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**Subject:** Sierra Club Canada Foundation comments on REGDOC-1.1.5: Licence Application Guide: Small Modular Reactor Facilities  
**Date:** November-20-18 9:47:29 PM  
**Attachments:** [SCCF\\_SMR\\_regulation\\_20\\_11\\_2018.pdf](#)

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To whom it may concern:

Please find attached comments from Sierra Club Canada Foundation regarding draft regulatory documents (REGDOC-1.1.5: Licence Application Guide: Small Modular Reactor Facilities ) and environmental assessments for small modular reactors.

Thank you for your attention to this important matter.

Sincerely,  
Gretchen Fitzgerald  
National Program Director

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I'm a #HikingHero! I'll be hitting the trails in the [National Hike For The Environment](#) between now and Oct. 21. Help me raise funds to protect our planet. Thank you!



Gretchen Fitzgerald

National Program Director

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November 20, 2018

**Re: Sierra Club Canada Foundation comments on REGDOC-1.1.5: Licence Application Guide: Small Modular Reactor Facilities**

To whom it may concern:

We are writing to express our concern about the regulatory process for small modular reactors (SMRs) in Canada. We are alarmed at the role the nuclear industry regulator, the Canadian Nuclear Safety Commission (CNSC), is playing to push for deregulation of high-risk, experimental nuclear technology.

Sierra Club Canada Foundation is a national grassroots environmental organization that empowers people to protect, restore and enjoy a healthy and safe planet. We advocate for solutions to climate change, but believe nuclear energy is an unacceptable energy source to fuel our transition away from fossil fuels.

Most recently, we have been working in solidarity with the Concerned Citizens of Renfrew County and Area and other stakeholders to highlight the lack of a national strategy to manage our existing nuclear waste and to call for legislative and regulatory reforms to address the impacts of nuclear technologies and wastes on human health and the environment.

We are also engaged in reform of our current environmental assessment legislation, and in particular applaud the government's stated intent to make environmental assessments credible again. Much-needed reforms to the role of the Canada Nuclear Safety Commission are contained in the new draft Impact Assessment Act, Bill C-69. However, there is a risk that if the draft Regulations Designating Physical Activities exclude small modular reactors, this exclusion and the

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process whereby it has been created will subvert the credibility and effectiveness of a new impact assessment regime.

Media reports<sup>1</sup> that the nuclear regulator itself has been lobbying for this exclusion in order to facilitate industry is alarming. We are calling **for a halt to the current regulatory process and a completed review of this process** to restore credibility and ensure the end result is in the best interests of Canadians and a healthy, safe environment.

Please see below for specific recommendations we have with regard to the draft regulatory document and the regulatory reform process:

- 1. All Nuclear Reactors Must Undergo Impact Assessments.** Nuclear reactors represent a long-term risk to the environment and human health. They may also impact energy systems, indigenous rights, electricity costs, and other stakeholders. Given the long-term legacy of nuclear plants, which includes safe storage of waste for thousands of years, it is unacceptable that any nuclear technology, particularly new technologies, would not undergo thorough impact review and public consultations.
- 2. Cradle-to-Cradle Assessment of Impacts.** The new regulations must require industry show it can handle all aspects of risk for the full life cycle of projects, from siting to decommissioning and safe management of nuclear waste. Assessment must also incorporate the ability to plan for and respond to accidents, and a full-cost assessment of liabilities. SMRs should be required to meet stringent safety standards and provide proof that they can support compensation and mitigation costs if there is an accident or malfunction.
- 3. Close Loop Holes.** There is a lack of clarity regarding how the draft regulatory document for small modular reactors would be applied in the context of existing regulatory documents. This is of particular concern because many small modular reactors would not use water as a coolant, but the current RD/GD-369: Licence Application Guide, Licence to Construct a Nuclear Power Plant specifically applies to only water-cooled plants.
- 4. No self-regulation.** Appendix A.2 of the draft regulatory document states that proponents can “propose alternative approaches” for projects that are not using water as a coolant, and are thus not covered by the current RD/GD-369: Licence Application Guide, Licence to Construct a Nuclear Power Plant. Providing proponents with the power to determine how their projects are assessed is an inappropriate and potentially dangerous conflation of the roles of industry, regulator, and impact assessment, and should be removed from the document.
- 5. Waste Management Must Be Addressed.** The current Nuclear Waste Management Organization was created to deal with existing spent fuel wastes, mainly from CANDU reactors. Small modular reactors would create new fuel waste streams that would be diverse, distributed across the country, and require safe management for generations. No

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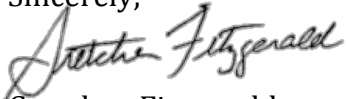
<sup>1</sup> Federal nuclear regulator urges Liberals to exempt smaller reactors from full panel review. The Globe and Mail. November 6, 2018. (<https://www.theglobeandmail.com/business/article-federal-nuclear-regulator-urges-liberals-to-exempt-smaller-reactors/>)

further development should occur to encourage this technology until solutions are developed to safely manage and regulate waste from SMRs.

6. **Define Small Modular Reactors.** The new regulatory document must specifically define the size and types of reactors to which it is meant to apply.
7. **Fix this Process.** Before consideration is given to approval of this document, there must be clear timelines, coordination, and public accountability for how and when these regulatory changes would occur. Given the ongoing parliamentary review of Bill C-69, a more coordinated regulatory reform and modernization approach is needed. The process to determine what level of assessment is required for SMRs should be public and transparent. The current piecemeal approach creates uncertainty and mistrust on the part of the public and civil society, as well as regulatory uncertainty for industry. Most worrying, the end result could be placing communities and the environment at unacceptable risk by creating insufficient and/or inconsistent regulatory oversight.

Thank you for this opportunity to provide feedback on comments received regarding REGDOC-1.1.5, Licence Application Guide: Small Modular Reactor Facilities.

Sincerely,



Gretchen Fitzgerald  
National Program Director

CC:

Hon. Catherine McKenna, Minister of Environment and Climate Change

Hon. Amarjeet Sohi, Minister of Natural Resources

Hon. Jody Wilson-Raybould, Minister of Justice

Hon. Ed Fast, Conservative Party of Canada Environment and Climate Change Critic

Hon. Lisa Raitt, Conservative Party of Canada Justice Critic

Shannon Stubbs, Conservative Party of Canada Natural Resources Critic

Alexandre Boulerice, New Democratic Party Environment and Climate Change Critic

Richard Cannings, New Democratic Party Natural Resources Critic

Murray Rankin, New Democratic Party Justice Critic

Elizabeth May, Green Party Leader