#### 1. FISCAL OPTIONS

Five different fiscal options were selected. These options provide for "packages" of fiscal changes. The five options represent rather different choices for Alberta. They are not meant to be five comprehensive alternatively recommendations. The options are chosen in order to evaluate the impact of packages of fiscal changes.

Based on an analysis of these packages recommendations can be made to select a combination of fiscal features that should form the final fiscal recommendation, based on the guidance of the Royalty Review Panel.

#### 1.1. Calibration of the options

The previous report entitled "Comparative analysis of fiscal terms for Alberta oil sands and international heavy and conventional oils (May 17,2007)" recommended that a modest increase in government take would be possible.

It is also a policy objective to improve the economics of upgrading.

All options were calibrated on the IRR of the Mine+Upgrader for Cost Level 4 and a price level of US \$ 50 per barrel.

The target IRR for the mining operation was less than the current level. The target IRR for upgrading was more than the current level. Overall for the Mining+Upgrading case there would be a small reduction. The following table illustrates the target IRR's that all five options were calibrated on:

|               | Current | Target |
|---------------|---------|--------|
| Mine          | 17.6%   | 15.3%  |
| Upgrader      | 15.2%   | 16.1%  |
| Mine+Upgrader | 16.2%   | 15.7%  |

These target IRR levels are not necessarily recommendations. The fiscal package could have lower or higher target IRR's. The final calibration would be subject to a further report. However, the targets permit a direct comparison for each of the five fiscal options.

## 1.2.Description of the five options

**Common features.** All options would implement the recommendation of Chapter 3 that the LTBR of 6% would be removed.

All options would also follow the recommendation to make any base royalty and Supplemental Oil Sands Tax deductible from the Net Profit Share rather having the current offset mechanism.

All five options provide credits for upgrading either against royalties or new taxes in order to stimulate upgrading. It is suggested that these credits can be traded. This would stimulate the development of new upgrading capacity by merchant upgraders. In other words merchant upgraders do not have to have production to benefit from the credits. Also integrated operations would have an incentive to increase upgrading capacity in order to permit access by third parties. The more upgrading the more credits.

It is assumed that for all five options the current bonus bid system would continue or that a work program proposal concept would be implemented whereby the oil sands projects would be judged on the basis of the best proposal.

# **Option-1.** Option-1 consists of the following package:

Rentals: no changeBase royalty: 0%

• NPS: no change. Based on bitumen values, but SOST would be deductible.

- Introduce a Supplemental Oil Sands Tax ("SOST") based on the bitumen production priced at the WTI price. The minimum SOST rate would be 3%. Over Can \$ 50 WTI per barrel the rate would increase with 0.20% per dollar up to a maximum of 25% (to be reached at Can \$ 160 per SCO barrel). The price scale would be based on 2007 Canadian dollars and would be corrected back to 2007 with the CPI or PPI.
- For upgrading there would be a tradable credit against the SPT equal to 5% of the capital expenditures. The qualifying capital expenditures would be those for which currently the ACCA applies for upgrading only.

The main focus of this option is to create a strongly price progressive and front end loaded feature that is at the same time cost regressive. The SOST is independent of the bitumen pricing and therefore Alberta would be protected from poor bitumen prices.

## **Option-2.** Option-2 consists of the following package:

- Rentals: no change
- Time sensitive base royalty: Based on bitumen values. Starts at 2% for 2007 and 2008 and goes up by one percentage point in 2009 and every two years thereafter up to a maximum rate of 20%.
- NPS: Based on bitumen values, but time sensitive royalty would be deductible. NPS rate is 30%.
- For upgrading there would be a tradable credit against the time sensitive royalty and NPS royalty equal to 5% of the capital expenditures. The qualifying capital expenditures would be those for which currently the ACCA applies for upgrading only.

The main focus of this option is to create a cost regressive feature that would increase over time in order to ensure that Alberta would increasingly obtain a higher government take and act as an incentive to gradually lower the level of activity and thereby suppress cost escalation.

#### **Option-3.** Option-3 consists of the following package:

- Rentals: no change
- Base royalty: Based on bitumen values. Fix at 5%.
- NPS: Based on bitumen values. The NPS rate would be based on a R-factor consisting of Cumulative Revenues over Cumulative Expenditures (including base royalties). The NPS would jump from 25% to 50% at an R-factor of 2.00. Royalty deductible for NPS purposes.
- There would be an Oil Sands Impact Tax ("OSIT") equal to 6% of all upstream capital expenditures. The OSIT would not be included in determining the R-factor and would not be deductible for purposes of the NPS.
- For upgrading there would be a tradable credit against the base royalty and NPS royalty equal to 5% of the capital expenditures. The qualifying capital expenditures would be those for which currently the ACCA applies for upgrading only.

The main focus of this option would be to create a progressive and back end loaded fiscal system that provides for an optimal level of discounted government take under all combinations. The OSIT is introduced to provide some regressivity with respect to costs in order to lower the level of activity somewhat.

#### **Option-4.** Option-4 consists of the following package:

- Rentals: 20 million per year per oil sands lease (depending on acreage)
- Base royalty: Based on bitumen values. Fix at 5%.
- NPS: Based on bitumen values. The NPS rate is price sensitive and increases with would be based on the minimum rate of 25%. Over Can \$ 50 WTI per barrel

- the rate would increase with 0.50% per dollar up to a maximum of 50% (to be reached at Can \$ 100 per SCO barrel). The price scale would be based on 2007 Canadian dollars and would be corrected back to 2007 with the CPI or PPI.
- For upgrading there would be a tradable credit against the base and NPS royalty equal to 5% of the capital expenditures. The qualifying capital expenditures would be those for which currently the ACCA applies for upgrading only.

The main focus is to create a price sensitive NPS, which is front end loaded and which is complemented with cost regressive high rentals.

# **Option-5.** Option-5 consists of the following package:

- Rentals: no change
- Base royalty: 0%
- NPS: Based on 85% of WTI based on bitumen production. The NPS rate is fixed at 14%.
- For upgrading there would be a tradable credit against the NPS royalty equal 2.5% of the gross value of the SCO barrel.

The main focus is to create a relatively simple royalty system that is entirely independent of the bitumen values. Also upgrading is stimulated with a broader overall gross value feature rather than a feature based on capital expenditures.