

Mr. Andrew Read
Pembina Institute
Suite 300, 9804 – Jasper Avenue
Edmonton, AB T5J 0C5

December 22, 2016

Access Request: E14-G-0575

Dear Mr. Read:

Subject: Freedom of Information and Protection of Privacy Act Request for records pertaining to the Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations.

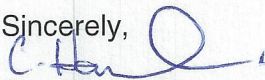
I am replying to your request for access to the subject records under the *Freedom of Information and Protection of Privacy (FOIP) Act*. Environment & Parks located records and is pleased to provide you with access to these records. This decision was made by Lora Pilliow, Assistant Deputy Minister, Policy, Legislation and Evaluation, Environment & Parks. A package consisting of 174 pages is enclosed.

Please note:

- On page(s) 150-151, 155, 156 & 157 information was severed (removed), applying Section 21 of the FOIP Act.
- On page(s) 22, 24, 61, 86, 88, 93, 95, 103, 106, 108, 120, 121, 155, 156, 157 & 165 information was severed (removed), applying Section 24 of the FOIP Act.
- Non-responsive information was removed from page(s) 3-4, 9-11, 16-19, 40, 44-47, 49-51, 54-55, 57-58, 64-65, 67, 70, 73, 75, 81-82, 104-105, 109, 110, 112, 118, 119, 120, 121, 130-131, 133, 135, 136, 138, 155, 156 & 157-158.

If you have any concerns about the processing of your request, please write or call me at (780) 422-7502, so that we can look at ways to address your concerns. If, however, we are unable to resolve your concerns, under section 65(1) of the Freedom of Information and Protection of Privacy Act, you may ask the Information and Privacy Commissioner to review [this decision]. To request a review, you must complete and deliver a Request for Review form within 60 days from the date of this notice to the Commissioner at 410, 9925 – 109 Street, Edmonton, Alberta, T5K 2J8. The form is available under the Resources tab on the Commissioner's website www.oipc.ab.ca or you can call 1-888-878-4044 to request a copy of the form.

If you request a review please provide the Commissioner with a copy of your original request, any letter(s) of clarification, a copy of this letter and provide the Commissioner with the reasons why you are requesting a review.

Sincerely,

Carol Hamelin,
Access & Privacy Advisor

Enclosure (Record Package consisting of 174 pages and sections 21 & 24 of the FOIP Act)

Minister
 Deputy Minister

BRIEFING NOTE

For Decision
 For information

AR {Action_Request_Number}

SUBJECT: Federal greenhouse gas emissions regulations

DATE: September 25, 2012

ISSUE:

In efforts to contribute to Canada's Copenhagen commitment and to address ongoing international concerns related to greenhouse gas emissions, Environment Canada is moving forward with a sector-by-sector approach to regulating greenhouse gas emissions.

BACKGROUND:

The sector-by sector approach lacks policy coherence and will likely result in uneven or unfair treatment across facilities, sectors, and regions. In addition, the piecemeal sectoral approach does not allow for the most effective and efficient policies to move forward – a key issue Alberta is also raising through discussions on equivalency and our engagement in the sector working groups. Alberta is advocating in every sector for comprehensive competitiveness and economic analysis, and for full access to compliance flexibility through offsets, interfacility trading and a provincial technology fund. Sectorally differentiated targets are likely useful for achieving Alberta's Climate Change targets without undue economic burden, but a common regulatory architecture and compliance flexibility are vital for achieving efficient reductions and maintaining regulatory clarity.

Starting in 2010, the first sector policies to be developed by Environment Canada were for the transportation and electricity sectors. The transportation policies mirror those developed in the United States which Alberta is supportive of. The *Federal Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations* was developed with very little consultation with the provinces or industry prior to publication. As a result Alberta and Alberta based power generators have had to do significant work to try make very minor changes to a regulation that has some fundamental problems for Alberta. In response to Alberta's and other parties' concerns on this lack of engagement, process working groups have been established to engage the industries and most effective provinces in the development of regulations for other sectors. A Deputy Ministers committee was also formed to keep all provinces informed of all Greenhouse Gas policy developments. Both the process working groups and the Deputy Minister committee were discussed and agreed to by Ministers Kent and McQueen when they met in Durban in December, 2011.

Alignment of greenhouse gas emissions regulations and mid-life base level industrial emission requirements (BLIERS) proposed through the national Air Quality Management System also needs to be addressed. Alberta does not support adoption of the mid-life base level industrial emission requirements for the coal-fired electricity sector, as the existing provincial air framework agreed to by a multi-stakeholder process under the Clean Air Strategic Alliance (CASA) for this sector will achieve substantial air pollution reductions much more cost effectively and without prejudicing the continuity of provincial electricity supplies.

Coal-fired Electricity

Environment Canada posted Gazette 2 of its Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations on September 12, 2012.

Environment Canada has offered alterations to their regulation that provide some positive shifts that address many of Alberta's initial requested modifications:

- Environment Canada has moved to allow a two-year extension to end of life rather than an 18 month extension for those adopting carbon capture and storage on existing facilities.
- Environment Canada has moved to a 420 tonnes carbon dioxide per gigawatt hour standard (from 375) which is more broadly accepted as a "clean as gas" standard.
- Environment Canada has moved to a 50 year life while maintaining emissions reductions in 2020 and 2030, which will set an end of life for some facilities before 50 years.
- Environment Canada has given recognition for early unit shutdown on a tonne for tonne basis, but did not allow recognition for temporary shutdown (for example, this could have extended life for Sundance 1 and 2)
- Environment Canada did not allow for facilities that have an approval prior to 2015 to fall under the category of "existing units" (for example, this could have allowed Maxim's proposed new plant which has already been approved to come on line without the emissions cap of 420 tonnes of carbon dioxide equivalent per gigawatt hour).
- Environment Canada has expressed interest in a provincial equivalency agreement that would achieve equivalent outcomes within the electricity sector in Alberta. Sector level management would be an improvement over the lack of flexibility in the draft regulation, but is very sensitive to the assumptions used in setting sector outcomes and there are large outstanding differences between the Alberta and Canada projections for the sector. There are also a significant outstanding issue regarding the treatment of behind the fence generation, cogeneration, renewable generation, and the potential for federal regulations on gas fired generation. Environment Canada has expressed an interest in working together on these topics.

Next Steps – Coal-fired Electricity:

- Evaluate potential costs and benefits to pursuing an equivalency agreement and complete analysis on impacts of the modifications made in Gazette 2.
- Evaluate impacts of Gazette 2 on the Clean Air Strategic Alliance framework and the proposed base level industrial emission requirements (BLIERS)

E14-G-0575

Pages (s) 3 & 4 has been withheld in their entirety, as these pages are not responsive to your request.

Equivalency

Provincial equivalency will be assessed on a regulation-by-regulation basis. Provinces would be required to demonstrate that equivalent environmental outcomes are met or exceeded for each sector through established provincial regulation. Alberta is currently in discussion with the federal government to explore an equivalency agreement to the coal regulation. A number of outstanding questions remain, including:

- incentives for going beyond the expected outcomes in one sector by allowing reductions to be recognized across sectors
- accounting for the purchase of offsets and technology fund contributions
- recognition of variances in production forecasting and therefore emissions forecasting
- uncertainty of a potential forthcoming natural gas electricity regulation

Alberta will need reassurance on many of these issues before an agreement can be fully contemplated. In addition, Alberta will have to modify its Specified Gas Emitters Regulation to achieve equivalent outcomes in the electricity sector before an equivalency agreement can be signed.

Next Steps – Equivalency:

- Continue discussion with Environment Canada to address questions and concerns of draft agreement
- Continue analysis of the pros and cons of moving forward with equivalency

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Alberta Climate Change Strategy Renewal

Alberta Environment and Sustainable Resource Development is also in the process of renewing the 2008 Alberta Climate Change Strategy. An update to the underlying modelling is in its final stages and a cross ministry working group has been involved in both the modelling and discussion of the broader strategy. Initial modelling results show:

- Alberta is not currently on track to meet its provincial targets for 2020 and 2050
- The federal regulations announced to date achieve reductions closer to Alberta's targets but still do not meet them
- Alberta can achieve equivalent reductions to the federal regulations and our own targets with relatively minor impacts on Gross Domestic Product
- Regulatory design has a large impact on the economic impacts of achieving Federal or Provincial emissions targets

Next Steps - Alberta Climate Change Strategy Renewal

- Sensitivity analysis and evaluation of the modelling results is ongoing. Alberta's preferred approach would be to finish the review of the provincial strategy and established Alberta's preferred path forward as a whole prior to finalizing sector based regulations and any associated equivalency agreements federally.
- Engagement with stakeholders in Climate Strategy

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KEY MESSAGES (For Communications' use only):

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For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Bob Savage

TELEPHONE: 780-644-4918

SUBMITTED BY: Policy Division

- Requires legislative/regulatory change

- Minister
- Deputy Minister

BRIEFING NOTE – MEETING

- For Decision
- For Information

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Meeting Date: Arial 12, no bold
Time: Arial 12, no bold
Attendees: Arial 12, no bold

AR {Action_Request_Number}

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SUBJECT: Federal greenhouse gas emissions regulations

DATE: September 26, 2012

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ISSUE:

In efforts to contribute to Canada's Copenhagen commitment and to address ongoing international concerns related to greenhouse gas emissions, Environment Canada is moving forward with a sector-by-sector approach to regulating greenhouse gas emissions.

BACKGROUND:

The sector-by sector approach lacks policy coherence and will likely result in uneven or unfair treatment across facilities, sectors, and regions. In addition, the piecemeal sectoral approach does not allow for the most effective and efficient policies to move forward – a key issue Alberta is also raising through discussions on equivalency and our engagement in the sector working groups. Alberta is advocating in every sector for comprehensive competitiveness and economic analysis, and for full access to compliance flexibility through offsets, interfacility trading and a provincial technology fund. Sectorally differentiated targets are likely useful for achieving Alberta's Climate Change targets without undue economic burden, but a common regulatory architecture and compliance flexibility are vital for achieving efficient reductions and maintaining regulatory clarity.

Starting in 2010, the first sector policies to be developed by Environment Canada were for the transportation and electricity sectors. The transportation policies mirror those developed in the United States which Alberta is supportive of. The *Federal Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations* was developed with very little consultation with the provinces or industry prior to publication. As a result Alberta and Alberta based power generators have had to do significant work to try make very minor changes to a regulation that has some fundamental problems for Alberta. In response to Alberta's and other parties' concerns on this lack of engagement, process working groups have been established to engage the industries and most effective provinces in the development of regulations for other sectors. A Deputy Ministers committee was also formed to keep all provinces informed of all

Greenhouse Gas policy developments. Both the process working groups and the Deputy Minister committee were discussed and agreed to by Ministers Kent and McQueen when they met in Durban in December, 2011.

Alignment of greenhouse gas emissions regulations and mid-life base level industrial emission requirements (BLIERS) proposed through the national Air Quality Management System also needs to be addressed. Alberta does not support adoption of the mid-life base level industrial emission requirements for the coal-fired electricity sector, as the existing provincial air framework agreed to by a multi-stakeholder process under the Clean Air Strategic Alliance (CASA) for this sector will achieve substantial air pollution reductions much more cost effectively and without prejudicing the continuity of provincial electricity supplies.

Coal-fired Electricity

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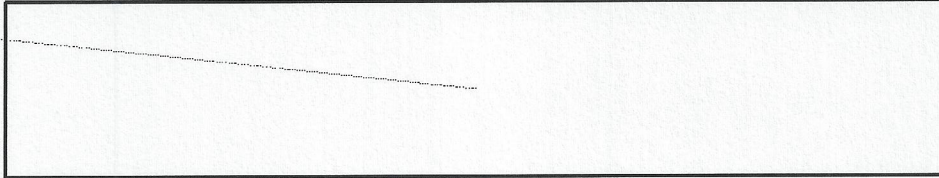
Environment Canada has offered alterations to their regulation that provide some positive shifts that address many of Alberta's initial requested modifications:

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Next Steps – Coal-fired Electricity:

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Pages (s) 9 & 10 has been withheld in their entirety, as these pages are not responsive to your request.



Equivalency

Provincial equivalency will be assessed on a regulation-by-regulation basis. Provinces would be required to demonstrate that equivalent environmental outcomes are met or exceeded for each sector through established provincial regulation. Alberta is currently in discussion with the federal government to explore an equivalency agreement to the coal regulation. A number of outstanding questions remain, including:

- incentives for going beyond the expected outcomes in one sector by allowing reductions to be recognized across sectors
- accounting for the purchase of offsets and technology fund contributions
- recognition of variances in production forecasting and therefore emissions forecasting
- uncertainty of a potential forthcoming natural gas electricity regulation

Alberta will need reassurance on many of these issues before an agreement can be fully contemplated. In addition, Alberta will have to modify its Specified Gas Emitters Regulation to achieve equivalent outcomes in the electricity sector before an equivalency agreement can be signed.

Next Steps – Equivalency:

- Continue discussion with Environment Canada to address questions and concerns of draft agreement
- Continue analysis of the pros and cons of moving forward with equivalency

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- The federal regulations announced to date achieve reductions closer to Alberta's targets but still do not meet them
- Alberta can achieve equivalent reductions to the federal regulations and our own targets with relatively minor impacts on Gross Domestic Product
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Next Steps - Alberta Climate Change Strategy Renewal

- Sensitivity analysis and evaluation of the modelling results is ongoing. Alberta's preferred approach would be to finish the review of the provincial strategy and established Alberta's preferred path forward as a

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whole prior to finalizing sector based regulations and any associated
equivalency agreements federally.

- Engagement with stakeholders in Climate Strategy

RECOMMENDATIONS:

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For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

ACTION//FOLLOWUP:

CONTACT:

TELEPHONE:

SUBMITTED BY:

- Requires legislative/regulatory change

BRIEFING NOTE

Minister

For Information

Meeting Name: Discussion on Fed Prov Items - GHG Regulations, Equivalency Agreements, Monitoring
Meeting Date: October 3, 2012
Time: 1:30 P.M. – 3:15 P.M.
Attendees: Minister Diana McQueen; Riley Georgsen; Dana Woodworth; Bob Barraclough; Bev Yee; (Environment and Sustainable Resource Development)

AR 50214

SUBJECT: Equivalency under federal coal-fired electricity greenhouse gas emissions regulation

DATE: October 2, 2012

ISSUE:

Alberta must determine the potential for achieving equivalency under proposed Federal Regulations for Coal-Fired Electricity. Gazette 2 of the regulation was released September 12, 2012.

BACKGROUND:

The federal government is currently pursuing a sector-by-sector approach to developing climate change regulations. Provincial equivalency will be assessed on a regulation-by-regulation basis. Provinces would be required to demonstrate that equivalent environmental outcomes are met or exceeded for each sector. The approach would not allow for provinces to balance reduction efforts across sectors. For example, if a provincial system achieved greater than required reductions in one sector, they would not be permitted to apply those additional reductions to establishing equivalency in another sector. A key concern with this narrow approach to equivalency is that provinces would not be permitted to address potential fairness issues across sectors created by the federal government's sector-by-sector approach, nor does it allow for the most effective, efficient reductions in greenhouse gas emissions.

Coal Fired Electricity Regulation

Specific to the regulation covering coal-fired electrical generation, Environment Canada has shared a draft equivalency agreement template that proposed total electricity sector emissions (on grid) as the metric to evaluate equivalency. This metric would not include industrial electricity generation for self use, such as cogeneration (off grid). Equivalency would be judged on the total cumulative emissions over five or ten year windows starting with 2015 – 2020, and 2020 – 2030. We are encouraged the proposal for equivalency reaches more broadly than the regulation and includes all electricity production, but we feel this scope must extend to include industrial self generation since an open and level playing field between generators is necessary to the functioning of Alberta's electricity market.

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The federal government set a sectoral emission limit for each five or ten year window that embodies both the forecasted impact of the federal regulation (the shut down of coal plants) and projections of electricity production. Both of these estimates are uncertain, with the margin of uncertainty likely being higher than the expected reductions resulting from the regulation.

In order to reduce the risk to both parties from uncertain production we have asked Environment Canada about backing out their production forecast and using a sector intensity metric to evaluate equivalency. Their initial response to this request was negative, but we will continue to pursue options to ensure forecasting uncertainty does not impact ability to reach intended environmental outcomes.

Our preliminary analysis of the emissions limit provided in the draft agreement suggests that Environment Canada has either over-estimated the emission reduction effect that could be expected from the proposed coal regulation or they have forecasted much lower production levels than predicted by the Alberta Electrical System Operator. We are working with both forecasters to better understand this discrepancy.

In addition, Alberta would like to clarify the treatment of credits for purchasing offsets outside of the Province within an equivalency discussion.

RECOMMENDATIONS:

- Further discussion is required at the working level to better understand a number of details including the development of the proposed emissions limit.
- We need to further understand how Environment Canada will frame equivalency in other sectors, particularly with respect to Alberta's technology fund which is central to our innovation and long-term emission reduction strategy.

For Minister/Deputy Minister's Use:

- Agree with recommendations
 Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Bob Savage

TELEPHONE: 780-644-4918

SUBMITTED BY: Policy Division

Requires legislative/regulatory change

BRIEFING NOTE

Deputy Minister
 Minister

For Information

AR 50214

SUBJECT: Update on federal sector approach for regulating greenhouse gas emissions

DATE: October 2, 2012

ISSUE:

Update on federal sectoral approach for regulating greenhouse gas emissions

BACKGROUND:

Update on federal greenhouse gas emissions regulations

From Alberta's perspective, the sector-by sector approach being taken by Environment Canada lacks policy coherence and will likely result in uneven or unfair treatment across facilities, sectors, and regions. In addition, the piecemeal sectoral approach does not allow for the most effective and efficient policies to move forward – a key issue Alberta is also raising through discussions on equivalency and our engagement in the sector working groups. Alberta is advocating in every sector for comprehensive competitiveness and economic analysis, and for full access to compliance flexibility through offsets, inter-facility trading and a provincial technology fund. Sectorally differentiated targets are likely useful for achieving Alberta's Climate Change targets without undue economic burden, but a common regulatory architecture and compliance flexibility are vital for achieving efficient reductions and maintaining regulatory clarity.

Coal-fired Electricity Sector

Environment Canada posted Gazette 2 of its Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations on September 12, 2012.

Environment Canada has offered alterations to their regulation that provide some positive shifts that address many of Alberta's initial requested modifications:

- Environment Canada has moved to allow a two-year extension to end of life rather than an 18 month extension for those adopting carbon capture and storage on existing facilities.
- Environment Canada has moved to a 420 tonnes carbon dioxide per gigawatt hour standard (from 375) which is more broadly accepted as a "clean as gas" standard.
- Environment Canada has moved to a 50 year life while maintaining emissions reductions in 2020 and 2030, which will set an end of life for some facilities before 50 years.

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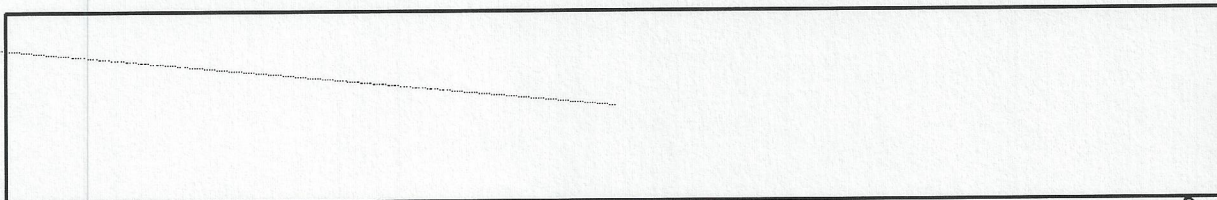
- Environment Canada has given recognition for early unit shutdown on a tonne for tonne basis, but did not allow recognition for temporary shutdown (for example, this could have extended life for Sundance 1 and 2)
- Environment Canada did not allow for facilities that have an approval prior to 2015 to fall under the category of "existing units" (for example, this could have allowed Maxim's proposed new plant which has already been approved to come on line without the emissions cap of 420 tonnes of carbon dioxide equivalent per gigawatt hour).
- Environment Canada has expressed interest in a provincial equivalency agreement that would achieve equivalent outcomes within the electricity sector in Alberta. Sector level management would be an improvement over the lack of flexibility in the draft regulation, but is very sensitive to the assumptions used in setting sector outcomes and there are large outstanding differences between the Alberta and Canada projections for the sector. There are also outstanding issues regarding the treatment of behind the fence generation, cogeneration, renewable generation, and the potential for federal regulations on gas fired generation. Environment Canada has expressed an interest in working together on these topics.

Coal-fired Electricity: Air Standards - There continues to be concern of alignment between the draft coal regulation and the mid-life base level industrial emission requirements (BLIERS) proposed through the national Air Quality Management System. Alberta does not support adoption of the mid-life BLIERS as we believe the existing provincial air framework agreed to by a multi-stakeholder process under the Clean Air Strategic Alliance for this sector, coupled with the planned federal greenhouse gas regulation for the same sector, will achieve substantial air pollution reductions much more cost effectively and without prejudicing the continuity of provincial electricity supplies. The federal government is proposing a mid life Base Level Industrial Emission Requirement for existing coal units. This requirement is not in line with the Clean Air Strategic Alliance Electricity Framework that requires facilities to meet new air emission standards at the end of their design life (at the end of forty years, an existing coal unit would be required to meet new emission standards for NO_x and SO₂).

Next Steps – Coal-fired Electricity:

- Evaluate potential costs and benefits to pursuing an equivalency agreement and complete analysis on impacts of the modifications made in Gazette 2.
- Evaluate impacts of Gazette 2 on the Clean Air Strategic Alliance framework and the proposed base level industrial emission requirements (BLIERS)

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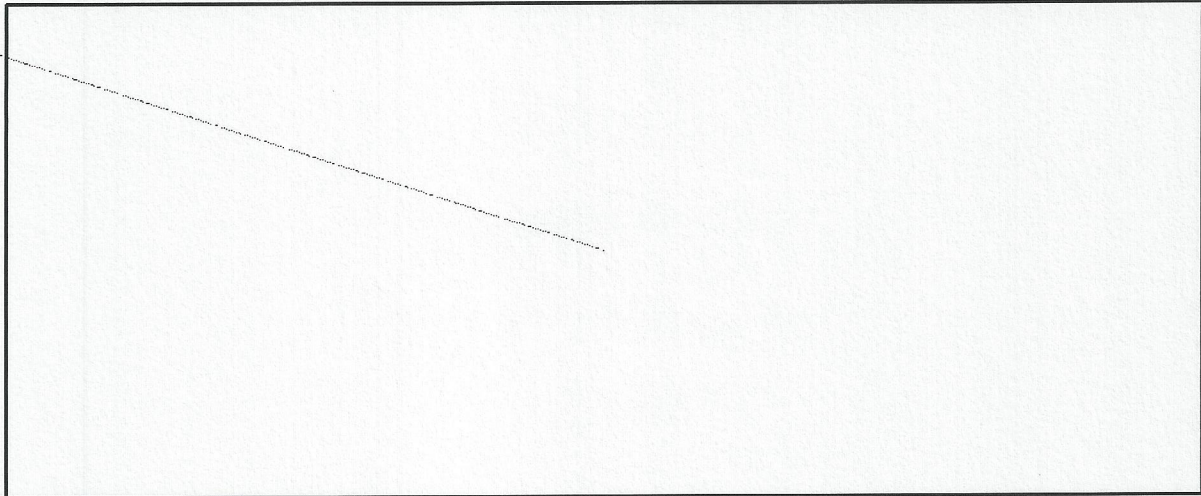


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Pages (s) 17 & 18 has been withheld in their entirety, as these pages are not responsive to your request.

NR



Equivalency

Provincial equivalency will be assessed on a regulation-by-regulation basis. Provinces would be required to demonstrate that equivalent environmental outcomes are met or exceeded for each sector through established provincial regulation. Alberta is currently in discussion with the federal government to explore an equivalency agreement to the coal regulation. A number of outstanding questions remain, including:

- incentives for going beyond the expected outcomes in one sector by allowing reductions to be recognized across sectors
- accounting for the purchase of offsets and technology fund contributions
- recognition of variances in production forecasting and therefore emissions forecasting
- uncertainty of a potential forthcoming natural gas electricity regulation

Alberta will need reassurance on many of these issues before an agreement can be fully contemplated. In addition, Alberta will have to modify its Specified Gas Emitters Regulation to achieve equivalent outcomes in the electricity sector before an equivalency agreement can be signed.

Future Sectors

Federal government has recently indicated the intention to regulate the chemical sector followed by natural gas electricity and pulp and paper sector.

For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

[Redacted]

CONTACT: Shannon Flint

TELEPHONE: 780-422-8463

SUBMITTED BY: Policy Division

Requires legislative/regulatory change

Deputy Minister

BRIEFING NOTE

For Decision

AR 50308

SUBJECT: CASA and the mid-life Base Level Industrial Emission Requirements for coal-fired electricity

DATE: October 26, 2012

ISSUE:

Some coal-fired electricity power producers have requested exemption from their commitments under the Clean Air Strategic Alliance Emissions Management Framework for the Electricity Sector due to the combined implications of the federal greenhouse gas emissions and Base Level Industrial Emission.

BACKGROUND:

Clean Air Strategic Alliance Emissions Management Framework for the Electricity Sector:

In Alberta, emissions from the electricity sector are managed under the 2003 multi-stakeholder consensus agreement developed by the Clean Air Strategic Alliance. The resulting framework was signed off by the Government of Alberta, non-governmental organizations, and all industry members (including ATCO and TransAlta).

Under the Clean Air Strategic Alliance framework, when an electricity generation unit reaches the end of design life (which is the later of 40 years or end of Power Purchase Arrangement), the operator is obligated to reduce emissions to meet the new standards of the day. These new standards are to be implemented through the *Environmental Protection and Enhancement Act* approvals issued to the company. The Clean Air Strategic Alliance Framework requires emission reductions in all cases, whether by physical emission reductions at a facility or credits acquired elsewhere within the electricity sector. Based on the recommendations of the Clean Air Strategic Alliance, Alberta enacted Regulation 33/2006: Emissions Trading Regulation in March 2006. This regulation outlines the flexibility mechanisms available in emissions trading to meet the emission reduction obligations.

These requirements also have the force of law within Alberta to ensure that the intended outcomes are achieved. If the required emission reductions are not achieved for a given unit within this sector, enforcement actions can occur as outlined in current provincial regulation.

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Federal mid-life Base Level Industrial Emissions Requirements:

A national electricity multi-stakeholder working group was established in 2011 to develop Base Level Industrial Emissions Requirements for the sector, as part of the Air Quality Management System. Environment Canada's approach for reducing nitrogen oxide (NOx) and sulphur dioxide (SO₂) emissions proposed specific performance requirements by the age of the unit. As a flexibility mechanism, Environment Canada proposed a fleet approach to meet these "mid-life" requirements, which would give some companies flexibility to manage their reductions amongst their fleet of units. However, any company that wishes to utilize this option would have to meet a more stringent mid-life Base Level Industrial Emission Requirements across their fleet, which is a potential disincentive to the flexibility option.

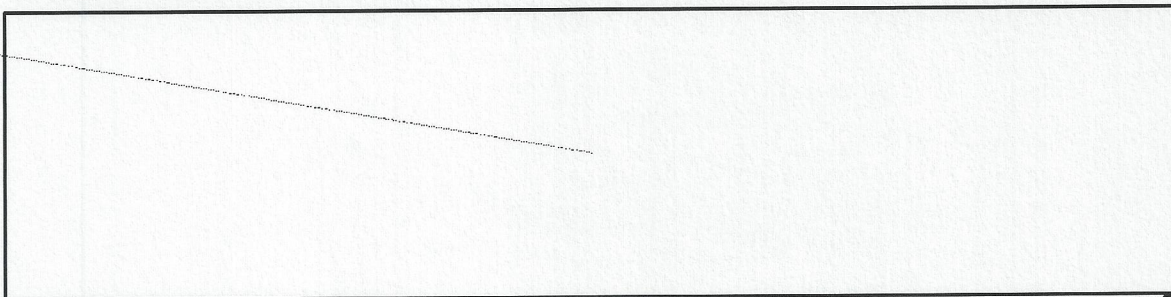
The multi-stakeholder working group has not held further discussions since the final report was completed at the end of March 2012. The group has become polarized with Alberta stakeholders (including the Government of Alberta, industry and environmental non-governmental organizations) expressing that a mid-life Base Level Industrial Emission Requirements for existing coal units is unnecessary as the Clean Air Strategic Alliance Framework achieves better environmental outcomes in a more flexible and economically efficient manner.

Clean Air Strategic Alliance Framework versus mid-life Base Level Industrial Emission Requirements:

The end of life approach to reductions in the Clean Air Strategic Alliance Electricity Framework, combined with its emission credit trading, allows companies to make significant reductions in a planned and cost-effective way. The cost of new units and major retrofits is significant in this sector and substantial time is required to plan and complete them. The end of life approach recognizes these realities, while still providing very substantial emission reductions over time.

The federally proposed mid-life Base Level Industrial Emission Requirements would undermine Alberta's end of life approach by requiring major unplanned reduction investments for units in specific time periods, regardless of what will result in the best economic and environmental outcomes. Alberta's electricity sector disputes Environment Canada's low estimates of retrofit costs and time lines. Alberta power producers estimate a cost of \$200 million per electrical production unit and several years time per unit to meet the proposed Base Level Industrial Emission Requirements.

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Ongoing negotiations and discussions with the federal government as well as commitments made provincially under the Clean Air Strategic Alliance Framework do not support this argument. The federal regulation does not address the air emissions from the end of life established through the Clean Air Strategic Alliance Framework (40 years or end of the power purchase agreements) nor does the greenhouse gas regulation satisfy the air pollution targets in the mid-life Base Level Industrial Emission Requirements.

Environment Canada has indicated, in preliminary discussions, that the Clean Air Strategic Alliance Framework would most likely be considered equivalent to the mid-life Base Level Industrial Emission Requirements. However, it is anticipated that any commitments from the federal government on equivalency are significantly reliant on the Clean Air Strategic Alliance Framework and industry commitments currently in place.

Clean Air Strategic Alliance Framework And The Trading System:

The Clean Air Strategic Alliance Framework requires generators to install emission controls at the 40th year of a unit's life and gives companies the ability to extend the life of a unit to 50 years through the use of credits. Credits are generated if a unit reduces emissions below historical levels before the unit must install emission controls.

Table 1 (In AR Attachments) illustrates the number and source of credits currently available. No credits have been traded to date. Units can continue to generate credits beyond those listed in Table 1. Who holds or owns a credit is confidential information under the Emissions Trading Regulation.

Environmental Outcomes:

As illustrated in the Figures 2 and 3 (In AR attachments) the Clean Air Strategic Alliance Framework provides a greater reduction in NO_x (nitrogen oxide) and SO₂ (sulfur dioxide) emissions than mid-life Base Level Industrial Emission Requirements. Both graphs assume coal facilities shut down at 50 year end of life under the federal greenhouse gas regulation.

Economic Considerations:

TransAlta has claimed that complying with the Clean Air Strategic Alliance Framework will cost approximately \$1.05 billion, including capital and operating costs. This estimation seems to be a worst case scenario that assumes abatement equipment would have to be installed on every unit. It does not seem to account for the flexibility afforded in the framework – to produce and/ or use credits allowing for the lowest cost reductions to be achieved through strategic investment of installing pollution control equipment only on some units and generating emission credits to be used by other units.

Greenhouse Gas Regulation for Coal-fired Electricity:

Figure 4 (In AR attachments) illustrates the effect of the greenhouse gas regulation in reducing generation from coal-fired electricity over time, compared to the expected demand for electricity growth. The gap between coal and demand will most likely be met through gas-fired electricity.

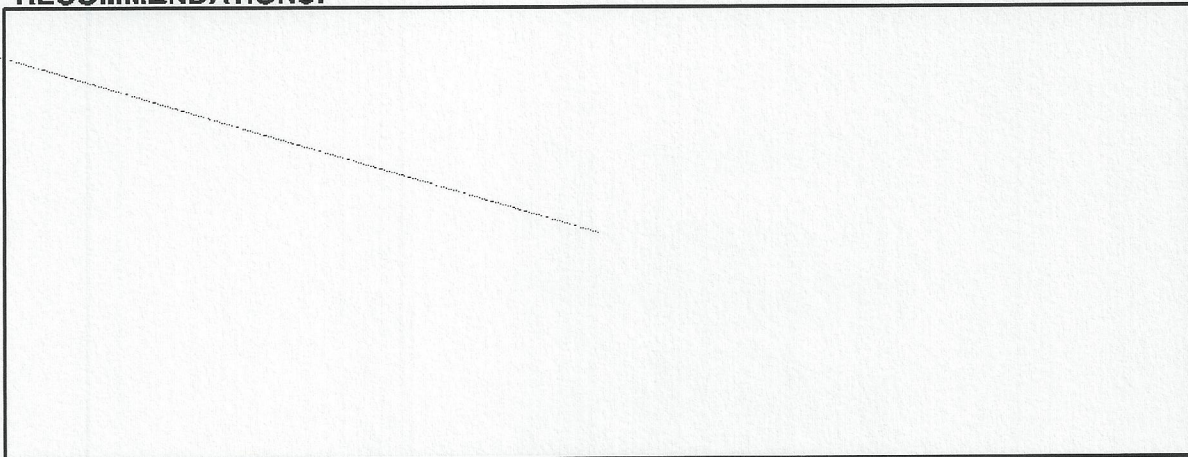
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Environment Canada has posted Gazette 2 of their coal-fired electricity greenhouse gas regulation. This requires new and facilities at end of life (50 years) to meet a performance standard of 420 tonnes of carbon dioxide equivalent per gigawatt hour to either shut down or implement carbon capture and storage.

The cost of the regulation depends on how many years individual units would have operated beyond the 50 years in absence of policy, which is an unknown factor. Consumer costs were estimated based on the price differential between coal and its displacement, mostly natural gas. According to Environment Canada, undiscounted additional generation costs for Alberta out to 2030 is estimated at \$2.8 Billion. The incremental cost to residential consumers is estimated at \$2.14/month. On the higher end, Alberta Energy ran a scenario that assumed natural gas-fired generation sets the power price 24 hours a day. If this were to occur in the future as natural gas comes on line to displace coal, residential and farm consumers could pay up to an additional \$23 per month for electricity.

RECOMMENDATIONS:

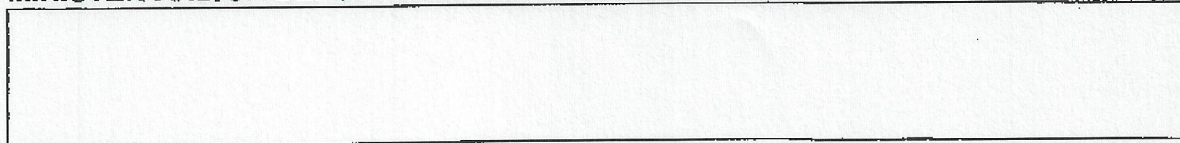
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For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:



CONTACT: Shannon Flint

TELEPHONE: 780-422-8463

SUBMITTED BY: Policy Division

- Requires legislative/regulatory change

Minister
 Deputy Minister

BRIEFING NOTE

For Decision
 For Information

AR 50308

SUBJECT: CASA and mid-life BLIERs in coal-fired electricity

DATE: October 26, 2012

ISSUE: Some coal-fired electricity power producers are raising concerns over the federal greenhouse gas emissions regulation and its implications to agreements they committed to through the Clean Air Strategic Alliance (CASA) electricity framework. If we do not continue to support the CASA framework, Environment Canada will proceed with implementation of mid-life Base Level Industrial Emission Regulations (BLIERs) for the coal sector. The BLIERs will provide a smaller environmental benefit under a more rigid and onerous system leading to greater overall costs and a potential for short-term generation issues.

Environment Canada has indicated the CASA framework would be considered equivalent to the mid-life BLIERs, but if we waffle on CASA at this time the ability to enter an equivalency agreement will erode. The CASA framework is established through a multi-stakeholder process, and issues such as the implication of the greenhouse gas regulation to end of life should be reviewed through the existing CASA review process.

BACKGROUND:

1. Brief background on managing air emissions from coal fired facilities (speaking to the fact we manage them through approvals and linkages with EPEA and CASA Electricity Framework). Information provided below on the CASA Electricity Framework may suffice.

In Alberta, emissions from the electricity sector are managed based on a multi-stakeholder consensus agreement developed by the Clean Air Strategic Alliance in 2003. Before then, the setting of emission standards was a very difficult and adversarial process that often played out in regulatory hearings. These issues culminated in 2000/2001 when public hearings were held for new developments at both the Genesee and Keephills power plants. At that time, Minister Taylor asked CASA to develop and electricity emission management system which would deliver improved environmental outcomes in the most cost-effective and efficient manner. The resulting framework was signed off by GOA, ENGO's and all industry members (including ATCO and TransAlta).

The crucial concept within the CASA framework is that when an electricity generation unit reaches the end of design life (which is the later of 40 years or end of Power Purchase Arrangement), the operator is obligated to reduce emissions to meet the new standards of the day. These new standards were to be implemented through the EPEA approvals issued to the company. The Alberta framework necessarily requires emission reductions in all cases, whether by physical emission reductions at a facility or reductions achieved elsewhere within the electricity sector. Based upon the recommendations of the Clean Air Strategic Alliance, Alberta enacted Regulation 33/2006: Emissions Trading Regulation in March 2006. This regulation outlines the flexibility mechanisms available in emissions trading to meet the emission reduction obligations.

These requirements also have the force of law within Alberta to ensure that the intended outcomes are achieved. Needless to say, if the required emission reductions are not achieved for a given unit within this sector, enforcement action needs to follow as prescribed in current provincial regulation.

2. Map of Alberta with coal facilities placed on them (table linked to each facility outlining CASA end of life year, federal end of useful life, SO₂ and Nox reductions expected from CASA and reductions expected based on assumptions of mid-life bliers below.

From Andrew Buffin

2. Brief background on CASA Electricity Framework and the trading system (how many credits are available and who owns them).

- Background on Emissions Trading System and Credit Availability
 - The CASA Electricity Framework requires generators to install emission controls at the 40th year of a unit's life and gives units the ability to extend the life of a unit to 50 years if a unit uses credits. Credits are generated if a unit reduces emissions below historical levels before the unit must install emission controls.
 - Table 1 shows the number of credit currently available and what unit created the credits. No credits have been traded to date. Who holds / owns a credit is confidential information under the Emissions Trading Regulation. However, ownership can be inferred from the information in this paragraph.
 - Units continue to generate credits and so the ability of units to use credit to "bridge a gap" is unknown. ***The most critical uncertainty might be whether unit operators take action to generate credits. If units operator do not retrofit one unit to gain credits for another unit, there might be very few credits available for some units.***

Table 1: Existing Emissions Trading Credits

Facility	Nitrogen Oxides	Sulphur Dioxide	Grand Total
Air Liquide Scotford (EPEA 68179)	186		186

Battle River (EPEA 1512)	10184	5851	16035
Calgary Energy Center Ltd.	227		227
Cavalier Station	80		80
Electric Generation Utility (EPEA 11610)	13545		13545
Genesee (EPEA 773)	15153	7725	22878
HR Milner (EPEA 9814)	1099	8870	9969
Keephills Generating Plant (EPEA 10324)	1906		1906
Muskeg (EPEA 73899)	651		651
Medicine Hat (EPEA 11610)	3		3
Rainbow Lake	1340		1340
Scotford Cogeneration Power Plant (EPEA 68179)	430		430
Sundance Generating Plant (EPEA 9830)		2612	2612
Wabamun Generating Plant (EPEA 10323)	223		223
Grand Total	45027	25058	70085

3. Brief background on discussions/process with federal government to date on discussing mid-life BLIERS.

A national electricity multi-stakeholder working group was established in 2011 to develop BLIERS for the sector, as part of AQMS. On numerous occasions, the federal government has indicated the need for mid-life BLIERS for the utility sector. To be absolutely clear, rather than the CASA approach to rely on a shortened end-of-life period to drive nitrogen oxide (NO_x) and sulphur dioxide (SO₂) reductions for existing generating units, Environment Canada proposed specific performance requirements by the age of the unit: units 0 – 10 years, units 11 – 40 years, and units 41 – 45 years. The federal government proposed a 45 year end of life period, after which units would have to meet new unit emission standards. This 45 year end of life period matched what Environment Canada was then proposing for its GHG regulation. It is unclear if Environment Canada will be altering its air pollution proposal to match the new GHG regulation's planned 50 year end-of-life requirement. As a flexibility mechanism, Environment Canada proposed a fleet approach to meet these "mid-life" requirements. This would base a company's requirement on the average performance of its units within a given age range. However, the proposed fleet requirements would be more stringent than the unit level requirements.

The end of life approach to reductions in the CASA Electricity Framework, coupled with its emission credit trading, allows companies to make significant reductions in a planned and cost effective way. The cost of new units and major retrofits is very large in this sector and substantial time is required to plan and complete them. The end of life approach recognizes these realities, while still providing very substantial emission reductions over time.

The federally proposed "mid-life BLIERS" would undermine Alberta's end-of-life approach by requiring major unplanned reduction investments for units in specific time periods, regardless of what might make the most economic sense. Alberta's electricity sector disputes Environment Canada's low estimates of retrofit costs and time lines; instead, Alberta power producers estimate a cost of \$200 million per electrical production unit and several years time per unit to meet the proposed BLIERS.

There have been no further discussions at the multi-stakeholder working group level since the group's final report was completed at the end of March 2012. The reason for this is that the positions of parties are absolutely polarized. Alberta stakeholders (including GOA, industry and ENGOs) have been united in declaring that a mid-life BLIER for existing coal units is unnecessary as the CASA framework achieves better environmental outcomes in a more flexible and economically efficient manner.

4. Analysis (table) outlining the timing of when units come offline under different scenarios (CASA End of Life Year and Federal End of Useful Life).

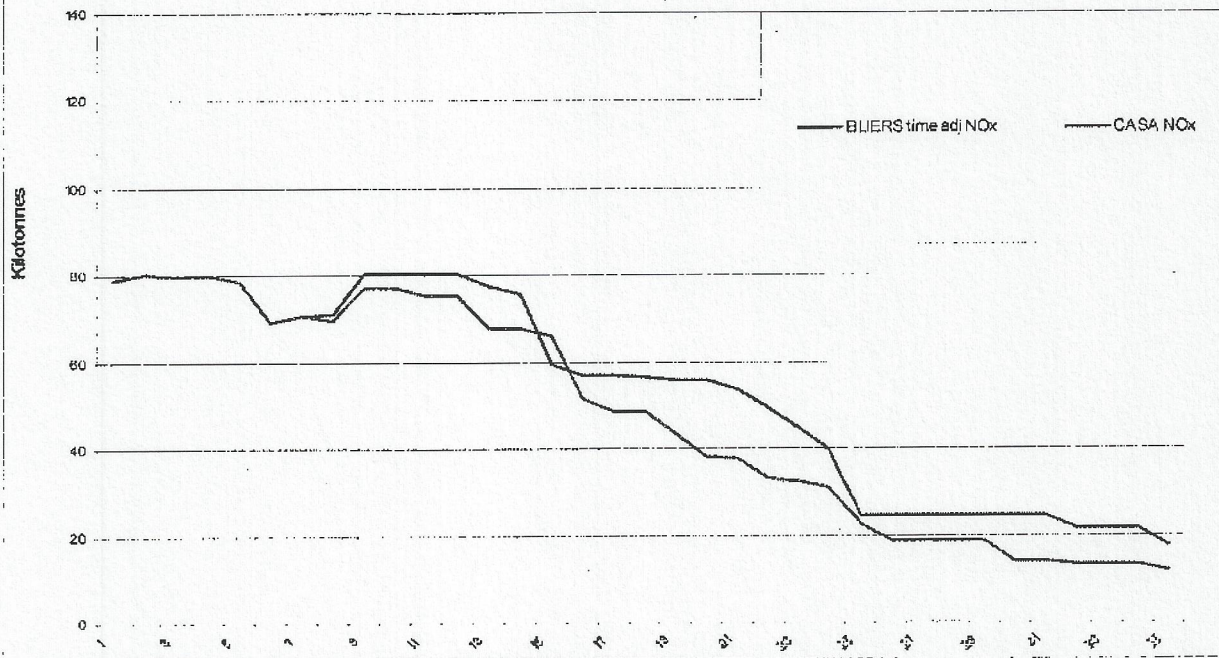
In the table?

Also need a column that provides the Nox and S02 credits companies currently have in system and if these credits will be allow them to bridge the gap (continue operating) between CASA end of year life and Federal Coal Regulation End of Useful Life.

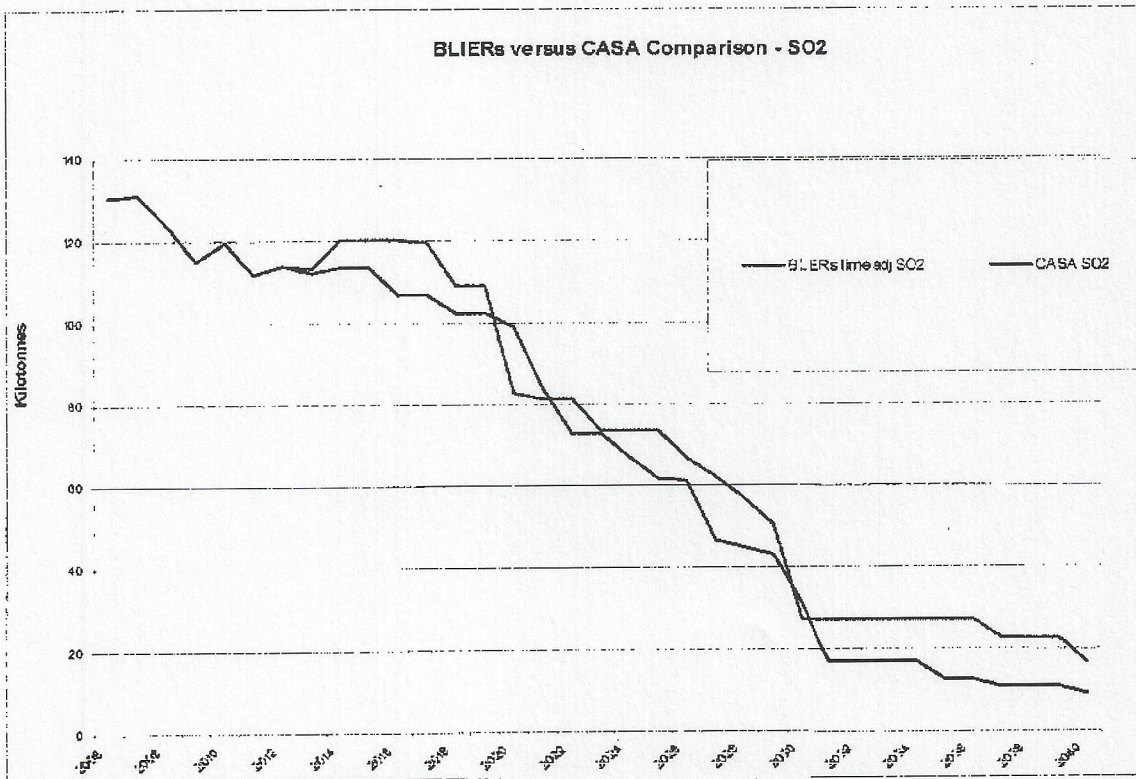
In the table?

5. Using an assumption that a mid life BLIER could be applied at the 20th year of end of useful life for a coal facility (use same logic that is applied for coal regulation (ie. Facility comes offline at 45-47-50 if before or after a certain year) what do the two graphs look like for Nox and S02 in terms of reduction. Cumulative graphs for all Alberta facilities is necessary and by facility is also needed.

BLIERS versus CASA Comparison - NOx



BLIERS versus CASA Comparison - SO2



6.

Outlining analysis that has been done for the cost implications of the federal coal regulation.

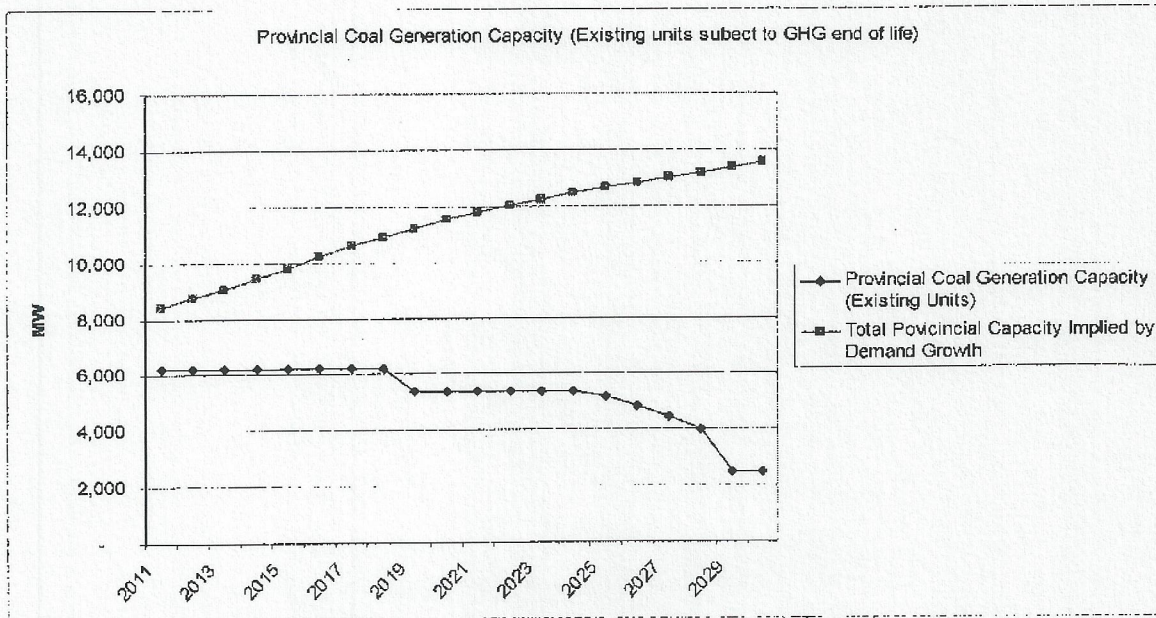
According to Environment Canada, undiscounted additional generation costs for Alberta out to 2030 is estimated at \$2.8 Billion. The incremental cost to residential consumers is estimated at \$2.14/month.

Alberta Energy ran a scenario that assumed natural gas-fired generation sets the power price 24 hours a day. If this were to occur in the future as natural gas comes on line and coal comes off line, residential and farm consumers could pay up to an additional \$23 per month for electricity.

7. Cost information by facility for ATCO and TransAlta for CASA and Coal and BLIERS (based on the assumption above).

- from TransAlta

**8. Graph that outlines (cumulatively) the amount of electricity coming offline versus what is projected to come online based on AESO's analysis. **



9. Next Steps- Recommended Path Forward (I have the recommendations)

10. Extra: Misconceptions being expressed by TransAlta and ATCO on the relationship amongst the federal GHG regulation, the CASA Electricity Framework, and the mid-life BLIERS.

TransAlta met with ESRD on October 18th to outline their concerns with having to meet the CASA requirements in light of the federal GHG requirements. They also provided cost data to show the potential impact of the CASA requirements on their company. However, this cost data was an unrealistic worst case scenario which had TransAlta

install pollution control equipment on all of their existing units. It did not reflect any of the flexibility mechanisms in place to help industry reduce the cost of meeting their CASA commitments by doing strategic investment in installing pollution control equipment on only some units and generating emission credits to be used by their other units. It is believed that ATCO shares the same view in this matter and shared these views with the Minister at a meeting on October 23rd, 2012.

The case that has been made by the above companies is that the Federal GHG requirements are sufficient to achieve Alberta's air pollution emission targets. This is indeed a false choice and a bit of wishful thinking by the above parties. The federal GHG requirements are a forgone conclusion. Now, the choices on table for Alberta for this sector are either the CASA framework or AQMS mid-life BLIERs for air contaminant reductions from this sector.

It is the opinion of ESRD staff if the CASA framework is not followed, the de facto alternative is the mid-life BLIERs. We do not believe that companies can avoid a requirement to reduce air contaminant emissions simply by complying with the federal GHG requirement. This position has been reinforced by informal conversations between ESRD staff and senior level Environment Canada staff.

Equivalency:

Equivalency is structured on a regulation by regulation basis however proposed equivalency under the coal fired electricity regulation is broad enough to include the sector. The equivalency agreement lays out the environmental outcome that is to be achieved. In this case Environment Canada is likely looking at cumulative 5 year greenhouse gas emissions for the sector with the first period covering 2015 to 2019. Regulations put forward by Alberta would have to be accepted by Environment Canada as meeting the outcomes identified under equivalency. Alberta would have the flexibility to move away from a defined end of life for coal fired power plants under equivalency if reductions could be achieved in other ways within the sector. Alberta needs to work with Environment Canada to confirm that the outcomes identified align with the reductions achieved under the federal regulation as well as expected levels of generation. Industrial self generation is also an outstanding issue as Environment Canada has not included this in its definition of the electricity sector.

RECOMMENDATIONS:

- Further discussion is required at the working level to better understand a number of details including the development of the proposed emissions limit.
- We need to further understand how Environment Canada will frame equivalency in other sectors, particularly with respect to Alberta's technology fund which is central to our innovation and long-term emission reduction strategy.

KEY MESSAGES (For Communications' use only):

- Arial 12, no bold

For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Bob Savage

TELEPHONE: 780-644-4918

SUBMITTED BY: Policy Division

- Requires legislative/regulatory change

Minister
Deputy Minister

BRIEFING NOTE

For Decision
For Information

AR (Action_Request_Number)

SUBJECT: Equivalency to Environment Canada Coal Fired Electricity Regulations

DATE: November 2, 2012

ISSUE:

Environment Canada has largely completed their regulatory process for greenhouse gas emissions from coal fired electricity generation. Alberta must now understand and evaluate the potential benefits and costs of pursuing an equivalency agreement to this regulation.

BACKGROUND:

Where possible Alberta has been working with Environment Canada in its regulatory development process to ensure the best possible regulations are brought forward in each sector. While useful this process will likely still result in a set of regulations that are not well aligned to provincial objectives. Equivalency may allow the province to deliver a more comprehensive, self consistent greenhouse gas regulation that can produce the same or better environmental outcomes.

Alberta Environment and Sustainable Resource Development staff have been working with Environment Canada to more fully understand the flexibility offered under equivalency to meet greenhouse gas outcomes under provincial regulations.

In order to enter into an equivalency agreement and have Environment Canada stand down their regulation the following conditions must be met:

- Both Environment Canada and the province must have regulations in place.
- Environment Canada must estimate the environmental outcome of the federal regulation.
- Environment Canada must evaluate the provincial regulations and deem that they will deliver equivalent or better environmental outcomes.

In recent meetings Environment Canada has indicated that they are willing to consider a single equivalency agreement which evolves over time as regulations are finalized on a sector by sector basis. This could give Alberta some flexibility to balance reduction requirements across sectors differently than as regulated by Environment Canada. Equivalency can offer increased flexibility but before Alberta pursues agreements we will ensure they align with provincial objectives, including recognizing the importance of technology funds and enabling policies that achieve long-term greenhouse gas reductions across the economy. Alberta remains concerned that the current Federal

approach to equivalency whereby provinces must meet their reduction obligations in five year windows, may inhibit the continued use of the climate change fund, as the fund cannot guarantee emissions reductions in this time frame.

The federal greenhouse gas regulation of coal fired electricity requires new or end of life coal plants to physically meet a clean as gas performance standard. The equivalency template that Environment Canada has advanced lays out emissions caps for the electricity sector for the period 2015 to 2019. Alberta Environment and Sustainable Resource Development has the following concerns that are still to be resolved:

- Environment Canada has defined the electricity sector more narrowly than desired which could lead to greater uncertainty than necessary in emissions estimates and a lack of transparency.
- Regulation of GHG emissions for natural gas generation is still forthcoming and will require a revision to the equivalency for the electricity sector.
- As CEPA requires equivalency agreements to expire after five years Environment Canada does not currently have a capacity to bank reductions beyond those required into subsequent periods.
- Environment Canada would like to use emissions forecasts originally developed for the Canada Gazette 2 Regulatory Impact Assessment which may not be in agreement with provincial forecasts of generation growth.
- If generation growth differs substantially from what was forecasted, it may be necessary to revisit the emissions numbers. This would be done in cooperation with Environment Canada.

Next steps:

Discuss with Environment Minister Kent the importance of a coherent regulatory system and ongoing support for innovation and technology as a means to achieve long-term reductions across the economy. Discuss the possibility of entering an agreement as an "Intent to reach an equivalency agreement" once alignment is reached on overall objectives.

Gather additional supporting details around the emissions forecast that Environment Canada has put forward, to ensure it is consistent with provincial forecasts.

Further test some of the issues above with Environment Canada through iterations over draft language in an agreement.

RECOMMENDATIONS:

Arial, no bold. Short paragraphs, no bullets.

KEY MESSAGES (For Communications' use only):

- Arial 12, no bold

For Minister/Deputy Minister's Use:

Agree with recommendations
Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Bob Savage

TELEPHONE: 780-644-4918

SUBMITTED BY: Climate Change Secretariat

Requires legislative/regulatory change

Minister
Deputy Minister

BRIEFING NOTE

For Decision
For Information

AR {Action_Request_Number}

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RECOMMENDATIONS:

Arial, no bold. Short paragraphs, no bullets.

KEY MESSAGES (For Communications' use only):

- Arial 12, no bold

For Minister/Deputy Minister's Use:

Agree with recommendations
Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Bob Savage

TELEPHONE: 780-644-4918

SUBMITTED BY: Climate Change Secretariat

Requires legislative/regulatory change

BRIEFING NOTE

Minister

For Information

AR

SUBJECT: Federal greenhouse gas emissions regulations

DATE: January 15, 2013

ISSUE:

Environment Canada is moving forward with a sector-by-sector approach to regulating greenhouse gas emissions. This is an update on the status of the federal government's negotiations with industry and with the provinces.

BACKGROUND:

Alberta Environment and Sustainable Resource Development has some significant concerns about the approach that the federal government is taking, and has shared those concerns at the working level, the Executive level, and in conversations with the Ministers in Doha.

Our concerns may be found in detail in other briefing materials, but the overall concerns may be summarized as follows:

- The sector-by-sector approach lacks policy coherence and may result in uneven or unfair treatment across industries, sectors, or regions. This is particularly a concern for co-generation, which will play an increasingly important role in the Alberta grid as coal-fired plants are shut down.
- The focus on "achievable" results in trade exposed sectors is resulting in the federal government requiring little more than business as usual from significant portions of the industrial base. This will result in fewer reductions than are required to achieve stated government targets or offsetting greater reductions in other sectors.
- There is little incentive in the federal approach for the major technological changes that are key to the long term transition to a lower carbon economy. These are critical to Alberta as we attempt to gain access to markets that are wary of our green house gas profile.
- Alberta is advocating in every sector for comprehensive competitiveness and economic analysis, and for full access to compliance flexibility through offsets and a provincial technology fund.
- In a number of sectors the requirements that the federal government is proposing are much less stringent than our current regulation. It may be anticipated that these sectors will apply political pressure to reduce the stringency at a time when our strategy review is considering increasing it.

Alberta has indicated a desire to pursue an equivalency agreement or agreements once the details of the federal government's requirements for the various sectors are known. The

federal government has indicated their willingness to enter into such an agreement. Alberta's strong preference is to have an agreement that will allow us broad flexibility to use or adapt our existing approach across the sectors rather than the federal sector by sector approach.

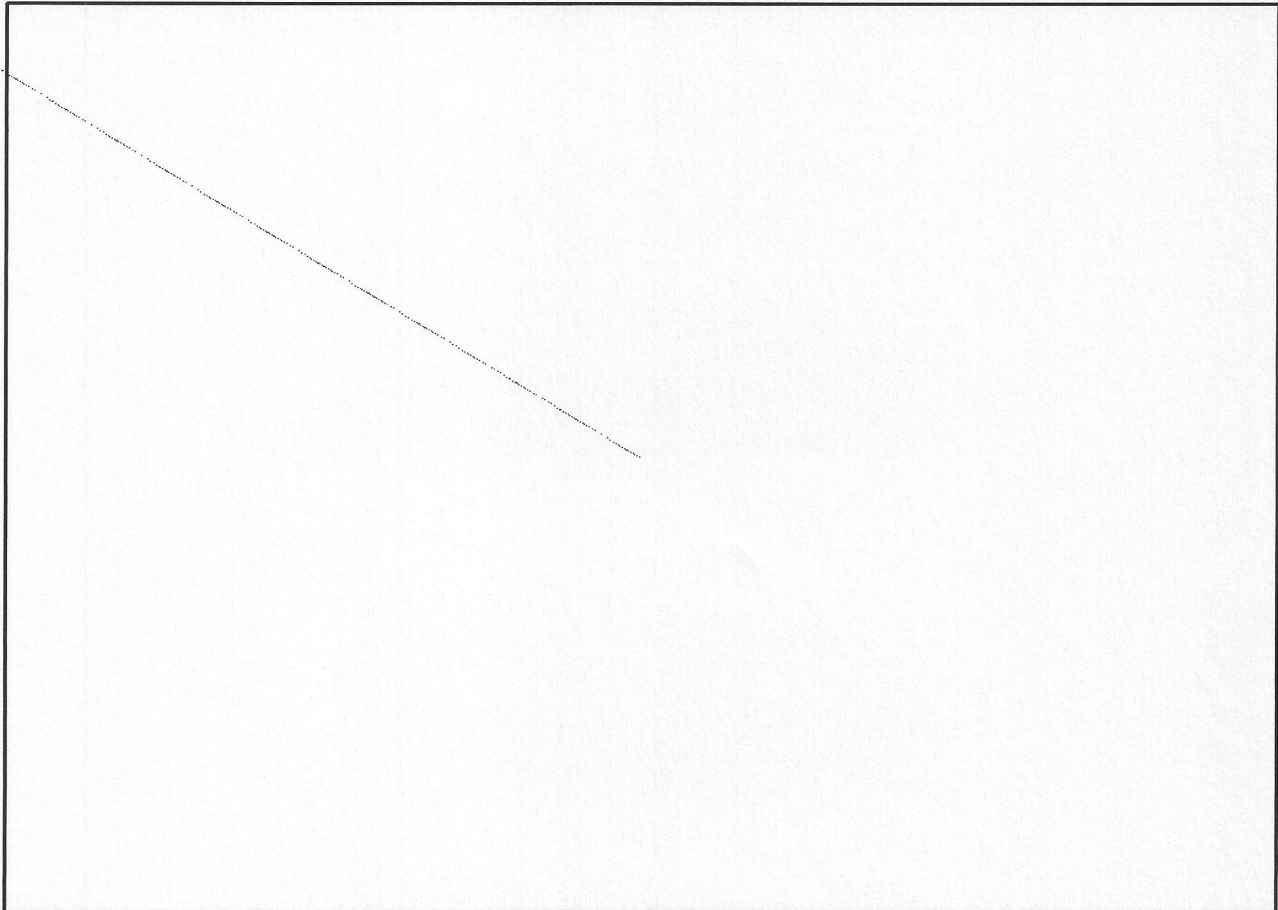
Electricity Sector

Environment Canada posted Gazette 2 of its greenhouse gas regulation for coal-fired electricity on September 12, 2012. Some of Alberta's concerns have been addressed in the regulation, and Alberta may be willing to proceed with an equivalency agreement that will incorporate the outcomes of this regulation, providing some of our other concerns (as noted above) are addressed.

There has been no response to date to our concerns on the "double jeopardy" that coal fired plants may run into as the impacts of both the greenhouse gas regulation and the proposed "Mid life BLIERS" hit the plants.

There remain some concerns about the as-yet unannounced federal requirements for co-generation, "behind the fence" power and gas fired generation, as the overall emissions from the electricity have been capped and it remains unclear how this impact will affect the various forms of generation. We have requested this information from the federal government on a number of occasions but they have not yet shared it with us.

NR



There will ultimately be about a dozen tables running concurrently. Both ourselves and Environment Canada may face resourcing issues once these processes are all up and running.

Alberta is advocating for a cohesive policy framework that sends the right signals across the economy and achieves real reductions today, coupled with a focus on investing in technology and innovation for real reductions in the future. Allowing some industry sectors to continue with status quo while imposing a large burden on other sectors such as coal and oil and gas is an unfair policy framework. To this point, Environment Canada has not articulated a clear justification for such uneven treatment across sectors.

Please see the attached table for an overview of the sectors.

For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Bob Savage

TELEPHONE: 780-644-4918

SUBMITTED BY: Policy Division

- Requires legislative/regulatory change

Climate Change

Advice to the Minister

Issue: The federal government released its coal-fired electricity greenhouse gas emission regulations in 2012 and is moving forward with regulations for oil and gas, fertilizers and other large emitters, all of which have implications for Alberta.

On federal emission standards on coal plants:

- The federal government gazetted a regulation requiring coal-fired power plants to reduce their greenhouse gas emissions to a level equal to gas-fired generation. This will likely lead to the closure of all or most of Alberta's coal fired power plants when they reach end of life, which is between 45 to 50 years old, depending on their start date.
- Overall, we believe the federal government has listened to our concerns regarding the new coal regulations.
- Alberta shares the same goals as the federal government – to produce energy more efficiently with less environmental impact.
- This needs to be done in a way that is fair to all provinces, particularly those still relying on coal to meet electricity needs – like Alberta.
- We provided input to the federal government on how flexible regulations can produce the same environmental outcome.
- We will continue to work with Environment Canada to ensure we find a way to achieve emissions reductions *without* negatively impacting Alberta's consumers.
- Alberta's coal plants already fall under the provincial greenhouse gas regulatory system, which has seen companies take action to reduce emissions or pay into our technology fund.

Climate Change

Advice to the Minister

On questions of equivalency:

- Alberta would prefer a broader more coherent approach that is fair across companies, sectors and jurisdictions and that provides both greater clarity on how we can help meet national greenhouse gas reduction targets and flexibility to allow the most economical means of achieving the desired outcomes.
- Alberta is completing a thorough analysis of the details to understand how this regulation fits with Alberta's broader greenhouse gas regulatory system and evaluate potential costs and benefits to pursuing an equivalency agreement.

On Alberta's actions to reduce coal-fired emissions:

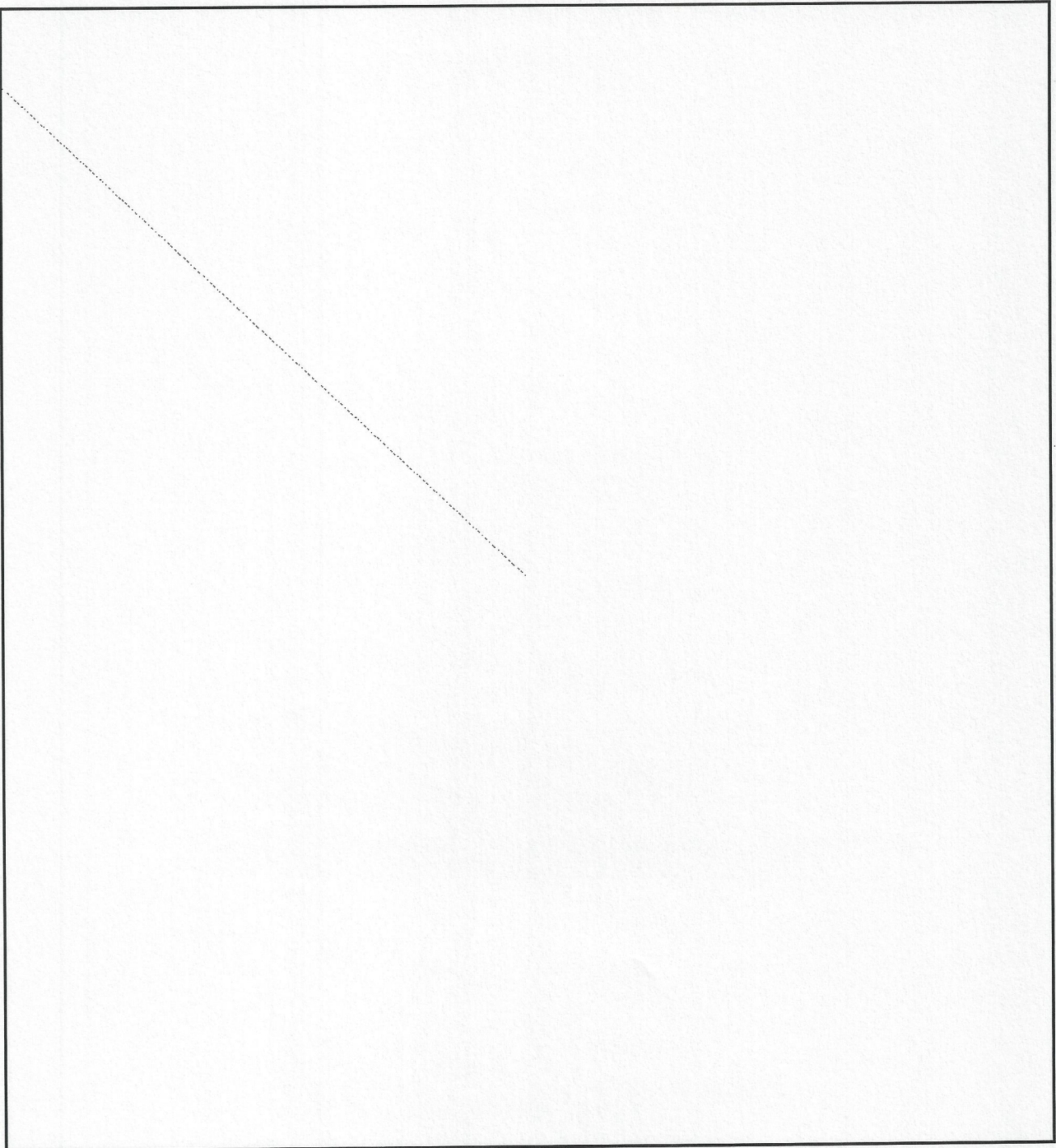
- We know the importance of producing cleaner energy. That's why we have been taking action to make our coal-fired electricity sector more efficient.
- Alberta was the first jurisdiction in North America to introduce mandatory greenhouse gas emission reduction targets for all large emitters.
- Under Alberta's greenhouse gas reduction program, coal-fired electricity plants have reduced emissions by 12 million tonnes, with 9 million tonnes of offsets purchased and \$100 million paid into clean energy technology fund by coal plants.
- We've been recognized internationally for our significant investment in carbon capture and storage.
- Experts around the world agree carbon capture and storage has the greatest potential among existing technologies for reducing emissions in the coal-fired electricity sector.

Climate Change

Advice to the Minister

- We feel strongly that federal policy aimed at encouraging greater innovation and technology is necessary if we are to truly tackle climate change at a national level.

NR



Climate Change

Advice to the Minister

NR

Background:

Environment Canada has committed to prescriptive greenhouse gas regulations across the country on a sector-by-sector basis; these regulations are framed as the means to achieve Canada's international commitments of reducing greenhouse gas emissions by 17 per cent off of 2005 levels by 2020.

Alberta would prefer a more comprehensive approach that would give greater clarity on how Canadian emission targets can be met.

Alberta's position is based on:

- achieving greenhouse gas reductions through the most economical means;
- supporting Canada's 2020 target committed to in Copenhagen;
- supporting the development and deployment of carbon capture and storage and other transformative technologies; and
- mitigating consumer cost impacts and minimizing stranded assets.

Federal emissions standards on coal-fired electricity plants:

Environment Canada posted Gazette 2 of its greenhouse gas regulation for coal-fired electricity in September 2012. Environment Canada has offered alterations to their regulation that provide some positive shifts that address many of Alberta's initial requested modifications:

- Environment Canada has moved to allow a two-year extension to end of life rather than an 18 month extension for those adopting carbon capture and storage.
- Environment Canada has moved to a 420 tonnes carbon dioxide per gigawatt hour standard (from 375) which is more broadly accepted as a "clean as gas" standard.
- Environment Canada has moved to a 50 year life while maintaining emissions reductions in 2020 and 2030, which will set an end of life for some facilities before 50 years.
- Environment Canada has given recognition for early unit shutdown on a tonne for tonne basis, but did not allow recognition for temporary shutdown (for example, this could have extended life for Sundance 1 and 2) or allowance for facilities that have an approval prior to 2015 to fall under the category of "existing units" (for example, this could have allowed Maxim's proposed new plant to come in line without the emissions cap of 420 tonnes of carbon dioxide equivalent per gigawatt hour.

Analysis by Alberta Energy and Environment and Sustainable Resource Development indicates the federal coal-fired electricity regulation will:

- potentially increase Alberta electricity prices;
- disrupt/impact provincial policies for climate change, including carbon capture and storage; resource development; and competitive electricity supply; and,

Climate Change

Advice to the Minister

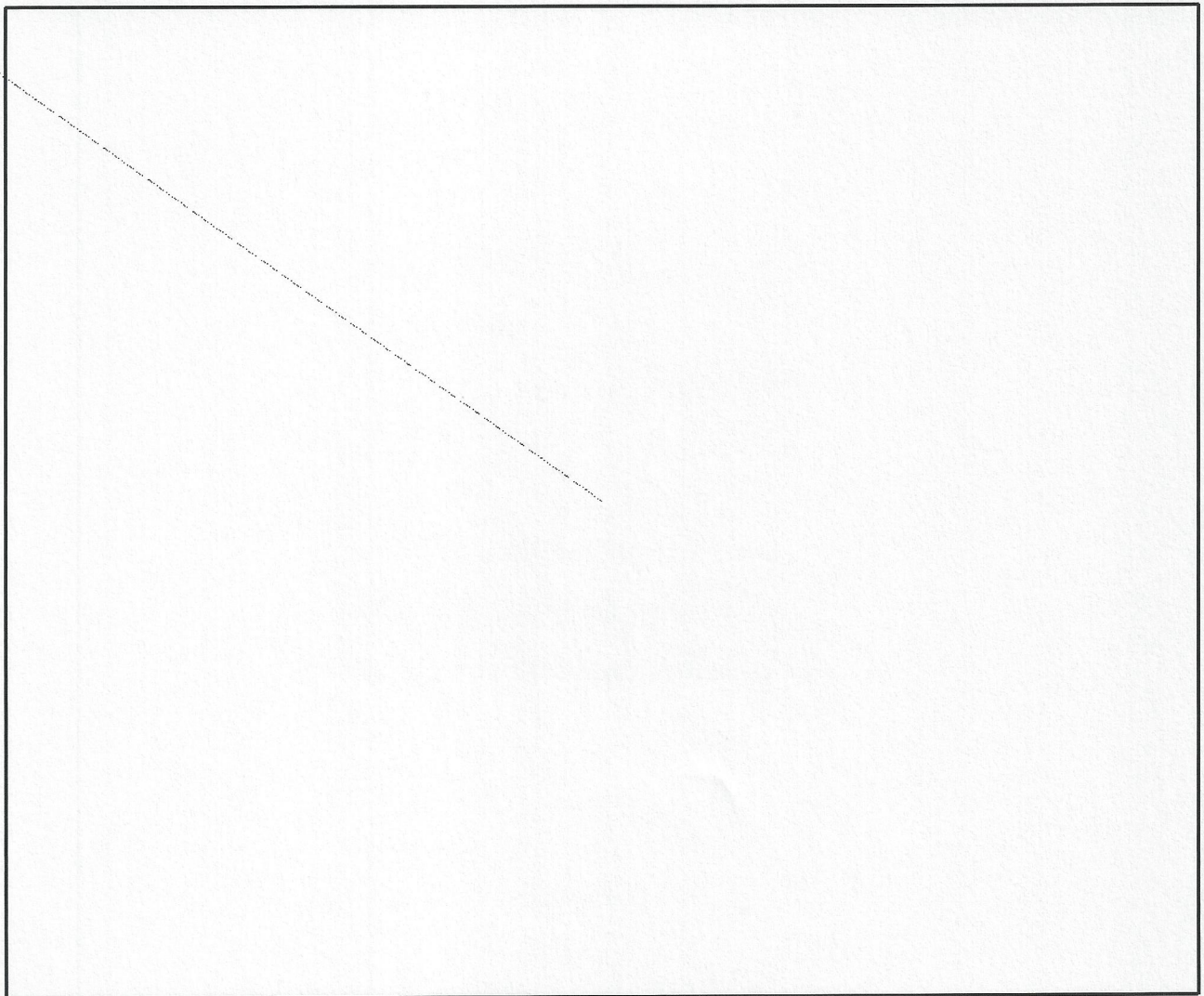
- set a precedent for federal policy development and regulation without meaningful provincial/territorial collaboration.

The federal sector-by-sector and performance standard approach means Alberta's electricity producers will run existing coal plants to the end of their life and then switch to natural gas facilities.

Alberta is completing a thorough analysis of the details to understand how this regulation fits with Alberta's broader greenhouse gas regulatory system and evaluate potential costs and benefits to pursuing an equivalency agreement.

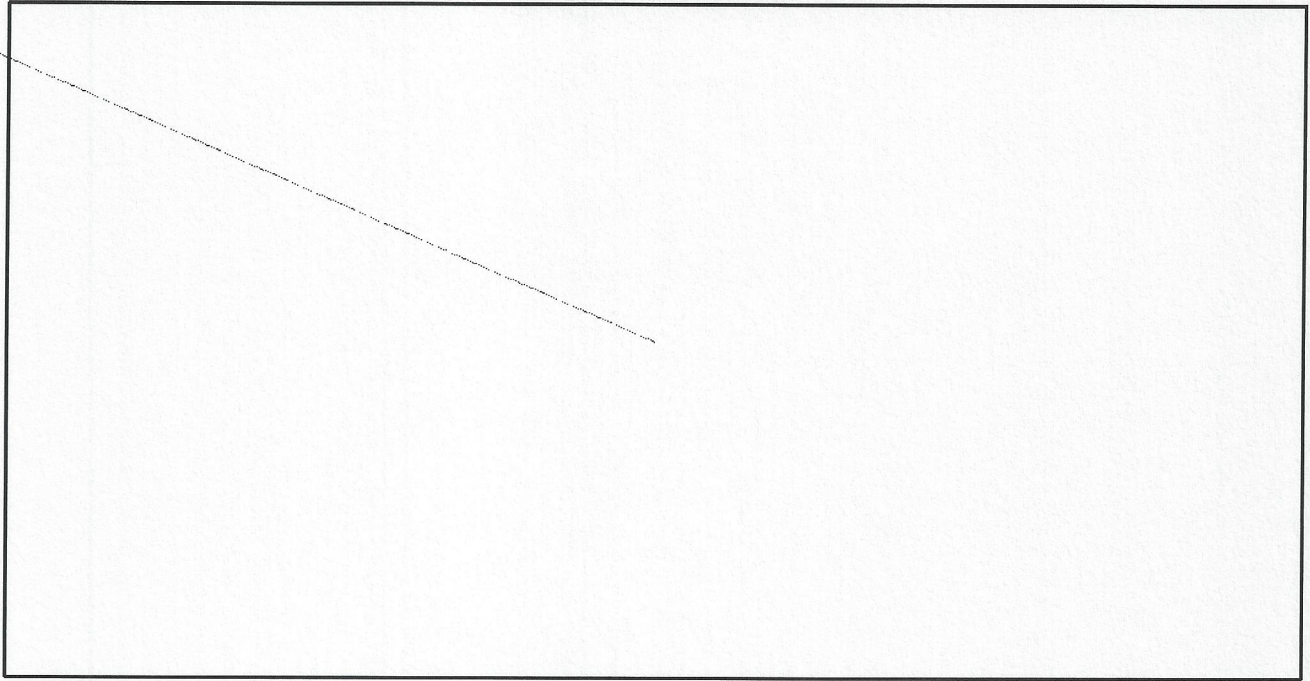
Equivalency is a concept under the *Canadian Environmental Protection Act* (CEPA) that allows the federal government to recognize provincial regulations in place of theirs that met the same desired outcome.

NR



Climate Change
Advice to the Minister

NR



Contact: Bob Savage, Policy, 780-644-4918

BRIEFING NOTE

Minister

For Information

AR

SUBJECT: Update on negotiations with the Canadian government on greenhouse gas emissions regulations

DATE: February 19, 2013

ISSUE:

Ongoing sectoral negotiations with Environment Canada and various industrial sectors re: greenhouse gas reductions.

BACKGROUND:

In efforts to contribute to Canada's Copenhagen commitment and to address ongoing international concerns related to greenhouse gas emissions, Environment Canada is proceeding with a sector-by-sector approach to regulating greenhouse gas emissions. Alberta has some significant concerns with Environment Canada's approach and is hoping to establish an equivalency agreement that will allow us to regulate within the province.

The sector-by-sector approach lacks policy coherence and may result in uneven or unfair treatment across industries, sectors, or regions. In addition, the piecemeal approach does not allow for the most effective and efficient policies to move forward – a key issue Alberta is also raising through discussions on equivalency. Alberta is advocating in every sector for comprehensive competitiveness and economic analysis, and for full access to compliance flexibility through offsets and a provincial technology fund.

Coal-fired Electricity

Environment Canada posted Gazette 2 of its greenhouse gas regulation for coal-fired electricity on September 12, 2012. The regulation requires on site emissions at 50 years of 418 kg/MWh – a level that can only be achieved with the use of Carbon Capture and Storage. This will result in these units shutting down and being replaced by gas or other generation.

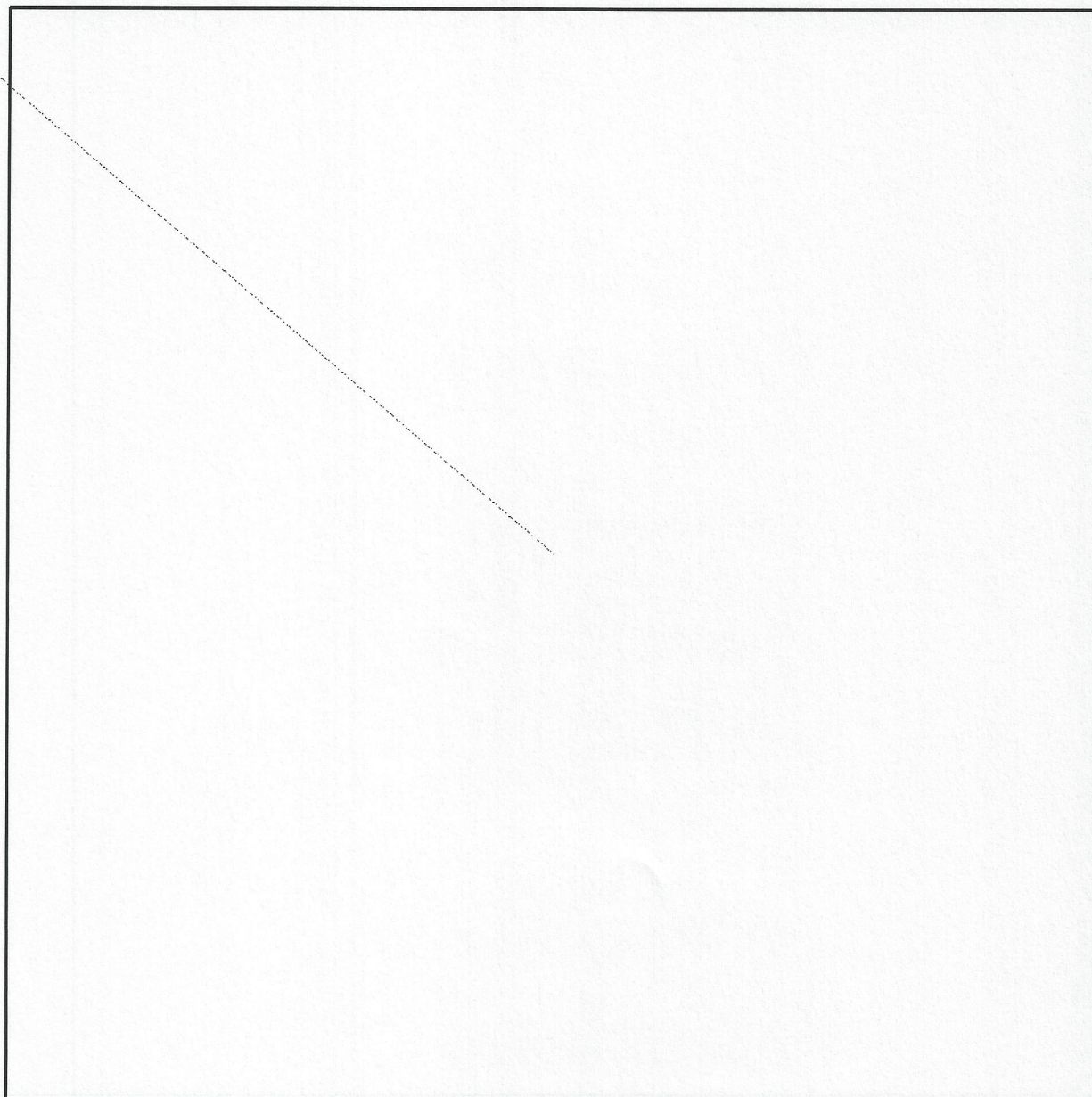
Equivalency:

Alberta will be working with Environment Canada on a draft equivalency agreement for the coal-fired electricity regulation, as well as other sectors as their regulations are rolled out. The federal government has been open to allowing for substantial flexibility in achieving the equivalent environmental outcome, which provides some incentive for Alberta to pursue equivalency. Further work is underway with Environment Canada to align generation forecasts and to define the policy options and flexibility.

Alignment of greenhouse gas emissions regulations and mid-life base level industrial emission requirements proposed through the national Air Quality Management System also needs to be addressed.

Alberta does not support adoption of the mid-life base level industrial emission requirements for the coal-fired electricity sector, as the existing provincial air framework agreed to by a multi-stakeholder process under the Clean Air Strategic Alliance for this sector will achieve substantial air pollution reductions more effectively. Environment Canada is open to pursuing equivalency for the mid-life base level industrial emission requirements, and feels that the Clean Air Strategic Alliance air framework should achieve equivalency.

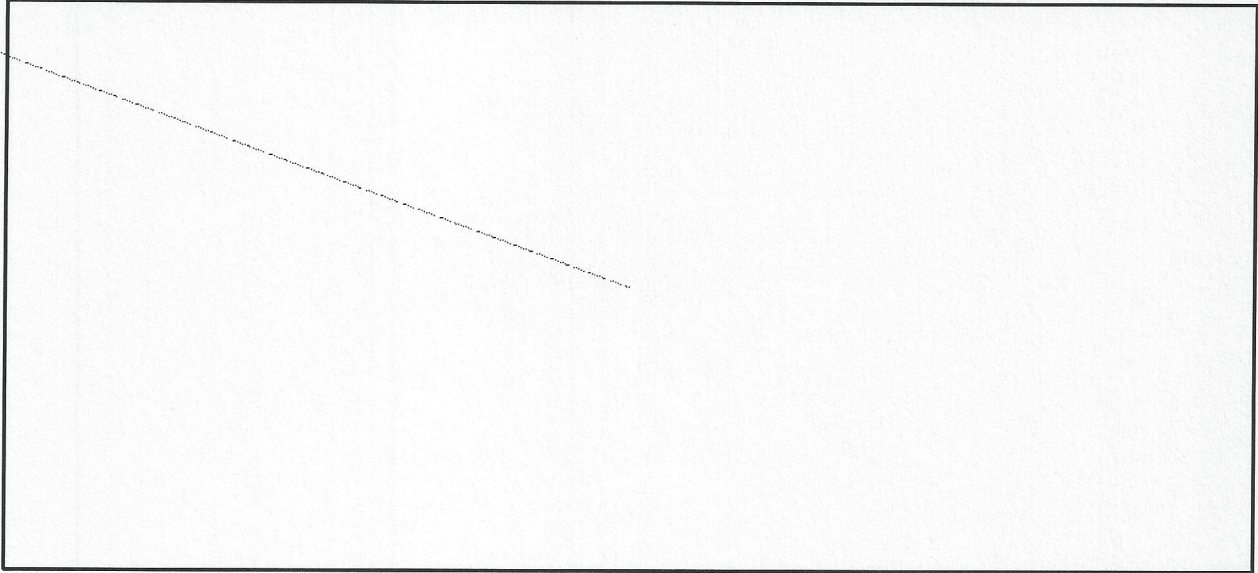
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E14-G-0575

Pages (s) 50 has been withheld in their entirety, as these pages are not responsive to your request.



Alberta's Position Across All Sectors

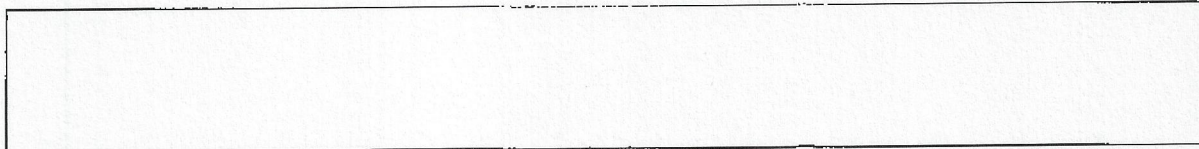
Across all sectors, Alberta is advocating for a cohesive policy framework that sends the right signals across the economy and achieves real reductions today, coupled with a focus on investing in technology and innovation for real reductions in the future. Alberta is advocating across all sectors for full access to compliance mechanisms, including low cost domestic reductions (offsets) and use of the provincial technology funds to achieve this balance of immediate real reductions and a commitment to long-term deep reductions through investment in innovation and technology. This would allow for reductions on site, across the economy (through offsets) and investments in longer term work to reduce the carbon footprint of industry through a technology fund. We believe that this approach is needed to position Alberta for the coming decades.

Alberta's current regulation requires a 12 per cent intensity reduction from large emitters across all sectors. Alberta is advocating that the national approach should achieve at a minimum the reduction currently imposed through Alberta's regulation, with recognition that the provincial climate change strategy is under renewal and the province may move to impose a greater reduction across all large emitters. The Province supports sending the right policy signal to incent continuous improvement across and within all sectors through an overarching policy framework. Allowing some sectors to continue with status quo while imposing a large burden on others, such as coal and oil and gas, is an unfair policy framework. In addition, Alberta supports a thorough analysis and understanding of competitiveness and economic impacts in setting individual reduction requirements for each sector.

For Minister/Deputy Minister's Use:

- Agree with recommendations
 Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:



CONTACT: Bob Savage

TELEPHONE: 780-644-4918

SUBMITTED BY: Policy Division

Requires legislative/regulatory change

BRIEFING NOTE

Minister

For Information

AR

SUBJECT: Federal greenhouse gas emissions regulations

DATE: November 6, 2013

ISSUE:

Environment Canada is moving forward with a sector-by-sector approach to regulating greenhouse gas emissions.

BACKGROUND:

Environment Canada is proceeding with its sectoral approach to regulating greenhouse gases. The sectoral targets will be based on emissions intensity standards, and, with the exception of coal fired power oil and gas, they will have limited compliance flexibility and will not require significant reductions from current levels.

Environment Canada's approach is causing some concern for Alberta Environment and Sustainable Resource Development. The sector-by-sector approach may result in uneven treatment across industries, sectors, or regions. In addition, this approach does not allow industry to seek the least expensive reductions through the use of flexibility tools such as offsets and performance credits. Their policy approach has very little in it to drive reductions beyond the minimal requirements it imposes, and does nothing to drive towards a lower carbon economy. It does not appear to be sufficient to meet the Copenhagen targets that the federal government has stated is its intent. If further reductions are required it will involve re-opening up the many sectoral conversations.

Alberta Environment and Sustainable Resource Development, along with Alberta Energy, have been participating in these sectoral tables and doing our best to minimize the impact of the federal system's flaws. We are intending to negotiate an equivalency agreement that will enable us to remain the regulator for Alberta's industries, and will allow the policy goals behind our Specified Gas Emitters Regulation to proceed – significant emission reductions, broad based compliance flexibility through offsets, performance credits and technology fund payments and targets that apply to all large final emitters.

Coal-fired Electricity

Environment Canada posted Gazette 2 of its greenhouse gas regulation for coal-fired electricity on September 12, 2012. This regulation requires all coal fired power plants to emit at a level of 420 kilograms per megawatt hour at the end of their design life, which varies between 45 and 50 years. With current technology the only way to meet this target would be the use of carbon capture and storage. Industry has looked at this technology and the cost of installing it and has decided that they will shut down their units and build replacement generation, likely natural gas.

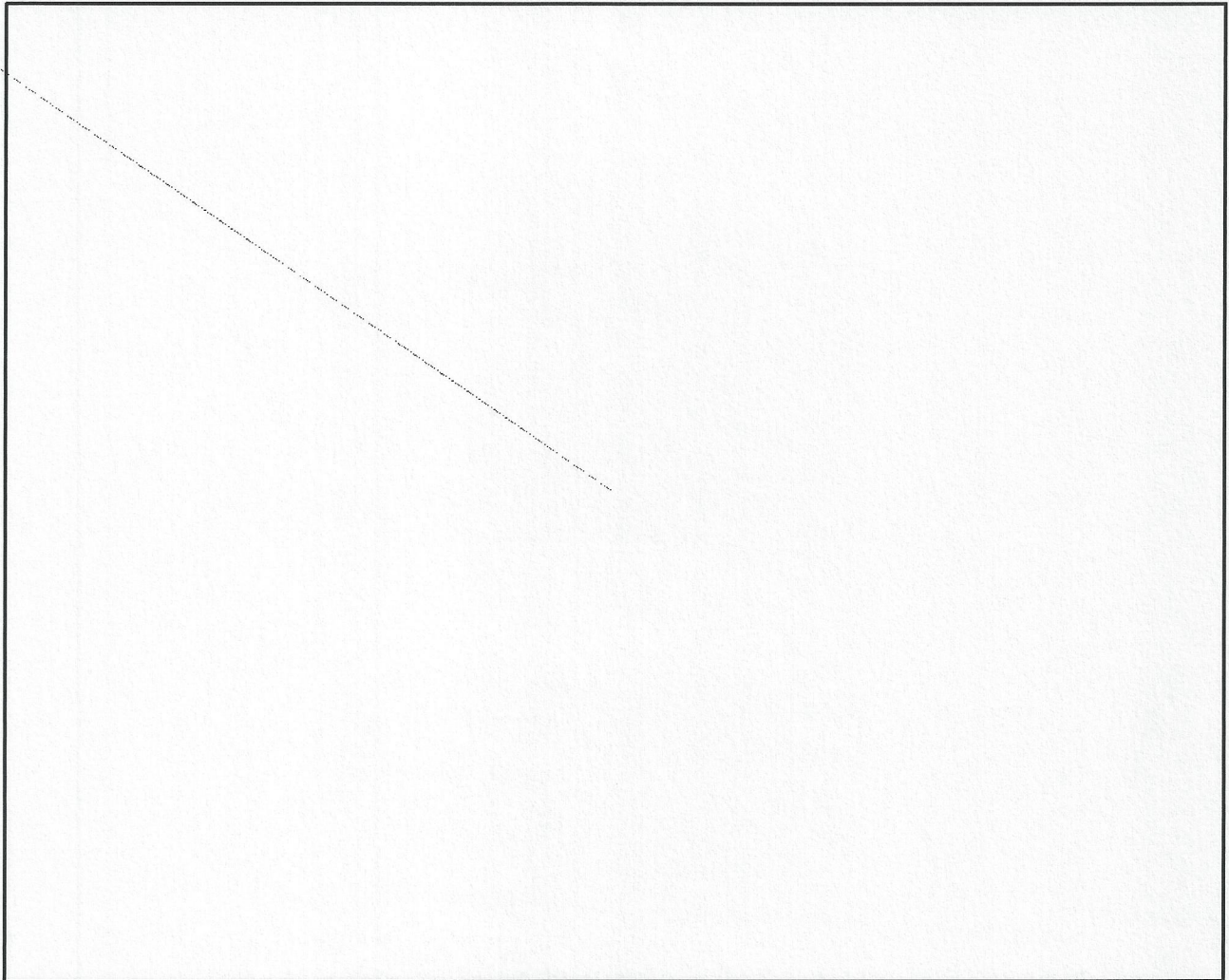
Equivalency:

Alberta has been working with Environment Canada on a draft equivalency agreement for greenhouse gases generally, and specifically for the electricity sector. The federal government has been open to allowing for substantial flexibility in achieving the equivalent environmental outcome, which provides some incentive for Alberta to pursue equivalency.

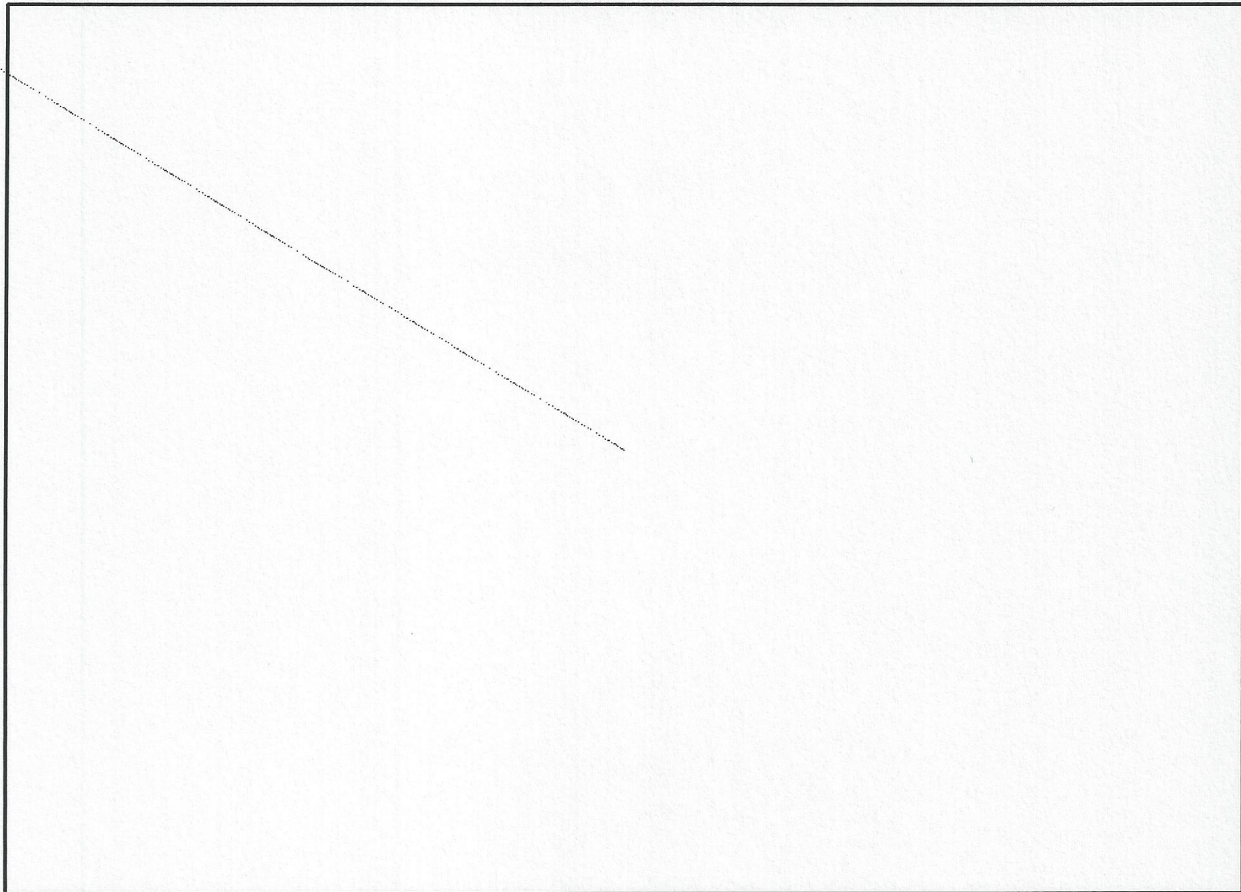
Mid-Life BLIERS

Alberta does not support adoption of the mid-life base level industrial emission requirements for the coal-fired electricity sector as is proposed in the federal governments Air Quality Management System. The existing provincial air framework agreed to by a multi-stakeholder process under the Clean Air Strategic Alliance for this sector will achieve substantial air pollution reductions more effectively. Environment Canada is open to pursuing equivalency for the mid-life base level industrial emission requirements, and feels that the Clean Air Strategic Alliance air framework should achieve equivalency. Although this concern has been raised many times, we are still waiting on word of a change on Ottawa's part.

NR



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Alberta's Position Across All Sectors

Across all sectors, Alberta is advocating for a policy framework that sends the right signals across the economy and achieves real reductions today, coupled with a focus on investing in technology and innovation for real reductions in the future. Alberta is advocating for full access to compliance mechanisms, including low cost domestic reductions (offsets) and use of the provincial technology funds to achieve this balance of immediate real reductions and a commitment to long-term deep reductions through investment in innovation and technology.

Alberta's current regulation requires a 12 per cent intensity reduction from large emitters across all sectors. Alberta is advocating that the national approach should achieve at a minimum the reduction currently imposed through Alberta's regulation, with recognition that the provincial climate change strategy is under renewal and the province may move to impose a greater reduction across all large emitters. The province supports sending the right policy signal to incent continuous improvement across and within all sectors through an overarching policy framework. Allowing some sectors to continue with status quo while imposing a large burden on others, such as coal and oil and gas, is an unfair policy framework. In addition, Alberta supports a thorough analysis and understanding of competitiveness and economic impacts in setting individual reduction requirements for each sector.

For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Keith Denman, Air and Climate Change Policy Branch

TELEPHONE: 780-422-2832

SUBMITTED BY: Policy Division

- Requires legislative/regulatory change

BRIEFING NOTE

ADM

For Decision

AR 54993

SUBJECT: Alberta's goals in Greenhouse Gas Equivalency conversation with Environment Canada

DATE: August 12, 2013

ISSUE: Affirming Alberta's goals in its upcoming negotiations with Canada relative to their greenhouse gas regulations

BACKGROUND:

What is equivalency?

Section 10 of the *Canadian Environmental Protection Act, 1999* allows jurisdictions to negotiate an equivalency agreement that will result in the federal government standing down a regulation under the *Canadian Environmental Protection Act, 1999* in that jurisdiction. This allows the levels of government to work together, ensures that the desired outcomes take place, duplication is avoided, and that the most appropriate jurisdiction regulates. The jurisdiction must prove to the federal Minister's satisfaction that an existing regulatory instrument is equivalent to the regulation under *Canadian Environmental Protection Act, 1999*, and that there exist provisions for the investigation of alleged offenses similar to the *Canadian Environmental Protection Act, 1999*. The Act itself does not define what constitutes equivalent to, but a background document on Environment Canada's website refers to achieving "the same environmental outcome". The *Canadian Environmental Protection Act, 1999* currently limits these to a five year period, after which time they must be re-established.

Among the items that will be negotiated with Canada is the number of agreements and how the various sectors are aggregated or left separate. This document will refer to a single agreement, but recognizes there may be more than one.

Proposed federal greenhouse gas regulations:

The federal government is rolling out a sectoral approach to greenhouse gas reductions comprised of intensity-based performance standards for sectors outside of oil and gas

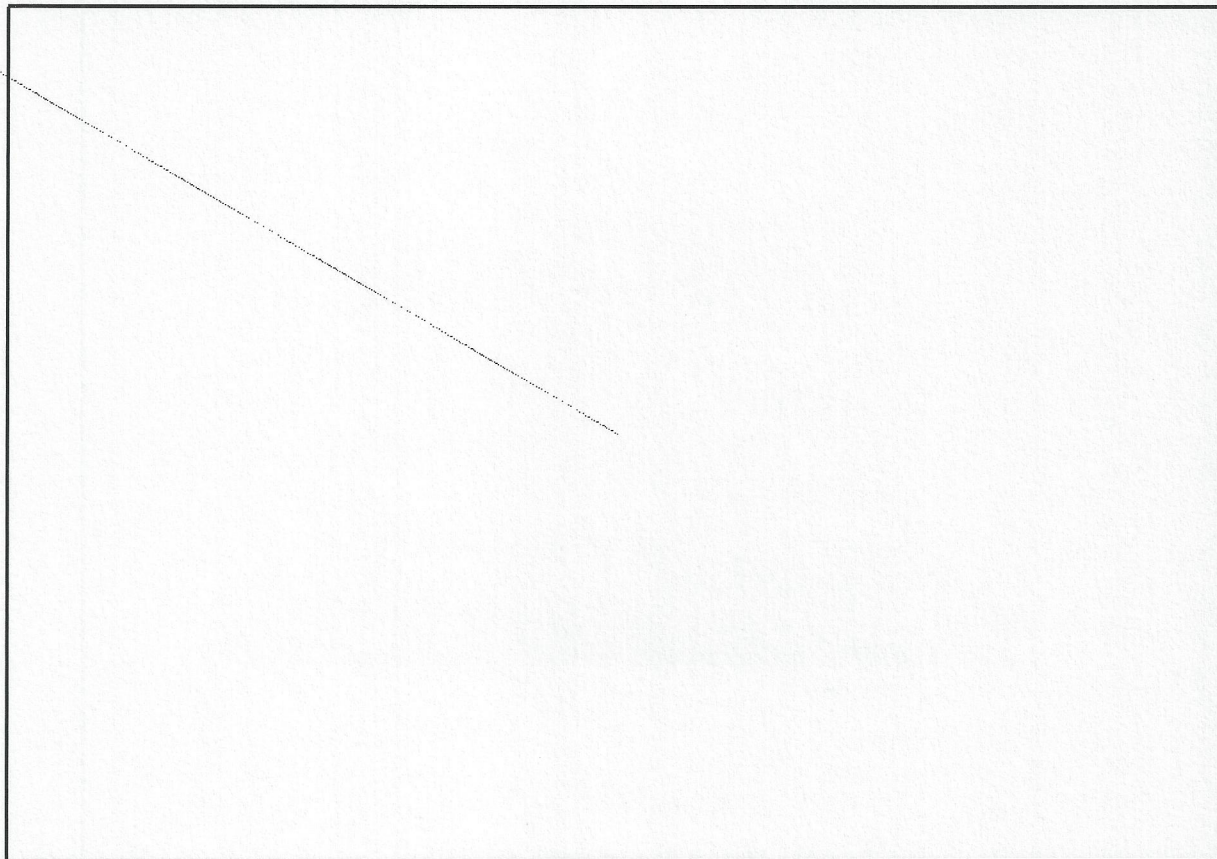
NR Their system does not, as it stands currently, allow for the use of technology funds outside of the oil and gas sector, and provides for a limited use of offsets, which it describes as "low cost domestic reductions". Alberta is participating in conversations with the federal government and the various industrial sectors that are underway.

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Coal-fired electricity

The first sector announced, and the only sector to have been completed to date, is coal-fired power generation. The regulation for this sector was gazetted in September 2012 and takes effect on July 1, 2015. It requires coal-fired generating units, at the end of a 45-50 year design life (depending on commission date), to emit no more than 420 kg CO₂e/Megawatt hour (which is essentially "clean as gas"). The same emissions standard applies to new facilities as of 2015. There is no allowance for flexibility mechanisms such as offsets or technology fund payments, though there is limited flexibility through fleet management. As carbon capture and storage is the only option currently available that could achieve this performance standard, and as the technology is not yet sufficiently cost-effective for industry to pursue, it is likely that these units will be decommissioned at the end of their design life and that no new coal facility will be built in Alberta – unless at some time in the future carbon capture and storage becomes more economically feasible.

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Rationale for pursuing an equivalency agreement

1. Alberta's system works

Alberta has been regulating greenhouse gases for a number of years through the Specified Gas Emitters Regulation, which covers a broad swath of the economy and currently includes a 12 per cent reduction target for all large final emitters, regardless of sector. It also includes a variety of flexibility tools, including offsets, performance credits and the availability of technology fund payments (currently set at \$15/tonne). These tools allow companies to use the lowest cost reductions available to them, include non-covered activities through the offset system, and provide funding for research and commercialization of the new technologies that are needed to drive long term reductions in greenhouse gases.

Industry is familiar with Alberta's system and they have learned to meet its reporting and compliance requirements. Alberta's system has delivered significant reductions in greenhouse gases, and the funds collected have spurred research that will help meet the longer term goals of reducing the carbon footprint of the province.

An equivalency agreement should provide Alberta with the ability to continue to operate its system, and leave us a freer hand to make any changes to achieve the economic, environmental and social objectives of the Province.

2. Architectural mis-match

The basic architecture of the federal system outside of the proposed oil and gas regulation is not easily compatible with Alberta's existing system. The sector-by-sector performance standard approach is very time consuming and does not easily allow for the ongoing reductions that will be required if Alberta is to achieve its stated goals for greenhouse gas reductions. Alberta's system is designed to be scalable – the stringency of the reductions and the carbon price (as reflected in the technology fund) can be adjusted as needed without running multiple sectoral processes as the current federal process requires. Aligning the two systems, or trying to assist industry in working within the two systems at the same time, would be very difficult.

An equivalency agreement should leave the Alberta system in place, with some adaptations that might be required in the negotiating process. It should be noted that Alberta's current system will not achieve an equivalent outcome as the proposed federal regulations for electricity and oil and gas and will need to be modified.

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3. Missing policy drivers

One of Alberta's significant concerns with the federal approach is that it does not have any policy or economic drivers for deeper reductions in greenhouse gases, or for the major structural and technological changes that will be required over the longer term. It provides no incentives for companies to go beyond compliance with what are, for many sectors, minimal compliance obligations.

An equivalency agreement that allows us to run our existing system or something similar to it would maintain the drivers we have for step changes in technology and the changes that are required to reduce our carbon footprint.

4. Duplication of effort for industry

The reporting tasks and the operation of the system are known quantities for Alberta industry. In the absence of an equivalency agreement, industry will have to layer on the reporting and compliance requirements of the federal system. This is not simply about filling out forms – it is about installing the control and measurement systems for steam, fuel and products that are needed to provide the data for those forms. Contracts are in place with offset providers, staff are trained in the reporting processes, and much of this may have to be redone in order to meet any new federal requirements.

An equivalency agreement would leave Alberta as the regulator and reduce the administrative load on our industry that would result from double regulation.

5. Specific concerns with some sectors

The proposed federal system poses difficulties for many sectors due to the lack of flexibility in achieving the set performance standards. Alberta's electricity system is investor owned and has different dynamics than other provinces. The province of Alberta is growing rapidly and with this growth comes increasing electricity demand from industry and consumers, at the same time as coal plants will be shutting down. This means that Alberta will need a lot of new generation from sources other than coal. Some of the policies emerging from the federal system may not provide an incentive for co-generation and make some of the generation that is essential to keep the grid stable problematic. The timelines required to plan, find capital, build and commission significant amounts of electrical generation must be allowed for.

An equivalency agreement should give us the flexibility to allow the electricity sector to adjust its generation mix in realistic timelines while still meeting the greenhouse gas outcomes expected from the federal regulation.

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6. Fairness and economic efficiency

The burden of reductions in greenhouse gases in the federal proposal is not evenly distributed through the various sectors. Two sectors in particular: coal-fired electricity and oil and gas bear a much heavier burden than the other sectors. While few sectors would say they would be willing to accept a heavier burden than the federal program asks of them, we believe that all sectors should contribute to reductions, and that all sectors should have access to flexibility mechanisms, which will allow the costs to be distributed more evenly across the economy.

The use of tools such as offsets allow industry to pursue the lowest cost reductions that are available to them. If we assume that a tonne of CO₂e is a tonne of CO₂e no matter what the source, then allowing the use of less expensive reductions will allow for greater overall reductions for the same cost. At the same time, considerations for trading beyond provincial borders will have to be a political decision for each province to make.

An equivalency agreement should allow us to achieve reductions in greenhouse gas emissions from across the economy.

An equivalency agreement should also allow the greatest level of reductions for the least cost through compliance flexibility.

7. Provincial regulation of provincially significant industry

In Alberta, perhaps more than most other jurisdictions, greenhouse gas policy and economic policy are intertwined. The economy of Alberta is dominated by a few industries, which are significant emitters of greenhouse gases. Decisions about the greenhouse gas management requirements will impact the costs for these industries.

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[REDACTED] Alberta is not comfortable leaving the future of our major industries in the hands of the federal government.

An equivalency agreement should allow decisions that can have significant impacts on Alberta's economy to be made by Alberta, the owner of the natural resources.

Process:

The *Canadian Environmental Protection Act, 1999* leaves the obligation on the other jurisdictions to establish that their regulation meets the conditions for an equivalency agreement, but does not give a great deal of detail as to how that is to be done. Alberta Environment and Sustainable Resource Development staff have begun a series of conversations with Environment Canada counterparts with the goal of preparing a Memorandum of Understanding that will include items such as the following:

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- The basic structure of the agreement or agreements(s)
 - i.e. single sector, single agreement or a combined document
- What constitutes “equivalent” for the purposes of this agreement and how it will be determined
- Statement of the agreed upon environmental outcome(s)
- How the various sectors’ performance standards under the federal approach will be translated into the provincial system
 - Will they be aggregated or will each sector have to meet individual targets?
- Specific items that must be in Alberta’s regulations to assist in establishing equivalency
- Outline of the content that will be found in the equivalency agreement

The goal is to have this part of the process completed by the end of 2013.

Once this document has been prepared and signed off by senior officials at both Alberta Environment and Sustainable Resource Development and Environment Canada, we will work with legal staff and Environment Canada to prepare the actual draft documents. The equivalency process will require both the provincial level regulatory instruments that will be used to enforce the province’s greenhouse gas program and the draft equivalency agreement to be complete. Changes that are required to provincial regulations as a result of the equivalency process and the climate change strategy renewal are targeted for completion by July 2014.

The draft agreement will be gazetted and open to receive comments. These comments will be received and responded to and a final version of the agreement gazetted. The draft version should be done by the end of 2014, with the aim of having it in place prior to July 2015 when the federal coal-fired power regulation comes into force.

RECOMMENDATIONS:

- Affirm the goals for negotiations as set out in this note.
- Staff should continue to work with Environment Canada, providing formal and informal feedback to address concerns we have with their regulatory approach.
- Engage with industry and relevant Alberta ministries to discuss areas of concern.

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For Assistant Deputy Minister's Use:

Agree with recommendations

Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Keith Denman

TELEPHONE: 780-422-2832

SUBMITTED BY: Nicole Spears

Minister
 Deputy Minister

BRIEFING NOTE

For Decision
 For Information

AR (Action_Request_Number)

SUBJECT: Alberta's goals in Greenhouse Gas Equivalency conversation with Environment Canada

DATE: August 12, 2013

ISSUE: Affirming Alberta's goals in its upcoming negotiations with Canada relative to greenhouse gas regulation.

BACKGROUND:

What is Equivalency?

Section 10 of the *Canadian Environmental Protection Act, 1999* (C.E.P.A.) allows jurisdictions to negotiate an equivalency agreement that will result in the federal government standing down a regulation under C.E.P.A. in that jurisdiction. This allows the levels of government to work together, ensures that the desired outcomes take place, duplication is avoided, and that the most appropriate jurisdiction regulates. The jurisdiction must prove to the federal minister's satisfaction that an existing regulatory instrument is "equivalent to" the regulation under C.E.P.A., and that there exist provisions for the investigation of alleged offenses similar to C.E.P.A.'s. C.E.P.A. itself does not define what constitutes "equivalent to", but a background document on Environment Canada's website refers to achieving "the same environmental outcome". C.E.P.A. currently limits these to a five year period, after which time they must be re-established.

Among the items that will be negotiated with Canada is the number of the agreements, and how the various sectors are aggregated or left separate. This document will refer to a single agreement, but recognizes that there may be more than one.

What the Federal government is proposing in its Climate Change regulations

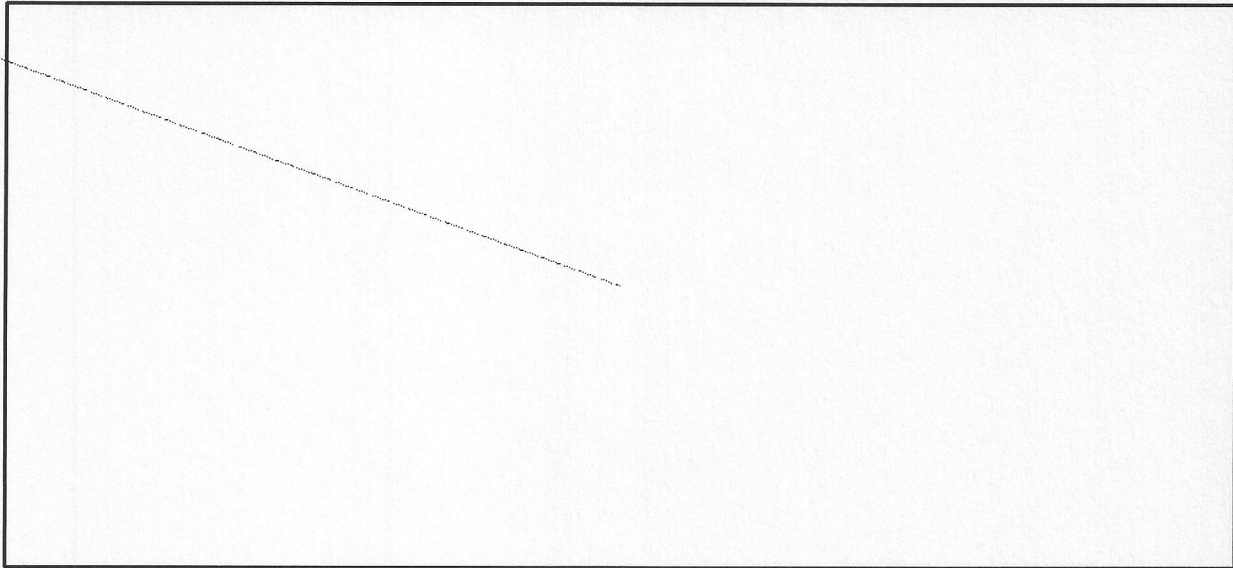
The federal government is rolling out a sectoral approach to greenhouse gas reductions comprised of intensity-based performance standards for sectors outside of oil and gas [redacted] NR
[redacted] Their system does not, as it stands currently, allow for the use of technology funds outside of the oil and gas sector, and provides for a limited use of offsets, which it describes as "low cost domestic reductions". Conversations with the various industrial sectors are underway. Alberta is participating in these conversations.

The first sector announced, and the only sector to have been completed to date, is coal-fired power generation. The regulation for this sector was gazetted in September 2012 and takes effect on July 1, 2015. It requires coal-fired generating units, at the end of a 45-50 year design

NR

life (depending on commission date), to emit no more than 420 kg CO₂e/MWh ("clean as gas"). The same emissions standard applies to new facilities as of 2015. There is no allowance for flexibility mechanisms such as offsets or technology fund payments, though there is limited flexibility through fleet management. As Carbon Capture and Storage is the only option currently available that could achieve these levels, and as the technology is not yet sufficiently mature or cost-effective for industry to pursue, it is likely that these units will be decommissioned at the end of their design life and that no new coal facility will be built – unless at some time in the future carbon capture and storage becomes more economically feasible.

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Why we would like to negotiate an equivalency agreement

1. Alberta's system works.

Alberta has been regulating greenhouse gases for a number of years through its Specified Gas Emitters Regulation. This covers a broad swath of the economy and currently includes a 12% reduction target for all large final emitters, regardless of sector. It also includes a variety of flexibility tools, including offsets, performance credits and the availability of technology fund payments (currently set at \$15/tonne). These tools allow companies to use the lowest cost reductions available to them, include non-covered activities through the offset system, and provide funding for research and commercialization of the new technologies that are needed to drive long term reductions in greenhouse gases.

Industry is familiar with Alberta's system and they have learned to meet its reporting and compliance requirements. Alberta's system has delivered significant reductions in greenhouse gases, and the funds collected have spurred research that will help meet the longer term goals of reducing the carbon footprint of the province.

An equivalency agreement should provide Alberta with the ability to continue to operate its system, and leave us a freer hand to make any changes that might come out of the current climate change strategy renewal.

2. Architectural mis-match

The basic architecture of the federal system is not easily compatible with Alberta's existing system. The sector by sector performance standard approach is very time consuming and does not easily allow for the ongoing reductions that will be required of Alberta to achieve its stated goals for greenhouse gas reductions. Alberta's system is designed to be scalable – the stringency of the reductions and the carbon price (as reflected in the technology fund) can be adjusted as needed without running many sectoral processes as the current federal process requires. Aligning the two systems, or trying to assist industry in working within the two systems at the same time, would be very difficult.

An equivalency agreement should leave the Alberta system in place, with some adaptations that might be required in the negotiating process. It should be noted Alberta's current system will not achieve an equivalent outcome as the proposed federal regulations for electricity and oil and gas and will need to be modified.

3. Missing Policy Drivers

One of Alberta's significant concerns with the federal approach is that it does not have any policy or economic drivers for deeper reductions in greenhouse gases, or for the major structural and technological changes that will be required over the longer term. It provides no incentives for companies to go beyond compliance with what are, for many sectors, minimal compliance obligations.

An equivalency agreement that allows us to run our existing system or something similar to it would maintain the drivers we have for step changes in technology and the changes that are required to reduce our carbon footprint.

4. Duplication of effort for industry

The reporting tasks and the operation of the system are known quantities for Alberta industry. In the absence of an equivalency agreement industry will have to layer on the reporting and compliance requirements of the federal system. This is not simply about filling out forms – it is about installing the control and measurement systems for steam, fuel and products that are needed to provide the data for those forms. Contracts are in place with offset providers, staff are trained in the reporting processes, and much of this may have to be redone in order to meet any new federal requirements.

An equivalency agreement would leave Alberta as the regulator and reduce the administrative load on our Industry that would result from double regulation.

5. Specific Concerns with some Sectors

There are some sectors, such as electricity, for which the proposed federal system poses some real difficulties, primarily due to the lack of flexibility. Alberta's electricity system is investor owned and has different dynamics than other provinces. The province of Alberta is growing rapidly and the need for new generation to replace the coal plants that will be shutting down and to meet the increasing demand from industry and consumers means that Alberta will need a lot of new generation. Some of the policies that seem to be emerging from the federal system may not provide an incentive for co-generation and make some of the generation that is essential to keep the grid stable problematic. The time lines required to plan, find capital, build and commission significant amounts of electrical generation must be allowed for.

An equivalency agreement should give us the flexibility to allow the electricity sector to adjust its generation mix in realistic timelines while still meeting the greenhouse gas profile expected in the federal system.

6. Fairness and Economic Efficiency

The burden of the reductions in greenhouse gases in the federal proposal is not evenly distributed through the various sectors. Two sectors in particular: coal-fired electricity and (potentially) oil and gas bear a much heavier burden than the other sectors. While few sectors would say that they would be willing to accept a heavier burden than the federal program asks of them, we believe that all sectors should contribute to reductions, and that all sectors should have access to flexibility mechanisms, which will allow the costs to be distributed more evenly across the economy.

The use of tools such as offsets allow industry to pursue the lowest cost reductions that are available to them. If we assume (and we do) that a tonne of CO₂e is a tonne of CO₂e no matter what the source, then allowing the use of less expensive reductions will allow for greater overall reductions for the same cost.

An equivalency agreement should allow us to achieve the greatest level of reductions for the least cost through compliance flexibility.

7. Provincial Regulation of Provincially Significant Industry

In Alberta, more than most other jurisdictions, greenhouse gas policy and economic policy are intertwined. The economy of Alberta is dominated by a few industries, which are significant emitters of greenhouse gases.

NR

Alberta is not comfortable leaving the future of our major industries in the hands of the federal government.

An equivalency agreement should allow decisions that can have significant impacts on Alberta's economy to be made in Alberta.

Process we will be following

(A detailed work plan is available – this is a summary only)

As mentioned earlier, C.E.P.A. leaves the obligation on the other jurisdictions to establish that their regulation meets the conditions for an equivalency agreement, but does not give a great deal of detail as to how that is to be done. Alberta Environment and Sustainable Resource Development staff have begun a series of conversations with their Environment Canada counterparts with the goal of preparing a Memorandum of Understanding that will include items such as the following:

- The basic structure of the agreement or agreements(s)
 - i.e. single sector, single agreement or a combined document
- What constitutes "equivalent" for the purposes of this agreement and how it will be determined
- How the various sectors' performance standards under the federal approach will be translated into the provincial system

- Will they be aggregated or will each sector have to meet the target?
- Specific items that must be in Alberta's regulations to assist in establishing equivalency.
- Outline of the content that will be found in the equivalency agreement

The goal is to have this part of the process completed by the end of 2013.

Once this document has been prepared and has been signed off by senior officials at both Alberta Environment and Sustainable Resource Development and Environment Canada we will work with legal staff and Environment Canada to prepare the actual draft documents. The equivalency process will require both the provincial level regulatory instruments that will be used to enforce the province's greenhouse gas program and the draft equivalency agreement to be complete. Changes that are required to provincial regulations as a result of the equivalency process and the climate change strategy renewal are targeted for completion by July 2014.

The draft agreement will be gazetted and open to receive comments. These comments will be received and responded to and a final version of the agreement gazetted. The draft version should be done by the end of 2014, with the aim of having it in place prior to July 2015 when the federal coal-fired power regulation comes into force.

RECOMMENDATIONS:

Affirm the goals for negotiations as set out in this note.

Staff should continue to work with Environment Canada, providing formal and informal feedback to reduce as much as possible the concerns we have with their regulatory approach.

Engage with industry and relevant Alberta ministries to discuss areas of concern.

KEY MESSAGES (For Communications' use only):

- Arial 12, no bold

For Minister/Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Keith Denman, Air and Climate Change Policy Branch

TELEPHONE: 780-422-2832

SUBMITTED BY: Nicole Spears

Requires legislative/regulatory change

BRIEFING NOTE

ADM

For Decision

AR

SUBJECT: Alberta's goals in Greenhouse Gas Equivalency conversation with Environment Canada

DATE: November 25, 2013

ISSUE: Alberta's negotiations with Canada on equivalency to federal greenhouse gas regulations.

BACKGROUND:

What is equivalency?

Section 10 of the *Canadian Environmental Protection Act, 1999* allows jurisdictions to negotiate an equivalency agreement that will result in the federal government standing down a regulation under the *Canadian Environmental Protection Act, 1999*. This allows the levels of government to work together, ensures that the desired outcomes take place, duplication is avoided, and that the most appropriate jurisdiction regulates. The jurisdiction must prove to the federal Minister's satisfaction that an existing regulatory instrument has equivalent provisions to the federal regulation.

Among the items that will be negotiated with Canada is the number of agreements and how the various sectors are aggregated or left separate. This document will refer to a single agreement, but recognizes there may be more than one.

Proposed federal greenhouse gas regulations:

The federal government is rolling out a sectoral approach to greenhouse gas reductions comprised of intensity-based performance standards for sectors outside of oil and gas Their system does not, as it stands currently, allow for the use of technology funds outside of the oil and gas sector, and provides for a limited use of offsets, which it describes as "low cost domestic reductions". Alberta is participating in conversations with the federal government and the various industrial sectors that are underway..

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Rationale for pursuing an equivalency agreement

1. Alberta's system works

Alberta has been regulating greenhouse gases for a number of years through the Specified Gas Emitters Regulation, which covers about 50 per cent of Alberta's total greenhouse gas emissions. It also includes a variety of flexibility tools, including offsets, performance credits and the availability of technology fund payments (currently set at \$15/tonne). These tools allow companies to use the lowest cost reductions available to them, include non-covered activities through the offset system, and provide funding for research and commercialization of the new technologies that are needed to drive long term reductions in greenhouse gases.

Industry is familiar with Alberta's system and they have learned to meet its reporting and compliance requirements. Alberta's system has delivered significant reductions in greenhouse gases, and the funds collected have spurred research that will help meet the longer term goals of reducing the carbon footprint of the province.

An equivalency agreement should provide Alberta with the ability to continue to operate its system, and leave us a freer hand to make any changes to achieve the economic, environmental and social objectives of the Province.

2. Architectural mismatch

The basic architecture of the federal system outside of the proposed oil and gas regulation is not easily compatible with Alberta's existing system. The sector-by-sector performance standard approach is very time consuming and does not easily allow for the ongoing reductions that will be required if Alberta is to achieve its stated goals for greenhouse gas reductions. Alberta's system is designed to be scalable – the stringency of the reductions and the carbon price (as reflected in the technology fund) can be adjusted as needed without running multiple sectoral processes as the current federal process requires. Aligning the two systems, or trying to assist industry in working within the two systems at the same time, would be very difficult.

An equivalency agreement should leave the Alberta system in place, with some adaptations that might be required in the negotiating process. It should be noted that Alberta's current system will not achieve an equivalent outcome as the proposed federal regulations for electricity and oil and gas and will need to be modified.

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3. Missing policy drivers

One of Alberta's significant concerns with the federal approach is that it does not have any policy or economic drivers for deeper reductions in greenhouse gases, or for the major structural and technological changes that will be required over the longer term. It provides no incentives for companies to go beyond compliance with what are, for many sectors, minimal compliance obligations.

An equivalency agreement that allows us to run our existing system or something similar to it would maintain the drivers we have for step changes in technology and the changes that are required to reduce our carbon footprint.

4. Duplication of effort for industry

The reporting tasks and the operation of the system are known quantities for Alberta industry. In the absence of an equivalency agreement, industry will have to layer on the reporting and compliance requirements of the federal system. This is not simply about filling out forms – it is about installing the control and measurement systems for steam, fuel and products that are needed to provide the data for those forms. Contracts are in place with offset providers, staff are trained in the reporting processes, and much of this may have to be redone in order to meet any new federal requirements.

An equivalency agreement would leave Alberta as the regulator and reduce the administrative load on our industry that would result from double regulation.

5. Specific concerns with some sectors

The proposed federal system poses difficulties for many sectors due to the lack of flexibility in achieving the set performance standards. Alberta's electricity system is investor owned and has different dynamics than other provinces. The province of Alberta is growing rapidly and with this growth comes increasing electricity demand from industry and consumers, at the same time as coal plants will be shutting down. This means that Alberta will need a lot of new generation from sources other than coal. Some of the policies emerging from the federal system may not provide an incentive for co-generation and make some of the generation that is essential to keep the grid stable problematic. The timelines required to plan, find capital, build and commission significant amounts of electrical generation must be allowed for.

An equivalency agreement should give us the flexibility to allow the electricity sector to adjust its generation mix in realistic timelines while still meeting the greenhouse gas outcomes expected from the federal regulation.

6. Fairness and economic efficiency

The burden of reductions in greenhouse gases in the federal proposal is not evenly distributed through the various sectors. Two sectors in particular: coal-fired electricity and oil and gas bear a much heavier burden than the other sectors. While few sectors would say they would be willing to accept a heavier burden than the federal program asks of them, we believe that all sectors should contribute to reductions, and that all sectors should have access to flexibility mechanisms, which will allow the costs to be distributed more evenly across the economy.

The use of tools such as offsets allow industry to pursue the lowest cost reductions that are available to them. If we assume that a tonne of CO₂e is a tonne of CO₂e no matter what the source, then allowing the use of less expensive reductions will allow for greater overall reductions for the same cost. At the same time, considerations for trading beyond provincial borders will have to be a political decision for each province to make.

An equivalency agreement should allow us to achieve reductions in greenhouse gas emissions from across the economy.

An equivalency agreement should also allow the greatest level of reductions for the least cost through compliance flexibility.

7. Provincial regulation of provincially significant industry

In Alberta, perhaps more than most other jurisdictions, greenhouse gas policy and economic policy are intertwined. The economy of Alberta is dominated by a few industries, which are significant emitters of greenhouse gases. Decisions about the greenhouse gas management requirements will impact the costs for these industries.

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Alberta is not comfortable leaving the future of our major industries in the hands of the federal government.

An equivalency agreement should allow decisions that can have significant impacts on Alberta's economy to be made by Alberta, the owner of the natural resources.

Process and Timing:

The *Canadian Environmental Protection Act, 1999* leaves the obligation on the other jurisdictions to establish that their regulation meets the conditions for an equivalency agreement, but does not give a great deal of detail as to how that is to be done. Alberta Environment and Sustainable Resource Development staff have begun a series of conversations with Environment Canada counterparts with the goal of preparing a Memorandum of Understanding that will include items such as the following:

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- The basic structure of the agreement or agreements(s)
 - i.e. single sector, single agreement or a combined document
- What constitutes "equivalent" for the purposes of this agreement and how it will be determined
- Statement of the agreed upon environmental outcome(s)
- How the various sectors' performance standards under the federal approach will be translated into the provincial system
 - Will they be aggregated or will each sector have to meet individual targets?
- Specific items that must be in Alberta's regulations to assist in establishing equivalency
- Outline of the content that will be found in the equivalency agreement

The goal is to have this part of the process completed by the end of 2013.

Once this document has been prepared and signed off by senior officials at both Alberta Environment and Sustainable Resource Development and Environment Canada, we will work with legal staff and Environment Canada to prepare the actual draft documents. The equivalency process will require both the provincial level regulatory instruments that will be used to enforce the province's greenhouse gas program and the draft equivalency agreement to be complete. Changes that are required to provincial regulations as a result of the equivalency process and the climate change strategy renewal are targeted for completion by July 2014.

The draft agreement will be gazetted and open to receive comments. These comments will be received and responded to and a final version of the agreement gazetted. The draft version should be done by the end of 2014, with the aim of having it in place prior to July 2015 when the federal coal-fired power regulation comes into force.

Sector-by-Sector Regulations:

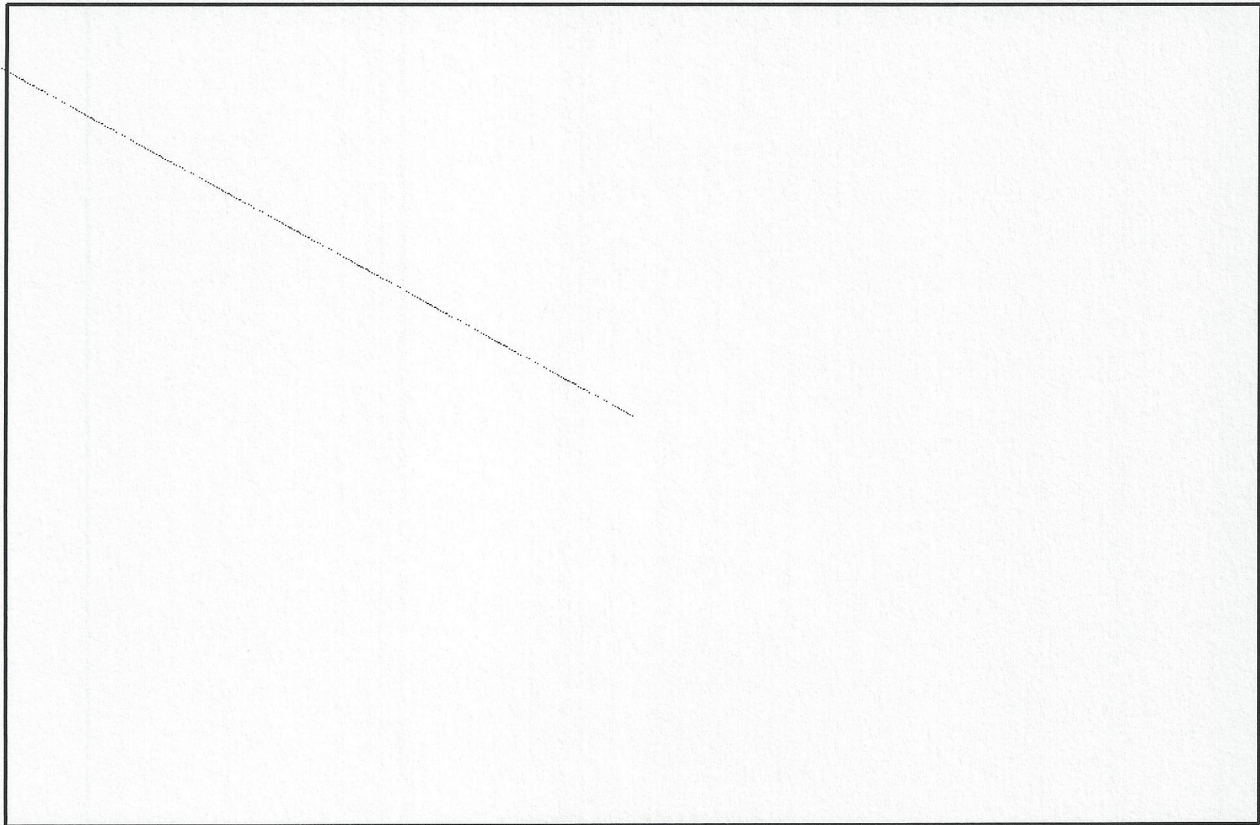
Coal-fired electricity

The first sector announced, and the only sector to have been completed to date, is coal-fired power generation. The regulation for this sector was gazetted in September 2012 and takes effect on July 1, 2015. It requires coal-fired generating units, at the end of a 45-50 year design life (depending on commission date), to emit no more than 420 kg CO₂e/Megawatt hour (which is essentially "clean as gas"). The same emissions standard applies to new facilities as of 2015. There is no allowance for flexibility mechanisms such as offsets or technology fund payments, though there is limited flexibility through fleet management. As carbon capture and storage is the only option currently available that could achieve this performance standard, and as the technology is not yet sufficiently cost-effective for industry to pursue, it is likely that these units will be decommissioned at the end of their design life and that no new coal facility will be

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built in Alberta – unless at some time in the future carbon capture and storage becomes more economically feasible.

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RECOMMENDATIONS:

- Affirm the goals for negotiations as set out in this note.
- Staff should continue to work with Environment Canada, providing formal and informal feedback to address concerns we have with their regulatory approach.
- Engage with industry and relevant Alberta ministries to discuss areas of concern.

For Assistant Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

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MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Keith Denman

TELEPHONE: 780-422-2832

SUBMITTED BY: Air and Climate Change Policy

BRIEFING NOTE

ADM

For Decision

AR

SUBJECT: Greenhouse Gas Equivalency Negotiations

DATE: November 25, 2013

ISSUE: Alberta's negotiations and timing with Canada on equivalency to federal greenhouse gas regulations.

BACKGROUND:

Equivalency

The *Canadian Environmental Protection Act, 1999* (the Act) allows jurisdictions to negotiate an equivalency agreement that will result in the federal government standing down a regulation under the Act. This enables the levels of government to cooperate, ensures desired outcomes occur, avoids duplication, and allows the most appropriate jurisdiction to regulate. The jurisdiction must prove to the federal Minister's satisfaction that an existing regulatory instrument has equivalent provisions to the federal regulation.

Among the items that will be negotiated with Canada is the number of agreements and how the various sectors are aggregated or left separate. This document will refer to a single agreement, but recognizes there may be more than one.

Need for an equivalency agreement

1. *Alberta's system works*- Alberta has been regulating greenhouse gases for several years through the Specified Gas Emitters Regulation, which enables a variety of tools including offsets, performance credits and the availability of technology fund payments. Industry is familiar with Alberta's system, operating to meet our reporting and compliance requirements. Alberta's system has delivered significant reductions in greenhouse gases, and the funds collected have spurred research to meet longer term reduction goals. An equivalency agreement should provide Alberta with the ability to continue to operate its system, and leave us a freer hand to make any changes to achieve the economic, environmental and social objectives of the Province.
2. *Architectural mismatch* - The basic architecture of the federal system outside of the proposed oil and gas regulation is not easily compatible with Alberta's system. The sector-by-sector performance standard approach is time consuming and does not easily allow for the ongoing reductions that are required if Alberta is to achieve its

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stated reduction goals. Alberta's system is designed to be scalable – the stringency of reductions and carbon price can be adjusted as needed without running multiple sectoral processes. Aligning the two systems, or trying to assist industry in working within the two systems concurrently, would be difficult. An equivalency agreement should leave the Alberta system in place, with some adaptations that might be required in the negotiating process. It should be noted that Alberta's current system will not achieve an equivalent outcome as the proposed federal regulations for electricity and oil and gas and will need to be modified.

3. *Missing policy drivers* - One of Alberta's significant concerns with the federal approach is that it does not have any policy or economic drivers for deeper reductions in greenhouse gases, or for the major structural and technological changes that will be required in the longer term. It provides no incentives for companies to go beyond compliance with what are, for many sectors, minimal compliance obligations. An equivalency agreement that allows us to run our existing system or something similar to it would maintain the drivers we have for step changes in technology and the changes that are required to reduce our carbon footprint.
4. *Duplication of effort for industry* - The reporting tasks and the operation of the system are known quantities for Alberta industry and government. In the absence of an equivalency agreement, industry will have to layer on the reporting and compliance requirements of the federal system. Contracts are in place with offset providers, staff are trained in the reporting processes, and much of this may have to be redone in order to meet any new federal requirements. An equivalency agreement would leave Alberta as the regulator and reduce the administrative load on our industry that would result from double regulation.
5. *Specific concerns with some sectors* - The proposed federal system poses difficulties for many sectors due to the lack of flexibility in achieving the set performance standards. Alberta's electricity system is investor-owned and has different dynamics than other provinces, and the timelines required to plan, find capital, build and commission significant amounts of electrical generation (to accommodate growth and move from coal-fired generation) must be allowed for. An equivalency agreement should give us the flexibility to allow the electricity sector to adjust its generation mix in realistic timelines while still meeting the greenhouse gas outcomes expected from the federal regulation.
6. *Fairness and economic efficiency* - The burden of reductions in greenhouse gases in the federal proposal is not evenly distributed through the various sectors. Alberta believes that all sectors should contribute to reductions, and that all sectors should have access to flexibility mechanisms, which will allow the costs to be distributed more evenly across the economy. The use of tools such as offsets allow industry to pursue the lowest cost reductions that are available to them, and considerations for

trading beyond provincial borders will have to be a political decision for each province to make. An equivalency agreement should allow us to achieve reductions in greenhouse gas emissions from across the economy and should also allow the greatest level of reductions for the least cost through compliance flexibility.

7. *Provincial regulation of provincially significant industry* - In Alberta, greenhouse gas policy and economic policy are intertwined as the province is dominated by a few industries which are significant emitters of greenhouse gases. Decisions about the greenhouse gas management requirements will impact the costs as well as social licence of these industries. Alberta is not comfortable leaving the future of our major industries in the hands of the federal government. An equivalency agreement should allow decisions that can have significant impacts on Alberta's economy to be made by Alberta, the owner of the natural resources.

Process and Timing

The *Canadian Environmental Protection Act, 1999* puts the obligation on the other jurisdictions to establish that their regulation meets the conditions for an equivalency agreement, but does not give a great deal of detail as to how that is to be done. Alberta Environment and Sustainable Resource Development staff have begun a series of conversations with Environment Canada counterparts with the goal of preparing a Memorandum of Understanding that will include items such as:

- the structure of the agreement(s)
- establishment of what constitutes "equivalent" for the purposes of this agreement and how it will be determined
- statement of the agreed upon environmental outcome(s)
- how the various sectors' performance standards under the federal approach will be translated into the provincial system
- specific items that must be in Alberta's regulations to assist in establishing equivalency
- outline of the content that will be found in the equivalency agreement

Alberta is drafting the Memorandum of Understanding for discussion with the federal government in mid-December 2013. The goal is to have this part of the process completed by the end of 2013.

Once this document has been prepared and signed off by senior officials at both Alberta Environment and Sustainable Resource Development and Environment Canada, we will work with legal staff and Environment Canada to prepare the actual draft documents. The equivalency process will require both the provincial level regulatory instruments that will be used to enforce the province's greenhouse gas program and the draft equivalency agreement to be complete. Changes required to provincial regulations as a result of the equivalency process and the climate change strategy renewal are targeted

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for completion by mid-2014.

The draft agreement will be gazetted and open to public comment. These comments will be received and responded to and a final version of the agreement gazetted. The draft version should be complete by the end of 2014, with the aim of having it in place prior to July 2015 when the federal coal-fired power regulation comes into force.

RECOMMENDATIONS:

- Affirm the goals for negotiations as set out in this note.
- Staff should continue to work with Environment Canada, providing formal and informal feedback to address concerns we have with their regulatory approach.
- Engage with industry and relevant Alberta ministries to discuss areas of concern.

For Assistant Deputy Minister's Use:

- Agree with recommendations
- Disagree with recommendations

MINISTER AND/OR DEPUTY MINISTER'S COMMENTS/DECISION:

CONTACT: Keith Denman

TELEPHONE: 780-422-2832

SUBMITTED BY: Air and Climate Change Policy Branch

MEETING BN

NR **MEETING WITH Environment Canada about Climate Change, Air Quality Management System BLIERS**

Meeting Details:

Date and time: January 23, 1014

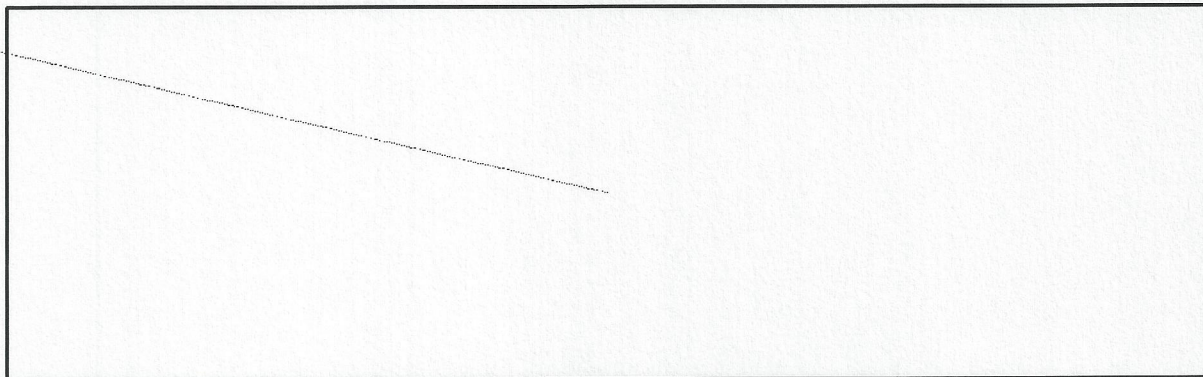
Location: Not known

January 16, 2014

PURPOSE: This meeting is to discuss issues of shared concern with Environment Canada.

CURRENT STATUS:

- Environment Canada has been rolling out its regulatory approach for greenhouse gases, based on intensity based sectoral performance standards. Alberta has been at every table involving Alberta's industrial sectors to provide input.
- In addition, we are pursuing an equivalency agreement to enable the province to maintain jurisdictional authority over our industry and natural resources.



DEPARTMENT REP:

Additional department staff recommended to attend meeting:

- Assistant Deputy Minister (name, division)
- Department staff (name, title, division)

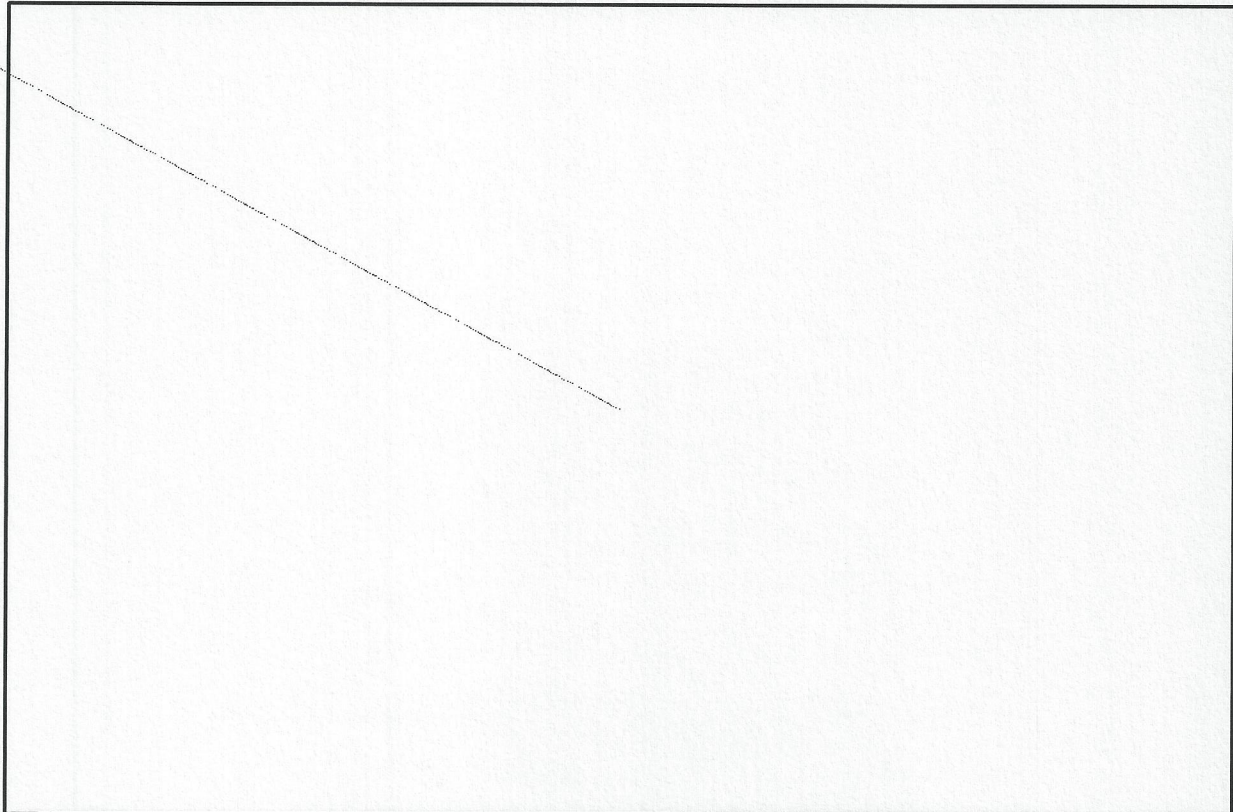
BACKGROUND:

- **Proposed federal greenhouse gas regulations:**
- Coal-fired electricity
The first sector announced, and the only sector to have been completed to date, is coal-fired power generation. The regulation for this sector was gazetted in September 2012 and takes effect on July 1, 2015. It requires coal-fired generating units, at the end of a 45-50 year

design life (depending on commissioning date), to emit no more than 420 kg CO₂e/Megawatt hour, which is essentially "clean as gas". The same emissions standard applies to new facilities as of 2015.

- There is no allowance for flexibility mechanisms such as offsets or technology fund payments, though there is limited flexibility through fleet management (shutting one unit down early and transferring that credit to a different unit). As carbon capture and storage is the only option currently available that could achieve this performance standard, and as the technology is not yet sufficiently cost-effective for industry to pursue, it is likely that these units will be decommissioned at the end of their design life and that no new coal facilities will be built in Alberta. This will hold true unless at some time in the future carbon capture and storage becomes more economically feasible or new technology is developed.

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- **Equivalency:**

Section 10 of the *Canadian Environmental Protection Act, 1999* allows jurisdictions to negotiate an equivalency agreement that will result in the federal government standing down their regulation in that jurisdiction.

- The Act leaves the obligation on the other jurisdictions to establish that their regulation meets the conditions for an equivalency agreement, but does not give a great deal of detail as to how that is to be done. Alberta Environment and Sustainable Resource Development staff have begun a series of conversations with Environment Canada, with the goal of preparing an Agreement in Principle by February 2014 that will set out the basic structure and content of the Equivalency Agreement. The agreement itself and subsequent order can only be completed once both jurisdictions have a regulation in place. Alberta's Specified Gas Emitters Regulation expires September 2014 and will have to be renewed and revised in order to achieve the equivalent outcome of the federal regulations.

- **Input to Canada's 2020 and post-2020 targets**

All provinces and territories have been asked for input to Canada on sub-national contributions to Canada's 2020 Copenhagen target (a 17% reduction of greenhouse gas emissions off of 2005 levels by 2020) under the United Nations Framework Convention on Climate Change. Alberta greatly appreciates the opportunity to provide guidance in terms of Alberta's own contribution and in helping to shape Canada's position in the international dialogue. Alberta is preparing a position paper to be shared with Environment Canada in the near future.

ATTENDEES:

- **Bill Werry**

Contact: Nicole Spears, Air and Climate Change Policy Branch, Phone: (780- 427-4208)
ADM: Shannon Flint, Policy Division, Phone (780-422-8463)

Deputy Minister's office use only

Comments/Required followup: