

Speech to the Calgary Chamber of Commerce
June 15, 2006
Alberta Energy and Utilities Board Chairman Neil McCrank
Check Against Delivery

INTRODUCTION

- The title of my speech this morning is “Alberta’s Energy Reserves on the World Stage.”
- And today, I am very pleased to release the EUB’s “Alberta Energy Reserves 2005 and Supply/Demand Outlook 2006-2015.”
 - This report contains bitumen, oil, gas, and coal reserve and production numbers for 2005, as well as a 10 year supply and demand forecast for each resource.

RESERVES REPORTING

- Until a few years ago, releasing this report was not very controversial.
- We calculated the amount of Alberta’s energy reserves and production and released them annually.
 - Industry experts took note, few others noticed.
- In 2002, things changed. The *Oil and Gas Journal*, a highly regarded petroleum magazine, began including Alberta’s oilsands in their reserve calculations for the very first time.
 - This led the *Journal* to rank Canada as having the second largest ‘estimated reserves’ of oil in the world with 180 billion barrels.
- After the *Journal* article, others began to look at the oilsands.
- Including the *New York Times*, which published several articles about the oilsands.
 - One of the articles stated that Alberta’s reserves figure was ‘highly questionable’.
- At the time, it caused quite a stir.
- Looking back, that New York Times article turned out to be a good thing.
- Because it reinforced to the EUB that we need to continue to be a transparent and open body.
 - We need to be able to stand up to public scrutiny, Albertans expect no less.

CONSERVATION

- The mandate of the EUB, and our predecessor Boards, has always been to *conserve* Alberta’s energy resources. To make sure our resources are developed safely, and to make sure our resources are not wasted.
 - *And in order to conserve what’s in the ground, we have to know what’s in the ground.*
 - To do this, we have rigorous technical methods which allow us to estimate what is in the ground and how much can be produced.

HOW THE EUB CALCULATES ALBERTA'S RESERVE FIGURES

- The EUB's geologists, engineers and technicians are better equipped than any organization anywhere, to determine what is in the ground in Alberta.
- A) The EUB operates the 'Core Research Centre' in Calgary, which is the largest collection of geological samples in the world.
- The Core Centre contains the most complete drilling history of any area in the world.
 - There are over 1.25 million boxes of core samples (rock samples taken during drilling).
 - Over 14 million drill cuttings (small rock chips recovered during drilling).
 - I can tell you, the EUB's bitumen reserve numbers are valid estimates based upon detailed geological analysis of data obtained from;
 - well log data from about 44,000 wells that have been drilled in the oilsands area,
 - and core samples from about 20,000 wells in the oilsands.
- B) Further proof of our bitumen reserves is investment in the oilsands.
- The National Energy Board estimates that in the period from 2006 – 2015, Alberta's oilsands will see capital expenditures of about \$95 billion (Cdn).

BITUMEN: 1 BILLION BARRELS ANNUALLY BY 2015

- C) Production volumes also speak to this immense resource.
- Today, I am announcing that the 2005 EUB 'Reserves Report' indicates that last year, Alberta's bitumen production totaled 388 million barrels.
 - Bitumen production in Alberta was actually down by 2% from 2004.
 - This was due to the fire at Suncor's oilsands facilities in January 2005, which dramatically reduced production at their operation until late last year.
 - (*Suncor daily production for 2005 was 171,000 bpd; Suncor is targeting production of 260,000 bpd in 2006. Source: Suncor Energy, Jan. 5, 2006 news release*).
 - Bitumen production in Alberta has actually increased by 59% since the year 2000.
 - Going forward, the EUB expects Alberta's bitumen production to increase to more than **one billion barrels** per year by 2015.

40 YEARS OF OILSANDS PRODUCTION

- Through our rigorous analysis, I am also announcing that the EUB's 2005 Reserves Report indicates that Alberta's oilsands contain 174 billion barrels of recoverable bitumen.
- It is important for Albertans, and the world, to know that *we have merely scratched the surface of Alberta's oilsands reserves*, as only about 3% of our bitumen reserves have been produced since 1967.
- After 40 years of oilsands production, we still have a bitumen reserve that is largely untapped.

THE CONTINENTAL ENERGY EQUATION

- It is interesting to see how the world continues to react to the oilsands.
- Most major media outlets have covered the oilsands...even the New York Times has returned.
 - In fact, earlier this year a column in the Times stated the following about the oilsands, "*The fields hold...more potential energy content than the oil fields of Iran and Libya combined.*" (NYT, March 28, 2006).
- And if you look at the 'Oil & Gas Journal's 2005 Worldwide Report', you will see Canada listed as having more reserves than Iran and Libya combined.
 - (OGJ, Dec. 19, 2005 lists Canada @ 178 billion barrels; Libya @ 39 billion barrels, Iran @ 132 billion barrels).
- And last year, President George Bush said, "...we've got to become less dependent on energy from overseas. We appreciate the fact that Canada's tar sands are now becoming economical, and we're glad to get the access toward a million barrels a day, headed toward 2 million barrels a day." (March 23, 2005).
- It is amazing how far Alberta has come in the past short while. Because our oilsands reserves have been quantified by an independent evaluation of the data...*Alberta has now become a fundamental part of a continental energy equation.*

OILSANDS AND THE EUB

- We all know that Albertans have been blessed by our abundant resources.
- And the challenge for all of us is to make sure this development is done right.
 - That's why the Board was created 70 years ago...to have a long term impact.
- At times, the EUB has made tough decisions in order to conserve Alberta's energy resources.
- You will recall 2 years ago, the EUB issued our 'Bitumen Conservation' decision, which shut-in about 1000 gas wells in the Athabasca oilsands area.
 - We shut-in those wells because we believed that gas production from those wells was leading to a risk to 'in situ' bitumen recovery in the area.
 - Through that decision, we believe we conserved about 25.5 billion barrels of bitumen.
- We have also made other lower profile decisions, which we calculate have conserved another 1 billion barrels of bitumen in the oilsands.
- Today, as we are front and centre on the world stage...we need to continue to carefully consider another aspect of conservation...the potential environmental effects of each oilsands project.
- Potential environmental impacts include:
 - surface disturbances,
 - air emissions,
 - water quality,
 - and impacts to fish and wildlife habitat.

- In response to these challenges, the Cumulative Environmental Management Association (CEMA) was created, bringing together regional stakeholders from industry, First Nations, environmental groups and government agencies.
- The EUB plays an active role in CEMA, as it represents the kind of commitment and long-term planning necessary for the sustainable development of the oilsands.

EUB OILSANDS DECISIONS AND THE ENVIRONMENT

- You can also see that commitment in our oilsands decisions.
- For example, the last two oilsands mining hearings for the Shell Jackpine and CNRL Horizon projects were carried out jointly between the EUB and the ‘Canadian Environmental Assessment Agency’,
- During those hearings, we heard evidence from First Nations, local residents, environmental groups, a medical staff association, and representatives from other regulatory bodies.
- Those projects were approved, but with stringent conditions and recommendations relating to;
 - Developing comprehensive surface water and fish monitoring programs,
 - Health studies dealing with First Nations,
 - Establishment of instream flow needs for the Athabasca River,
 - And the development of wildlife monitoring programs and reviews of wildlife corridors.

ALBERTA - CAPACITY TO STORE 50 YEARS WORTH OF CO₂

- The EUB’s efforts in CO₂ sequestration also have the potential to significantly reduce atmospheric emissions from oilsands development.
- After more than a decade of research and work, the EUB is recognized as a world leader in the evaluation of sites for CO₂ geological storage.
- The scientists at our Alberta Geological Survey have determined that Alberta has the capacity to store about 50 years worth of CO₂ from large sources, or 8000 megatonnes, within depleted oil and gas reservoirs in Alberta.
- Currently, there are 5 sites in Alberta where CO₂ is injected for enhanced oil recovery, and another 33 sites throughout the province where H₂S and CO₂ are injected deep into the ground.
- The EUB is committed to continued leadership in CO₂ geological storage and we will continue to improve our regulatory framework, and assist with international efforts in this area.

CONVENTIONAL OIL – 209 MILLION BARRELS IN 2005

- For many decades, conventional oil was the bread and butter of Alberta’s energy industry.
- Last year, we saw Alberta produce 209 million barrels of conventional crude oil.
- At the same time, we actually saw the recoverable reserves of conventional oil in the ground increase by 2% over 2004 to 1.6 billion barrels.

- This was due to additional discoveries and new technology which allows more oil to be recovered from existing reservoirs.

NATURAL GAS – 4.9 TCF PRODUCED IN 2005

- In terms of natural gas, production in Alberta declined by 2% last year from the previous year, as we saw about 4.9 trillion cubic feet of gas produced.
- This year's Reserves Report estimates there is still about 41 trillion cubic feet of recoverable gas reserves in the ground.
- With regard to coalbed methane, this year's Reserves Report notes that CBM now contributes about 2% of the province's total gas production, helping offset the decline in Alberta's conventional gas production.
- This is an extremely important resource, as our Alberta Geological Survey estimates there to be about 500 trillion cubic feet of CBM in place in Alberta.

COAL

- Turning to coal. In 2005, 11 coal mines in Alberta produced **33 million** tonnes of raw coal.
 - This resource supplied fuel for about 65% of the province's electricity generation last year.
- Alberta massive coal reserves of over **34 billion** tonnes represent over 1000 years of supply at current production levels.

TERRORISM AND ALBERTA'S ENERGY INFRASTRUCTURE

- Just before I conclude, I want to focus on the recent concerns about the potential for terrorism in our province.
- Over the past few weeks, Albertans have wondered if we are vulnerable to terrorist attacks in our energy industry.
- I would like to assure you that the EUB has developed stringent regulations to ensure the protection of critical energy infrastructure in Alberta.
- EUB regulations direct companies with critical infrastructure to develop terrorist mitigation plans.
 - The EUB has audited these plans and we are proud to say that industry is in 100 per cent compliance with our security management regulations.
- Our terrorist mitigation strategies are intelligence based. We are not undertaking these efforts alone.
- The EUB is linked to local, regional, national and international intelligence networks that enable us to proactively work with companies and other agencies to ensure Alberta's critical energy infrastructure is protected.

CONCLUSION

- In closing, I would like to thank you for coming today as we announce this important news about the present and future of Alberta's energy resources.
- Alberta has been blessed by abundant resources, and we have all benefited from them.
- Our challenge today, as we are front and centre on the world stage, is to move forward and make sure that oil and gas development continues to be done right in Alberta.
- Thank you.

The following links will take you to

[News Release 2006-24](#) (June 15, 2006)
[ST98-2006](#)