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May 5, 2021

***Subject: Comments on the Proposed Greenhouse Gas Offset Credit System Regulations***

Dear Ms. Mercer:

The Canadian Nuclear Association (CNA) appreciates this opportunity to provide comments on the draft regulations published in the Canada Gazette Part I on March 6, 2021, titled *Greenhouse Gas Offset Credit System Regulations* (the Regulations). CNA has approximately 100 members, representing over 70,000 Canadians employed directly or indirectly in exploring and mining uranium, generating electricity, advancing nuclear medicine, and promoting Canada's worldwide leadership in science and technology innovation. The design of the offset system, including the eligibility of clean electricity conversions, will significantly impact the interests of CNA members.

CNA supports the development of a federal offset system in Canada as an additional compliance mechanism with which to meet federal and provincial greenhouse gas (GHG) emission reduction obligations. However, the system must be designed to credit GHG emissions reductions wherever they are realized. Specifically, industrial, and remote GHG emitters require flexibility to shift to lower emitting energy sources or to non-emitting electricity. Nuclear energy and nuclear fuels development should be included as eligible offset credit generating activities to accelerate the transition to non-emitting energy sources and to help Canada achieve its commitments for 90% non-emitting electricity by 2030, and a net-zero grid before 2050.

**The Importance of Nuclear Energy, Globally and in Canada**

Nuclear energy provides safe, reliable, clean power around the world. 446 operating nuclear reactors produce 11% of global electricity, which avoids about 2.5 billion tonnes of CO<sub>2</sub> emissions annually. In Canada, 19 power reactors generate 16% of the electricity supply, including 63% in Ontario. Canada has some of the richest uranium deposits in the world and is the world's second largest producer of uranium.



Canadian uranium not only powers our domestic reactors but powers many reactors worldwide thus making a significant contribution to global emissions reductions.

Nuclear energy is necessary to hold the global temperature increase to below 2°Celsius. Natural Resources Minister Seamus O'Regan has repeatedly said that nuclear power is essential to meeting Canada's climate change goals. Canada has a home-grown nuclear advantage and must build on this strength as society moves to a lower carbon economy.

### **Nuclear Power, Including Small Modular Reactors, Should be Eligible to Create Offset Credits**

In [\*A Healthy Environment and a Healthy Economy\*](#), published in December 2020, the government notes that inducing investments in non-emitting electricity is a critical element of Canada's climate plan:

"Increasingly, societies around the world are using more electricity to power vehicles, homes and businesses. For Canada, this economic and societal shift builds on an existing strength. Canada is a world leader in zero-carbon power, generating approximately 82% of its electricity from non-emitting sources, such as water, wind, solar and nuclear. That's a competitive advantage in a world moving to clean energy, and the Government of Canada intends to build on that foundation. To that end, this plan invests in reducing emissions from the power Canada still generates from fossil fuels and connecting more places to non-emitting sources of power."

A challenge to this plan is that current policies do not send a strong enough price signal that will accelerate change. The federal carbon pricing backstop system regulations, for example, provides existing natural gas-fired electricity generation with an emissions intensity standard of 370 tonnes per gigawatt hour (t/GWh) and diesel-power generation with a standard of 550 t/GWh. This weakens the price signal that would otherwise support investments in non-emitting electricity. The result is a Canadian electricity system with little incentive to change.

Global industrial emission trading systems have encouraged clean energy fuel production and power generation in other countries through credits awarded to projects that have reduced emissions, are responsible for switching fuel to a lower carbon intensity source, or generate renewable or zero emission power. Carbon credits awarded to natural gas, solar, wind, hydro, other renewables and biofuels through carbon compliance systems has significantly benefited these industries relative to nuclear fuel and power. It is critically important to the CNA that the federal government does not perpetuate this disparity in its suite of climate change policy instruments and instead develops compliance options that promote investment in uranium production and nuclear power.

Providing nuclear power operators with an opportunity to earn offset credits would provide a price signal that is currently lacking.

## **Eligibility of the Nuclear Sector to Participate in the Offset System**

CNA recognizes that, per the draft Regulations, eligible project activities “cannot be subject to any policy or other risk management instrument that places a price on carbon pollution, either directly through a carbon charge or tax, or indirectly through the issuance of emission credits or allowances (e.g. in a cap-and-trade or performance-based system).” However, the nuclear sector is currently excluded from the federal OBPS and its inclusion would permit the sector to generate compliance credits based on its performance measured against the national average emission intensity of electricity generation. The standards for natural gas, diesel, and coal-fired electricity would also be more stringent in this case, putting upward cost pressure on fossil-fuel based generation options.

Canada’s climate change targets will only be achieved if the value of non-emitting power is fully recognized within the policy framework. While the current design of the OPBS does not provide this recognition, providing nuclear energy with the ability to generate offset credits where emissions are lowered beyond the business-as-usual scenario would help level the playing field.

This is especially so in remote and northern regions where a lack of energy infrastructure leads to industrial and community reliance on diesel. Non-emitting energy solutions are highly limited in their ability to displace this diesel reliance. Indeed, in such situations, small modular nuclear reactors present the opportunity for a “leap-frog” effect, whereby total decarbonization can occur without the capital cost and timelines associated with large scale energy infrastructure buildouts.

### **Nuclear Sector Offset Protocol**

To enable the generation of credits, a protocol should be designed to measure the GHG emissions benefits of investing in new nuclear assets like SMRs in cases where the ‘baseline’ decision would be natural gas or diesel. A protocol related to the production of nuclear fuels should also be considered.

CNA proposes to work with the federal government in a coordinating capacity with the provinces and territories, to develop nuclear sector offset protocols that would be applicable in multiple jurisdictions, including international trading in the future (i.e. Internationally Transferred Mitigation Outcomes). Federal leadership in developing protocols that can be referenced within both the National Offset System and recognized provincial systems ensures consistency and avoids duplicating efforts.

Nuclear energy and nuclear fuels should be considered as priorities for offset protocol development. CNA would be willing to lead these efforts with the government's support or could work closely with federal officials who will lead the development efforts.

### **Enable Canadian Intra-Market Linkages and Fungibility**

The CNA supports ECCC proceeding with the development of domestic offset markets, which allows for linkages between federal and existing provincial systems. Market linkage is beneficial since the bigger the market, the wider the range of abatement opportunities and technology innovations, resulting in lower program costs and an expanded portfolio of emission reductions. We hope to see continued expansion of market linkages and credit fungibility within Canada (including provincial carbon pricing systems and the Clean Fuel Standard) and beyond our domestic borders.

### **Valuing Canadian Projects Abroad**

Canada should pursue offset protocol development approaches in a strategic manner, prioritizing opportunities that could promote both domestic and international uptake, and scaling of Canadian clean exports. This is considered in Canada's proposed 2030 Climate Plan, which states: "Canada will continue to push for strong rules for international carbon markets (Article 6) to establish a credible regime that is based on environmental integrity and provides predictability and certainty for investors and Canada's exporters of clean technology solutions".

The Canadian mining sector is a world leader in responsible environmental practices, including continuous efforts to decrease GHG emissions. CNA believes that an offset protocol should be designed to value domestic efforts by allowing mining sector offsets to be used as both domestic and international compliance obligations.

By extending the offset system beyond the borders of Canada, it will allow offset-generating companies to sell to the highest bidder, which will in turn encourage more projects in Canada.

### **Regulatory Complexity**

CNA represents the full value chain of the nuclear sector. Many members are concerned about the complexity in the GHG emissions regulatory landscape.

The three levels of government have developed a myriad of policy instruments in support of our national target of a 40 - 45% reduction in GHGs by 2030 on 2005 levels. This includes the federal carbon pricing system, the Clean Fuel Standard, sectoral regulations, provincial pricing systems and regulations, and municipal programs and requirements. This complex regulatory landscape creates administrative and operational challenges for GHG-emitting companies.

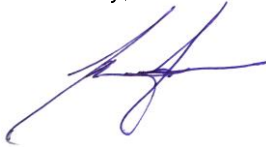
The preamble to the Offset Regulations acknowledges this complexity and commits the government to developing guidance material “to support submissions of registration applications and regulatory reports, and to assist project proponents in using the credit and tracking system for offset projects and credits.” CNA welcomes the development of this material.

### **Staying Engaged**

CNA and its members have a very significant interest in the design and implementation of the Offset Credit System and the development of protocols. It will remain engaged in all stakeholder engagement opportunities that ECCC provides. CNA asks that the government include it on all relevant mailing lists and working groups going forward.

CNA again thanks the government for providing this opportunity to comment and looks forward to staying engaged on this highly impactful issue.

Sincerely,



**John Gorman**

President and Chief Executive Officer  
Canadian Nuclear Association