Nuna Development Royalty Modification Briefing

Legislative Budget and Audit Committee

Royalty Modification → Long-Standing Tool to Spur New Development

- Royalty modification is a long-standing, statutorily defined mechanism designed to help spur development of uneconomical fields or pools.
- Allows the Commissioner of the Department of Natural Resources to negotiate a modified royalty schedule to allow for production from a field or pool under a variety of conditions.
- Commissioner may grant royalty modification if the applicant <u>makes a clear and convincing showing that a modification of royalty is in the best interests of the state</u>.
- 2 royalty relief modifications granted out of 6 applications since 1996.

Nuna Development → High Risk – High Reward

- The target Nuna reservoir, a Brookian Torok fan complex containing over a billion barrels of oil-in-place, presents a host of unique challenges, and rewards.
- The Nuna development is unable to attract necessary investment capital and funding without modification.
- Factors such as low porosity, low permeability, high oil viscosity and high initial water cut will negatively impact reservoir performance and rate deliverability.
- Development challenges require innovative and expensive techniques to maximize resource recovery. An example of which are large hydraulic fracture treatments on <u>both</u> producers and injectors (~ 3MM pounds, largest on the North Slope).
- Initial high water cut of 40% watercut greatly exceeds typical new developments initial flow characteristics complicating facility design requirements and introducing uncertainty regarding ultimate recoverable hydrocarbons.
- Rewards to the State of Alaska are significant:
  - $ 1.0 to $1.75 billion in total gross severance taxes, property taxes, corporate income taxes, crude conservation taxes, royalties and net profit share payments.
  - Hundreds of construction and operation jobs, manufacturing activity, potential follow-on developments flow from the Nuna Development activities.
  - More oil through the trans-Alaska pipeline system – estimated peak production of 15,000 – 18,000 barrels of oil per day.
  - Critical development information will be shared with the state and other parties interested in developing similar plays in Alaska.

Royalty Modification Preliminary Findings → in the Best Interests of the State

- The Division of Oil and Gas in their preliminary finding concluded that royalty modification for Nuna is necessary to prolong the economic life of the field, is clearly in the best interest of the state and meets all requirements in accordance with AS 38.056.180(j)(1)(B) as;
  - It "prolongs the economic life of an oil or gas field or pool as costs per barrel or barrel equivalent increase," and clearly provides economic benefits to Alaska through royalty and tax payments, jobs, and technical knowledge that might not otherwise be realized.

Nuna Royalty Modification Terms → Protects, Provides for Alaska

1. Five percent royalty rate will be in effect beginning at first production of the Torok Formation as developed from the Nuna Development facilities. Leases associated with this royalty modification are ADLs 355038, 355039, 390434,390697, 392158.
2. Five percent royalty will remain in effect until Caelus has achieved a Gross Revenue Target (GRT) of $1.25 billion in revenue associated with gross production of Nuna Torok production. Gross Production is defined as sales volume of oil from Torok Nuna Revenue is calculated using netback wellhead pricing with a fixed 6% Backout deduction.
3. Upon reaching the GRT the original, un-modified, royalty terms will be re-established, being 16.667% on 25% of the affected area and 12.5% plus a 30% net profit interest on the 75% balance.
4. The State will capture project upside through both future production taxes and the 30% net profit component.
5. The project must be sanctioned by December 31, 2014. If project sanction documents and AFEs are not provided to DNR before December 31, 20 14, this royalty relief is rescinded.
6. The royalty modification is rescinded if facilities CAPEX expenditures (surface equipment, flowline and drilling capital) are not initiated by March 31, 2015 and do not equal or exceed $260 million by March 31, 2017.
7. The royalty modification is rescinded if sustained production from the Nuna drill site from Torok does not commence by March 31, 2017.
8. The NPSL accounting practices for 11 AAC 83.201 - 11 AAC 83.295 remain in full force and effect.
9. The royalty modification is not assignable without prior written approval of the Commissioner. The Commissioner will approve a transfer of the royalty modification unless he or she makes a written finding that the transfer would adversely affect the best interests of the State or does not comply with applicable regulations.
10. Twenty four months following the commencement of sustained commercial production from Nuna Drill Site 1, Caelus shall deliver to DNR a non-confidential written project summary similar in form to an SPE paper that includes development activities, construction costs, well designs and costs, fracture stimulation designs and costs, waterflood recovery designs and future development plans and rate projections. The purpose of this document will be to share the project learnings with DNR and the North Slope Operators free of charge to enable all developers to better develop the State's natural resources.

Proposed Nuna Development Location Map