From: [personal information redacted]
Sent: December 20, 2019 10:07 PM
To: Consultation (CNSC/CCSN)

**Cc:** Office of the Minister / Bureau du Ministre (NRCAN/RNCAN)

**Subject:** Feedback on comments on CNSC REGDOC-2.11.2, Decommissioning, from Concerned

Citizens of Renfrew County and Area

**Attachments:** CCRCA comments on REGDOC-2.11.2.pdf

Dear Sir or Madam,

In response to the December 2, 2019 <u>Invitation</u> to provide feedback on comments on CNSC Regulatory document REGDOC-2.11.2, *Decommissioning*, feedback from Concerned Citizens of Renfrew County and Area are provided.

Sincerely yours,

Ole Hendrickson, for Concerned Citizens of Renfrew County and Area

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## Concerned Citizens of Renfrew County and Area

Feedback on Comments on CNSC REGDOC-2.11.2, Decommissioning.

## December 20, 2019

Our group believes that commenting on a CNSC REGDOC is not an appropriate means to address some very significant issues that arise in respect of decommissioning of nuclear facilities. To paraphrase some observations recently made by a colleague with a major national environmental law organization:

- members of the public have a huge interest in decommissioning of nuclear reactors and other nuclear facilities;
- compared to the nuclear industry, members of the public lack capacity (e.g., financial resources, technical support) to properly engage in decommissioning issues despite this huge interest;
- decommissioning issues are of import for time frames ranging from decades to millennia and there will inevitably be intergenerational equity issues arising out of decisions made today;
- there is a complete lack of relevant federal policies and strategies, as documented in detail by our group in environmental petitions 427 (<u>Nuclear governance problems in</u> <u>Canada</u>), 418 (<u>Need for a national policy on decommissioning of nuclear reactors</u>), and 411 (Policies and strategies for managing non-fuel radioactive waste); and
- it would be timely and useful to have decommissioning policy issues discussed broadly in a public forum apart from the context of site specific proposals.

REGDOC-2.11.2 is completely inadequate in addressing the issue of public involvement. Its guidance in this matter is essentially limited to the following statement:

the licensee should consider the following, as appropriate: public and Indigenous engagement

In comparison, the IAEA Decommissioning Safety Guide (SSG-47) says that:

...interested parties are required to be involved in the licensing process for decommissioning, as well as in the process for termination of the authorization for decommissioning, and are required to be given an opportunity to provide comments before decisions are taken by the regulatory body and prior to the granting or termination of an authorization for decommissioning.

This IAEA Safety Guide goes on to explain the public's interest in detail:

Experience has shown that interested parties mainly focus their attention on the selected decommissioning strategy and its justification, the nature and extent of planned dismantling actions, the management and long term storage of radioactive waste on the site, the facility's end state, especially in the case of restricted reuse, the financial management of the decommissioning fund and the socioeconomic impacts of the decommissioning.

In Canada, at present, some existing decommissioning licences have been granted with no public input whatever. Although nuclear decommissioning activities result in significant long-term environmental impacts (both positive and negative), most are not covered by the *Impact Assessment Act*. Decommissioning strategies for two of the Government of Canada's own shut-down nuclear reactors were decided with no public input whatever, then announced, and are now being defended – at great ongoing cost to taxpayers, and with no tangible results to date.

The current situation with regard to public involvement in decommissioning is untenable. The public should be consulted BEFORE the "licensee shall select a decommissioning strategy that will form the basis for the planning for decommissioning and facilitate achieving the desired end state," which is to say the public must have a say in the selection of the desired end state.

The CNSC REGDOC fails to address what is arguably the most fundamental and important point made in the IAEA Safety Guide:

Release from regulatory control without restrictions should be the preferred end state and ultimate objective of decommissioning.

The failure of the REGDOC to acknowledge this fundamental principle may explain why "in situ decommissioning" is being proposed as an "acceptable" strategy in certain circumstances, even though this is completely at odds with international practice. The IAEA Safety Guide says:

On-site disposal of decommissioning waste is not a recommended practice in the case of decommissioning after normal operation, and is not addressed in this Safety Guide.

Our group endorses the submission of Dr. J.R. Walker in its entirety. We urge the CNSC to take careful note of the concluding statement from his submission:

the finalized regulatory document should not allow the use of a decommissioning strategy (in situ decommissioning) that is specifically proscribed by international standards for planned decommissioning, is fiscally unsound, and that creates an inequitable outcome for rural Canadians.

The REGDOC should acknowledge the ongoing debate regarding prompt versus deferred decommissioning. In reality, there is only one acceptable strategy – dismantling – and the question is how long to wait (if at all) before dismantling commences. As the IAEA notes,

Decontamination, dismantling and other decommissioning actions may be carried out immediately following permanent shutdown or may be deferred until after a safe enclosure period. As a consequence, the time period for the conduct of decommissioning actions typically ranges from a few months for simple and small facilities undergoing immediate dismantling, to decades for large and complex facilities using the deferred dismantling strategy (for example, to allow for radioactive decay).

In general, the REGDOC should provide additional guidance on whether to carry out dismantling immediately upon closure, or after a "safe storage" period. The REGDOC should note the IAEA's preference for commencement of dismantling as soon as possible after facility closure:

If the waste management infrastructure is available, including for waste disposal, then immediate dismantling is the preferred strategy. In the absence of facilities and infrastructure for processing radioactive waste, or when storage or disposal capacities are not available, the preferred decommissioning strategy could include a period of safe enclosure until the necessary waste management infrastructure is available.

With regard to "safe enclosure" or "safe storage", if current knowledge suggests that well-defined intermediate or interim states can be distinguished during a more complex decommissioning project (e.g. for a large power reactor), the REGDOC should provide information about what these states are and how long they may last. The REGDOC should avoid use of the confusing and inherently contradictory term of "interim end state".

Finally, the REGDOC should specify clearly what decommissioning activities – if any – can take place under an operating license, and what decommissioning activities can take place during "storage with surveillance". The REGDOC suggests that "storage with surveillance" activities may include:

removal and recycling of non-contaminated or slightly-contaminated equipment (e.g., turbines, pumps and heat exchangers)

This statement makes "storage with surveillance" another contradictory term (like "interim end state"). Pumps and heat exchangers may be contaminated with significant amounts of long-lived radionuclides. Their removal should only be allowed after a detailed decommissioning plan has been developed and approved, so that there can be a clear pathway for management of the wastes arising. The REGDOC also proposes to allow "removal of radioactive waste to an offsite licensed storage facility" during storage with surveillance. Removal of contaminated equipment and radioactive waste should not be allowed in the absence of an approved detailed decommissioning plan.