

# Summary of Potential Federal Incidental Activities

BRUCE C NUCLEAR PROJECT

June 16, 2025

## 1. Introduction

Under the *Impact Assessment Act* (IAA), a designated project includes one or more physical activities that are listed in the [Physical Activities Regulations](#) (the Project List), as well as any physical activity incidental to those listed activities. An incidental activity is an activity that is likely to happen in conjunction with a project proposed by a proponent, meaning that it becomes part of the designated project and must be assessed. Once an activity is deemed incidental to a project it is considered in the federal decision-making phase and, if a project is allowed to proceed, would be subject to conditions in a Decision Statement.

Impact Assessment Agency of Canada (IAAC) reviewed and analyzed the documentation provided by Bruce Power including, but not limited to, the [Initial Project Description](#) and the [Response to the Summary of Issues](#) as well as comments received from Indigenous Nations and communities, the public, government authorities, and other participants during the first public comment period.

The purpose of this document is to summarize IAAC's preliminary views on whether certain activities are likely to be incidental to the Project. IAAC's preliminary conclusions are also reflected in the draft Integrated Tailored Impact Statement Guidelines (Integrated Guidelines). Bruce Power is encouraged to consider where there may be additional information that could support further tailoring of the draft Integrated Guidelines including the geographic extent of those activities.

## 1. Criteria for determining which physical activities are incidental to the designated project

As per subsection 27(a) of the *Physical Activities Regulations*, the Project will require the site preparation for, and the construction, operation and decommissioning of, one or more new nuclear fission or fusion reactors if (a) that activity is located within the licensed boundaries of an existing

Class IA nuclear facility and the new reactors have a combined thermal capacity of more than 900 MWth.

IAAC analyzed whether four potential additional activities were incidental to the designated physical activity:

- a) Transmission lines and switchyard;
- b) Storage of nuclear waste;
- c) Traffic associated with road, rail and barge outside of the lease boundary; and
- d) Transportation of nuclear materials.

## Federal considerations

IAAC's [\*Guide to Preparing an Initial Project Description\*](#) outlines five criteria to be taken into account in determining which physical activities are incidental to the designated project.

Under the IAA, the potential impacts of a designated project on the rights of Indigenous Peoples must be considered as a factor during the assessment. In making a decision on the project, the Government of Canada must also consider how the designated project, including any incidental activities, could potentially interfere with the exercise of Indigenous rights.

Project-specific considerations are taken into account when analyzing whether an activity is incidental to the project. Therefore, the inclusion of an incidental activity and the associated geographic extent are specific to the unique circumstances of a particular project and not determinative for future assessments.

## 2. Potential Incidental Activities associated with the Project

### a) Transmission lines and Switchyard

*Onsite transmission lines and the switchyard are incidental to the Project.*

The following summarizes the key reasons why onsite transmission lines and the switchyard are considered incidental to the Project:

- The proponent identified the construction of a switchyard and transmission lines as activities related to the Project in their Initial Project Description (IPD).
- IAAC requested additional information in Table 1 of the Summary of Issues (SOI) in order to determine whether the switchyard and transmissions lines could be considered incidental to the Project. The proponent indicated in the Response to the Summary of Issues (RSOI) their understanding that on-site activities, such as the new switchyard and transmission corridors, are required as part of the Integrated Guidelines Template and, along with the layouts as per REGDOC-1.1.1 *Site Evaluation and Site Preparation for New Nuclear Facilities* guidance.

As such, the IAAC has included information requirements related to the on-site transmission lines and switchyard activities in the draft Integrated Guidelines.

*Potential or eventual offsite power grid infrastructure upgrades, including transmission lines, are not incidental.*

The following summarizes the key reasons why potential or eventual offsite power grid infrastructure upgrades are not considered incidental to the Project:

- Should any new or upgraded offsite grid transmission lines and distribution infrastructure (i.e. located outside the lease and/or fenced area beginning at where there is connection to the grid, for the purpose of transmission and distribution of power to customers) be required in the future, they would fall under provincial jurisdiction. It is IAAC's understanding that any new grid transmission lines would be subject to a robust coordinated connection process conducted by Ontario's Independent Electricity System Operator (IESO) and Hydro One Networks Inc. (Hydro One) under the oversight of the Ontario Energy Board (OEB).

As such, any potential or eventual transmission lines will not be considered incidental to the Project. However, coordination is currently underway with the Province of Ontario to determine whether there could be efficiencies in gathering information for any potential provincial assessments during the federal impact assessment.

## b) Storage of nuclear waste

*All potential on and offsite options for the interim storage of waste are incidental to the Project.*

The following summarizes the key reasons why all potential on and offsite options for interim storage of waste are incidental to the Project:

- In the RSOI, the proponent stated that they will further assess the interim waste management options as part of the Impact Statement, including providing quantities of new radioactive waste. The proponent identified the following potential alternatives for waste management associated with the Project:
  - Interim storage of low-level and intermediate-level waste at one or more existing or new appropriately licensed facilities.
  - Interim storage of high-level waste at an existing or new appropriately licensed facility at the Bruce Power site, with high-level waste contained in fuel specific dry storage containers.

Information requirements, including the potential impacts associated with all the interim waste storage alternatives listed above and any associated traffic (see section on Road Traffic) have been included in the draft Integrated Guidelines. Furthermore, the proponent has been asked to discuss the lifecycle of waste generated by the Project, including timing, quantities and location of the various storage stages and options in the impact statement.

*Permanent storage of nuclear waste is not incidental to the Project*

The following summarizes the key reasons why the permanent storage of waste is not considered to be incidental to the Project:

- In the RSOI, the proponent stated the long-term (permanent) storage of waste would be subject to a separate review process.
- The nuclear waste generated by the Project would be stored on-site on an interim basis (as per options identified in the Integrated Guidelines ), possibly for decades before being transported to a permanent location (such as a deep geological repository) for storage.
- The Nuclear Waste Management Organization was established in accordance with the *Nuclear Fuel Waste Act* to design and implement Canada's plan for the long-term management of used nuclear fuel. The regulatory decision-making process for an eventual deep geological repository is independent of the Project.

However, any traffic associated with the permanent storage of waste would be included as part of the overall traffic associated with the Project (see section on Road Traffic).

### c) Road, rail and barge traffic

In the RSOI, the proponent confirmed that there will be road, boat and/or rail traffic, including the movement of construction material, to the Project site. The proponent is currently completing a Critical Component and Logistics Study as well as a Transportation Assessment. The proponent acknowledged in the RSOI that should on-site new roads, road upgrades, or a new dock be constructed to support the Project, these activities would be assessed as part of the Impact Statement.

Indigenous Nations and local communities raised concerns and issues regarding the cumulative effects and regional impacts associated with traffic. Specifically, during the IPD public comment period, IAAC heard from Indigenous Nations, municipalities, the county and school boards that road traffic associated with the Project could have potential adverse effects and cumulative effects on terrestrial vegetation and wildlife of cultural importance, local infrastructure, school routes, and community well-being and safety.

#### *Road traffic is incidental to the Project.*

A summary of key reasons for including road traffic as incidental to the Project are outlined below:

- The movement of materials and personnel by road to the Project site is a key Project component and would not be able to proceed without it.
- To date, the proponent has not provided projections of road traffic associated with the Project, limiting understanding of the potential adverse effects of road traffic.
- Although road traffic off-site is largely outside of the care and control of the proponent, the proponent would likely have the ability to direct or influence the carrying out of the movement of materials by third parties through contracts and consignment arrangements, as well as influence impacts of vehicle traffic associated with the Project through shift scheduling and delivery timing.

In addition, IAAC considered views expressed during the IPD public comment period on the geographic extent of road traffic associated with the Project. With respect to an assessment of the effects of the Project on road traffic, IAAC has proposed the following preliminary geographic

extent in the draft Integrated Guidelines and to be considered in the proponent's traffic assessment :

- School transportation routes and intersections along Highway 21 within the municipalities of Kincardine and Saugeen Shores
  - (e.g., Highway 21 and Bruce Road 20, Highway 21 and, intersection of Alberta Street and Concession Road 2)

*Barge traffic is incidental to the Project.*

A summary of key reasons for including barge traffic as incidental to the Project are outlined below:

- Based on information provided to date, barge traffic would be spatially and functionally connected to the designated physical activity of the Project. Materials and equipment brought to the Project site by barge would be offloaded within the Project site.
- To date, the proponent has not provided projections of barge traffic frequency or routes associated with the Project, limiting understanding of the potential effects of these activities.
- The proponent would likely have the ability to direct or influence the carrying out of barging activities by third party suppliers or carriers through contracts and consignment arrangements, as well as influence impacts of barge traffic associated with the Project through delivery timing.
- Barging is predominantly federally regulated and any potential impacts on fish and fish habitat are within federal jurisdiction.

In the RSOI, the proponent acknowledged that barges may be used to bring construction materials to site. However, the proponent did not provide further information on the geographic extent of this activity (e.g., size, frequency or anticipated routes of barge activities). Barging activities have been included in the Integrated Guidelines and will include information requirements; however more information is needed to determine the geographic extent of the proposed activity.

*Rail traffic is not incidental to the Project.*

A summary of key reasons for not including rail traffic as incidental to the Project are outlined below:

- In the RSOI, the proponent outlined that the Project would use existing rail networks to bring materials to site. As the use of only existing rail networks are currently proposed for the Project, anticipated effects of rail traffic would be limited to existing routes of rail line.
- Existing rail networks do not connect to the Project site and would rely on a transfer of materials to truck or barge in order to bring materials to the Project site. Road and barging traffic activities are considered incidental to the Project and would account for the impacts of the increased traffic in the close vicinity of the Project due to transfers to/from rail.
- Rail traffic is not within the care and control of the proponent, and any ability the proponent may have to direct or influence the rail operators is likely limited.
- The proponent is not the only party benefiting from the movement of materials by rail as the existing regional rail networks (CN and the Goderich-Exeter Railway) already benefit a variety of proponents and projects.

## d) Transportation of nuclear materials

*Transportation of nuclear materials is not incidental to the Project.*

A summary of key reasons for not including transportation of nuclear materials as incidental to the Project are outlined below:

- In order to undertake the Project, nuclear material must be transported to and from the site. This includes the transportation of new nuclear fuel from the uranium extraction and refining facilities, and the transportation of used nuclear fuel (i.e., waste) to interim or permanent storage facilities. The proponent has indicated that it will not be the sole entity responsible for carrying out this activity, as nuclear material is typically transported by third-party contractors throughout its lifecycle (i.e., from mine, to mill, to reactor, to waste storage facility).
- The safe and secure transport of nuclear materials is governed by both the CNSC's *Packaging and Transport of Nuclear Substances Regulations, 2015* (PTNSR) and Transport Canada's *Transportation of Dangerous Goods Regulations* (TDGR). The TDGR regulates the transport of all classes of dangerous goods, while the PTNSR focuses specifically on the unique hazards of radioactive materials. Given the highly regulated nature of the transportation of nuclear materials in Canada, there are other appropriate mechanisms to consider or address concerns related to the regulatory framework and oversight of this activity.
- Considering the above, the only aspect related to the transportation of nuclear materials that will be considered in the assessment, is increased road/barge traffic in the Project area, as it may contribute to effects to wildlife, air quality, and socioeconomic conditions.

However, aspects of the transportation (transit) of nuclear materials onsite would be considered for the purpose of emergency response and management plans.

Experts from the CNSC and Transport Canada will be available throughout the process, including information sessions and public hearing proceedings, to speak to the regulatory framework and oversight for the transportation of nuclear materials.