

August 5, 2014

## Canada and Nova Scotia Finalize Equivalency Agreement on the Control of Greenhouse Gas Emissions in the Electricity Sector

Written by: Nigel Bankes

**Documents commented on:** [Agreement on the Equivalency of Federal and Nova Scotia Regulations for the Control of Greenhouse Gas Emissions from Electricity Producers in Nova Scotia](#); Proposed Order in Council Declaring that the *Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations* do not apply in Nova Scotia, [Canada Gazette vol 148 \(2014\), June 28, 2014](#) and the accompanying Regulatory Impact Analysis Statement

This Agreement is the first greenhouse gas (GHG) equivalency agreement to be finalized between Canada and a province. The Agreement and the accompanying draft Order in Council will serve to suspend the application of Canada's [Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations](#), SOR/2012-167 (the federal Coal Regulations or the CFGRs) made under s.93 of the [Canadian Environmental Protection Act, 1999](#), SC 1999, c 33 (*CEPA, 1999*) in the province of Nova Scotia. For comment on the CFGRs see the post by Astrid Kalkbrenner [here](#). The Agreement will be of considerable interest to other jurisdictions (including Alberta) which are negotiating equivalency agreements with Canada to avoid the application of federal GHG regulations. While a draft of the Agreement has been available for a couple of years (see [here](#), and for a very short summary of the two supportive comments received see [here](#)), and there are very few changes between the draft and the final version, what is new is the release of the Regulatory Impact Analysis Statement (RIAS) which casts some light on the methodology that the federal government will apply in assessing equivalency.

Interested parties have 60 days to provide comments and/or file a notice of objection requesting establishment of a board of review under s.333 of *CEPA, 1999*.

### Federal Greenhouse Gas Regulations

As is well known, the federal government proposes to reach its Copenhagen commitment to reduce greenhouse gas emissions by implementing a sector by sector regulatory approach. This has proven to be painfully slow. The federal government adopted the CFGRs in 2012 but promised regulations for other sectors, including the oil and gas sector, have been repeatedly delayed. The CFGRs establish a performance standard of 420 tonnes of carbon dioxide per gigawatt-hour (tCO<sub>2</sub>/GWh) for new coal-fired electricity generation units and those that have reached the end of their useful life. According to the RIAS, the application of the CFGRs would

require the province (Nova Scotia Power) to retire its coal fired units totalling 952 MW of capacity between 2020 and 2030. Nova Scotia sought to avoid this result (with the implication that it would need to build new natural gas capacity) and therefore entered into negotiations for an equivalency agreement.

## Equivalency

The CFGRs are enacted pursuant to the *Canadian Environmental Protection Act, 1999*. Section 10 of *CEPA, 1999* allows the Governor in Council to make an order declaring that specific regulations “do not apply” to a particular jurisdiction where the Minister of Environment and the government of the other jurisdiction “agree in writing” that there are laws in force in the other jurisdiction, the provisions of which “are equivalent to” the regulations. The premise of the Nova Scotia Agreement is that an “outcome-based” equivalency agreement is adequate to meet the terms of s.10 thereby justifying an order making the federal regulations inapplicable. Thus, the purpose of the Nova Scotia Agreement is to allow existing coal fired facilities to continue generating even though they will not be able to meet the standards prescribed by the federal regulations. A finding of equivalency is justified on the basis that Nova Scotia will achieve reductions equivalent to those that will be achieved through the federal regulations by reduced generation at coal facilities and by other measures that have nothing to do with the coal sector. These other measures include a commitment to increase the share of renewable energy in the province’s energy mix through a number of initiatives including a feed in tariff program, and support for the Muskrat Falls hydro project, as well as various energy efficiency programs including smart metering. In addition, Nova Scotia was also required to amend its regulations to ensure that electricity producers must meet certain caps prescribed in the Agreement. This is perhaps the crucial element here – the adoption of a hard cap for the sector rather than the technology based target – because it provides some certainty as to reduced emissions in the sector.

If we assume that the outcomes based approach to equivalency is appropriate (and it is not entirely clear that it is, since s.10 of *CEPA 1999* focuses on the provisions of the laws of the other jurisdiction, not on the effect or outcome of the measures taken in the other jurisdiction) it is of course necessary to show that the provincial measures will reduce GHG emissions by at least as much as the reductions that would be achieved by application of the CFGRs. It is evident that this assessment requires the construction of two scenarios. The first is a business as usual (BAU) scenario in which emissions are assessed on the basis that the equivalency agreement is not concluded and thus that the CFGRs will apply *as well as* any applicable provincial rules (other than incremental commitments made as part of the equivalency agreement – see s.8.2.3 of the RIAS and the “caps” that the province undertook to impose). The second scenario, the regulatory scenario, establishes what the electricity generation sector is expected to look like with the implementation of the proposed Order in Council (i.e. the federal regulations are backed out and the incremental provincial commitments apply).

The RIAS summarizes the comparison between the two scenarios (here I focus on the reduced emission rather than the more general cost-benefit analysis, which, for example, assumes avoided decommissioning costs at coal generation facilities by pushing them out beyond the period of review, 2021 – 2030) as follows (RIAS, s.8.2.3):

Standing down the federal coal-fired electricity regulations would allow the electricity producer to continue to operate coal-fired units reaching the end of their useful life that would otherwise have been closed in the BAU scenario at the

end of their useful life. This flexibility is expected to result in avoided natural gas capacity investments. ....

Also, prior to 2030, the electricity producer is expected to generate, relative to the BAU scenario, less electricity from coal-fired units and natural gas units in order to comply with provincial GHG emission caps for 2021–2030. Therefore, the electricity sector is expected to show a cumulative reduction in generation in Nova Scotia and correspondingly in Canada. It is also expected that Nova Scotia would need to rely more on importing renewable energy from the Muskrat Falls project in order to meet demand and the provincial renewable energy standards. This reduces, relative to the BAU scenario, the generation available for export to the United States from Muskrat Falls through New Brunswick, leading to an overall reduction in electricity exports. The reduction in generation from coal-fired units and natural gas units also leads to additional benefits from GHG emissions reduction, additional changes in air pollutant emissions, avoided fuel costs, avoided variable O&M costs associated with less reliance on coal-fired units and natural gas units.

The RIAS also provides an analysis of changes in demand (RIAS s.8.4.1) (a small reduction in demand in the regulatory scenario presumably because of the emphasis on demand side management (DSM) measures), and changes in the generation mix to meet that demand (RIAS, s.8.4.3) (projects less investment in new natural gas capacity in the regulatory scenario). The overall analysis is that over the 2015–2020 period, the regulatory scenario is “expected to result in an incremental reduction of 0.3 Mt CO<sub>2</sub>e of GHG emissions” and over the 2021–2030 period “incremental GHG reductions are estimated to be about 3 Mt CO<sub>2</sub>e of GHG emissions”.

## **Commentary**

The principal difficulty with any scenario analysis such as this is the same difficulty that faces any offsets analysis and that is the challenge of showing additionality (especially over such a long time frame). For example, one might expect that a utility would take DSM measures in any event to avoid or defer building new capacity and so it is not clear why any reductions associated with DSM should be credited to the regulatory scenario. Similarly, the BAU analysis assumes that natural gas generation would be added to replace retired coal generation but at this stage we do not know what any sector specific regulations might look like for the natural gas sector. This might of course influence what is business as usual and what is therefore additional – that which is required by law is not additional.

I think that this points to the general difficulty of negotiating equivalency agreements on a sector by sector basis where the potential equivalent commitments that provinces may offer involve activities in other yet-to-be-regulated industrial sectors; it would be perverse if a province were offering equivalency commitments from activities undertaken in another sector which then falls to be covered by new federal regulations for that sector.

One paragraph was added to the final version of the Equivalency Agreement which goes some way to addressing this issue:

4.3 The Parties agree that, should they develop further regulations relating to greenhouse gases or air pollutants affecting the electricity sector in Nova Scotia, they will in good faith use their best efforts to conclude an equivalency agreement in respect of those

regulations. If the regulation pertains to greenhouse gases, the Parties may choose to amend the present agreement and determine equivalency on the basis of a comparison of the aggregate impact of both the *Reduction of Carbon Dioxide from Coal-Fired Generation of Electricity Regulations* and any new federal regulation on electricity sector emissions in Nova Scotia with the impact of the *Greenhouse Gas Emissions Regulations* on electricity sector emissions in Nova Scotia.

All of this of course is connected to the duration of the proposed arrangements and here the RIAS attempts to choreograph a merry dance between the competing needs of regime certainty (to obtain the needed investments and to avoid stranded assets) and flexibility (to respond to the sort of complexity referred to above as well as to provide the opportunity for adjustments should equivalency prove to be unattainable). The RIAS attempts to offer certainty by analysing emissions projections over a sixteen year period from 2015 – 2030 (the first year coinciding with the entry into force of the CFGRs and the Agreement and Order in Council and the second, more subjectively, based on “the time frame of the amendments made to Nova Scotia’s regulations to enter into the equivalency agreement for the control of GHG emissions from the electricity sector in Nova Scotia.” (RIAS, s.8.2.2)) The Agreement itself however tells a different story since it provides that it terminates on December 31, 2019 – or by either Party giving at least three months’ notice. The latter provision flies in the face of the need for certainty and that concern is only partially met by Canada’s commitment that if the Agreement is terminated before the end of 2019 Canada will “start applying” the CFGRs in the province “with as little disruption as possible in the circumstances, in a manner that takes into consideration the importance of a reliable supply of electricity that does not place an undue economic burden on Nova Scotia.” (s.5.4). That might be enough comfort in a province where the only coal fired generator is a Crown corporation; it might not be enough in a province like Alberta where all of the generation is privately owned. However, the challenge is built in to the *Act*; both the five year term and the three months notice to terminate are prescribed by s.10(8) of *CEPA, 1999*.

The Agreement addresses its possible extension or renewal as follows:

Should both Parties be in compliance with the Agreement on June 1, 2019, the Parties commit to initiate its renewal, provided that the effect on greenhouse gas emissions levels in the electricity sector in Nova Scotia of the limits to be imposed pursuant to the [provincial equivalent measures] is still considered equivalent to the effect on greenhouse gas emissions levels that would result from the application of the *Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations* in Nova Scotia during this period.

It will be interesting to see if the finalization of this Agreement triggers the finalization of additional equivalency agreements. It will also be interesting to see if any party attempts to trigger the review procedure contemplated by s.10 and s.333 of the *Act*.

To subscribe to ABlawg by email or RSS feed, please go to <http://ablawg.ca>  
Follow us on Twitter @ABlawg

