



STAFF REPORT

Meeting Date: January 10, 2022

Title: Dryden Nuclear Education & Engagement Committee

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Department: Administration

Report Number: Administration-2022-001

Recommendation:

- 1) **THAT** Council receives this report titled, '*New Committee of Council: Dryden Nuclear Education & Engagement Committee*', dated 7 December 2021, as information.
- 2) **THAT** Council approves the Terms of Reference for the proposed Dryden Nuclear Education & Engagement Committee as attached to this report dated 7 December 2021.
- 3) **THAT** the Dryden Nuclear Education & Engagement Committee be established for the City of Dryden.
- 4) **THAT** Council authorizes the Acting Clerk to initiate the recruitment process for membership to the Dryden Nuclear Education & Engagement Committee.

Purpose:

The purpose of this report is to present a recommendation from the Master Plan Steering Committee for the establishment of a Dryden Nuclear Education & Engagement Committee.

Background:

Government of Canada, Canada's Radioactive Waste

In 2002, Parliament passed the *Nuclear Fuel Waste Act*. This legislation required nuclear energy corporations to establish a waste management organization, the Nuclear Waste Management Organization (NWMO), as a non-profit entity to manage the long-term management of Canada's nuclear fuel waste.

After a comprehensive three-year study and public engagement process, the Government of Canada selected the NWMO's Adaptive Phased Management (APM) approach as Canada's plan for the long-term management of used nuclear fuel in June 2007.

The NWMO is conducting a site selection process to select an informed and willing community to host a deep geological repository in a suitable rock formation. The NWMO's deep geological repository would accommodate all used nuclear fuel in Canada.

Under the *Nuclear Fuel Waste Act*, the Government of Canada is responsible for reviewing the study of long-term management options prepared by the NWMO, selecting a long-term option from those proposed, and ensuring oversight during its implementation.

Federal oversight: *Nuclear Fuel Waste Act*

The *Nuclear Fuel Waste Act* (NFWA) establishes the oversight that the Government of Canada and the Minister of Natural Resources will exercise in regard to the long-term management of nuclear fuel waste in Canada. The NFWA also clarifies the responsibilities of the Nuclear Waste Management Organization (NWMO) and the nuclear energy corporations, including Atomic Energy of Canada Limited.

Oversight exercised by the Government of Canada includes:

- monitoring all relevant NWMO activities;
- reviewing NWMO annual reports to ensure compliance with the legislation;
- tabling the NWMO's annual reports in both Houses of Parliament;
- approving the funding formula to ensure the full costs of managing nuclear fuel waste over the long term are accounted for;
- ensuring that audited financial statements indicate the required monies are being set aside by waste owners in established trust funds;
- carrying out independent public consultations and auditing measures, as required;
- issuing a public statement on the NWMO's annual reports;
- assessing the need for consultations that may be necessary to meet the Crown's duty to consult; and
- enforcing compliance, as necessary.

Responsibilities of the Nuclear Waste Management Organization include:

- implementing the Adaptive Phased Management approach for the long-term management of nuclear fuel waste;
- submitting annual reports to the Minister of Natural Resources;
- offering long-term management services to small nuclear fuel waste owners;
- engaging with the public, interested communities, including First Nation and Métis peoples; and
- making all reports available to the public as indicated under the NFWA.

Minister Statements: *Nuclear Fuel Waste Act*

Through ongoing federal oversight, the *Nuclear Fuel Waste Act* requires the Minister of Natural Resources to make a public statement on the Nuclear Waste Management Organization's annual report. The public statement is an important mechanism by which the Minister of Natural Resources, on behalf of the Government of Canada, can inform Canadians about progress of the NWMO under the NFWA and convey messages to the NWMO to ensure that it conforms to the legislation as it implements the Adaptive Phased Management approach. The statement is also

an important element in increasing and maintaining public confidence with regard to the long-term management of Canada's nuclear fuel waste.

Memorandum of Understanding between Natural Resources Canada and the Nuclear Waste Management Organization in relation to Aboriginal Consultations

A Memorandum of Understanding (MOU) between Natural Resources Canada and the Nuclear Waste Management Organization was signed on August 14, 2009. This MOU clarifies the roles and responsibilities of Natural Resources Canada and the NWMO with respect to any obligation for consultations with Aboriginal people, pursuant to the Government of Canada's duty to consult and the NWMO's statutory obligations in relation to the *Nuclear Fuel Waste Act*. This MOU covers the period during that part of the NWMO's work that precedes the identification of a site for the Project.

For the past six years the City of Dryden has participated as a voting member of the Ignace Community Nuclear Liaison Committee. Since fall 2020, the City has been working to implement a more focused approach to learning of the Nuclear Waste Management Organization's (NWMO) Adaptive Phased Management (APM) project. We have also listened to, received and continue to follow up on the concerns and views presented by persons or groups in opposition to the proposed development of a Deep Geological Repository (DGR) in the Revell Batholith and surrounding greenstone belt area of the northwestern Ontario region.

The anticipated outcome of APM is the centralized containment and isolation of Canada's used nuclear fuel in a DGR, in an area with stable geological formations and an informed and willing host community. APM also involves the development of a transportation system to move the used fuel from the facilities where it is currently stored to the new site.

No matter where this DGR is eventually constructed, it will have a significant impact on all communities in that region, most especially those within close proximity to the chosen development site. The Township of Ignace remains as one of the two potential host siting communities in the Site Selection process. The Nuclear Waste Management Organization (NWMO) is studying a potential site in the rock unit of the Revell batholith located between Dryden and Ignace in unorganized territory on Crown land. The NWMO has reported that this potential construction site is located approximately 35 kilometers from the municipal boundary of Ignace, and 40 kilometers from the municipal boundary of Dryden.

Discussion:

The City of Dryden supports a vast retail and service / coverage area. By road network, the City provides services-in-reach to nine surrounding municipalities and twenty small unincorporated townships, to an approximate combined population of 25,353 (including the City of Dryden). In addition to the importance of Council and municipal staff receiving a better understanding of the community's narrative around nuclear energy and nuclear waste, it is equally as important that leadership and residents have opportunity to gain knowledge of the potential impacts of the NWMO's project on the City of Dryden, both negative and positive.

An economic impact report completed by AECOM in 2015 estimates that,

If a community in the area near Ignace was able to capture 40 per cent of benefits during the operations phase of the Adaptive Phase Management Project, this would represent approximately 536 additional households in the community to accommodate the employees....A population

increase of this magnitude would also result in a need for increased infrastructure and social services and could attract additional retail and services to the community (p.20).

As a regional leader and essential service, retail and transportation hub, Dryden has now also inherited the role of potentially becoming the significant neighbouring community very near the area of the proposed site for the DGR. Dryden is certainly included in the Tissue Local Study Area for the anticipated environmental assessment work. We must therefore remain engaged in the ongoing exploratory work of the NWMO as it is reasonable to anticipate that Dryden will be significantly impacted by the forecasted population and community growth noted in the AECOM report, as well as the Project Economics: Employment backgrounder report released by the NWMO in 2016, should the DGR be developed in this region.

Relative to environmental stewardship, it is important that we become educated as to nuclear energy, which has become a key component of Natural Resources Canada's Climate Strategy as a driver for clean growth (Nuclear in Canada and Governance Framework infographic attached to this report).

It is also important to increase our understanding of nuclear medicine. According to the Government of Canada:

Medical isotopes are used by medical professionals to diagnose and treat health conditions such as heart disease and cancer.

The production of medical isotopes is achieved by using two overarching technologies: nuclear reactors, and particle accelerators (linear accelerators, cyclotrons). Canada is home to one research reactor, three nuclear power stations (with reactors producing medical isotopes), twenty-five cyclotrons, and two linear accelerators.

Canada is a key player in the international supply chain of several medical isotopes, including:

- **Cobalt-60**, used in cancer radiation treatments, sterilizing medical devices and treatment of food and consumer products; and,
- **Iodine-125** used for a number of medical uses including diagnostic procedures (nuclear medicine imaging, biological assays) and as brachytherapy in the treatment of some types of cancer.

Federally, Health Canada and the Canadian Nuclear Safety Commission (CNSC) play an important role in monitoring and regulating medical isotopes. Health Canada ensures that Canadians have access to safe and effective drugs and health products, including medical isotopes which are regulated and approved as medical devices or pharmaceuticals. The CNSC regulates the use of nuclear energy and materials, to protect the health, safety and security of Canadians and the environment.

In acknowledging the potential positive benefits and negative impacts of the APM project of the NWMO, we must consider reasonable consequences to the environment, municipal infrastructure and services, increases in housing and food costs, rental availability and cost, demand for housing, emergency responders, health care providers, and other core and supportive community services. Through the City's ongoing strategic planning efforts, we have begun to lay the foundation to begin anticipating projected growth and additional pressures to Dryden's existing social safety and well-being ecosystem. Specifically, we endeavour to further inform and validate future data

acquisition efforts, thereby advancing purposeful examination of Dryden's safety and well-being in the context of sustainability.

We must remain mindful that should the Township of Ignace and Wabigoon Lake Ojibway Nation express their willingness to be host communities for the NWMO's project, Dryden will be significantly affected by such a decision, both negatively and positively. This is therefore not a matter on which we cannot be educated or engaged in. The best interests and the future of Dryden must be considered, and Dryden residents must have the ability to actively participate in the community conversation as stakeholders who have a vested interest in what happens in their community.

As a Committee of Council, the Dryden Nuclear Education & Engagement Committee (DNEEC) will represent the community's interests through the development of a more formal community education, conversation and feedback learning loop structure, specifically as it relates to nuclear energy in Canada and the NWMO's APM project. The ethics of community engagement is at the forefront of this work.

It is important to acknowledge and articulate that the formation of the DNEEC **does not** constitute Dryden's community support for either the APM project or the selection of Ignace as a final host community pursuant to NWMO's Site Selection Process.

Notice Provisions:

This Staff Report and Terms of Reference have been submitted to Council and Dryden residents in accordance with the public notice provisions of Procedural By-law 2021-101.

Financial Implications:

None identified at the time of preparing this staff report.

Strategic Alignment

The intent and constitution of the DNEEC is well-aligned with the goals of City of Dryden's Community Strategic Plan 2020-2025.

Additional Relevant City Plans, Guides or Strategies:

- Community Capacity Study, Business Gap Analysis and Official Plan Update - in progress
- Dryden, Machin and Area Community Safety and Well-Being Plan 2021-2025
- Community Improvement Plan 2019

Attachments (Reference Material):

- Dryden Nuclear Education and Engagement Committee – ToR
- Canada Nuclear Fuel Cycle Infographic