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Representative Chris Tuck
Chair, Legislative Budget & Audit Committee
State of Alaska
120 4th Street, State Capitol, Room 24
Juneau, AK 99801-1182

rep.chris.tuck@akleg.gov

Dear Rep. Tuck,

Initial Analysis of Initiative 19OGTX

Introduction

Further to your request, we offer the following initial commentary on Initiative 19OGTX.

The House and Senate of the 31st Legislature of the State of Alaska has requested that Gaffney, Cline & Associates ("GCA") provide an initial analysis of Initiative 19OGTX. This initiative, "An Act related to the oil and gas production tax, tax payments and tax payments" has been proposed by Vote Yes for Alaska's Fair Share, an Alaska-based non-profit organization.

As instructed, our initial analysis considers only the initiative itself rather than *ex post* commentary or interpretations of what exactly the initiative proposes.

Summary

For a proposal that addresses a number of complex and interrelated aspects of taxation applicable to oil and gas production in Alaska, the initiative is remarkably brief. We interpret the basic objective of the initiative is to seek to extract some additional tax revenues from a handful (four) of the largest and most productive fields on the North Slope by implementing a combination of an additional tier of production tax, a revised (increased) alternative minimum tax and reducing tax offsets/deductions both directly and through the application of field-level ring-fencing. However, as drafted, there are several areas of uncertainty that would need to be clarified and resolved prior to assessing the likely impact on tax receipts and on producer economics and behaviors.

Discussion

19OGTX initiative

Subject to comments below on matters within the 19OGTX initiative that require further clarification, we understand the initiative to:

1. Apply to North Slope (north of the 68th parallel) “fields” that have cumulative production in excess of 400 million barrels *and* in the prior calendar year produced in excess of 40,000 barrels per day.
2. Assess an additional 15% of tax on incremental revenues (no deductions or credits) from oil production for periods in which the Production Tax Value (PTV) is in excess of $50 per barrel.
3. Implement an Alternative Gross Minimum Tax of 10% on production when prices (ANS in the L.A. basin) are below $50 per barrel, rising at 1%/$5 increments to a maximum of 15% for prices at or above $70 per barrel. There would be no offsets, credits or other adjustments.
4. Shrink the tax ring-fence from the broader North Slope area to individual “fields, units and nonunitized reservoirs”

The current terms are compared to those proposed in the initiative in the following table:

ANS Production Tax	Current Terms	Proposed Initiative 19OGTX
Applicability	All oil and gas produced each calendar year from each lease or property in North Slope	Oil produced from fields, units, and nonunitized reservoirs from ANS, > 40 kbpd production in previous calendar year, and > 400 MMBbl of total cumulative oil production
Production Tax	The greater of 35% of Production Tax Value (adjusted for prior year carry-forward lease expenditures) minus Per-Taxable-Barrel Credits, or the Alternative Minimum Tax	15% of additional production tax on the difference between Production Tax Value and $50, if Production Tax Value is greater than $50/Bbl
Minimum Tax	4% of Gross Value at Point of Production (GVPP) when average price of ANS crude oil for sale on USWC is over $25/Bbl	10% of GVPP when price is < $50/Bbl, additional 1% for each $5 incremental, max rate 15% (Price > $70/Bbl)
Production Tax Value (PTV)	Production Tax Value (PTV) = Gross Sales Value (GSV) - Tariff - Royalty - Qualified Expenditures (including Prop. Tax) - Gross Value Reduction (GVR)* **Gross Value Reduction on New Oil (GVR): 20% or 30% of GVPP can be deducted in the first 7 years of production (or 3 years if netback price > $70/Bbl)	
Production Tax Adjustments (Credits and carry forward)	• GVR-eligible production: $5/Bbl. Can apply against minimum tax. • Non-GVR-eligible production: $8/Bbl if wellhead price <$80/Bbl, reducing to $0 if wellhead price > $150/Bbl. Cannot apply against minimum tax. • Net Operating Loss (NOL) credits are no longer available, having been replaced with carry-forward lease expenditures	No credit, carried-forward lease expenditures, including operating losses, or other offsets may reduce the amount of tax due below the amounts calculated in "Alternative Gross Minimum Tax" (Section 3) Per-taxable-Bbl credit shall not be used in "Tax on Production Tax Value" (section 4)

ANS Production Tax	Current Terms	Proposed Initiative 19OGTX
	• Lease Expenditure Carry-forward (LCF) cannot be used to reduce minimum tax	

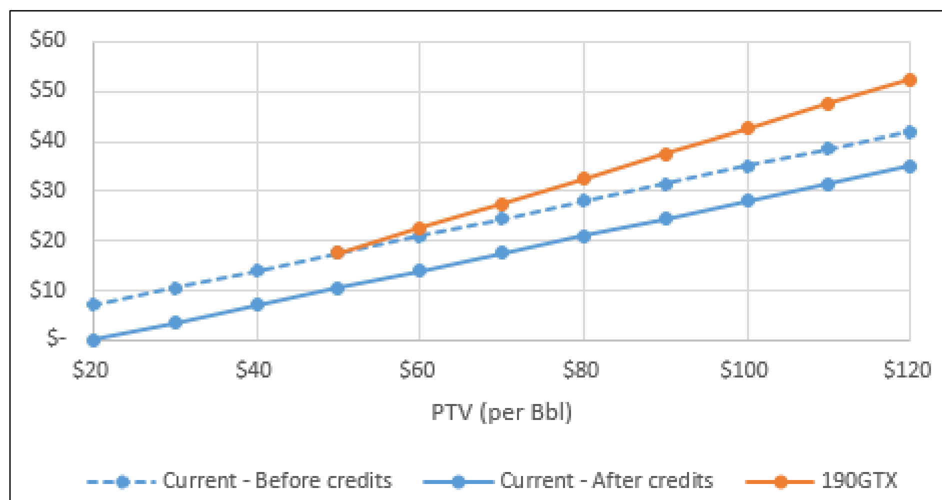
Effects

The indicative "first-order" (i.e., ignoring for the moment the impact on future investments and production levels) effect of the initiative is, in any scenario, an increase in tax revenues. As shown in Figure 1, initiative 19OGTX proposes a minimum tax rate that exceeds the current application of 0%-4% of Gross Value at Point of Production at all levels of prices. This results in a minimum tax that is more than double the current level, regardless of whether general offsets or reductions are still applicable.

Figure 1: Rate of AMT

At the same time, the production tax will also increase, for two reasons. First, Section 4 of the initiative proposes an additional tier to the production tax, which increases the tax per barrel when Production Tax Value (PTV) reaches $50/Bbl and above. Second, Section 4 (a) eliminates the application of per-taxable-barrel credit that under current terms can be used to offset production tax liability. As shown in Figure 2, the production tax per barrel under 19OGTX will be higher than the current production tax at all price levels.

Figure 2: Production Tax Per Bbl*



* The chart includes the impact of both the additional production tax and elimination of the per-taxable-barrel credits (these range from $0 at wellhead price of more than $150 to $8 at wellhead price less than $80 per barrel for non-GVR areas). By removing the application of per-taxable-barrel credits, the production tax per barrel under current terms (the solid blue line) will move up to the dotted blue line. By including the additional tax on incremental PTV, tax per barrel will further move up to the orange line. For example, at $70 per barrel PTV, production tax before and after application of credits are $25 and $17, respectively, under the current tax regime; under 19OGTX, production tax will rise to $28/Bbl.

While the indicative first-order effects of the initiative are unequivocally in one direction (a higher ultimate tax payment), as noted above, there are a number of uncertainties introduced by the 19OGTX initiative as currently drafted that would need to be resolved prior to more precise quantitative analysis.

Ring-fencing

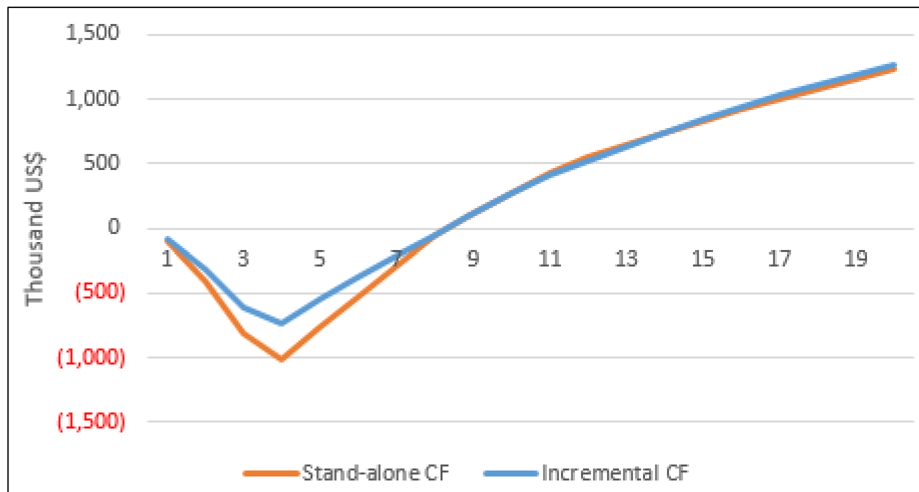
Tighter ring-fencing can discourage producers from investing in new (marginal) stand-alone projects. To test the potential impact of shrinking the tax ring-fence to a “field” level, GCA did a screening level calculation—a hypothetical new investment to bring on stream 25,000 barrels per day of production with and without tax consolidation with an existing field producing at 150,000 barrels per day (Figure 3). For the existing field, opex is assumed to be $15/Bbl. For the new investment, capex is assumed to be $1,000 million, spread over four years of development.

In this example, new production starts in year five, and stays at plateau for ten years before entering a 5% annual decline. The profiles for the existing field and the new investment are taken from GCA’s 2017 analysis of production taxes under LB&A’s instructions. As a stand-alone project, the new investment generates a NPV10 of $0.8/Bbl, under current fiscal terms and a price assumption of $60/Bbl. If the new investment were able consolidate tax with the existing field, the incremental cash flow of the new investment corresponds to a NPV10 of $1.1/Bbl, a 40% increase in the value of net cash flows to the producer relative to the stand-alone case.

This simple example illustrates that the ability to consolidate new investments for tax purposes effectively accelerates (but does not impact the quantum of) the cumulative cash flow and enhances project returns. This proposed change in ring-fencing could have a negative effect on

incremental project development for the producers of the 4 targeted properties. For example, for the Kuparuk satellite fields, tax can be consolidated under the current regime, but under Initiative 19OGTX, investments on these satellite fields could not be used to offset tax on Kuparuk, and the satellite fields would have to be assessed on their stand-alone merits. We would expect this to further challenge marginal investments and potentially lead to delayed/cancelled investments on the Kuparuk satellite fields.

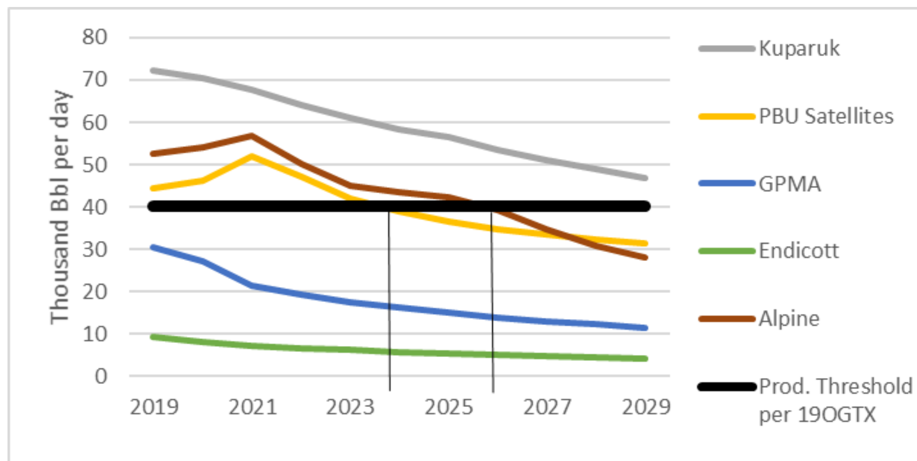
Figure 3: Cumulative Cash Flow of New Investment



Short and Long Term Consequences

According to the production estimates in the latest (Fall 2019) Revenue Sources Book and our interpretation of the initiative, the production criteria described in 19OGTX will only apply to a limited number of fields within the next ten years (the limit of the forecast in the publication). Individual field-level production within an oil producing pool is not available in the public domain, as a result this analysis uses production from oil producing pools according to the Revenue Sources Book s as the points of taxation. Currently, there are four ANS oil producing pools that appear to fit both the total cumulative production and the current production criteria. Prudhoe Bay, Kuparuk, PBU Satellites and Alpine would appear to meet the proponents' criteria, as we interpret them (Figure 4). However, production from both the PBU Satellites and Alpine is projected to decline below the 40,000 barrel per day threshold in the next four to six years (2024 and 2026, respectively or sooner, if planned production increases in 2020 and 2021 are not realized). In this case the tax changes proposed in 19OGTX would only be implemented for a few years on Alpine and PBU Satellites, before reverting to the current terms. The short-lived benefits (to the government) of the proposed changes will have to be carefully weighed against potential consequences in terms of the overall business environment, concerns over fiscal stability and associated investment (dis-)incentives on the North Slope and, indeed, elsewhere in the State.

Figure 4: ANS Oil Producing Pool with Cum Oil > 400 MMBbl*
(excluding Prudhoe Bay)



* The chart is based on production forecasts of oil producing pools in the Fall 2019 Revenue Sources Book.

Imprecision of Applicability

Section 2 limits the applicability to "[fields] that have produced in excess of 40,000 barrels of oil per day in the previous calendar year and in excess of 400[million] barrels of total cumulative production…" For the current production test, it is not clear whether this refers to the daily average for the year, an average for the days that there was production (i.e. "stream-days"), the year-exit production rate or that the [field] simply had achieved that level once during the year. While we would normally assume that the intent of the proponents was likely to be those properties where total annual production divided by 365 is greater than 40,000, as drafted we believe the measure applies to any property that produced 40,000 barrels of oil during a 24 hour, midnight to midnight period during the year. While we do not see any obvious "gaming" issues, it is our experience that measures that have "step" rather than "slope" functions can result in unintended consequences (for example deferring or halting investment and activity to keep below a tax-triggering threshold.)

Effect on Middle Earth and Cook Inlet basins

For producers who own assets in both the North Slope and the Cook Inlet or Middle Earth, the production tax is already ring fenced within these areas. Therefore, no direct impact would be expected for production tax collected from Cook Inlet or Middle Earth. However, as alluded to above, changes on the North Slope could have knock-on effects elsewhere in the State if prospective investors became concerned over basic fiscal and contractual stability.

Other

Other than issues discussed above, there are areas in the initiative that require greater clarity from the proponents:

- 190GTX uses "fields, units, and nonunitized reservoirs" to describe the subject of taxation, without pointing out the difference of "lease or property" as used in current tax statutes. Our interpretation is that "fields, units, and nonunitized reservoirs" would refer to the

smallest unit that the production can be allocated to within ANS. It awaits further clarification from bill proponents how these terms differ from "lease or property" as used in current tax statutes.

- Although the initiative mentions "oil and gas" in its title it appears to be assessed only on oil (see Sections 2, 3 and 4). Moreover, Section 5(a) requires that the tax be calculated separately for oil and gas.
- Our interpretation is that “offsets” refer to any reduction in value that could be applied to the Alternative Gross Minimum Tax. It is unclear in Section 3(c) if Gross Value Reduction (GVR) can still apply. As drafted "no credits, carried-forward lease expenditures, including operating losses, *or other offsets* may reduce the amount of tax due…", we would interpret the intent of the proponents to be that the GVR could *not* be applied to the tax base. Notwithstanding, this may only be a theoretical issue as GVR is only applicable to fields that are within the first seven years of production.
- Section 5(c). “For each of the fields, units, and nonunitized reservoirs, the lease expenditures shall be calculated, deducted, and carried forward separately” which sounds like a ring-fencing provision on individual fields. It is unclear how the satellites (PBU Satellites and Kuparuk Satellites) will be handled. Our interpretation is that, due to the “field-level ringfencing” as intended in the initiative, carry-forward lease expenditure for new developments outside the major fields would only be used to offset production tax liabilities on the particular new developments where the cost occurs, and it is still subject to the 10% value reduction after 10 years.
- It is not clear if there would be substantive effects from other elements of the initiative (for example, monthly vs. annual assessments, or putting all tax-related filings into the public record) although overall we would expect these aspects to be administratively more burdensome.

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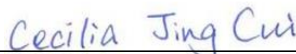
We look forward to reviewing and discussing these elements with you at your convenience.

Yours sincerely,

Gaffney, Cline & Associates



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