

QUESTIONS FROM TENURE INFORMATION EXCHANGE 2009

PROVINCIAL ENERGY STRATEGY

Is the Government of Alberta encouraging electricity generation from nuclear to meet oil sands development needs and as a “clean air” strategy?

The Government of Alberta remains open-minded on the merits and challenges of nuclear power generation. As a first step in considering this issue, the Government of Alberta created a “Nuclear Power Expert Panel” to gather information and present facts on nuclear energy to Albertans. A broad public consultation has also been conducted to obtain Albertan’s views on the issue. The public consultation process encouraged an open discussion in Alberta and has provided feedback that will be important in developing a provincial policy on the issue of nuclear power generation in the near future.

Would new education programs currently under development qualify for Department Financial support if they meet Energy literacy criteria?

The department is working to understand the energy literacy needs of Albertans. Over the course of the next year, a plan will be developed to advance greater energy-related education, awareness and literacy. The department will work with interested stakeholders in preparing the plan, including implementation and identification of funding requirements.

Re: Public Education. Is there any plan to model the Alberta Public Education plan on that of other provinces such as British Columbia to accelerate the implementation of such a program?

Alberta is interested to learn from experience in all jurisdictions in preparing its energy literacy plan. There is no intent to model Alberta’s energy literacy plan on any other jurisdiction. Rather, the department is working to understand the particular energy literacy needs of Albertans to deliver a product that Albertans can use and want.

How will the public become more literate about energy issues as a result of the Provincial Energy Strategy?

The Department will develop a multi-faceted approach to help Albertans learn more about their energy industry including preparation of materials, collaboration in development of school curriculum and collaboration with industry stakeholders to deliver objective and informed information on Alberta’s energy industry.

How will the Alberta Government support unconventional oil and gas initiatives?

Support for more research and development (R&D) is advanced in the Provincial Energy Strategy as an opportunity for government to support future unconventional oil and gas. Government will identify opportunities to provide support to unconventional oil and gas projects with R&D funding.

Alberta's royalty framework states that the government will implement 'shallow rights reversion' to maximize extraction of the province's resources. The Shallow Rights Reversion Initiative will, in the long term, free up non-producing shallow zones that would become available for resale. These shallow rights include some of the potential unconventional reservoir rocks that are currently held by deeper production.

Can you comment on how the Alberta Government is prepared to support the explorers and producers to create new investment in this province relative to achieving this Clean Energy Strategy? Will there be true business incentives? (ie. tax credits, royalty credits)

A streamlined model for provincial Research and Development (R&D) will ensure effective allocation of R&D funds to energy-related activities such as new clean energy technologies and processes to improve the environmental sustainability of energy development in oil, gas, oil sands and other energy resource development. A case in point is the \$2 Billion allocated for new testing and piloting of carbon capture and sequestration (CCS) to help clean energy development. Government funding for renewable electric power generation is in place through the Alberta Bio-Energy Plan, supporting new investments in bio-energy and bio-fuels.

CARBON CAPTURE AND STORAGE (CCS)

You outlined the merits of CCS and Alberta's geological attributes. What evidence is there that CCS is "safe"?

The various components of CCS have been in use in industrial application around the world for many years. While it is true that we need to gain more experience with operating each of the components together at a commercial scale, they are well understood. Canada is home to the Weyburn-Midale Project, one of the most studied CO₂ injection schemes in the world that has successfully injected over 5 million tonnes of CO₂. The site has been monitored extensively by an international team of scientists and no leakage has been detected to date. As an energy producer, the Province has extensive data and experience with the geology of the Western Canadian Sedimentary Basin. This formation has contained world scale volumes of hydrocarbons that have formed over millions of years and it is this same geology that will act as an effective trapping mechanism to store CO₂. Alberta has proven success safely handling H₂S transport, compression and disposal and managing CO₂ will be similar. Effective management of CO₂ will involve proper site selection, engineering controls, and a robust monitoring program. Our Branch is evaluating current practices with a view to ensuring the long term safety of storing large volumes of CO₂.

How can a freehold well mineral owner benefit from a well that is being used by CO₂ recovery?

A potential benefit for a freehold owner would be enhanced recovery from freehold oil wells completed in mature pools. If CO₂ were injected into a producing reservoir that they own, it could result in a net increase in the production of oil from that property. A high level screening of Alberta's oil pools has taken place to examine the suitability and potential for enhanced oil recovery. Key results of this analysis will be included in the CCS Council's final report.

Is there a template of an agreement?

The Department of Energy is currently developing a Tenure agreement for Crown owned rights. It is unknown if a similar process is taking place for freehold mineral rights. If you have further questions about the Crown process, please send them to Retha Purkis, our Director of Unconventional Tenure at Retha.Purkis@gov.ab.ca

FREEHOLD MINERAL TAX

How much tax is generated annually from the Freehold Mineral Tax?

The 2008 annual assessment is \$300 million.

What are the freehold mineral tax rates?

For gas production, the rate is 6.9 per cent with rate reductions down to 1 per cent for low productivity wells.

For oil production, the rate is 6.3 per cent with rate reductions for low productivity.

LAND-USE FRAMEWORK

Will Regional Plans recognize/outline First Nations Traditional Lands?

Traditional Lands will be one of the things the Regional Advisory Councils (RAC) and the Government will be considering in the development of regional plans.

Will Regional Plans recognize Alberta Aboriginal Consultation Policy?

Yes

Are First Nations prepared to integrate their own "Consultation Process" into the Regional Plans?

The Métis Settlements General Council and Treaty 6 and 8 all have members on the RAC for the Lower Athabasca Regional Plan. The Government of Alberta is also committed to consulting with each First Nation through the development of the regional plan as well.

Why does the Government permit certain access roads to Crown forest reserves to be closed at the mere request of ranchers? ie. no access to Flat Creek or Pekisko Creek valleys?

Decisions regarding access to public land rest with Sustainable Resource Development (SRD), not individual disposition holders. These decisions are based on the need to control or restrict access in the interest of achieving broader resource management outcomes.

Under section 18 of the Forest Reserves Regulation, prohibitions to access to high risk areas can be implemented. Under section 18, situations where access may be restricted include imminent harm to grazing livestock and imminent damage to grazing rights or rangeland health. The purpose is to ensure proper management and protection of the range resources through appropriate access controls. However, it is SRD, not the permit holder that would make these decisions.

If industry has questions or concerns about gaining access to public land, they are encouraged to contact the applicable local SRD office.

Has the issue of selling crown reserve lands to grazing lease holders been settled once and for all or will this issue arise again and again?

In general, public lands in the White area can be sold to facilitate agricultural expansion and for certain types of commercial, industrial and recreational uses. In order to sell public land, the suitability for sale would need to be verified. Public land is not sold if there are access problems or if it is needed for conservation, critical wildlife habitat, or other Alberta government programs. Land in the Rocky Mountains Forest Reserve is not available for sale.

Please comment further on how thresholds for cumulative effects will be quantified?

There will be quantifiable thresholds in regional plans for things like nitrous oxide and sulphur dioxide and water quality and quantity. Any thresholds will be determined through processes that look at balancing economic, social and environmental perspectives.

How will the regional groups evaluate the tricky balance between optimized development of unconventional gas (coalbed methane and shale gas) on high-yield farm land? Especially, as downspacing with vertical wells is deemed the most efficient recovery method?

Analyzing competing land uses is always a consideration. This might not be a case of optimization but rather balance between development of things like coal bed methane and reducing the conversion of agricultural land. Unconventional gas development has benefited from advancement in well drilling technology that help to minimize environmental footprint by utilizing not only vertical drilling but more frequently, also horizontal and directional drilling.

To the extent that the Land-use Framework process leads to “sterilization” of existing petroleum and natural gas tenures, has a compensation mechanism or policy been established?

There are no new compensation provisions for mines and minerals under the *Alberta Land Stewardship Act*. If Government determines through a regional plan that it is not in the public interest to develop mineral resources, the *Mines and Minerals Act* and the Mineral Rights Compensation Regulation will be used to determine if and how compensation would be provided.

ERCB-LICENSEE LIABILITY RATING (LLR) PROGRAM

Licences Transfer Assessment- If post transfer LLR equals or exceed "1.0", can you explain what would equal 1.0? Is it the number of wells?

The LLR assessment is a comparison of a licensee's deemed assets to its deemed liabilities. The program considers a producer licensee's deemed asset to be its cash flow from oil and gas production reported to the Petroleum Registry of Alberta and a nonproducer licensee's (NPL) deemed asset to be its cash flow from midstream activities. The deemed liability of both producer and nonproducer licensees is the cost to abandon and reclaim its wells and facilities included within the scope of the LLR Program. For LLR Program calculation purposes, a licensee is considered to derive all of the benefits and to hold all of the liabilities of the wells, facilities, and pipelines for which it is the licensee.

Calculation of LLR Ratio:

$$\text{LLR} = \frac{\text{Deemed Assets}}{\text{Deemed Liabilities}} = \text{Ratio}$$

As a company considering entering Alberta through an acquisition, what e steps should I take prior to becoming an Alberta operator?

It is recommended that if considering entry into the oil and gas industry that you become familiar with all applicable regulatory requirements. Specific to the various ERCB Liability Management Programs, the following Directives should be referred to:

- Directive 067: Applying for Approval to Hold ERCB Licences
- Directive 006: Licensee Liability Rating (LLR) Program and Licence Transfer Process
- Directive 011: Licensee Liability Rating (LLR) Program, Updated Industry Parameters and Liability Costs
- Directive 024: Large Facility Liability Management Program
- Directive 068: ERCB Security Deposits
- Directive 001: Requirements for Site-Specific Liability Assessments in Support of the ERCB's Liability Management Programs

When a new company comes on the scene, how does the Company establish an LLR rating?

The ERCB conducts a LLR assessment of each licensee monthly, following receipt of updated production information from the Petroleum Registry of Alberta. This is usually on the first weekend of each month.

Additionally, on receipt of a licence transfer application, the ERCB will conduct a LLR assessment of both the transferor and the transferee. The licence transfer LLR assessment is conducted as if the transfer were approved (Post-Transfer LLR).

In order to receive an incremental security deposit refund, is a reclamation certificate required, or is well abandonment by ERCB regulation standards sufficient?

A licensee whose deemed liabilities exceed its deemed assets (LLR below 1.0) is required to place a security deposit with the ERCB equal to the difference between its deemed liabilities and deemed assets. Any activity (i.e. Increase production volume, abandonment, reclamation) undertaken may reduce the difference between the licensee's deemed liabilities and deemed assets. This may result in the licensee being eligible for an incremental or full security deposit refund.

Can you please give an example of how the Orphan Fund kicks in to abandon a well? Also, is the mineral rights holder liable for any portion of the abandonment (i.e. is different from the well licensee)

Pursuant to section 70(2) of the Oil and Gas Conservation Act (OGCA), the ERCB may designate a well or facility an orphan where it is determined that there is a defaulting working interest participant who:

- has an obligation under the OGCA to contribute toward suspension costs, abandonment costs or related reclamation costs,
- has not contributed to those costs as required by the OGCA, and
- in the opinion of the ERCB, does not exist, cannot be located or does not have the financial means to contribute to the costs, as required by the OGCA.

The Orphan Fund will only abandon a well or facility, if the above criterion are met.

A mineral rights holder is liable to abandon a well; to the extent they have a beneficial or undivided legal interest in the well (well licence). That is to say, the extent to which a mineral rights holder is a working interest participant in the well.

Has the ERCB seen an increase in abandonments due to Government of Alberta incentives on abandonment of wells?

The province is providing \$30 million to be invested by the Orphan Well Association in abandonment and reclamation projects with a focus on high-priority, very old "legacy" sites and on final reclamation efforts for abandoned sites – all of which pre-date the creation of the Orphan Well Association and the establishment of modern industry practices and regulatory standards. There are more than 600 estimated sites that fall into these categories.

Government of Alberta News Release – March 3, 2009

When selling wells we can check the LLR, however, sometimes transfers are rejected for compliance reasons. Can you find out information on companies that are non-compliant? Is that data public?

The ERCB website at www.ercb.ca provides access to the public to the ERCB's Monthly ST108: Enforcement Action Summary Report. This report provides industry compliance statistics and a list of enforcement actions taken in response to industry noncompliance. The report expands on past reporting of non-compliances and includes all ERCB compliance categories with requirements that have been designated high risk. The summary also contains Low Risk Enforcement – Global REFER and legislative/regulatory enforcement action.

Publication of the monthly summary occurs within 120 days of the enforcement actions. The summary is posted to the ERCB website on the last Thursday of each month.

How do you determine the deemed asset value?

When calculating the deemed assets of a producer licensee, the ERCB uses the provincial industry average netback.

The deemed asset of a producing licensee is the cash flow derived from oil and gas production reported to the Petroleum Registry of Alberta from wells for which it is the licensee. Deemed assets are calculated by multiplying a licensee's reported production of oil and gas from the preceding 12 calendar months in cubic metres oil equivalent (m³ OE) by the 5-year rolling average industry netback by 3 years.

When calculating the deemed assets of a nonproducer licensee (NPL), the ERCB uses the NPL's own calculated netback.

The deemed asset of a NPL is the sum of the cash flow derived from facility throughput of water injection/disposal, oil processing, and gas processing reported to the Petroleum Registry of Alberta from facilities for which it is the licensee, and the cash flow derived from oil and gas production reported to the Petroleum Registry of Alberta from any well for which it is the licensee. The deemed asset of an NPL is calculated by multiplying the NPL volume from the preceding 12 calendar months by the NPL's netback by 3 years.

How are LLR security deposits held?

- a. **In secure/guaranteed deposits, or**
- b. **In investments that are susceptible to market fluctuations?**

The ERCB establishes a separate interest-earning account with a Canadian chartered bank for each licensee placing a cash deposit with the ERCB. The bank is responsible for issuing monthly account statements and annual T-5 statements to each licensee having a cash deposit.

OTHERS

SHALLOW RIGHTS REVERSION

Please give a short update on Shallow Rights Reversion. Is it still moving forward?

All agreements that have been purchased since January 1, 2009 have been subject to shallow rights reversion at expiry. The *Mines and Minerals Act* was amended to include provisions for shallow rights reversion notices (section 82.1). This allows the Department to serve a 3-year shallow rights reversion notice. The intent is to start serving a small amount of notices (likely in 2011), gradually building to the full amount through several years. The P&NG Tenure Regulation must be updated which will occur in the next year or so. Other work that must be done is to publish a schedule indicating what years will be impacted with notices, finalizing procedures, updating the continuation application form and guidelines, and the Technical Guidelines for Continuation.

ENERGY INCENTIVE PROGRAM

Since the Province benefits from a Freehold Mineral Tax, why does the Government not allow for the recently announced Drilling Incentives to apply to wells drilled on Freehold lands?

The Drilling Incentive Program applies to wells drilled on Alberta Crown mineral rights. The rationale for this is that the Drilling Credits are based on, and are credited to Alberta Crown royalties paid. As wells drilled on freehold mineral rights do not pay Alberta Crown royalties, they do not qualify.

Drilling Incentives/reducing royalties: need to clarify who/how the incentive will be shared between working interest owners, i.e. the Operator should not be the recipient of 100% of the credits.

The drilling credit for both gas and oil will be payable to the working interest owner. Program details will be made available as soon as they are finalized.