Summary of Issues

Bruce C Nuclear Project

Table I – Issues to Inform the Decision whether an Impact Assessment is Required

Table I of the Summary of Issues (SOI) includes issues that the Impact Assessment Agency of Canada (IAAC) and the Canadian Nuclear Safety Commission (CNSC) consider necessary to address in order to support decision-making on whether an impact assessment is required, under section 16 of the *Impact Assessment Act* (the IAA). IAAC, in collaboration with the CNSC have summarized additional issues in Table 2 below.

Table I was prepared based on comments received during the public comment period on the Summary of the Initial Project Description for the proposed Bruce C Nuclear Project (the Project).

Specifically, Table 1 focuses on:

- information needed to better understand the scope of the Project as a federal work or undertaking, licensing sought under the *Nuclear Safety and Control Act* (NSCA) and other permits or authorizations that may be required;
- information required to determine whether any further activities could be considered incidental to the Project[1], namely activities related to:
    - the transportation of construction material to site by boat or other means;
    - the need for a new switchyard and transmission line upgrades;
    - the transportation of new fuel to site;
    - the potential for new long-term and interim radioactive waste storage facility; and
    - the transportation of radioactive waste.

In accordance with section 15 of the IAA, Bruce Power must indicate how it intends to address the issues included in the SOI, including any issues related to potential adverse impacts the Project may have on the rights of Indigenous Peoples. In order to ensure that the responses related to adverse impacts on rights are adequate, the Proponent is strongly encouraged to work directly with Indigenous Nations and communities.

During engagement with Indigenous Nations and communities, additional issues may arise. IAAC particularly notes that the Saugeen Ojibway Nation stated that their comments "are not exhaustive and are preliminary in nature" (see Registry #74). IAAC and the CNSC request that Bruce Power document and respond to issues that may not have been captured by the SOI or other submissions on the Registry, as appropriate.

[1] As stated in the *Guide to Preparing an Initial Project Description and a Detailed Project Description*, IAAC requires information on the physical activities that could be incidental to the designated project. Annex I, Part B, item 9 of the Guide outlines the criteria that shall be taken into account to determine physical activities incidental to the project. These criteria have been used to develop the issues included in Table I of this Summary of Issues.

IAAC and the CNSC encourage Bruce Power to review and consider all original participant comments available online, on the Canadian Impact Assessment Registry (the Registry) for the Project (Reference Number 88771).

Issues
CNSC Licensing Requirements
Clarity on the nature of the licence application request Bruce Power is seeking under the *Nuclear Safety and Control Act* is required to understand the scope of an integrated assessment, should a positive impact assessment decision be made. Understanding the activities for which Bruce Power is seeking a licence will help tailor what requirements Bruce Power will need to follow when the Tailored Impact Statement Guidelines are being developed.
Requirement for Other Permits or Authorizations
In addition to the CNSC licensing information, provide a list of permits or authorizations that may be required by jurisdictions that have powers, duties or functions with respect to the Project, including for activities incidental to the Project.
Transportation of Construction Material to Site by Boat or Other Means
• Describe the means of transport (e.g. boat, road, rail, or other) for construction material to site, and provide clarity regarding the geographic extent of transportation. State whether additional structures will be constructed for the Project (e.g. docks, rail line, roads). Identify whether new activities would result from the maintenance of these structures and their duration and frequency (e.g. land clearing, dredging). • Clarify ownership and responsibility for the construction material. Describe at what point the care and control of the construction material transfers from the seller to Bruce Power. • Clarify the relationship between Bruce Power and other parties related to the transportation of construction material, and whether Bruce Power can direct or influence the activity of transportation to site. Describe if a contract will be required if a third party has care and control of the activity. • Provide information about the potential for the transportation of construction material to site to benefit other proponents. • As applicable, describe engagement undertaken with Indigenous Nations and communities on the transportation of construction material to the project site and provide a summary of issues raised during this engagement. • If known, describe any potential impacts on rights of Indigenous Peoples from transportation of construction material to site by boat or other means and identify any mitigation or accommodations measures.
New Switchyard and Transmission Line Upgrade

- Describe the additional capacity and geographic extent for new a switchyard and transmission line required as a result from the Project. Describe the predicted schedule for when structures and activities related to the transmission line upgrade would occur.
- Clarify ownership, responsibility, cost and financial responsibility for new transmission line. Should Bruce Power not be responsible for the transmission line, the relationship between Bruce Power, the owner and who has care and control of the transmission line needs to be clarified in clear details.
- Clarify the relationship between Bruce Power and other parties related to the new switchyard and transmission line upgrade, and whether Bruce Power can direct or influence the activity. Describe if a contract will be required if a third party has care and control of the activity.
- Provide information about the ways in which the new switchyard and transmission line upgrade may benefit other proponents.
- As applicable, describe engagement undertaken or planned with Indigenous Nations and communities on the impacts of building a new switchyard and upgrading transmission line and provide a summary of issues raised during this engagement.
- If known, describe any potential impacts on the rights of Indigenous Peoples from a new switchyard and transmission line upgrade and identify any mitigation or accommodation measures.

Transportation of New Fuel to Site

- Clarify the fuel type for all reactor technology being considered, as well as the source of the fuel and potential geographic extent of transportation for the fuel to the project site. Indicate if the nuclear fuel will need to cross international or provincial borders.
- Clarify ownership and responsibility for the new fuel. Describe at what point the care and responsibility of the nuclear fuel is transferred from the seller to Bruce Power.
- Clarify the relationship between Bruce Power and other parties related to the transportation of nuclear fuel, and whether Bruce Power can direct or influence the activity of new fuel transportation. Describe if a contract will be required if a third party has care and control of the activity.
- Provide information about the ways in which the choice of reactor technology and associated fuel may benefit other proponents.
- As applicable, describe engagement undertaken or planned with Indigenous Nations and communities on the impacts of transportation of nuclear fuel, and provide a summary of issues raised during this engagement.
- If known, describe any potential impacts on the rights of Indigenous Peoples from the transportation of new fuel to site and identify any mitigation or accommodation measures.

New Long-term and Interim Radioactive Waste Storage Facility

- Describe the anticipated types and quantities of new radioactive waste (i.e. low-level, medium-level and high-level) which would be generated during site preparation activities (i.e. under a Licence to Prepare Site), as well as throughout the Project's lifecycle.

Explain how that waste is expected to be managed including if existing licenced facilities will be used, or if new waste facilities would need to be constructed (and whether onsite or offsite).

- Clarify ownership and responsibility for long-term and interim radioactive waste storage.
- Clarify the relationship between Bruce Power and other parties related to the management and storage of radioactive waste, including for the proposal of new storage facilities, as applicable. Explain whether Bruce Power can direct or influence the need and development of potential new facilities.
- As applicable, describe engagement undertaken or planned with Indigenous Nations and communities on the impacts of potential new long-term and interim storage facilities, and provide a summary of issues raised during this engagement.
- If known, describe any potential impacts on the rights of Indigenous Peoples from new long-term and interim radioactive waste storage facilities and identify any mitigation or accommodation measures.

Transportation of Radioactive Waste

- Clarify if radioactive waste would be transported offsite and under what circumstances.
- Describe the means of transport (e.g. truck, rail, or other) for radioactive waste to off-site storage facilities, and provide clarity regarding the geographic extent of transportation.
- Clarify ownership and responsibility for radioactive waste. Should Bruce Power not be responsible for radioactive waste once it has been transported offsite, Bruce Power should clarify the relationship between the producer, owner and who has care and control of the waste.
- Clarify the relationship between Bruce Power and other parties related to the transportation of radioactive waste, and the degree to which Bruce Power can direct or influence the activity of radioactive waste transportation.
- Provide information about the potential for radioactive waste to be used, sold, or recovered for other nuclear generating ventures.
- Describe Bruce Power's role in emergency response related to transportation of radioactive waste.
- As applicable, describe the engagement undertaken or planned with Indigenous Nations and communities on transportation of radioactive waste, provide a summary of issues raised during this engagement.
- If known, describe any potential impacts on the rights of Indigenous Peoples from the transportation of radioactive waste and identify any mitigation or accommodation measures.

Table II – Other Issues relevant to Tailoring the Impact Statement Guidelines

Table II presents the issues IAAC and the CNSC consider relevant to an impact assessment of the proposed Project, should IAAC decide that an impact assessment is required. The table provides a high-level summary of comments, advice, and recommendations received from participants on the Summary of the Initial Project Description.

In the event that an impact assessment is required per section 16 of the IAA, IAAC and the CNSC would use the information provided in response to Table II to help support the preparation of the Tailored Impact Statement Guidelines and other Planning Phase documents. IAAC and the CNSC therefore encourage Bruce Power to provide sufficient detail in its responses to allow for effective tailoring and to improve regulatory efficiency.

As stated for Table I, Bruce Power is strongly encouraged to work directly with Indigenous Nations and communities to ensure that the responses related to adverse impacts on rights in Table II are adequate.

The issues below are informed by comments from all participants, which includes federal and provincial authorities, the United States Environmental Protection Agency, Indigenous Nations and communities, municipalities, industry, academia, non-governmental organizations, and the public. IAAC encourages Bruce Power to review and consider all original participant comments available online, on the Registry for the Project (Reference Number 88771).

Issues
1. Accidents and Malfunctions
a. Concerns about effects on the Great Lakes ecosystem, human health and surface and drinking water from accidents and malfunctions of the Project. Request to consider long-term management and monitoring for residual effects following an accident or malfunction. ♦[2]
b. Concerns about cumulative risks of accidents and malfunctions and the potential effects on Saugeen Ojibway Nation Territory with the addition of new reactors at the Bruce site. ♦
c. Concerns about adequate development and communication of emergency response plans and procedures, including plans for communications and the delivery of emergency response program exercises to potentially affected populations in case of accidents and malfunctions. Need for translation of emergency response plans and procedures in Indigenous languages for potentially affected Indigenous Nations and communities. ♦
d. Need for expanded emergency response resources and capabilities to meet the demand of new nuclear development. The Saugeen Ojibway Nation notes past engagement in nuclear emergency planning and preparedness has been limited and more engagement is required. ♦

[2] As indicated under issue #15 below, issues relevant to Indigenous Interests and raised by Indigenous Peoples are interwoven across multiple categories of issues and are identified using the symbol "♦".

2.	**Alternative Means of Carrying Out the Project**
a.	Need to consider how the potential for effects on valued components (e.g. migratory birds, fish and fish habitat, species at risk) would change based on alternative siting options and condenser cooling options, and how these changes would factor in the selection of the site location and condenser cooling technology. ♦
b.	Need to consider potential releases of contamination related to historical land use in the site option analysis, and the potential for those releases to interact cumulatively with effects of the Project.
c.	Need to consider alternative designs for the proposed site infrastructure (e.g. the forebay, the water intake and the water outtake) to improve upon known issues and impacts of the current infrastructure of Bruce A and B facilities. ♦
3.	**Alternatives to the Project**
a.	Interest in understanding whether there are feasible and cost-effective alternatives to the Project, including renewable power such as hydroelectricity and wind power, and energy conservation.
4.	**Atmospheric Environment**
a.	Concerns about effects on air quality and the effectiveness of applicable mitigation measures and monitoring plans during all phases of the Project.
b.	Concerns regarding potential impacts on children and other vulnerable receptors from the effects related to transportation routes, including effects on air quality and the potential for collisions (also relevant for *Accidents and Malfunctions*). Need to consider avoidance of sensitive areas in designing and selecting transportation routes.
c.	Concerns regarding potential for transboundary effects on the atmospheric environment, such as from emissions due to construction activities.
5.	**Baseline Studies**
a.	Need for baseline conditions to be based on recent information that is representative of the study areas for valued components and relevant to the Project effects (e.g. need to have a sufficient sample size and duration to understand of within-year and between-year variation).
b.	Need to understand availability of detailed information on the diet and traditional foods for the potentially impacted Indigenous Nations and communities, as well as on cultural uses of wildlife species.
c.	Concern regarding limited access to sources of baseline information referenced by Bruce Power. See comments from Environment and Climate Change Canada (Registry #40) for examples of sources that were not publicly accessible.
6.	**Climate Change and Greenhouse Gas Emissions**
a.	Need to understand the potential for greenhouse gas emissions and contribution to climate change by project activities and components through all phases of the project

lifecycle, including consideration of practices to reduce the expected greenhouse gas emissions, for example, replacing carbon-intensive construction materials.
b. Need to understand contribution of the Project to Canada's net-zero emission targets by 2050, including how the Project's projected timelines affect its contribution.
c. Concern about how the Project effect would interact with past, existing and foreseeable effects from climate change and increase risks on the rights and interests of Indigenous Peoples. Need to plan adequate mitigation and adaptation measures to mitigate these risks.
7. CNSC Licensing
a. Need to understand whether Bruce Power has, or will have, authority to carry out any licensed activities from the owner of the site.
b. Clarify whether Bruce Power will prepare a Predictive Environmental Risk Assessment for the Bruce C project, in accordance with REGDOC 2.9.1.
8. Cumulative Effects
a. Need to consider past, existing and foreseeable projects and activities in the cumulative effects assessment, including: nuclear facilities, continued above ground storage of nuclear waste, Major Components Replacement project, any proposed Deep Geological Repository for nuclear waste, large-scale battery storage facility, transmission lines, manufacturing and production plants, and natural gas pipelines. ♦
b. Need to consider cumulative effects on fish and wildlife, especially due to thermal effects, impingement and entrainment, contamination and habitat loss. ♦
c. Request to consider measures to mitigate or balance any increase due to Project effects on existing cumulative effects in the Great Lakes, to result in a reduction or no new net impacts. ♦
d. Concern about potential cumulative effects on the Saugeen Ojibway Nation due to transformation of archeologically significant ancestral landscape in Saugeen Ojibway Nation territory. ♦
e. Need for further information on cumulative impacts to Indigenous rights and interests, including on the ability to catch fish species for food, commerce and ceremony by their preferred means. ♦
f. Need to understand and consider historical context and impacts in assessing cumulative impacts. ♦
9. Economic Conditions
a. Support for the potential positive effects on the local and regional economy (e.g. job creation, youth retention in the area, and indirect effects on local businesses). Importance of working with municipalities to understand local economic development plans and potential role of the Project.

b. Concern about potential negative effects on availability of workforce for non-nuclear companies in the region (e.g. construction industry) and low wage jobs (e.g. hospitality, service, tourism, healthcare, childcare, manufacturing and agriculture).
c. Concern about potential effects of the Project on local demand for housing and increased housing and rental prices. Consider mitigation measures to reduce pressure on local housing market (e.g., workforce housing program).
d. Need to identify types and number of jobs created (permanent/part-time), wages, conditions and benefits, necessary skills, and duration of employment at each phase of the Project, and to prepare mitigation measures to address potential shortage of skillsets (such as training programs), in order to adequately assess potential economic impact and support population and housing growth projections.
e. Concern regarding financial assurance for decommissioning and closure early should the Project no longer be economically viable. Bruce Power should provide information on costs and financing for each project stage, including decommissioning and long-term waste management. ♦
10. Effects of the Environment on the Project
a. Consideration of effects of the environment due to natural hazards, including effects from climate change, in determining site suitability and the preferred site option.
b. Consideration of potential flooding events in the evaluation of the storage and management plans for spent nuclear fuel at the waste facility site.
11. Effects on Lands Outside of Ontario and Canada
a. Need to clarify potential environment interactions of the Project with the wider Great Lakes ecosystem, including transboundary effects.
b. Concern about potential effects on health and environmental conditions from accidents and malfunctions resulting from the Project on people, lands and waters outside Ontario.
12. Fish and Fish Habitat
a. Need to understand potential thermal effects on fish and fish habitat and aquatic species at risk, including but not limited to American Eel and Lake Whitefish egg, larval, and juvenile development. Potential for thermal plumes to act as a fish attractant. ♦
b. Need to understand potential effects from all project components and activities throughout its lifecycle on fish migration, recruitment, mortality (e.g. gizzard shad, lake whitefish etc.), health, spawning in adjacent spawning shoals, and on the spread or establishment of invasive species in fish habitat.
c. Concern about potential for fish impingement and entrainment on local fish and aquatic species at risk populations, including eggs, larvae, juveniles and adults. ♦
d. Need to understand potential effects on benthic invertebrates through multiple pathways (e.g. effluent, thermal plume and/or entrainment and impingement) as benthic invertebrates have a vital role in aquatic ecosystems. ♦

e. Need to consider effects of the Project on fish and fish habitat in general with a focus of species of interest to the Saugeen Ojibway Nation; including but not limited to lake whitefish, lake sturgeon, yellow perch, suckers, bass, northern pike, and walleye. ♦
f. Request to share information with the Saugeen Ojibway Nation on proposed baseline studies on fish and fish habitat, including biological indicator species, such as benthic invertebrate species. ♦
g. Clarify whether the Project would result in an exceedance of the current thermal release maximum. ♦
13. Follow-up and Monitoring Programs
a. Comment that mitigation measures and robust monitoring programs should be developed to avoid impacts to species at risk and their habitat, including critical habitat. Request that these plans should be provided to Indigenous Nations and communities for review and comment, if they choose to do so. ♦
b. Request for further information on anticipated long-term monitoring plans during the decommissioning phase to the end of abandonment. ♦
14. Human Health and Well-Being
a. Need to clarify health effect pathways based on Project interactions with the environment, including all potential contaminants and exposure pathways during all phases of the Project and the views of potentially impacted human receptors.
b. Concern about potential changes to drinking and recreational water sources resulting in health effects. Need to identify the location of all existing and potential future human receptors, including drinking and recreational water sources.
c. Clarify whether the representative persons used in the radiological dose calculations result in measures that are protective of Indigenous persons.
15. Indigenous Interests *Note:* Issues relevant to Indigenous Interests and raised by Indigenous Peoples are interwoven across multiple categories of issues and identified using the symbol "♦". The following section of the Summary of Issues focuses on issues pertaining to consultation and engagement with Indigenous Peoples, integration of Indigenous Knowledge, the current use of lands and resources for traditional purposes by Indigenous Peoples, Indigenous health and well-being, and potential impacts on the rights of Indigenous Peoples. The issues are presented here in a consolidated manner to better convey the original comments. Bruce Power is strongly encouraged to refer to original comments on the Registry Site when preparing the response on how they intend to address issues raised by Indigenous Peoples.
a. Concerns about the level of detail pertaining to Indigenous engagement. Bruce Power is expected to provide details of engagement activities, including content shared and information received, the involvement of community leadership, hunters, fishers, Elders, youth, and women. The documentation should include the main issues raised by each

	Indigenous group and Bruce Power's responses, including how matters have been or will be addressed.
b.	Lack of details regarding opportunities for collaboration with Indigenous Nations and communities during the assessment process. Bruce Power would be expected to share information about the Project and collaborate on the assessment on potential impacts to rights with all potentially affected Indigenous Nations and communities, as advised by IAAC. ♦
c.	Need to indicate how Bruce Power will provide sufficient information to Indigenous Nations and communities on the selected technologies throughout the IA process, how it will continue to follow-up with Indigenous Nations once the technology is selected, and how it will develop appropriate mitigation or accommodation measures with Indigenous Nations and communities for any of the potential technologies being considered.
d.	Request for Bruce Power to clarify how they intend to include Indigenous Nations and communities' membership from both on and off reserve in engagement activities.
e.	Concern that the assessment process timelines and the lack of information on project design would limit the possibility for a comprehensive Project assessment by Indigenous Nations and communities. ♦
f.	Use of consistent terminology should be applied, including referring to the Saugeen Ojibway Nation burial site as Jiibegmegoong. ♦
g.	Importance of providing opportunities for the sharing of culturally important information from Indigenous Nations and communities who wish to be meaningfully engaged, including but not limited to the Chippewas of Kettle and Stony Point First Nation. ♦
h.	Clarify how Bruce Power will consider and integrate Indigenous decision-making, Indigenous Knowledge and values, including consideration of free, prior and informed consent, in this project-specific decision making. Need to assess effects of the Project and process on Indigenous governance. ♦
i.	Respect of the United Nations Declaration on the Rights of Indigenous Peoples in the context of radioactive waste management and decommissioning, including meaningful engagement with Indigenous peoples, recognizing their unique status and rights, and ensuring their participation in the planning, development, and operation of radioactive waste management projects so that they can provide their consent to waste management solutions. ♦
j.	Importance of providing sufficient information to clearly understand the Project's pathways of effects that could result in effects on Indigenous Peoples[3] and impacts on their rights. For example, a key issue is the potential impact on Indigenous health, fishing practices,

[3] Per section 2(1) of the IAA:
(c) with respect to the Indigenous peoples of Canada, an impact — occurring in Canada and resulting from any change to the environment — on (i) physical and cultural heritage, (ii) the current use of lands and resources for traditional purposes, or (iii) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance;
(d) any change occurring in Canada to the health, social or economic conditions of the Indigenous peoples of Canada;

	and governance rights resulting from changes to fish and fish habitat and water quality, including in water temperature. Bruce Power would be expected to provide sufficiently detailed information to assess the effects from the new intake and discharge structures on Lake Huron to valued components that affect the practice of Aboriginal and Treaty rights. ♦
k.	Concern about the lack of detail on the historical and ecological importance of the Inverhuron area to the Saugeen Ojibway Nation. ♦
l.	Concerns about the protection of Saugeen Ojibway Nation sacred sites and culturally significant locations. Need to describe existing and proposed measures for the protection of culturally significant areas, including the manner in which the Saugeen Ojibway Nation has been consulted on the development of these measures. ♦
m.	Concerns about the potential impacts of an increased human population and development in Saugeen Ojibway Nation Territory on the landscape and the ability of Saugeen Ojibway Nation members to fish or harvest and practice their rights. ♦
n.	Concerns about the potential impacts on the effectiveness of fishers through the loss of Indigenous knowledge from loss of access to preferred fishing areas or loss of fish as a result of the project. ♦
o.	Lack of information about baseline characterization of the terrestrial ecology of Saugeen Ojibway Nation Territory. The Saugeen Ojibway Nation requests that the temporal boundaries for baseline conditions include the time prior to treaties, and prior to nuclear development at the site. ♦
p.	Concerns regarding the archaeological investigations on the property not being conducted according to current provincial and Saugeen Ojibway Nation standards, with use of outdated maps within the proposed development envelope. ♦
q.	Concerns about health inequalities between Indigenous Nations and communities and the general population and a health impact assessment should be tailored to each of the impacted communities. Indigenous Nations and communities should be offered the opportunity and the means to carry out their own assessment of project impacts on their health and well-being.
r.	Clarity requested on how current monitoring results contribute to an understanding of impacts of site operations on Saugeen Ojibway Nation rights as stewards of the Land. ♦
s.	Concerns regarding economic impact inequity for Indigenous Peoples. Need for more information on the potential effects to economic conditions of local Indigenous Nations and communities (on and off reserves), including positive (e.g., training and hiring of community members, and Indigenous procurement) and negative effects (e.g. impacts to traditional territory and to traditional economic and resource use near the project site, affordable housing, cost of living, employment, education, and wage disparity). ♦
t.	Concern regarding the impact of influx of temporary workers on Indigenous communities including crime, addiction and public health issues that are often associated.

u. Request for involvement of Indigenous Nations and communities in the Socio-Economic Support Study to establish workforce and population projections as a result of the Project. ♦
v. Concerns about the lack of information on marine and terrestrial archeology and archaeological sites in the Project area and in Lake Huron (e.g. bathymetric mapping) and concern about potential impacts from the Project layout on previously established culturally sensitive and archeologically significant areas. ♦
w. Potential impacts to Saugeen Ojibway Nation women's relationship with water, including their responsibility to protect the water as part of the assessment. ♦
16. Infrastructure and Services
a. Concerns about the capacity of municipal governments to collaborate with provincial authorities and to secure funding and support required to upgrade the current regional infrastructure and services (healthcare services, hospital facilities) to meet the increased demands due to the Project and address the anticipated environmental and socio-economic impacts.
b. Concerns about potential effects of increased demand on healthcare services, childcare services and education, as well as community, recreational and emergency services.
c. Concerns about potential impacts of the Project on county and municipal infrastructure due to increased use of roads (e.g., intersections along Highway 21, intersection of Albert Street and Concession Road 2, and school transportation routes) and transportation infrastructure, public transit, sewer and water infrastructure, waste management. Concern that increased road traffic may cause unsafe conditions for active transportation (cyclists, pedestrians).
d. Comments regarding influx of temporary workers as a result of the Project and the infrastructure and services required to support them (housing, transportation). ♦
17. Migratory Birds and Habitat
a. Need to understand potential effects from all Project components and activities throughout its lifecycle on migratory birds and their habitat. Request to provide further information on migratory bird species that have the potential to be directly or indirectly affected by the Project.
18. Noise and Vibration
a. Concern about the potential for Project activities (blasting) to cause on-land noise and vibration that may affect terrestrial wildlife including avian species and species at risk, in addition to underwater noise and vibration. Need for information on potential effects of on-land noise and vibration, as well as any planned on-land and underwater noise and vibration studies in the Project area.
b. Potential impacts on recreational facilities and other sensitive receptors due to construction and noise vibrations. Need for plans to provide sufficient warning prior to of noise and vibration-intensive activities.
19. Project Activities

a. Lack of detail on project components and activities during all project phases. Need to understand all waste and emissions that could be generated during all phases of the project and how these would be managed. See also Table I of this Summary of Issues.
b. Need to determine restoration requirements, including offsetting ratios, in consultation with Indigenous Nations and communities. ♦
20. Project Contribution to Sustainability
a. Need to understand potential to use sustainable building practices and materials in Project construction and energy efficient measures throughout the lifecycle.
21. Public and Stakeholder Engagement
a. Concerns about financial burden for Bruce County and municipalities to participate in the process for the Project and need for sources of municipal capacity funding to facilitate meaningful participation.
b. Need to plan engagement activities for local residents and municipalities. Need to consider methods and strategies to ensure participation and solicit input from regional municipalities, as well as from marginalized, vulnerable or underrepresented populations.
22. Reactor Designs and Plant Parameter Envelope (PPE) Approach
a. Need to understand the production processes of each technology listed in the PPE, including the maximum capacity for each.
b. Concern that use of multiple reactor technologies and condenser cooling options considered in the Plant Parameter Envelope (PPE) does not provide transparency for pathways of effects. Need to understand reactor technologies and condenser cooling options considered and their respective pathways of effects, including sourcing of fuel and heavy water, GHG emissions, accidents and malfunctions risks, waste management challenges and proliferation concerns. ♦
c. Need to understand the radioactive and non-radioactive waste management systems anticipated for the reactor technologies considered within the PPE, including pre-disposal management, decommissioning of facilities, and waste disposal, in accordance with Canada's Policy for Radioactive Waste Management and Decommissioning, the Integrated Strategy for Radioactive Waste, and the *Nuclear Fuel Waste Act*. ♦
d. Interest in a feasibility and level of impact analysis for Bruce A, B and C that includes cooling tower and/or air-cooling technology. ♦
e. Need to clarify the contractual relationship between the Bruce Power and OPG related to the selection of technology for the project, including assignment of liabilities and cost exposure, and whether OPG can direct or influence the selection of reactor technology.
23. Proliferation and Security Risks
a. Need for further information on the proliferation and security risks related to fuel sourcing and production, fuel operations, and fuel waste generation and management for the Project.

b. Concern about consideration of reactor technologies that uses plutonium extracted from CANDU fuel or enriched uranium as fuel increases risk of nuclear weapons proliferation.
24. Species at Risk, Terrestrial Wildlife, and their Habitat
a. Concern that potential effects to the Western Chorus Frog, a federal species at risk, are not considered. Bruce Power would need to provide additional information on the presence of Western Chorus Frog in the project area, including maps.
b. Concerns on how invasive populations will be controlled or eradicated. Need to consider whether Ontario's Invasive Species guidelines are applicable and would be implemented for the Project.
c. Concern about potential effects to bat species at risk due to removal of vegetation.
d. Need to identify the species at risk present within the three proposed Bruce C locations and provide maps of the areas where camera traps were located.
25. Vulnerable Population Groups and Gender-based Analysis Plus (GBA Plus)
a. Need further information on how Bruce Power will consider GBA Plus in the assessment of health, social and economic impacts to improve project design and develop mitigation measures that address differential impacts on historically excluded or underrepresented groups.
b. Need further information on how social, economic and health baseline data will consider GBA Plus and include disaggregated data.
c. Need to understand how Bruce Power will consider the potential risks of gender-based violence as a result of increased population of a transient workforce, as part of health and safety assessments.
26. Water – Groundwater and Surface Water
a. Need to understand the potential effects from all Project components and activities throughout its lifecycle on groundwater and surface water quality, including effects resulting from decommissioning and reclaiming the Bruce C site. For example, concern about capacity for water to support the health and wellbeing of animals, plants, and people that rely on it. ♦
b. Need to understand the potential effects of the Project components and activities on stormwater water runoff. Need to consider recent storm events in the design of stormwater management infrastructure and the effects of vegetation removal on increased rates of erosion and reduced infiltration.
27. Wetland Environments
a. Need to understand the potential direct and indirect effects, mitigation measures, monitoring plans and residual effects on wetlands and wetland functions during all project phases as it relates to valued components (including biological, social, hydrological, migratory birds, species at risk). ♦