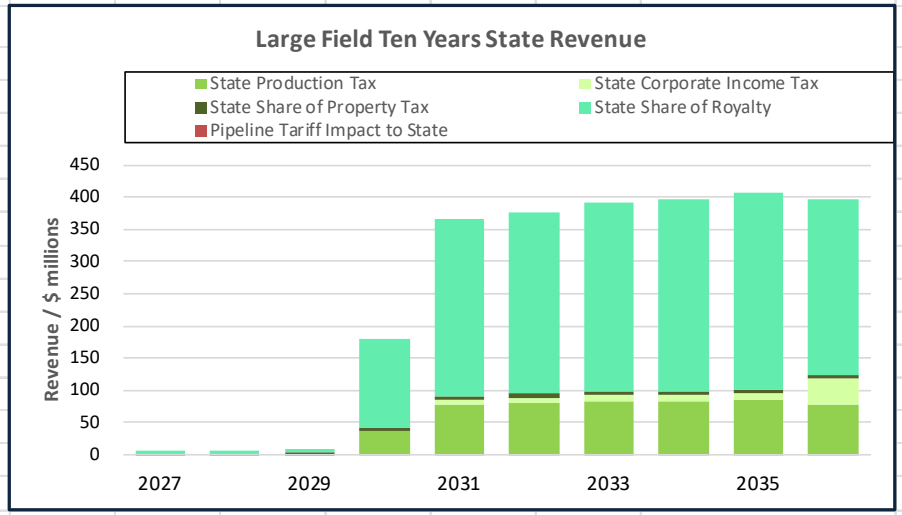


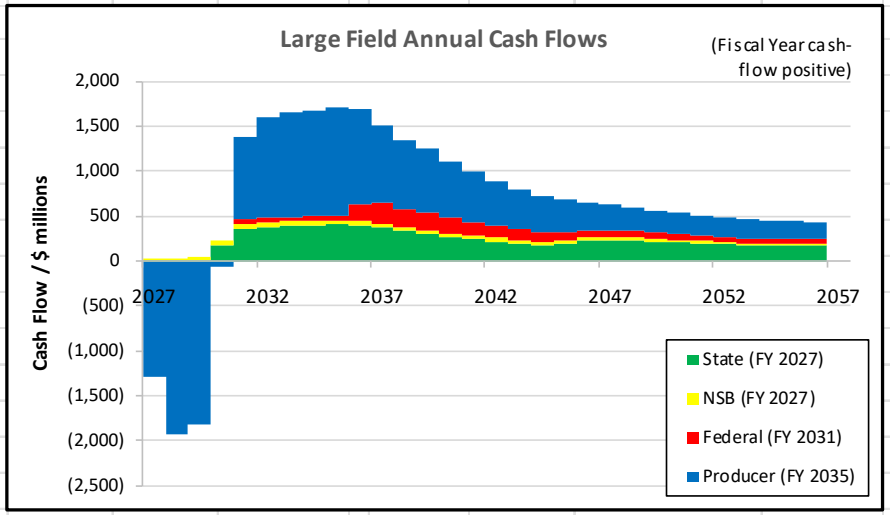
New Entrant, No GVR

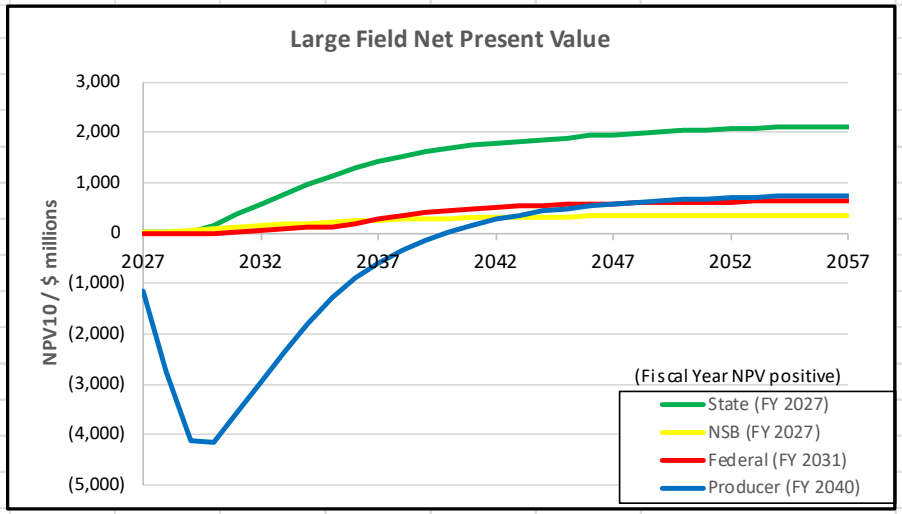
Assumptions	
Field	Large Field
Location	State lands
Company	New Entrant
Cost per barrel	$25.00
PTB credit	Status Quo
Min tax	Status Quo



Lifecycle Totals	
Prod. Tax (company total) ($M)	2,020
Prod. tax total if no project ($M)	0
Prod. tax (net impact of project) ($M)	**2,020**
Total State Annual Losses ($M)	0
Total State Annual Gains ($M)	7,053
Net State Gain (Loss) ($M)	**7,053**
State NPV @ 10% ($M)	2,115
Total Producer Annual Losses ($M)	(5,078)
Total Producer Annual Gains ($M)	14,468
Net Producer Gain (Loss) ($M)	**9,390**
Producer NPV @ 10% ($M)	**752.34**
Producer IRR	**12.4%**

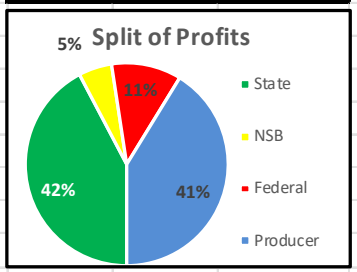




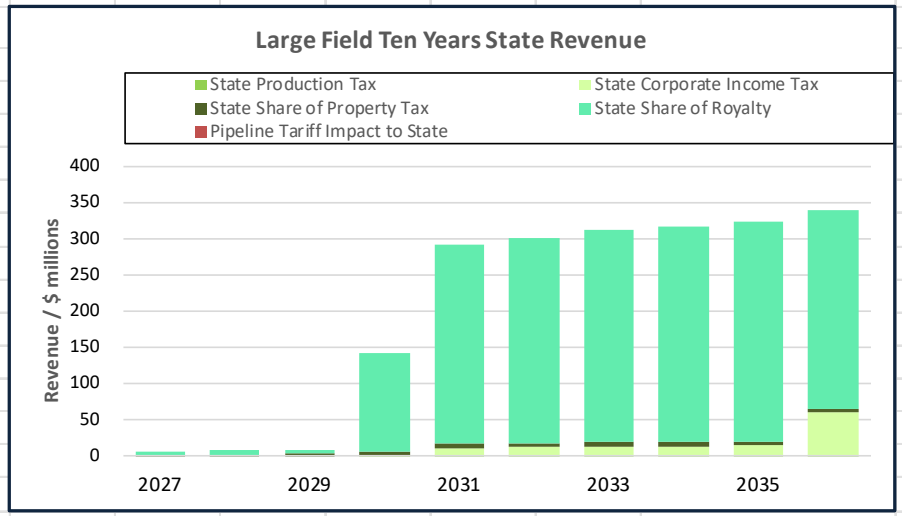


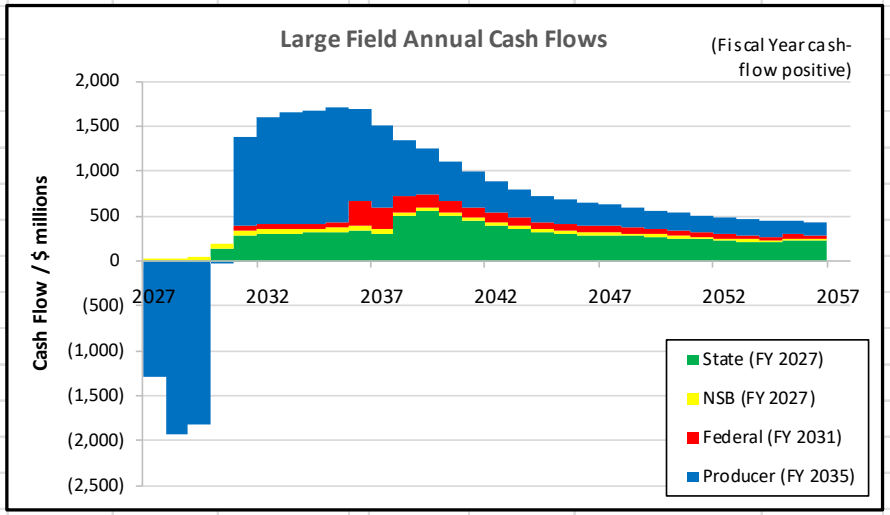
New Entrant, ACES

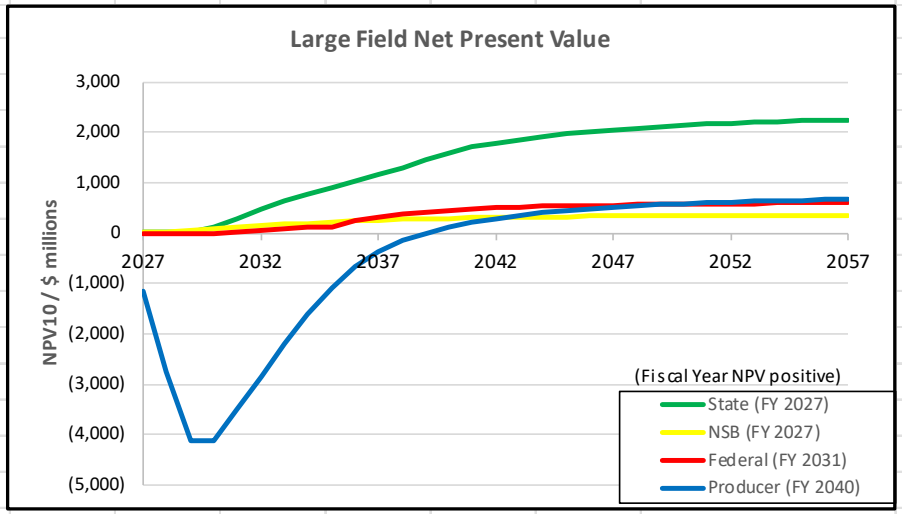
Assumptions	
Field	Large Field
Location	State lands
Company	New Entrant
Cost per barrel	$25.00
PTB credit	Status Quo
Min tax	Status Quo



Lifecycle Totals	
Prod. Tax (company total) ($M)	3,506
Prod. tax total if no project ($M)	0
Prod. tax (net impact of project) ($M)	**3,506**
Total State Annual Losses ($M)	0
Total State Annual Gains ($M)	8,475
Net State Gain (Loss) ($M)	**8,475**
State NPV @ 10% ($M)	2,244
Total Producer Annual Losses ($M)	(5,041)
Total Producer Annual Gains ($M)	13,307
Net Producer Gain (Loss) ($M)	**8,266**
Producer NPV @ 10% ($M)	**661.46**
Producer IRR	**12.3%**

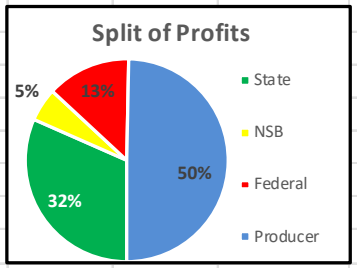




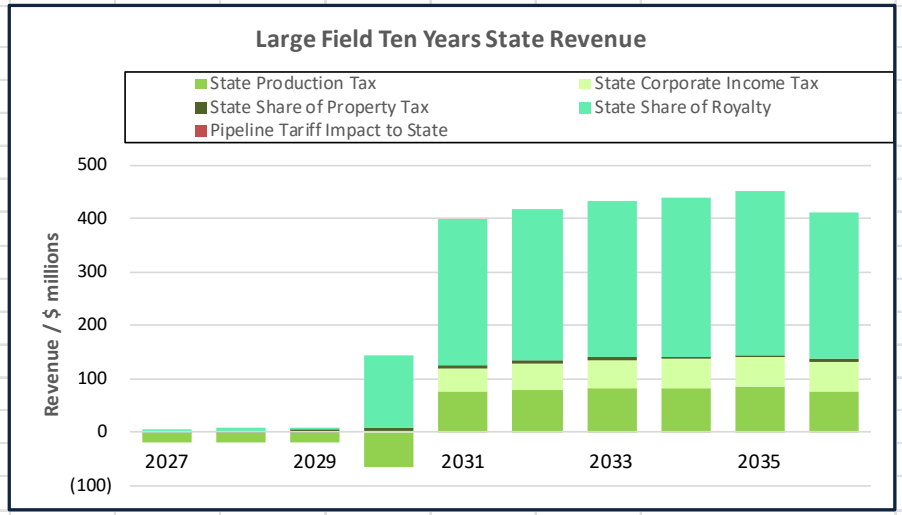


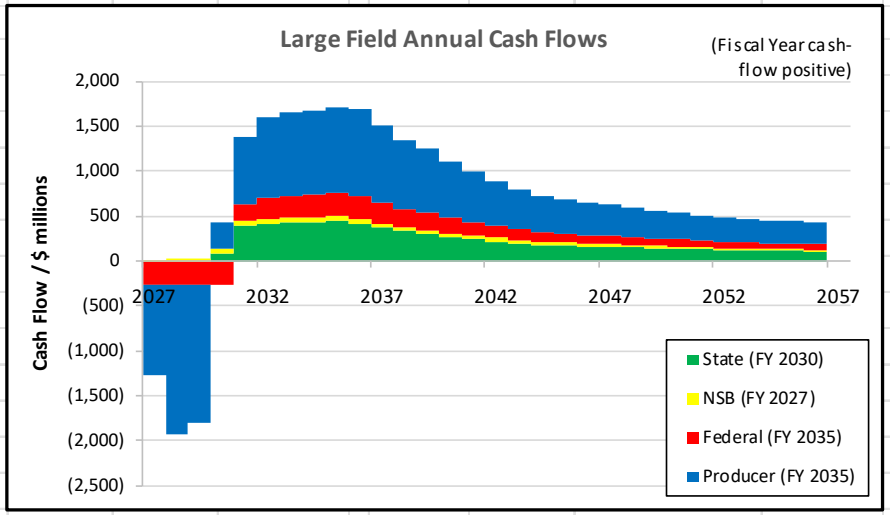
Incumbent, Current Tax Law

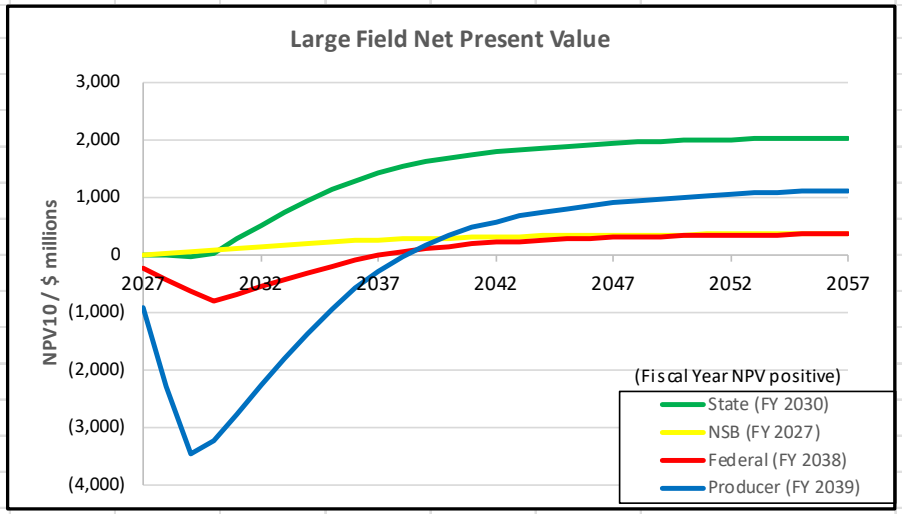
Assumptions	
Field	Large Field
Location	State lands
Company	Incumbent
Cost per barrel	$25.00
PTB credit	Status Quo
Min tax	Status Quo



Lifecycle Totals	
Prod. Tax (company total) ($M)	7,429
Prod. tax total if no project ($M)	6,379
Prod. tax (net impact of project) ($M)	**1,049**
Total State Annual Losses ($M)	(33)
Total State Annual Gains ($M)	6,366
Net State Gain (Loss) ($M)	**6,334**
State NPV @ 10% ($M)	2,032
Total Producer Annual Losses ($M)	(4,216)
Total Producer Annual Gains ($M)	14,174
Net Producer Gain (Loss) ($M)	**9,958**
Producer NPV @ 10% ($M)	**1,118.34**
Producer IRR	**14.0%**

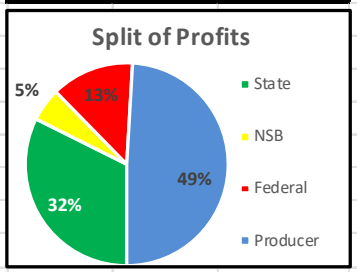




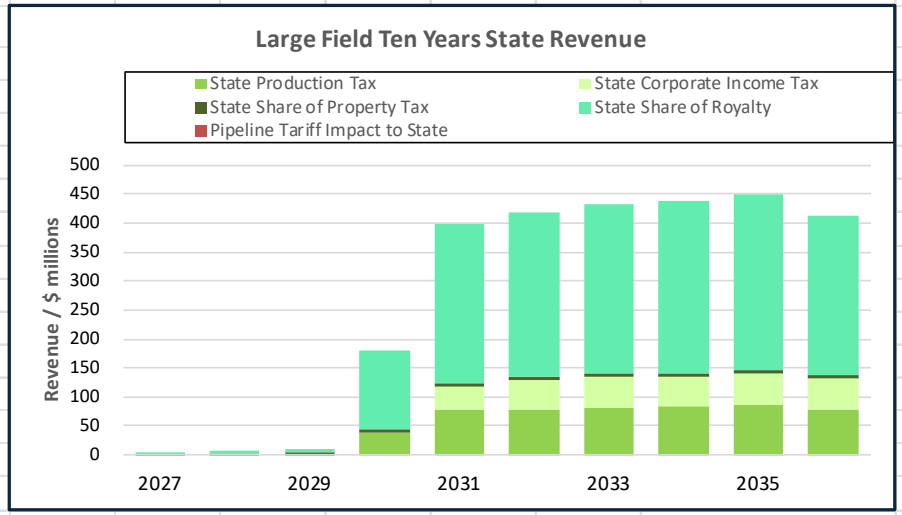


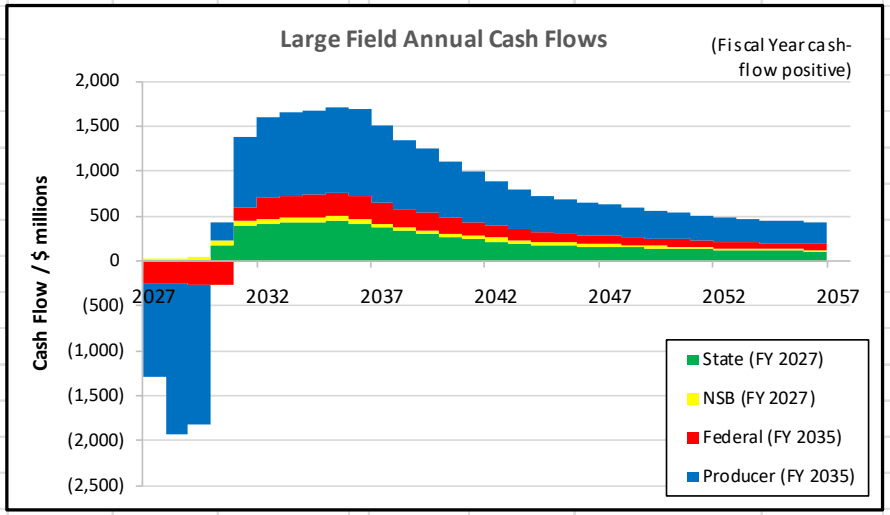
Incumbent, No GVR

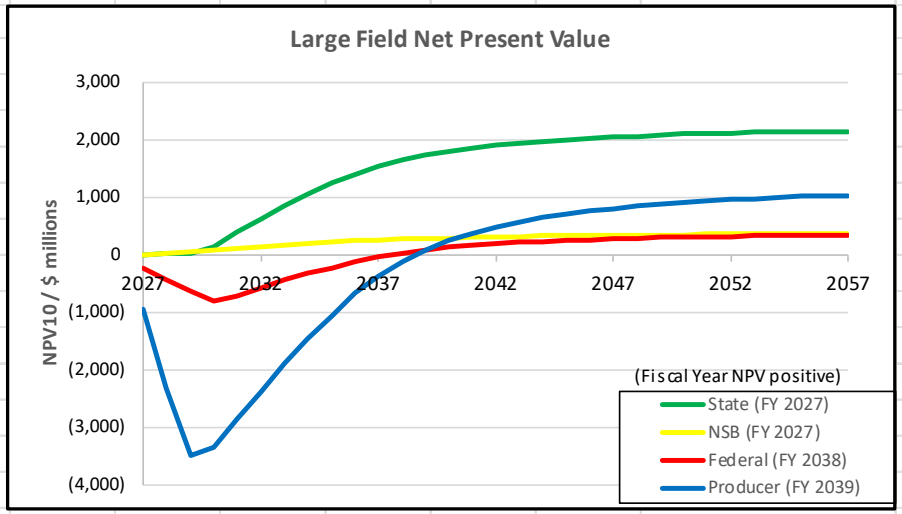
Assumptions	
Field	Large Field
Location	State lands
Company	Incumbent
Cost per barrel	$25.00
PTB credit	Status Quo
Min tax	Status Quo



Lifecycle Totals	
Prod. Tax (company total) ($M)	7,585
Prod. tax total if no project ($M)	6,379
Prod. tax (net impact of project) ($M)	**1,206**
Total State Annual Losses ($M)	0
Total State Annual Gains ($M)	6,487
Net State Gain (Loss) ($M)	**6,487**
State NPV @ 10% ($M)	2,145
Total Producer Annual Losses ($M)	(4,270)
Total Producer Annual Gains ($M)	14,107
Net Producer Gain (Loss) ($M)	**9,836**
Producer NPV @ 10% ($M)	**1,025.34**
Producer IRR	**13.6%**

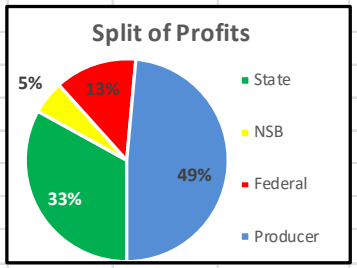






Incumbent, ACES

Assumptions	
Field	Large Field
Location	State lands
Company	Incumbent
Cost per barrel	$25.00
PTB credit	Status Quo
Min tax	Status Quo



Lifecycle Totals	
Prod. Tax (company total) ($M)	1,701
Prod. tax total if no project ($M)	352
Prod. tax (net impact of project) ($M)	**1,349**
Total State Annual Losses ($M)	(52)
Total State Annual Gains ($M)	6,671
Net State Gain (Loss) ($M)	**6,619**
State NPV @ 10% ($M)	2,008
Total Producer Annual Losses ($M)	(4,124)
Total Producer Annual Gains ($M)	13,856
Net Producer Gain (Loss) ($M)	**9,732**
Producer NPV @ 10% ($M)	**1,149.27**
Producer IRR	**14.3%**