

Nuna Torok Development Royalty Modification

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Background

- Caelus Energy Alaska, LLC. (Caelus) acquired Pioneer Alaska effective early in June 2014. Caelus is a 70% owner in Oooguruk Drill Site (ODS) & 100% owner of Nuna
- Nuna development is an onshore pad designed to develop the southern part of the Torok reservoir which cannot be reached from ODS. Nuna, like ODS, will pay to use Kuparuk facilities to process its oil
- On July 1st 2014, Caelus applied for royalty modification for the Nuna development under AS 38.05.190(j)(1)(B) to prolong Torok economic life
- DNR issued a Preliminary Finding for the royalty modification application on October 28, 2014



Royalty Modification History

- 1995 BP Milne Point
 - Explicitly associated with BP contract with OXY
- 1997 Unocal 10 Cook Inlet Platforms - withdrawn
- 1999 Phillips Cook Inlet Platform – withdrawn
- 2005 Pioneer Oooguruk – 5% until NPSL payout
- 2005 Kerr-McGee Nikaituchuq/Tuvaaq – denied
- 2007 Chevron W. Cook Inlet fields – withdrawn
- 2008 ENI Nikaitchuq – 5% triggered by oil price



Terms of Royalty Modification

- For the Nuna Torok development, 5% royalty rate until \$1.25 billion of gross revenue has accumulated, after which all original royalty terms re-established
 - Gross revenue is defined as
 - the value of gross production as measured at the lease
 - with a fixed percentage (6%) of production allowed for “backout”
- Caelus must approve authorizations for Nuna development expenditure by 12/31/14
- Facility installation must commence by 12/31/15
- Production must commence by March 31, 2017
- Sharing of technology employed for Torok development required within 24 months of initial production



Caelus Application

- AS 38.05.180(j)(1)(B)
 - Per (j)(1)(B) must show by clear and convincing evidence that
 - Modification is necessary to prolong economic life of an oil or gas field or pool because, without modification, future production is not economically feasible
 - Royalty modification is in best interests of the State
- Caelus requested a royalty modification mirroring the existing Oooguruk Kuparuk and Nuiqsut royalty modification terms:
 - 5% royalty for Torok production from ODS & Nuna until NPSLs reach payout
 - At payout, royalty increase 1.875%/year for 3 years
 - 4th anniversary base royalties returned



Caelus Modeling

- Caelus used conservative, deterministic, modeling assumptions
 - Examined only 1P or 'Proven Reserves', (90% chance that actual reserves will be higher)
 - Price derived from the futures curve and fixed starting in 2018
 - Fixed CAPEX and OPEX
- Results indicated project uneconomic with a low rate of return before federal income tax

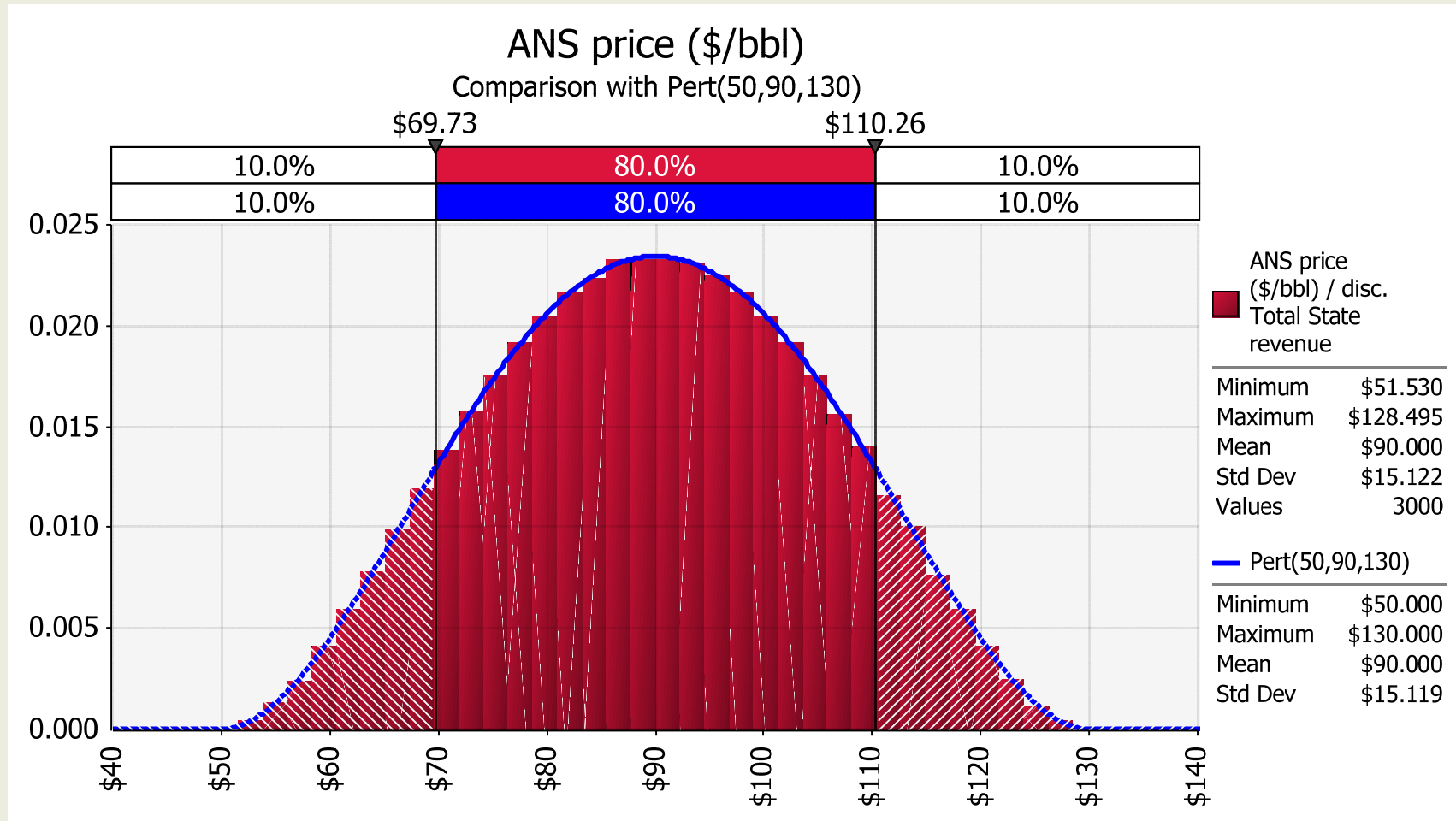


State Modeling

- Stochastic Model: utilized a range of possible future oil prices, reserves, and costs (capex/opex) as model inputs
- Incremental analysis: compared “Nuna + ODS” to “ODS only” to evaluate the ‘prolonging’ of the Oooguruk field’s economic life.
- Returns after federal income taxes (AFIT)
- From range of inputs, derived range statistical of outputs and values

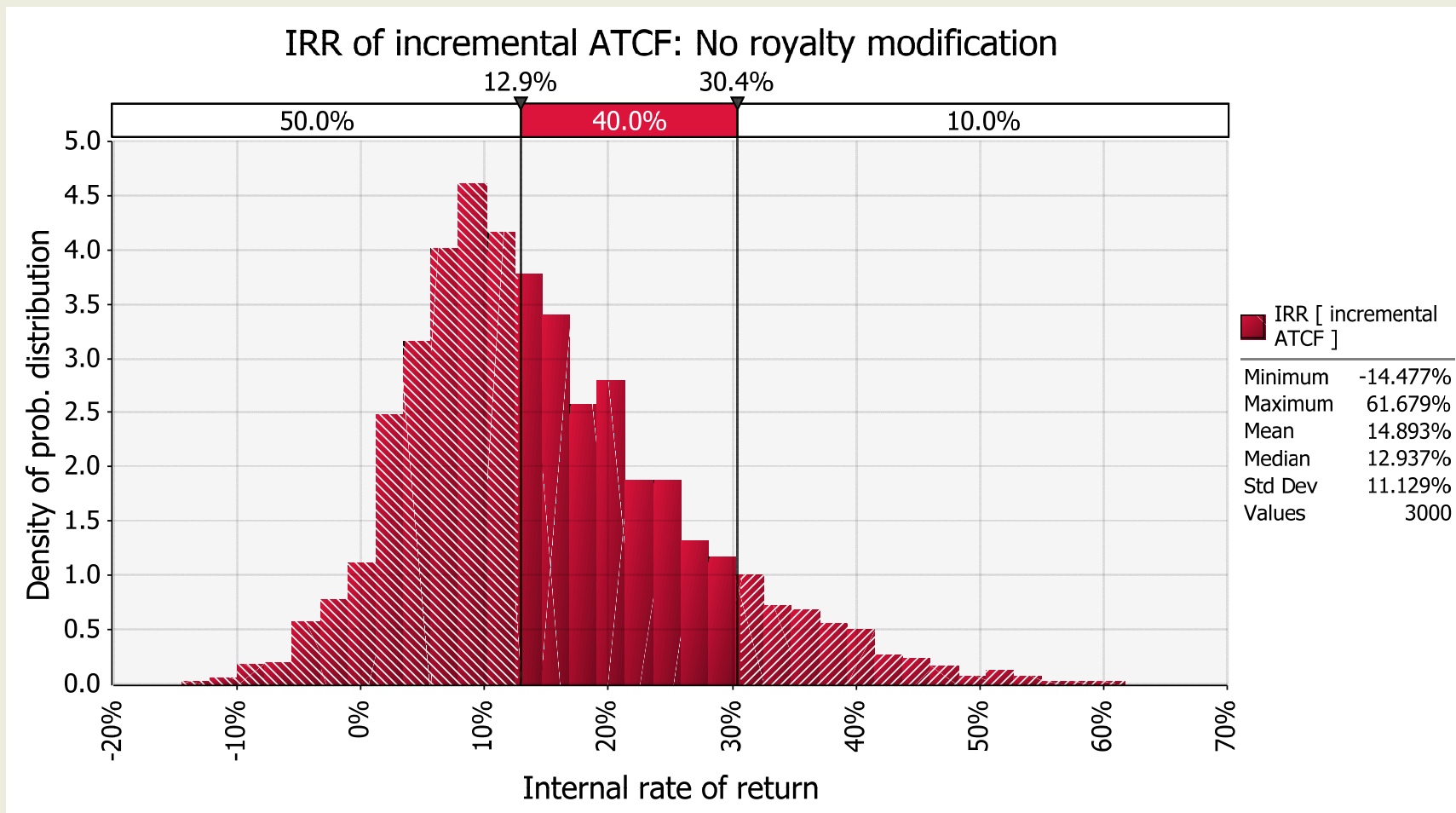


State Modeling: ANS price forecast



State Modeling: project returns without royalty modification

In at least 50% of cases the project does not reach 15% prudent investor return target



Economic Feasibility Test

- Reexamined appropriate rate of return threshold to determine economic feasibility
 - Even under a prudent investor rate of return, the project's median case is negative and is very reserve sensitive
 - Required rate of return linked to firm's cost of capital.
- Caelus has a higher cost of capital than prior royalty modification applicants
 - Caelus: A single-asset start-up company that lacks a diversified portfolio of assets, and
 - Has only limited and expensive private equity financing options available
 - More diversified companies have internal cash generation capabilities and access to corporate financing and own equity



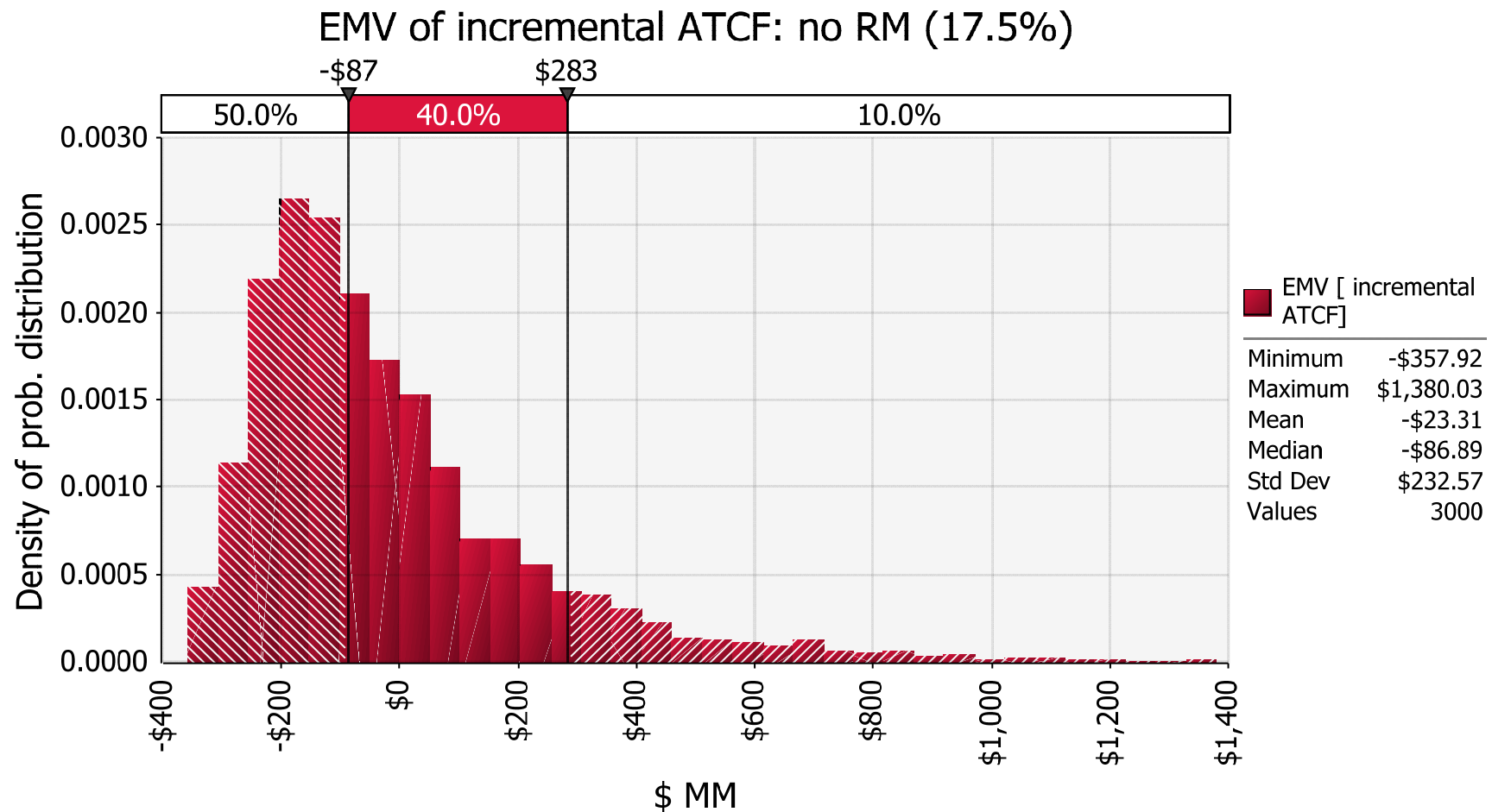
Economic Feasibility Test

- Caelus utilizes the Private Equity funding market which requires high rates of return
 - Permanent Fund, a type of private equity fund, requires 25% rate of return on upstream oil and gas projects
 - Used a 17.5% hurdle rate to mimic private equity return targets



Project feasibility based on Private Equity Investor Return Target

In more than 65% of cases the project does not reach 17.5% Private Equity Investor Target

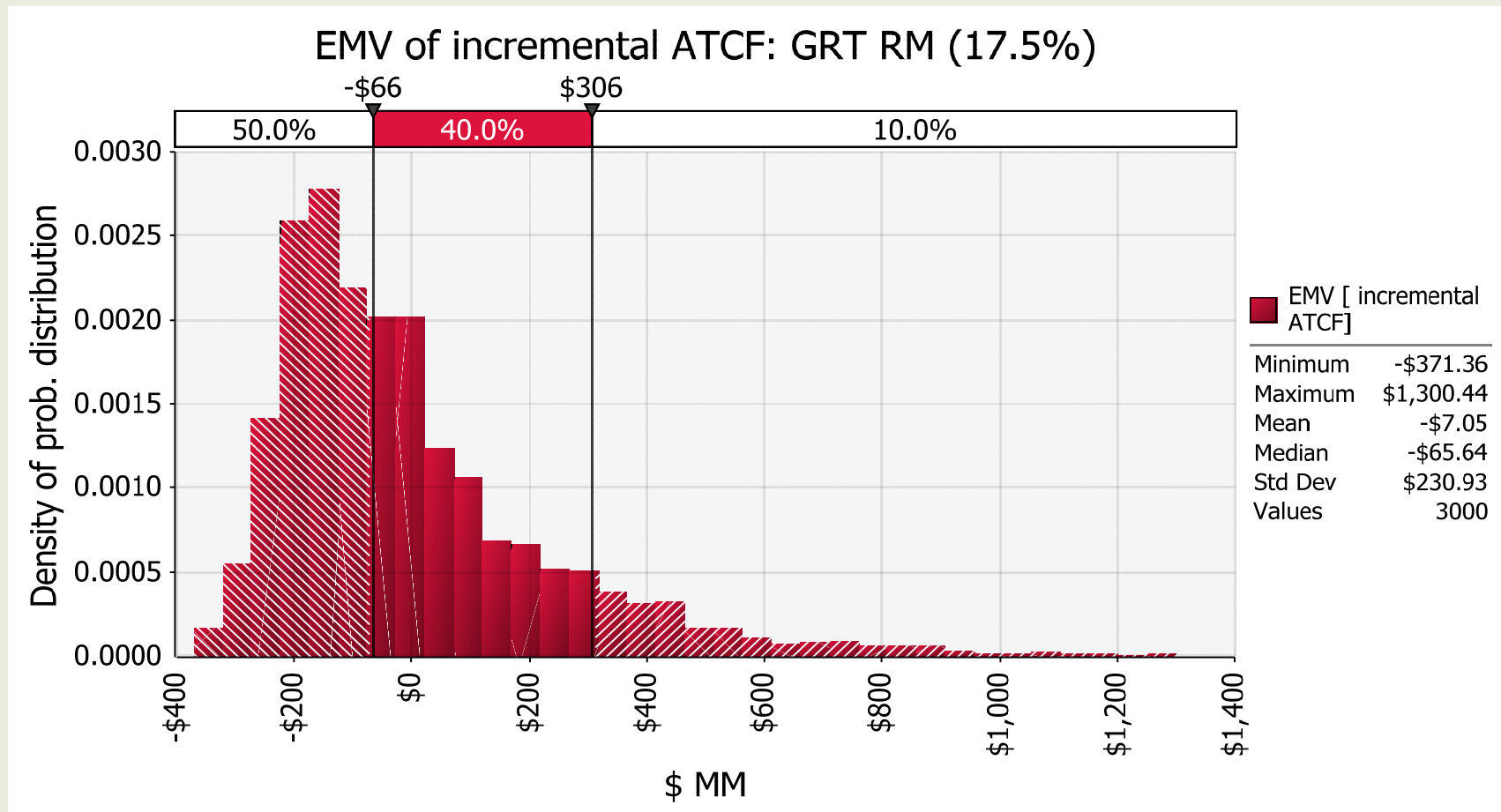


Critical Factors to Caelus's proposed NPSL-based royalty modification

1. Recognizes significant Reservoir Risk of Torok formation
2. Promotes new drilling techniques on the North Slope
3. Encourages development of reserve-uncertain projects and ensures technology sharing
4. Focuses scope of modification to a single formation from new development site
5. Has specific project achievement milestones to retain reduction
6. Doesn't adversely affect NPSL benefits
7. Production, recovery, and price critical factors
8. Avoid factors directly controlled by operator
9. Alternate concepts: Down side product price protection with sliding scale, or gross revenue target to address price and reserves risk

State Model Results for Caelus's EMV with royalty modification

As a result of the royalty modification the project's EMV approaches zero mark, while the State foregoes \$44mm of revenue to ensure implementation of the project



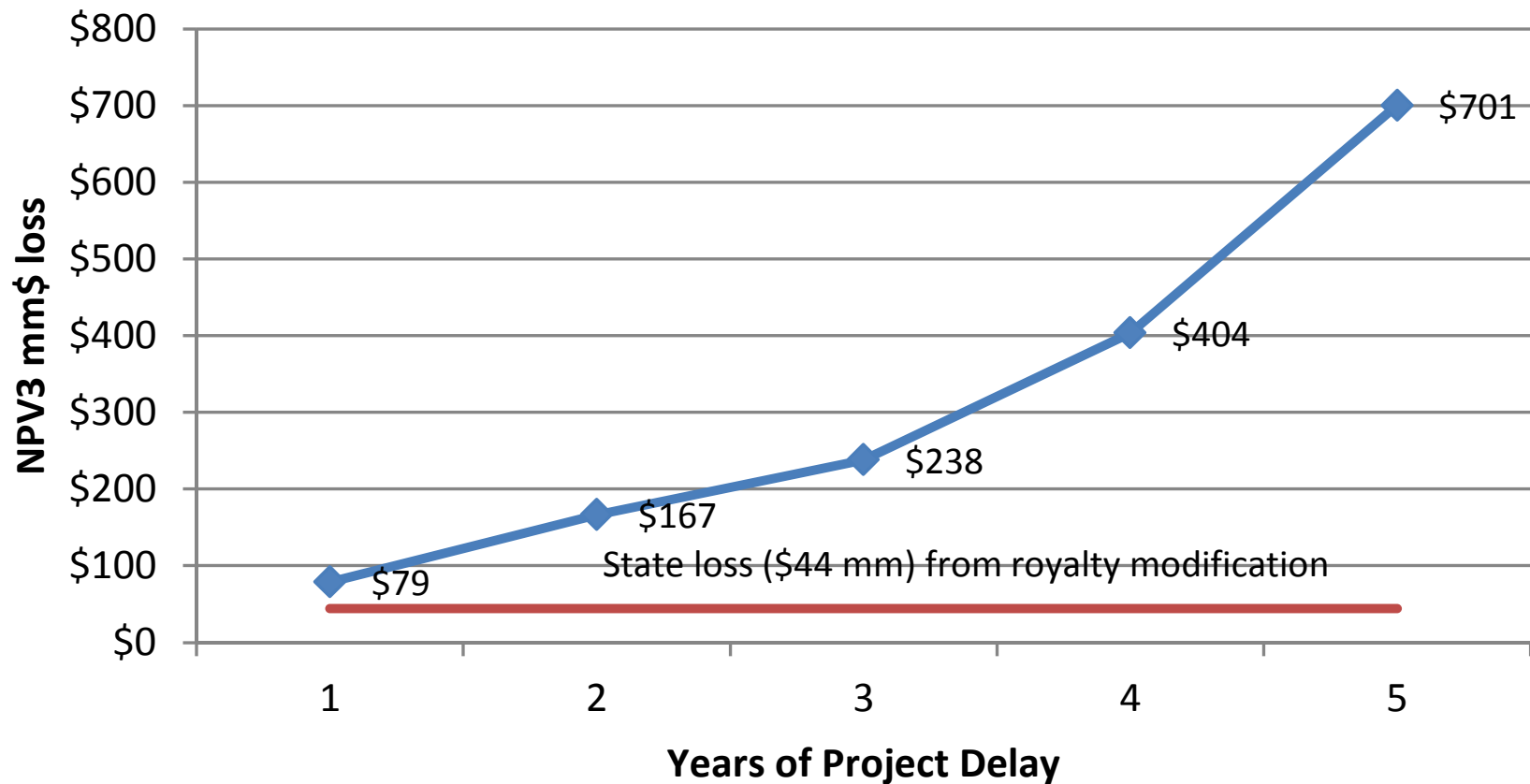
Nuna Torok Royalty Modification in Best Interest of the State

- By accepting terms of royalty modification, Caelus commits to immediate development of Nuna, expected to yield ~\$1.3 billion in State revenue
- Without royalty modification, Caelus states it would be difficult to progress the project or at best the project significantly delayed.
- In time, State could try to get another developer to implement Nuna,
 - delay would be longer and more costly to the State as compared to impact of royalty modification
 - would shorten the overall economic life of the project



Nuna Torok Royalty Modification in Best Interest of the State

Impact of Nuna project delay on state revenue



Nuna Torok Royalty Modification in Best Interest of the State

- Promotes immediate development of new reserves
 - Delays are more costly than impact of royalty modification
- Focuses scope of modification to a single formation from new development site
- Has specific project achievement milestones to retain reduction
- Doesn't adversely affect NPSL benefits
- State gains ~\$1.3 billion in revenue at a 3% discount rate
- Targets an elusive reservoir with implications across the North Slope

