

January 15, 2021

Melissa Ollevier
Ontario Ministry of Environment, Conservation and Parks
Financial Instruments Branch
6th Floor, 40 St. Clair Avenue West
Toronto, ON
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Canada

RE: Capital Power Comments on Amendments to Transition Ontario Industrial Facilities from the Federal Output-Based Pricing System to Ontario's Emissions Performance Standards Program

Dear Ms. Ollevier,

Capital Power is pleased to provide for consideration by the Ministry of Environment, Conservation and Parks ("MECP") the following submission providing Capital Power's perspectives regarding amendments to transition Ontario industrial facilities from the federal Output-Based Pricing System ("OBPS") to Ontario's Emissions Performance Standards program ("EPS").

The MECP is proposing to amend the following regulations:

- *Greenhouse Gas Emissions Performance Standards Regulation (O. Reg. 241/19 or the "EPS Regulation")* and the incorporated Greenhouse Gas ("GHG") emissions performance standards and methodology for the determination of the total annual emissions.
- *Greenhouse Gas Emissions: Quantification, Reporting And Verification Regulation (O. Reg. 390/18 or the "Reporting Regulation")* and the incorporated guideline for quantification, reporting and verification of greenhouse gas emissions.

Capital Power currently owns, operates and has interests in 5 facilities in Ontario representing over 1300 MW of capacity. Capital Power's thermal operations in Ontario are the East Windsor Cogeneration Centre and Goreway Power Station, which are wholly owned, and the York Energy Centre in which Capital Power has joint interest and serves as operator. Capital Power also owns and operates the Kingsbridge 1 and Port Dover and Nanticoke wind generation facilities. Accordingly, Capital Power has an interest in and stands to be impacted by the transition to the EPS.

Capital Power supports the Government of Ontario ("Government") and MECP efforts to transition Ontario industrial facilities from the OBPS to Ontario's EPS to effectively and efficiently regulate large emitters of GHG. Regarding the electricity benchmark, Capital Power believes the current EPS electricity benchmark of 0.42 tonnes of carbon dioxide equivalent per megawatt-hour ("tCO₂e/MWh") is appropriate for Ontario's electricity market and balances environmental objectives with ratepayer considerations. Capital Power believes that the EPS should be revenue neutral, and that proceeds should be returned to industry to invest in GHG emission reduction projects that meet specific criteria developed by the Government and via a proposed framework discussed below. In addition, the Government should allow offsets as a compliance option under the EPS.

Capital Power recommends that GHG emissions from imported electricity should be subject to the same GHG charges that Ontario generators are subject to. Charging GHG emissions from imported electricity will ensure a level playing field and also avoid carbon leakage and resource shuffling that might otherwise arise.

Capital Power's perspectives are described in detail in the sections below.

1. EPS Performance Benchmark

Capital Power recommends an electricity benchmark of 0.42 tCO₂e/MWh for all thermal electricity generating units. The electricity benchmark of 0.42 tCO₂e/MWh ensures a workable more coherent framework with Ontario's existing wholesale electricity market structure and also protect ratepayers. The OBPS electricity benchmark of 0.37 tCO₂e/MWh can only be achieved by a new Natural Gas Combined Cycle ("NGCC") running as a baseload facility under steady conditions, which is not representative of the general role of Ontario's thermal fleet.

In Ontario, nearly all of the electricity generation is either contracted or rate-regulated, meaning that the cost increases should be recoverable either through contract terms or as approved costs by the regulator and will simply end up as higher electricity rates for consumers as they are passed through. Further, these increased costs may not come with a commensurate reduction in emissions given Ontario's existing market structure. Contracted facilities, for example, may receive out-of-market dispatches by the Independent Electricity System Operator ("IESO") to meet system demand for short period of times or below the steady conditions where market forces would not have otherwise directed such output. These suboptimal and non-baseload operating conditions will reduce the efficiency of NGCC units and, as a result, will not be able to meet the 0.37 tCO₂e/MWh. Given this, maintaining the 0.42 tCO₂e/MWh instead of 0.37 tCO₂e/MWh better reflects the carbon intensity resulting from the fact a facility output is not entirely decided by or within the control of facility owners but also the IESO.

Capital Power also recommends that any ratcheting of the stringency level of the electricity benchmark should approximate the expected pace of improvements in technology performance. If the electricity benchmark outpaces the capabilities of turbine technology, the primary effect will be to increase consumer costs rather than to achieve physical reductions in emissions.

2. Allocation of EPS Proceeds to Support Decarbonization Technology Investments

Ontario will need investment in emerging decarbonizing technologies to continue to demonstrate leadership towards its own climate objectives as well as to support Canada's pursuit of climate change targets committed to under the Paris Agreement. In addition to the commitment to reduce GHG emissions by 30% below 2005 levels by 2030, Canada has also recently announced that it will develop a plan to set Canada on a path to achieve net-zero emissions by 2050 as stated in the proposed *Canadian Net-Zero Emissions Accountability Act*.

The EPS has an important role to play in encouraging private sector investment in these types of emerging technologies. Under the EPS, Excess Emission Units (carbon tax "EEU") and Emissions Performance Units are the only compliance options. Capital Power proposes a new concept for allocating the EEU that would accelerate investments in GHG emerging technologies at commercial scale. The proposed new concept would have the following key features:

- A certain percentage of EEU be retained by the Government for GHG emission reductions. The majority of the EEU would be deposited into an Innovation Fund, the purpose of which would be to provide funds for large emitters for future investments in emerging GHG technologies.
- The compliance payment deposits to the Innovation Fund account would be collected by the Government under the EPS and then made available in the first instance to eligible large emitters in the form of government grants. Large emitters would still provide their cash payment compliance obligation to the Government but would have right of first refusal to use funds deposited into the Innovation Fund on the condition that proposed projects meet certain Government criteria for GHG emerging reduction technologies. Funds held in Innovation Fund account that are not granted to industry within a 5-year period would be permanently surrendered to the Government for GHG emission reduction.
- Grants must be made to projects (including initial capital outlay and potentially ongoing costs) that align with the objectives of the Intergovernmental Panel on Climate Change's Special Report. The grants should not be used to subsidize investment in currently commercial technology, such as cogeneration, wind and solar generation and energy storage, given their current commercial viability and competitiveness. Rather, grants should be directed to the following types of technologies that are at earlier stages of deployment and for which funding support remains necessary and appropriate:

- End-Use Decarbonization (technology that is carbon-free at point of consumption): Small Modular Nuclear Reactors (“SMR”), test combusting hydrogen to generate electricity, etc.
- Production Decarbonization (technology that removes carbon during production): Blue Hydrogen (SMR combined with Carbon Capture and Storage (“CCS”)), Green Hydrogen, Bioenergy CCS, CCS retrofit for oil and gas or electricity production, etc.
- Removal and Conversion (technology that removes or uses carbon): Direct Air Capture, Carbon Capture and Utilization, etc.
- Midstream Decarbonization: Hydrogen Pipelines, Electric Vehicle Charging Infrastructure, Hydrogen Fueling, etc.

This proposed allocation approach provides innovative companies with existing compliance obligations with access to time-based incentives to tap into capital to invest in emerging sustainable technology. Such investment would accelerate deployment of advanced technology and spur further research and development reducing costs for future investment. In doing so, it would drive real emission reductions, create new jobs and put Ontario at the forefront of sustainable innovation.

3. Offsets

Capital Power recommends that MECP adopt the federal offset system as a compliance tool under EPS. Adopting the federal offset system will allow Ontario facilities access to offset projects in different provinces, avoid duplicating the efforts to develop a stand-alone provincial program and reduce the future administrative cost to maintain the offset program.

Capital Power’s support for offsets reflects our experience operating under Alberta’s carbon framework for large emitters. The offset mechanism has enabled Capital Power and other large emitters to achieve compliance obligations in a cost-competitive manner. The associated offset projects have provided real and verifiable emissions reductions, while also stimulating economic development and employment in various sectors. Capital Power has been the largest private sector investor in offsets in Alberta’s carbon market.

4. Carbon Levy on Imported Electricity

Under EPS, imported electricity’s carbon emissions were not recognized. As such, imported electricity enjoyed an unjustifiable advantage over electricity generated in Ontario. This inequity risked carbon leakage undermining the effectiveness of EPS via resource shuffling, and as such needs to be addressed as part of the transition back from the OBPS.

There are three general approaches for this to be achieved. The first option would be to collect a flat carbon levy on all imported electricity. The collected carbon levy would neutralize electricity price uplift due to the internal cost of carbon from EPS. The second option would be to impose a carbon levy that is based on import region. This would more accurately reflect the carbon intensity of imported electricity but would be more challenging to administer. The third option would be a levy based on electricity source as tracked through E-tag. Such an approach would be the most difficult and costly to administer. At this time, Capital Power believes the first option would be most appropriate.

Capital Power appreciates the opportunity to provide its comments regarding this important initiative. Please contact me at (780) 221-2354 if you have any questions or wish to discuss the foregoing comments.

Sincerely,



Ahmed Idriss, Ph.D., P.Eng
Director, Environmental Policy

cc. Tom Johnson, Director, Financial Instruments Branch, Ministry of the Environment, Conservation and Parks
Daniel Jurijew, Vice President, Government Relations, Regulatory & Environmental Policy, Capital Power