ATTACHMENT: October 5, 2022

Federal Authority Advice Record: Designation Request under IAA

Response due by October 25, 2022

Small Modular Reactor Demonstration Project

Department/Agency	Health Canada
Lead Contact	Beverly Ramos-Casey
Full Address	1505 Barrington Street Halifax, Nova Scotia, B3J 3Y6, Suite 1625
Email	beverly.ramos-casey@hc-sc.gc.ca
Telephone	902-403-9658
Alternate Departmental Contact	Ellen Chappell (Tel: 902-237-7478 / ellen.chappell@hc-sc.gc.ca) Jérémie Allain (Tel: 514-213-1846 / jeremie.allain@hc-sc.gc.ca)

1. Has your department or agency considered whether it has an interest in the Project; exercised a power or performed a duty or function under any Act of Parliament in relation to the Project; or taken any course of action (including provision of financial assistance) that would allow the Project to proceed in whole or in part?

Specify as appropriate.

Not applicable

2. Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Project to enable it to proceed?

If yes, specify that power, duty or function and its legislative source.

Not applicable

3. If your department or agency will exercise a power or perform a duty or function under any Act of Parliament in relation to the Project, will it involve public and Indigenous consultation?

Specify as appropriate.

Not applicable

4. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to any potential adverse effects within federal jurisdiction caused by the Project or adverse direct or incidental effects stemming from the Project?

Specify as appropriate.

As a federal authority, Health Canada will provide specialist or expert information and knowledge in the Department's possession (expertise) to support the assessment of impacts on human health from projects considered individually or cumulatively under the *Impact Assessment Act* (IAA). The Department provides expertise in the areas described below; it does not play a regulatory role. It should also be noted that expertise related to assessing human health that is relevant to impact assessment (IA) may be held by other federal, provincial, and municipal partners, reflecting the shared jurisdiction for environmental and human health within Canada. For example, the Public Health Agency of Canada (PHAC) has expertise in the social determinants of health approach and health equity, and may provide that expertise through Health Canada, upon request from the reviewing body(ies). How the expertise provided by Health Canada and PHAC will be used in the IA process will ultimately be determined by the reviewing body(ies). Health Canada can provide human health expertise in the following areas:

- Air quality;
- Recreational and drinking water quality;
- Contamination of traditional foods (i.e., country foods);
- Noise:
- Methodological expertise in human health risk assessment;
- Methodological expertise in conducting health impact assessment;
- Electromagnetic fields;
- Radiological emissions: and
- Public health emergency management of toxic exposure events.
- 5. Has your department or agency had previous contact or involvement with the Proponent or other parties in relation to the Project?

Provide an overview of the information or advice exchanged.

No. Health Canada was not involved or contacted by the Proponent or other parties regarding this project.

6. From the perspective of the mandate and area(s) of expertise of your department or agency, does the Project have the potential to cause adverse effects within federal jurisdiction or adverse direct or incidental effects as described in section 2 of IAA? Could any of those effects be managed through legislative or regulatory mechanisms administered by your department or agency? If a licence, permit, authorization or approval may be issued, could it include conditions in relation to those effects?

Specify as appropriate.

Health Canada has reviewed the following documents provided by the Impact Assessment Agency of Canada:

- NB Power Project Information
- CRED-NB Designation Request

Based on the information available and the concerns raised by the requestor, Health Canada notes that there may be potential adverse effects on human health from Project-related changes to the biophysical environment (e.g., degradation of the quality of air, soil, water, country foods, and elevated noise levels) during the construction, operation, and/or decommissioning phases of the project. However, there is insufficient detail/information in the documents provided to confirm this, including whether there are potential impacts in areas under federal jurisdiction (i.e., effects to Indigenous peoples). Information gaps include, but are not be limited to, a lack of information on

potential adverse health effects of sensitive human receptors (e.g., daycares, schools, long-term care facility), and on how the Project would differentially impact diverse groups of people, including vulnerable subgroups.

More specifically, information gaps Health Canada identified from the information provided at this time are the following:

- It is not clear whether impacts to water quality are anticipated during normal operation of the project (e.g., whether contamination of cooling water may occur).
- Potential for noise (e.g., truck traffic) and air quality impacts (e.g., dust, diesel particulate matter) along the transportation route (e.g., ship terminal, highway) if enriched uranium fuel will be imported and transported to the reactor.
- Likelihood, nature or severity of an accident and/or malfunction (onsite or during the transportation of
 enriched uranium) with the potential to impact air, country foods and drinking and/or recreational water
 quality.
- Insufficient Information to confirm whether Indigenous peoples and their traditional use of the land (including hunting, fishing, harvesting of plants, drinking water and recreational water use) within the vicinity of the proposed Project will be impacted, including as a result of accidents or malfunctions. Taking into consideration the proponent's indication that potential adverse impacts on Indigenous peoples are not anticipated as, "The site is existing, no current traditional land use".
- Lack of appropriate mitigation and monitoring measures to reduce potential impacts.

Please note that these items do not constitute an exhaustive list.

- 7. Does your department or agency have a program or additional authority that may be relevant and could be considered as a potential solution to concerns expressed about the Project? In particular, the following issues have been raised by the requestor:
 - · Protecting Indigenous Rights
 - · Impacts to Fish and Fish Habitat
 - Impacts to Species at Risk
 - Impacts to Migratory Birds
 - Effects to Lands Outside of New Brunswick
 - Impacts of Accidents and Malfunctions
 - Impacts to Bay of Fundy rural coastal lands, communities and local industries and enterprises (e.g. fishing, wild blueberry farms, tourism)
 - Cumulative Effects
 - Alternatives to and Alternative Means of Carrying out the Project
 - Long-term Management of Nuclear Waste
 - Non-proliferation of Nuclear Weapons

If yes, please specify the program or authority.

No

8. Does your department or agency have information about the interests of Indigenous groups in the vicinity of the Project; the exercise of their rights protected by section 35 of the *Constitution Act, 1982*; and/or any consultation and accommodation undertaken, underway, or anticipated to address adverse impacts to the section 35 rights of the Indigenous groups?

If yes, please specify.

Not applicable

9. If your department has guidance material that would be helpful to the Proponent or the Agency, please include these as attachments or hyperlinks in your response.

To date, Health Canada has published the following guidance documents for evaluating human health impacts:

Guidance for Evaluating Human Health Impacts in Environmental Assessment:

- Human Health Risk Assessment
- Air Quality
- Drinking and Recreational Water Quality
- Country Foods
- Noise
- Radiological Impacts
- Interim Guidance on Health Impact Assessment¹.

Guidance prepared by Health Canada on management of crude oil incidents is available as a PDF and in html format through the following link:

Guidance for the environmental public health management of crude oil incidents: a quide intended for public health and emergency management practitioners:

https://www.canada.ca/en/health-canada/services/environmental-workplace-health/contaminatedsites/guidance-documents/guidance-environmental-public-health-management-crude-oilincidents.html

Finally, PHAC has published the following guidance documents for evaluating other aspects of human health (e.g. mental health):

<u>Social Determinants of Health and Health Inequalities</u>

Key Health Inequalities in Canada: A National Portrait. Public Health Agency of Canada

¹Health Canada. Draft Interim Guidance Document for the Health Impact Assessment of Designated Projects under the *Impact Assessment Act*. Draft for review. Juin 30, 2022. Available upon request.