

Cleaning up Coal II

By Astrid Kalkbrenner

Regulations commented on:

Federal Regulations “[Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations](#)” as of 30 August 2012, (Canada Gazette Part II, Vol. 146, No 19, SOR/2012-167)

On 27 August 2011 the federal government published proposed regulations on the “Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity” (the “[Draft Regulations](#)”) (see my previous ABlawg post [Cleaning up Coal](#)). The Draft Regulations were open for comments for a 60-day public consultation period. Environment Canada received over 5000 submissions during the consultation period, including submissions from 4 provincial governments, 16 electricity industry corporations and system operators, 17 other industry corporations and associations, 6 Non-governmental Organizations (NGOs) and from the general public. The Regulatory Impact Assessment Statement (RIAS) for the Regulations acknowledges that the comments and extensive discussions with industry and provinces led to refinements of the Draft Regulations which in its final version provides greater flexibility to industry, while respecting the draft regulatory framework and maintaining the contribution of the Regulations to meeting Canada’s Copenhagen target (for the RIAS see Canada Gazette Part II, Vol. 146, No 19, SOR/2012-167, 2002 at 2003). On 30 August 2012, the final Regulations were published as a regulation of the *Canadian Environmental Protection Act, 1999* (CEPA), SC 1999, c 33.

In my previous ABlawg post I described the underlying rationale of the Regulations which is to assist in meeting Canada’s GHG commitments and climate targets. This post focuses on the major changes between the Draft and the final Regulations.

Content of the Regulations

The most significant changes are:

- the performance standard level was lowered from the proposed 375 tonnes of CO₂/GWh to 420 tonnes CO₂/GWh, and
- the definition of useful life was revised from 45 years in the Draft to 50 year and is now based on the unit’s commissioning date.

The final Regulations follow the structure of the Draft Regulations and consist of 29 sections and 6 schedules divided into four parts: (1) regulated units and emission limit; (2) reporting, sending and recording of information; (3) quantification rules; and (4) dates for the coming into force.

Sections 29 provides for staggered entry into force provisions and require careful attention to determine when particular sections and obligations come into force for which units and situations. The main obligations (the performance standards) of the Regulations will come into force on 1 July 2015, unless otherwise stated. However, other sections of the Regulations with respect to registration, substitution of units, deferred application, and CCS related provisions will come into force on 1 January 2013. Section 3 (performance standard for standby units (units that operate at a capacity factor of 9% or less)) comes into force on 1 January 2030.

The Regulations apply to CO₂ emissions that result from the production of electricity by means of thermal energy using coal as a fuel, whether in conjunction with other fuels or not (section 1(1)). The definitions of the terms “coal,” “responsible person,” “new units,” and “old units” are identical with the Draft Regulations.

The new and final emission-intensity limit for coal fired power plants is now “420 tonnes CO₂ emissions from the combustion of fossil fuels in the unit for each GWh of electricity produced by the unit during a calendar year” (section 3(1) of the Regulations). Section 3(1) provides that emissions do not include emissions captured through carbon capture and storage (CCS) (section 3(5) of the Regulations).

The Draft and final Regulations define “old units” as those that have reached the end of their useful life but continue to produce electricity. Old and new units have to fulfill the new performance standard. If they do not fulfill the standard the responsible person will have to close down these units. Significant changes were made to the term “useful life,” which means the period that begins on the commissioning date and ends on a specified date as set out in the Regulations. The Regulations determine different useful life periods depending on the commissioning date. The final version opts for a longer useful life (50 instead of 45 years). The commissioning and end of useful life dates of coal fired power plants are defined, as follows:

- For a unit whose commissioning date is before 1975 the end of useful life (whichever comes first) is: 31 December of the calendar year that is 50 years after the commissioning date or 31 December 2019;
- For a unit whose commissioning date is after 1974 but before 1986 the end of the useful life (whichever comes first) is: 31 December of the calendar year that is 50 years after the commissioning date or 31 December 2029;
- In any other case the end of useful life is 31 December of the calendar year that is 50 years after the commissioning date.

A new (“other than an old unit, whose commissioning date is on or after 1 July 2015”) or old unit (see above) combined with a carbon capture and storage system may receive a temporary exemption from the application of the performance standard (ordinarily 1 July 2015) until 31 December 2024 (sections 9 – 13 of the Regulations). Unlike the Draft Regulations, the new CCS deferral provision is available to both new and old units (RIAS, at 2005).

In addition, a responsible person can apply for a transfer of an exemption from the performance standard from existing units (“units that are neither an old unit nor a new unit”) to an old unit in recognition for early action (RIAS, at 2005). A precondition to this is that the existing units begin carbon capturing before they are required to. The exemption from the performance standard will be for 24 consecutive months (final Regulations), instead of 18 consecutive months (Draft Regulations) (section 14).

Also, existing units that permanently shut down or meet the performance standard earlier than required can transfer a deferral to an old unit (sections 5 and 6). In order to transfer a deferral certain prerequisites have to be fulfilled, such as, but not limited to, the requirement that an existing unit and the old unit must have a common owner with an ownership interest of 50% or more in each of those two units, the production capacity of the existing unit and the old unit were equal and the existing unit and the old unit are located in the same province (see sections 5(1)(a)-(c); 14(1)(a)-(c) of the Regulations).

The final Regulations, like the Draft version, stipulate that a responsible person may obtain an exemption from the performance standard in cases of emergency, meaning a disruption or a significant risk of disruption to the electricity supply (section 7).

Comment

The federal government, after intensive consultation with stakeholders, lowered the overall performance standard of the Regulations. The Draft Regulations were estimated to result in a reduction of approximately 175 Mt of carbon dioxide equivalent (CO₂e) in GHG emissions over the period 2015–2030 (RIAS for the Draft Regulations, at Benefits and Costs). The final Regulations “are expected to result in a net reduction of 214 Mt over the period 2015–2035” (RIAS, at 2082). The two estimates are not directly comparable because they refer to two different time periods. However, 175 Mt reductions for a time period over 15 years translates to 233 Mt reductions over 20 years which is the time period of the final Regulations. The final Regulations result in a reduction of 214 Mt over 20 years, whereas the Draft Regulations would have provided for a reduction of 233 Mt over 20 years. That means the final Regulations will result in 19 Mt less CO₂ reductions over an extended period of time compared to the goals of the Draft Regulations.

Reaction to the Regulations is divided. Industry stakeholders expressed relief that they succeeded in reducing the burden on their business. Guy Bruce, vice president of planning for SaskPower commented: “We are pleased that our feedback has been heard. We see the changes announced today as very positive, especially the proposed change to end of life for coal units from 45 to 50 years and the change in performance standard from 375 to 420 tonnes per gigawatt hour.” (CBC News, “[Critics slam Kent’s ‘grossly inadequate’ coal regulations](#)” 5 September 2012). NGOs have criticized the continuous weakening of already weak Regulations. (See for example: The Pembina Institute, “[Addressing ‘misperceptions’ about Canada’s coal power regulations](#)” 7 September 2012). On the other hand, the federal government celebrates its accomplishments and status as a “world leader in clean electricity production” (Environment Canada, news release dated 5 September 2012: [Harper Government moves forward on tough rules for coal-fired electricity sector](#)).

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