Alberta Petroleum Marketing Commission (APMC)

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CEO, APMC
Agenda

• APMC History

• Alberta’s Market Challenge

• APMC’s Enhanced Mandate

• Implementing BRIK
Alberta Petroleum Marketing Commission (APMC)

- Crown corporation that markets Alberta’s conventional oil royalties of 70,000 bpd
- Sets royalty reference prices and manages trucking claims and audits
- Also has mandate to implement Bitumen Royalty in Kind (BRIK) for strategic purposes
- Value added processing (e.g., Sturgeon Refinery)
- Infrastructure and market development
  - Pipelines (e.g., Energy East)
  - Rail
  - Export facilities
  - International customers
APMC

- Corporate entity created by statute (*Petroleum Marketing Act*) in 1972
- Agent of the Crown – has Alberta’s AAA credit rating/Powers of Natural Person
- Historically independent commissioners (directors)
  - Originally sold all Crown land oil, later Crown royalty share
  - Managed natural gas aggregation processes
- 1996: outsourced most (90%) marketing to agents and internalized governance to DOE
  - DOE DM is Chair, ADM and CFO on Board
ALBERTA’S MARKET CHALLENGE
Oil Sands Investment Outlook

• 64 proposed and under construction projects valued at $115 billion

• Projects by CNRL, Cenovus, ConocoPhillips, Devon, Husky, Imperial, Grizzly, JACOS, KNOC, Lericina, MEG, Shell, Suncor, Sunshine, Athabasca Syncrude, Total and others as of March 2013.
Oil & Gas Investment in Alberta

Oil and Gas Extraction Sector Capital Investment in Alberta (Billion Dollars)

Source: Statistics Canada, Private and Public Investment in Canada (*2012 data are preliminary actuals, **2013 data are intentions)
Our Challenge

1. Saturated market with increasing production.
2. Energy infrastructure has not kept pace with expansion of oil production.
3. Social license to continue oil sands development and build new energy infrastructure.
Avoiding Infrastructure Bottlenecks and Price Discounts
APMC’S ENHANCED MANDATE
Building New Petroleum Markets Act

• Legislation Proclaimed January, 2014, amended PMA

• Transferred the APMC’s authority to determine “public interest” and granted that to the Minister, and provided Minister a new power to give directions to the APMC

• Modernized and improved the basic corporate rules under which the APMC operates including the ability to appoint up to 7 directors, some of whom may be from outside the public service

• Clarified financial tools available to the APMC and ensured proper Crown controls on use of these tools
Current & Potential Mandate

• Value Added Activity
  – Upgrading, partial upgrading, and refining in Alberta
    • Take or pay processing agreements or long-term crude/bitumen supply agreements
    • Sturgeon Refinery: existing 30 year take or pay processing agreement

• Market Access
  – Refineries: Canadian, US, or international customers
    • Sales/supply agreements
  – Pipelines and rail – Canada or US
    • Take or pay commitments for capacity (i.e., Energy East)
  – Loading/unloading facility and/or rail car take or pay commitments
  – Ports, terminals and oil storage operations
Conceptual Annual Royalty Benefit of Adequate Market Access

<table>
<thead>
<tr>
<th></th>
<th>Scenario #1</th>
<th>Scenario #2</th>
<th>Scenario #3</th>
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<tbody>
<tr>
<td>Maya – WCS Spread ($/bbl)</td>
<td>$10</td>
<td>$25</td>
<td>$40</td>
</tr>
<tr>
<td>Transport AB to USGC ($/bbl)</td>
<td>($10)</td>
<td>($10)</td>
<td>($10)</td>
</tr>
<tr>
<td>Average Excess Discount for AB Heavy ($/bbl)</td>
<td>$0</td>
<td>$15</td>
<td>$30</td>
</tr>
<tr>
<td>2020 Alberta Heavy Oil Supply (mmbpd)</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Assumed Royalty Rate</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Annual Royalty Impact</td>
<td>$0</td>
<td>$2.9 billion</td>
<td>$5.8 billion</td>
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</table>
Existing APMC Commitments

• Sturgeon Refinery
  – 37,500 bpd bitumen plus associated diluent for processing to diesel
    + 37,500 bpd plus diluent for remarketing until phase 2 operational
  – 30 year take or pay tolls for capital and operating costs ($19 billion
    over 30 years or >$500 million/year)
  – APMC maintains ownership of products through to sale – has all
    price risk of margin between diesel and bitumen less toll

• TransCanada Energy East Pipeline
  – 100,000 bpd of oil to Saint John, NB (blends to be determined)
  – Payment of take or pay tolls ($5 billion over 20 years or >$ 200
    million/year)
  – APMC has risk that pipeline tolls exceed the difference between
    price in New Brunswick (tide water) or Quebec and Alberta
Royalty volumes put Alberta/APMC among Canada’s largest oil producers

Source: CIBCWM Research. Total company oil production 2013/APMC BRIK volume all projects + current conventional + current C5
Commitments & Complexity

- Requisite Expertise
  - Market
  - Product
  - Risk Management
- Robust tools
  - Operational
  - Financial
- Robust Processes

New commitments require staff to appropriately manage APMC’s interest.
- Sturgeon Refinery
- Energy East

- # of assets
- # of types of assets
- # of commodities
- # of markets
IMPLEMENTING BRIK
Alberta’s Objectives

• System that Will Meet Alberta’s Policy Objectives
  – Supply to Sturgeon Refinery in advance of operations
  – Ability to meet additional needs when determined

• Avoid Adverse Impacts on Bitumen Production and Markets
  – Logistics & pricing

• Administrative Efficiency for Gov’t. and Industry
  – Clarity regarding requirements and timelines

• Fairness Among BRIK Projects
  – Including considerations of costs and benefits for smaller volumes
Consultation Process

- DOE consulted with CAPP through 2011 and 2012

- Simplified Implementation Model developed making use of BRIK Credit concept

- Simplified Implementation model endorsed by CAPP and Energy Minister

- Implementation to be done to meet physical need for crude volumes for strategic uses
Simplified BRIK Implementation

- CAPP accepted Crown has right to BRIK
- Developed efficient system that and avoids potential market distortions and logistical issues
  - Neutral to OSR and minimizes cost to Crown and industry
- Provides Crown with rateable volume of known quality where it is needed (e.g., Edmonton)
  - Crown contracts with several companies for desired supplies
  - A portion of supply is BRIK, balance is purchased for cash
  - Contracts negotiated on market principles, and valued at market price (BRIK and non-BRIK volumes)
  - Industry views Crown as high quality customer
  - Ample volumes available on reasonable notice
- CAPP members committed to making this system work
- Crown retains the right to implement a “regulatory backstop”
### Bitumen Royalty in Kind Implementation Model

(000 bpd for an example production month)

<table>
<thead>
<tr>
<th>Sources</th>
<th>Bitumen Producer A</th>
<th>Bitumen Producer B</th>
<th>Bitumen Producer C</th>
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<tbody>
<tr>
<td>Dilbit Available for Sale</td>
<td>20,000</td>
<td>100,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Dilbit Supplied to APMC</td>
<td>15,000</td>
<td>15,000</td>
<td>---</td>
</tr>
<tr>
<td>Cash Royalty Obligation Translated to Dilbit Volume</td>
<td>3,000</td>
<td>25,000</td>
<td>4,000</td>
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<tr>
<td>Cash Paid by APMC to Producer Translated to Dilbit Volume</td>
<td>12,000</td>
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<tr>
<td>Cash Royalty Paid by Producer Translated to Dilbit Volume</td>
<td>---</td>
<td>10,000</td>
<td>4,000</td>
</tr>
<tr>
<td>BRIK Credit Provided by APMC Translated to Dilbit Volume</td>
<td>3,000</td>
<td>15,000</td>
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APMC

Uses

- Sturgeon Refinery to make high-quality low-sulphur diesel in Alberta
- Energy East Pipeline to eastern Canadian refineries and international customers
- Other strategic uses to be determined, such as:
  - Infrastructure Development
    - Pipelines
    - Rail
    - Ports
    - Terminals
    - Storage
  - Value Added Facilities
    - Refineries
    - Upgraders/Partial Upgraders
    - Diluent Recovery Units
    - Etc.
Potential Bitumen Royalties vs. Commitments

Potential Bitumen Royalty Volume (Late 2013 production and price outlooks, and a number of other assumptions).

Note: Volume of bitumen available for purchase in Edmonton and Hardisty far exceeds total BRIK volume so no physical shortage occurs.
Sturgeon Refinery Infrastructure

Regional Feedstock Pipelines

- IPF – Cold Lake
- Enbridge – Waupisoo
- Enbridge – Woodland
- Access
- TCPL – Grand Rapids

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<th>Current Capacity (bpd)</th>
<th>1,100</th>
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<td>Future (2017-18)</td>
<td>3,600</td>
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Sturgeon Refinery Input/Outputs

**Feedstock – 78,655bpd**
- Bitumen – 50,000bpd

**Product Sales – 80,670bpd**
- Propane: 21%
- Butane: 11%
- Diluent: 11%
- Naphtha: 14%
- Diesel: 50%
- VGO: 2%
- Other Crudes: 10%

[Diagram showing the distribution of feedstock and product sales]
BACK UP CHARTS
BRIK Credit Estimate Reconciliation
(Estimated BRIK Credit < Royalty Due)

Settlement with APMC

Supplier

Bitumen Blend Supply Value $40 million
Invoice With Estimated BRIK Credit $18 million ($25^m)
Cash Pymt $22 million ($25^m)

APMC

Settlement with ADOE

Supplier

Actual Royalty Due Calculation $20 million Less Est. BRIK Credit Claimed of $18 million ($30^m)
Cash $2 million ($30^m)

ADOE

When Estimated BRIK Credit < Actual Royalty Due, Balance of Royalty Obligation Paid in Cash To ADOE
BRIK Credit Estimate Reconciliation
(Estimated BRIK Credit > Royalty Due)

Settlement with APMC
- Bitumen Blend Supply Value $40 million
- Invoice With Estimated BRIK Credit $18 million (<25m)
- Cash Pymt $22 million (25m)
- APMC

Settlement with ADOE
- Supplier
- Actual Royalty Due Calculation $15 million
- Less Est BRIK Credit Claimed of $18 million
  $3 million Overpymt (30m)
- ADOE

When Estimated BRIK Credit > Actual BRIK Credit, APMC is invoiced for the difference and pymt made promptly