Preliminary Findings and Determination
Nicolai Creek Unit Royalty Modification

Legislative Budget and Audit Committee

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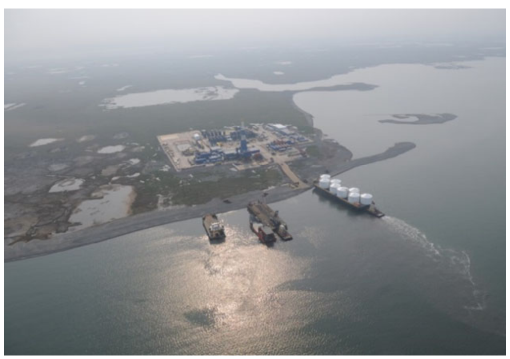
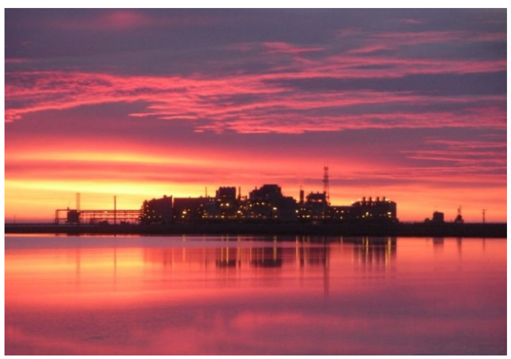



Outline

1. Executive Summary
2. Royalty Modification – Relevant Statutes and History
3. Nicolai Creek Unit Background
4. Statutory Criteria
5. Best Interest of the State
6. Scenario Modeling – Key Results
7. Quantified Impacts and Unquantified Indirect Benefits of Royalty Modification
8. Royalty Modification Mechanism

Executive Summary

- Amaroq Resources, LLC (Amaroq), operator of the Nicolai Creek Unit (NCU), submitted a royalty modification application to Department of Natural Resources (DNR) on September 3, 2024
- The application to reduce royalty is intended to prolong the economic life of the unit as per barrel equivalent costs are increasing due to declining production
- DNR engaged in an extensive review and analysis of both public and confidential financial and production information provided by the applicant
- DNR concluded that, absent additional production from new drilling, the unit would likely reach the end of the economic field life in September 2026
- DNR recommends a royalty modification mechanism based on cumulative gross revenues beginning on September 1, 2024
- DNR analyses showed that royalty modification would, in the mean case, extend the life of the field by four years with an expected $0.9 million increase in direct revenue to the State

Royalty Modification - Relevant Statutes

- The Commissioner:
  - Alaska Statute (AS) 38.05.180(j)(1)(B): may provide modification of royalty “to prolong the economic life of an oil or gas field or pool as per barrel or barrel equivalent costs increase or as the price of oil or gas decreases, and the increase or decrease is sufficient to make future production no longer economically feasible.”
  - AS 38.05.180(j)(4)(B) “may not grant a royalty reduction … under (1)(B) of this subsection...of less than three percent ...”
- The lessee needs to:
  - AS 38.05.180(j)(2): “make a clear and convincing showing that a modification of royalty” meets the statutory requirements and “is in the best interest of the state.”
- AS 38.05.180(j)(3): The royalty modification mechanism “… shall be based on a change in the price of oil or gas and may also be based on other relevant factors such as a change in production rate…”

Royalty Modification - History

Year	Lessee	Field or pool	Outcome
1995	BP	Milne Point Unit	Denied
1997	Unocal	10 Cook Inlet platforms	Application withdrawn
1999	Phillips	One Cook Inlet platform (Tyonek Deep pool)	Application withdrawn
2005	Pioneer and Eni	Oooguruk (Kuparuk and Nuiqsut Pools)	Granted
2006	Kerr-McGee and Eni	Nikaitchuq Unit and Tuvaaq Unit	Denied
2007	Chevron (Unocal)	Ivan River Unit and Stump Lake Unit	Application withdrawn
2008	Eni	Nikaitchuq (Schrader Bluff Pool)	Granted
2014	Caelus	Oooguruk (Nuna Torok Pool)	Granted
2021	Oil Search	Pikka Unit	Application withdrawn
2023	Savant	Badami Unit	Granted
2024	Furie	Kitchen Lights Unit	Granted

Royalty Modification - Results

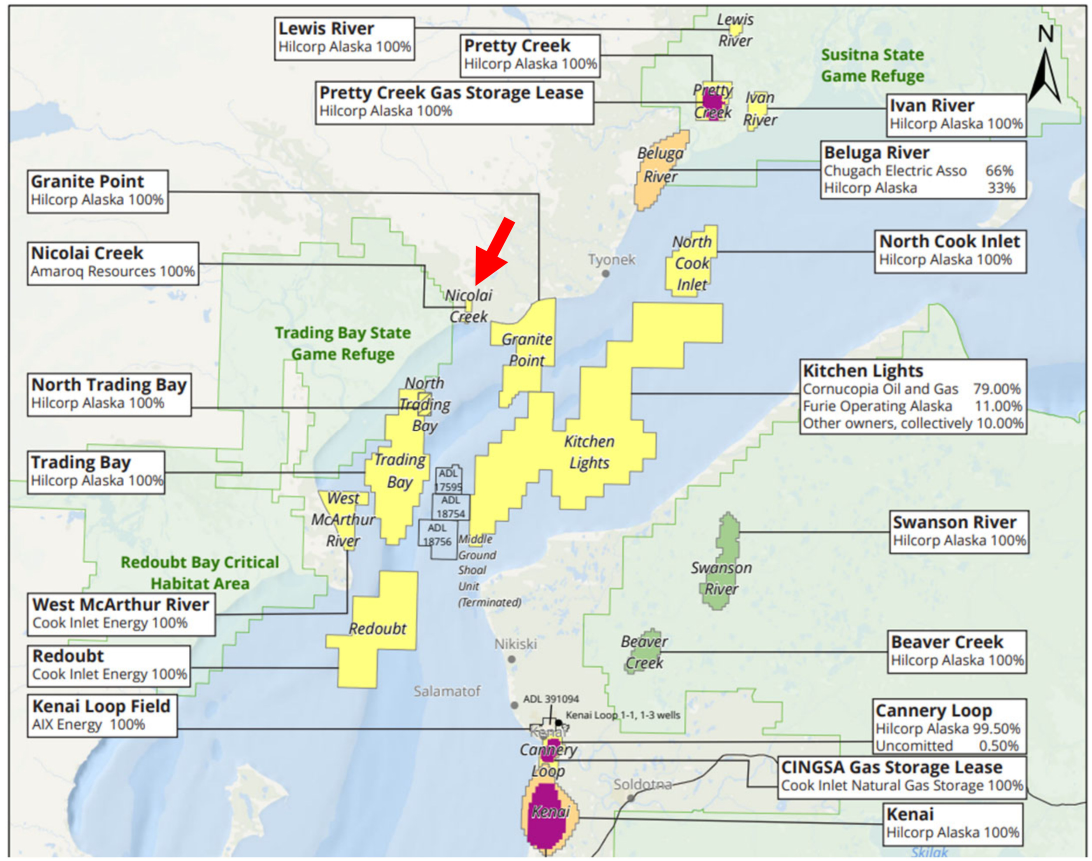
Year	Lessee	Field or Pool	Reasoning	Outcome
2005	Pioneer and Eni	Oooguruk (Kuparuk and Nuiqsut Pools)	Access pool not economic to produce	Eni developed the two pools Production began in 2008 Produced 52 million barrels
2008	Eni	Nikaitchuq (Schrader Bluff Pool)	Access pool not economic to produce	Eni developed the Schrader Bluff pool Production began in 2011 Produced 89 million barrels
2014	Caelus	Oooguruk (Nuna Torok Pool)	Extension of field life by at least six years	Requirements of modification were not met due to 2014 low oil price Royalty modification rescinded Conoco acquired leases in 2019 began drilling new wells in 2023
2023	Savant	Badami Unit	Extension of field life beyond January 2023	Unit continues to operate Planning new drilling in 2025 Produced 1.3 million barrels
2024	Furie	Kitchen Lights Unit	Extension of field life beyond June 2025	Unit continues to operate Has drilled three new wells Produced additional 1.1 Bcf of Cook Inlet Gas

Bcf = billion standard cubic feet

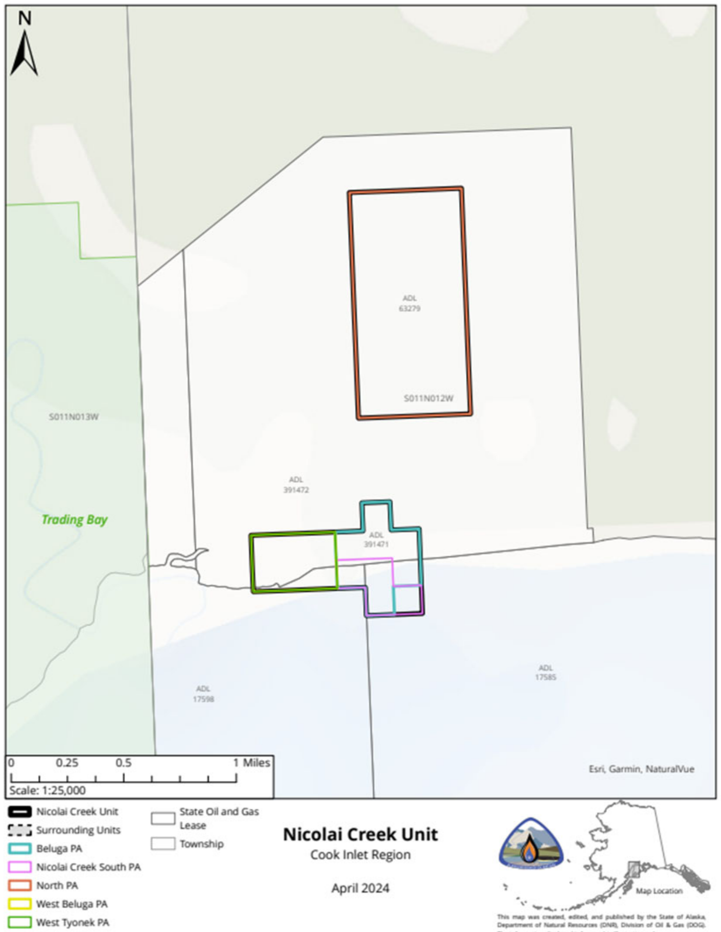
Production numbers through June 2025

NCU Background – Unit Location

- Unit formed in 1968 by Texaco
- 470 acres
- Originally produced until 1977
- Production restarted by Aurora Gas in 2001
- Amaroq acquired NCU in 2018 due to Aurora Gas' bankruptcy
- Annual production 0.2 percent of total Cook Inlet production



NCU Background – Lease Information

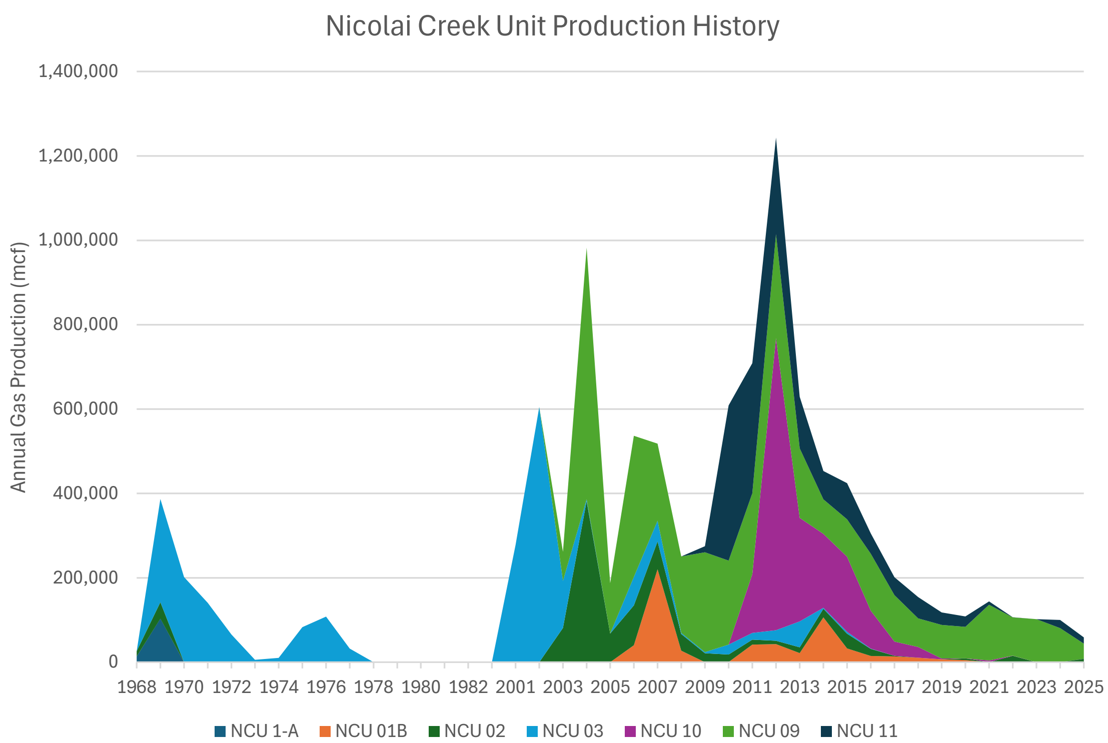


Lease	Segment	Tract #	Unitized Acreage	Depth	Royalty Rate	ORRI		Total Burden	Production Allocation	Shallow Burden	Deep Burden
63279	2	1	320	<5053'	12.5%	4.0%		16.5%	68.09%	11.25%	
	A	1		>5053'		6.5%	*	19.0%			12.95%
391471	1	2	44.51	<4911'	12.5%	4.0%		16.5%	9.47%	1.56%	
	A	2		>4911'		6.5%	*	19.0%			1.80%
17585	1	3	37.58	<6620'	12.5%	1.5%		14.0%	8.00%	1.12%	
	A	3		>6620'		3.0%	*	15.5%			1.24%
17598	1	4	7.90	<4558'	12.5%	1.5%		14.0%	1.68%	0.24%	
	A	4		>4558'		3.0%	*	15.5%			0.26%
	2	6	35.90	<4558'	12.5%	1.8%	*	14.3%	7.64%	1.09%	
	B	6		>4558'		3.3%		15.8%			1.20%
391472	2	5	24.10	<4911'	12.5%	4.3%		16.8%	5.13%	0.86%	
	B	5		>4911'		6.8%	*	19.3%			0.99%
Total Acreage			470						100.0%	16.12%	18.44%

* 1.5% ORRI held by Amaroq Resources, LLC

ORRI = Overriding Royalty Interest

NCU Background – Production History



Timeline truncated 1982-2001 due to lack of production

- Amaroq produced about 60 million cubic feet (MMscf) through June 30, 2025
- Production comes from three wells:
  - NCU 02
  - NCU 09
  - NCU 11

Statutory Criteria

- Amaroq demonstrated the per-barrel-equivalent costs increase will make future production uneconomic per AS 38.05.180(j)(2)
  - The increase in per-barrel-equivalent costs is mainly due to declining production from current wells
  - Continued operation of the NCU would be uneconomic due to per-barrel-equivalent costs
- Amaroq demonstrated that royalty modification would prolong the economic life of the NCU per AS 38.05.180(j)(1)(B)
  - Absent relief, the NCU would begin shutting down in September 2026 as operating the field would become uneconomic
  - With relief, modeling showed operations could continue for an additional year
  - Amaroq proposed a royalty modification mechanism at a fixed rate until profitable

Statutory Criteria

- Amaroq demonstrated that under current royalty it was uneconomic to drill additional wells per AS 38.05.180(j)(1)(C)
  - Amaroq provided a reserves report analyzed by a third party identifying proven and probable gas reserves in the NCU
  - Amaroq provided sufficient information for the development costs and financing to show that drilling would be uneconomic without relief
  - With relief, Amaroq's economics are improved and will help secure funding for the drilling program

Best Interest of the State

Modification is in the best interest of the State per AS 38.05.180(j)(2)

- DNR modification extends field life and provides:
  - Continued Cook Inlet gas production
  - Diversity in Cook Inlet explorers and producers
  - Additional indirect benefits (details on slide 18)
- DNR's royalty modification expected to extend field life by one year
  - Modification mechanism accounts for price and production
  - Multiple development, price, and shutdown scenarios were modeled
  - Preserves potential of additional drilling

Best Interest of the State

- Amaroq is seeking funding to drill two or three additional wells
  - Further extend field life
  - Produce additional gas (details on slide 18)

- Wells will reestablish production from gas zones not produced in five to 10 years
  - Two wells could be drilled from existing pads
  - An additional third well could be drilled from a new pad

Scenario Modeling: End of Life

($ in thousands)

	End of Field Life	Royalty Modification Ends	Cumulative Production (MMscf)	Royalty Income	Production Tax	Property Tax 50 Percent State Share	Total State Revenue	Additional Gas (beyond September 2026) (MMscf)
Scenario 1: No Royalty Modification (Baseline)	Sep 2026	No Royalty Modification	224.6	$ 256.6	$ 37.7	$ 36.4	$ 330.7	
Scenario 1a: Royalty Modification - No Development Drilling	Sep 2027	End of Field Life	304.3	$ 81.9	$ 48.7	$ 46.2	$ 176.8	79.7

All dollar amounts are in $thousands and at Net Present Value (NPV) 12.5

MMscf = million standard cubic feet

Scenario Modeling: Development Drilling

($ in thousands)

Amaroq Price Path	End of Field Life	Royalty Modification Ends	Cumulative Production (MMscf)	Royalty Income	Production Tax	Property Tax 50 Percent State Share	Total State Revenue	Additional Gas (beyond September 2026) (MMscf)
Scenario 2a: Royalty Modification - Development Drilling (High Case)	Jul 2031	Jun 2029	2,997.7	$ 1,230.7	$ 362.3	$ 103.4	$ 1,696.5	2,773.1
Scenario 2b: Royalty Modification - Development Drilling (Medium Case)	Sep 2030	End of Field Life	2,078.6	$ 511.0	$ 260.1	$ 103.9	$ 875.0	1,854.0
Scenario 2c: Royalty Modification - Development Drilling (Expected Case)	Nov 2030	End of Field Life	2,187.5	$ 536.1	$ 271.9	$ 103.9	$ 911.9	1,962.9
Scenario 2d: Royalty Modification - Development Drilling (Low Case)	Jul 2030	End of Field Life	1,501.8	$ 371.8	$ 191.7	$ 87.3	$ 650.8	1,277.2

All dollar amounts are in $thousands and at Net Present Value (NPV) 12.5

MMscf = million standard cubic feet

Scenario Modeling: Development Drilling

($ in thousands)

DNR Utility Price Path	End of Field Life	Royalty Modification Ends	Cumulative Production (MMscf)	Royalty Income	Production Tax	Property Tax 50 Percent State Share	Total State Revenue	Additional Gas (beyond September 2026) (MMscf)
Scenario 3a: Royalty Modification - Development Drilling (High Case)	Feb 2031	May 2029	2,888.4	$ 1,165.6	$ 353.3	$ 103.4	$ 1,622.4	2,663.8
Scenario 3b: Royalty Modification - Development Drilling (Medium Case)	Jul 2030	End of Field Life	2,038.0	$ 502.3	$ 256.5	$ 96.2	$ 855.0	1,813.4
Scenario 3c: Royalty Modification - Development Drilling (Expected Case)	Aug 2030	End of Field Life	2,126.6	$ 523.2	$ 266.6	$ 103.9	$ 893.7	1,902.0
Scenario 3d: Royalty Modification - Development Drilling (Low Case)	Apr 2030	End of Field Life	1,454.4	$ 361.4	$ 187.3	$ 87.3	$ 636.0	1,229.8

All dollar amounts are in $thousands and at Net Present Value (NPV) 12.5

MMscf = million standard cubic feet

Quantified Impacts of Royalty Modification

($ in whole dollars)

- The initial extension of field life yields the following:
  - One year of additional field life
  - ($154,000) in total state revenue (NPV 12.5)
  - 79.7 MMscf (0.08 Bcf) in additional gas
- Development drilling, Scenario 3c, yields:
  - Four years of additional field life, beyond September 2026
  - $894,000 total state revenue (NPV 12.5)
    - $523,000 Royalty
    - $267,000 Production tax
    - $104,000 Property tax
  - 1,902 MMscf (1.9 Bcf) in additional gas

NPV = Net Present Value

Bcf = billion standard cubic feet

MMscf = million standard cubic feet

Unquantified Indirect Benefits

- Continued local gas production
    - Cook Inlet utilities face natural gas deliverability and supply issues in coming years
    - Continued production at NCU is potentially a lower-cost alternative to liquified natural gas imports or other energy sources
    - Maintains demand for energy services and associated jobs in the region
- Diversity in producers in the Cook Inlet basin
- Environmental, social, and cultural impacts
    - Leases contain stipulations to protect the environment
    - Amaroq employs three staff with additional contractors

DNR Royalty Modification Mechanism

- Three percent royalty rate per month until gross revenue generated from NCU beginning September 1, 2024, reaches a cumulative amount of $25.3 million (Gross Revenue Target)
  - Accounts for both production and price
- After the Gross Revenue Target is reached, the royalty rate returns to 12.5 percent and royalty modification will expire
  - Depending on price and production levels, DNR estimates royalty modification should lapse in the early 2030s
- Gross Revenue Target was generated from total monthly cost and expense estimates for continued development drilling at NCU

DNR Royalty Modification Mechanism

- Minimum royalty rate is three percent
- Subject to routine DNR royalty audit
- DNR has the right to obtain expense invoices and financial/accounting records from Amaroq every six months
- DNR shall have the right, upon notice to Amaroq, to terminate the royalty modification in whole or in part:
  - If criteria of AS 38.05.180(j)(1)(B) or 38.05.180(j)(2) are no longer met
  - If DNR finds NCU operator to be in default per 11 AAC 83.374 (failure to comply with terms of an approved plan of development), and the default is not cured, royalty modification will terminate
- Royalty modification can only be assigned upon written approval of the Commissioner
- Royalty modification applied retroactively to September 1, 2024

Summary

- Royalty modification is in the best interest of the State per AS 38.05.180(j)(2)
- Three percent royalty rate per month until gross revenue generated from NCU beginning September 1, 2024, reaches a cumulative amount of $25.3 million
- At least ~ one year of field life extension and 0.08 Bcf of incremental gas
- With additional drilling, estimated incremental direct revenue to the State of $0.9 million (NPV 12.5) and ~2 Bcf of additional gas

Thank You

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