

# Summary of Issues

## Peace River Nuclear Power Project

The Summary of Issues (SOI) outlines the key issues that the Impact Assessment Agency of Canada (IAAC), with input from the Canadian Nuclear Safety Commission (CNSC), considers relevant for the federal impact assessment process for the Peace River Nuclear Power Project (the project), as proposed by Energy Alberta (the proponent). The proponent's response to the SOI will support decision-making by IAAC on whether an impact assessment is required under section 16 of the *Impact Assessment Act*. If an impact assessment is required, the key issues outlined below and the proponent's response will inform the scope of the impact assessment, and the continued development and finalization of the Integrated Tailored Impact Statement Guidelines (Integrated Guidelines) and plans, as appropriate.

Given the project is a federal work or undertaking, consideration of adverse federal effects includes non-negligible adverse changes resulting from the project to the environment or to health, social or economic conditions.

IAAC was informed by input from federal and provincial authorities, Indigenous Nations and communities, and the public received to date on the Proponent's Summary of the Initial Project Description. The key issues identified below were raised during the public comment period, on the Summary of the Initial Project Description, from April 14 to May 14, 2025. Throughout the SOI, key issues raised have been summarized to provide a succinct description. The proponent is encouraged to consult the Canadian Impact Assessment Registry Internet site for the project (Reference Number [#89430](#)) where the original submissions are available for its review.

The proponent is required to provide a response that sets out how it intends to address the key issues identified below as part of the development of its project, including those related to potential adverse impacts the project may have on the rights of Indigenous Peoples in accordance with section 15 of the *Impact Assessment Act*. A high-level description is sufficient. Where relevant, the proponent is encouraged to identify if the key issues will be addressed through existing legislative and regulatory frameworks (i.e. legislation or regulation), by proponent commitments to best practices, policies or standards, or both.

To ensure that the responses related to adverse impacts on Indigenous rights are adequate, the proponent is strongly encouraged to work directly with Indigenous Nations and communities. Please see *Annex B: Preliminary understanding of key impacts on Indigenous Peoples and Indigenous rights* for summaries from submissions received from Indigenous Nations and communities on the proponent's Initial Project Description.

IAAC and CNSC anticipate releasing the draft Integrated Guidelines in the coming days. The proponent is encouraged to consider how its responses to the SOI may be addressed by information requirements in the draft Integrated Guidelines. In addition to its high-level responses to the SOI, the proponent may provide a more detailed response indicating how it intends to address issues through its comments on the draft Integrated Guidelines.

In either the responses to the SOI or comments on the draft Integrated Guidelines, the proponent should provide clear and detailed plans for accessible and inclusive engagement activities that involve local communities potentially impacted by the project and respond to the concerns raised by these communities.

## Summary of Key Issues Raised

Issues raised by Indigenous Nations and communities are interwoven across multiple categories of issue and identified using the symbol “◆”.

### Biophysical Environment

#### Atmospheric Environment

- Need to understand potential effects from the project (including transportation, site preparation, and project equipment), and potential mitigation measures, throughout its lifecycle on the atmospheric environment and air quality.
- Need for a comprehensive air quality management system and plan for project-related activities, during all phases of the project.

#### Groundwater and Surface Water

- Need to understand the potential effects from the project on groundwater and surface water from water withdrawals, wastewater treatment and management, throughout the project lifecycle and potential mitigation measures. ◆
- Need to understand the potential effects from the project on water quantity, including the full extent of water use, withdrawal amount from the Peace River for associated project infrastructure (e.g., draft cooling infrastructure) and potential effects this may have on fish and the ecosystem, including effects to riparian and adjacent terrestrial habitats in normal and extreme climate conditions. ◆
- Need to understand the cumulative effects of water withdrawal on water quality and quantity, including discharge rates and water levels, hydrological regimes, ecosystem components (e.g., migratory bird habitat and fish habitat), and deposition of materials in the Peace River and navigable waterways. Need to also consider water flows and the potential downstream effects on Wood Buffalo National Park and the Peace Athabasca Delta. ◆
- Need for more information on the long-term projections of water quantity and flows in the Peace River watershed and the Peace River based on varying climate change projections to understand whether sufficient water supply will be available to safely support the plant based on a one-hundred-year operating cycle. ◆

#### Species at Risk, Terrestrial Wildlife and their Habitat

- Concerns about potential effects to large game habitat and wildlife corridors including concerns about how impacts to one species can impact the entire ecosystem. ◆

#### Fish and Fish Habitat

- Need to understand potential effects on fish and fish habitat for the project, including for egg, larval, and juvenile development, and those species of Indigenous importance. ◆
- Need to understand the potential for fish impingement and entrainment of local fish and aquatic species at risk populations, including eggs, larvae, juveniles and adults in all aquatic systems. ◆
- Need for appropriate indicators and metrics, including those co-developed with Indigenous Nations and communities, to inform the evaluation of project effects on aquatic ecosystem health.

#### Migratory Birds and their Habitat

- Need to understand potential direct and indirect effects (e.g., sensory disturbance via infrastructure lights, increased mortality due to interactions with transmission lines) from all project components and activities throughout its lifecycle on migratory birds and their habitat, including those species of Indigenous importance. ◆

- Concern regarding process water, wastewater, or treatment ponds potentially containing chemicals harmful to migratory birds, especially waterfowl and potential mitigation measures.

## Health, Social, and Economic Conditions

### Human Health and Well-Being

- Need for clarity on health effects pathways (potential contaminants, exposure pathways, anticipated daily exposures) based on project interactions with the environment, and potential health effects for human receptors at varying distances from the project during all project phases and the views of potentially impacted human receptors. ♦
- Concern about potential contamination to drinking water, including from the Grimshaw Gravels Aquifer, on public health effects. Need to identify the location of all existing and potential future human receptors, including drinking water sources.
- Concern regarding the safety of handling nuclear substances and potential effects to the health of workers from exposure to radioactive substances throughout all phases of the project lifecycle.
- Concern that current health, disease and cancer data is too broad, does not reflect regional or community trends, and does not apply to the entirety of the exclusion zones.
- Concern that accidents or malfunctions do not appear to be linked to human health. Uncertainty on how accidents and potential health effects will be incorporated into the assessment. ♦
- Concerns over lack of baseline radiological data for the environment (e.g. air and water quality, noise) and country foods and how radiological effects from the project (inhalation, ingestion, and external exposure pathways) might affect human health, especially for nearby communities and sensitive populations like Indigenous Peoples, children, pregnant women, the elderly, and those with pre-existing health conditions. ♦
- Need to assess the perceptions and attitudes about safety of a nuclear project and psychological effects on people's mental health. ♦
- Need for additional information on potential contamination of soil and potential effects to crops and food chains, including potential mitigation measures.

### Infrastructure and Services

- Need for additional information about potential effects of increased demand on local infrastructure and services (e.g., housing, healthcare, childcare, social services, education, community services, and emergency services and others), including the preferred options to support an influx of temporary workers during each phase of the project and increases to the cost of living for those already in the region, and potential mitigation measures. ♦
- Concerns about potential effects from the project on county and municipal infrastructure due to increased use of transportation infrastructure, public transit, sewer and water infrastructure, waste management. ♦
- Concerns regarding transmission infrastructure and the increase in energy and generating capacity influencing the development of other and future projects. ♦

### Socio-Economic Conditions

- Importance of working with municipalities and local businesses to understand local economic development plans, potential role of the project, and potential indirect effects such as competition for and potential reduced availability of skilled workforce from other established sectors.
- Concern about potential effects of the project on local demand for and increased housing and rental prices, with higher impacts to low-income families. ♦
- Need to identify types and number of jobs with specialized skills, and duration of employment at each phase of the project, and potential mitigation measures to address potential shortage of skillsets (such as training programs).
- Need for additional information on how the project would affect the economic conditions of farms, agriculture, and livestock in the area, as a result of potential effects through emissions, effects to

surface water, groundwater, accidents and malfunctions, waste storage and transportation, and increased dust and noise from construction.

- Need for additional information on economic impacts of the project on farms, including reduction of property value of nearby farms, and compensation mechanisms for impacted farmers.
- Need for further information on industries most likely to be positively impacted as a result of the project, and any potential benefits or challenges for local municipalities and communities.
- Need to understand how the proponent will consider the potential risks of gender-based violence to local communities, including vulnerable communities such as Indigenous women and girls, as a result of increased population of a transient workforce and as part of health and safety assessments. ♦
- Concern regarding initiatives to assist Indigenous communities potentially impacted by the project with respect to employment and job training for positive economic benefits, partnerships, and equity participation. ♦

## Indigenous Peoples

### Indigenous Interests

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 effectively convey the original comments. The proponent 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. Annex B includes hyperlinks to original submissions in addition to detailed summaries from individual Indigenous Nations and communities.

- Concern that the assessment process timelines and the lack of project information would limit the possibility for a comprehensive project assessment by Indigenous Nations and communities. ♦
- Concerns over lack of early and meaningful engagement with Indigenous Nations and communities. ♦
- Need to understand how the proponent aims to secure Free, Prior, and Informed Consent through the assessment process of the project with Indigenous Nations and communities identified in the Initial Project Description. This could include co-drafted consultation plans with each Nation. ♦
- Need for cumulative impacts on rights assessment for this project. This includes how the increase in energy and generating capacity due to the project could give rise to other reasonably foreseeable projects and development trends. ♦
- Need for clarity on how the proponent will consider, integrate, and facilitate funding to build capacity support for Nations to incorporate Indigenous decision-making, Indigenous Knowledge and values, Indigenous-led and collaborative assessments, and inclusion to project-specific decision making. ♦
- The Peace River, including the Peace Athabasca Delta, is of utmost importance to Indigenous Peoples in this region. Need to understand how the assessment will minimize any impacts to the Peace River, including biophysical, cultural and spiritual aspects of the river. ♦
- Need to assess and address potential effects from the project, including accidents and malfunctions, on Indigenous culture and way of life for Indigenous Nations and communities and their waters and lands. ♦
- Need to understand what Treaty and Indigenous rights are practiced within the region through working with Indigenous Nations and communities. Concerns about the proponent's commitment to assess project impacts, in a holistic manner, to the exercise of those Treaty and Indigenous rights and accommodate impacts from the project. ♦

- Concerns regarding comprehensive consideration of nuclear safety and risks from the project not just from the western scientific perspective, but in accordance with the perspectives of the Indigenous Peoples who are the stewards of these lands. ♦
- Need for additional information regarding exposure of Indigenous Peoples to project-related emissions and radiation while conducting traditional land and resource use activities and potential impacts to their health. Need for clarity on the methodologies used to assess the effects, and how these effects will be communicated to communities and mitigated. ♦
- Need to understand the potential economic impacts and opportunities available to Indigenous Nations and communities, and how social conditions may change (i.e., influx of temporary workers, increase in crime, addiction and public health issues, and access to resources of non-Indigenous hunters), as result of the project. ♦
- Need for additional information as to how Indigenous Knowledge will be incorporated into identifying effects to valued components or associated mitigation measures, including any existing Indigenous Knowledge studies completed to date or plans for future studies. ♦
- Concerns about how the project's construction and long-term operation could adversely impact Indigenous rights, harvesting, culture and way of life, preferred and culturally important sites, and the loss of Indigenous Knowledge and what the full nature and scope of the project's impacts will be on the ecosystem which Indigenous rights, culture and way of life are predicated upon and depend on. ♦

## Other Key Issues Related to the Federal Undertaking

### Accidents and Malfunctions

- Concerns about effects from accidents and malfunctions of the project, including catastrophic failures, such as upstream dam failures or from effects of the environment on the project, and radioactive substance emissions on the Peace River ecosystem and the Grimshaw Gravels Aquifer. Need for additional information on pathways of effects and mitigation measures for the project's infrastructure and operations, and hazardous releases and emissions which include long-term surface water and groundwater monitoring. ♦
- Concerns about the adequate development and communication of emergency response plans, procedures, and program exercises in rural settings to potentially impacted local populations. ♦
- Need for the assessment of how seismicity in the region, both natural and human induced, could affect the project, including accidents and malfunctions and the potential for increased seismicity as a result of oil and gas activities. ♦
- Need for clarity regarding the requirements for emergency response for any accident and malfunction scenario related to the transportation of radioactive material and to identify all parties involved, their roles and responsibilities, including for the coordination of the response and for any training that is required. ♦
- Need for clarity on how potential radiological consequences to the public will be assessed in the event of a nuclear accident, and the selection of criteria for the assessment.
- Need for additional information on emergency preparedness procedures during the operation phase should a shutdown be required.
- Need for additional information on regional co-development between the host and neighboring communities, including Indigenous Nations and communities, regarding emergency management plans, including, funding for local emergency programs, and targeted emergency response education initiatives. ♦

### Effects of the Environment on the Project

- Need for clarity on how effects of the environment due to natural hazards, including from seismic (natural and human induced) activity, wildfires, tornadoes, flooding and slope destabilization have been incorporated in choosing project siting option and project design. ♦

- Concerns on how potential flooding events have been considered in the evaluation of the storage and management plans for spent nuclear fuel at the waste facility site.
- Concerns regarding the project's resilience to climate change and need for clarity on how climate change was considered in project design and evaluating the effects on the environment and Indigenous Nations and communities. ♦

## Transportation

- Need for additional information on project-related transportation of hazardous and non-hazardous materials throughout the entire lifecycle of the project (site preparation, construction, operations, decommissioning, and abandonment), including anticipated usage of existing provincial and municipal roadways, and whether construction of new or upgraded roadways. ♦
- Need for clarity on transportation of new nuclear fuel to the project, including who has care and control, geographic extent of transportation, including if the fuel will cross international or provincial borders, and the frequency of nuclear fuel deliveries to the project site. ♦
- Need for additional information on all modes of transport that would be used to move radioactive waste to off-site storage facilities, including geographic extent of transportation and potentially impacted communities along the route. Need for clarity whether the proponent will have care and control of transportation of radioactive waste.
- Need for additional information around potential effects of increased traffic on community safety, accident risks, and wildlife injury. ♦
- Concerns around the engagement process for communities along transportation routes for nuclear materials and wastes.

## Waste Management – Storage

- Need for additional information about nuclear waste management, including and short-, medium-, and long-term storage, and the potential for containment breaches due to flooding, accidental releases, and limited rural infrastructure to support transportation. ♦
- Need for further information on the location of radioactive waste and hazardous materials storage, and the potential for regional expertise and capacity in the development of short and long-term nuclear waste management solutions. ♦

Need for additional information on how much spent fuel is expected during project operations (e.g., after 10 years, 30 years, 70 years).

## Annex A: Additional Comments, Guidance and Recommendations

The following list provides additional comments, guidance and recommendations by IAAC for information purposes only. The proponent is encouraged to consult the Canadian Impact Assessment Registry Internet site for the project (Reference Number #[89430](#)) where the original submissions are available for its review.

### Reactor Design

- Need to understand – given Monark reactors are a new, yet-to-be-licensed technology – all radioactive fuel and sources, waste (including the level of radioactive waste) and hazardous wastes and releases at each stage, including the anticipated radioactive and non-radioactive waste management systems, pre-disposal management, decommissioning of facilities, and waste disposal, in accordance with, the [Integrated Strategy for Radioactive Waste](#), and the [Nuclear Fuel Waste Act](#).
- Concerns regarding the readiness, proven track record and lack of clarity about stated outputs of the CANDU MONARK technology to be constructed and whether other technologies may be more appropriate for the Peace River region. ♦

### Other

- Need to understand which, if any, lands are currently owned by the proponent, and whether the proponent intends to occupy or purchase additional land (including Crown and public land) for the project and if a title, deed, or authorization has been acquired for any water lots.
- Need to understand whether the proposed sites have been previously evaluated, as several years of data collection and analysis are required for site evaluation, including site characterization studies and seismic hazard assessments.
- Concerns about inaccuracy or absence of provincial and federal acts and regulatory requirements, and identification of federal authorities to which the project is subject.
- Concerns regarding strategies or initiatives planned or underway to increase perception of safety, security under normal operating procedures, or risks of nuclear weapons proliferation and targeted malevolent acts (e.g., terrorist activity), and public acceptance of the project. ♦

## Annex B: Preliminary understanding of key impacts on Indigenous Peoples and Indigenous rights

IAAC and CNSC commit to consultation and engagement with Indigenous Nations and communities who are potentially impacted by the project in the spirit of reconciliation, renewal of Nation-to-Nation, government-to-government and Crown-Inuit relations, and respect for the [Principles respecting the Government of Canada's relationship with Indigenous peoples](#).

This section includes summaries of key issues identified within submissions received from Indigenous Nations and communities on the proponent's Initial Project Description. The submissions have been summarized by IAAC, however the proponent should reference the original submissions made by each Indigenous Nation and community and provide responses to IAAC about how they intend to address the issues that relate to the adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the *Constitution Act, 1982*. Note: Indigenous Nations and communities are listed in alphabetical order.

### Athabasca Chipewyan First Nation

#### [Athabasca Chipewyan First Nation Submission](#)

- Concerns about how the *United Nations Declaration on the Rights of Indigenous Peoples Act* (UNDRIP) and the recognition of rights will guide the process and require impacted Indigenous Nations to give consent for the project to be approved
- Need for the assessment of nuclear waste management and storage for both medium and long-term storage and safety regulations
- Concerns that waste management and storage for both medium and long-term storage and safety regulations must reflect UNDRIP
- Need for an assessment on water intake from the project and water quality and resulting impacts to the Peace River, including water flows and downstream effects on Wood Buffalo National Park
- Need for an assessment on psychosocial impacts of the project (e.g., mental health) associated with living near the nuclear projects and past effects from industry developments
- Need for an assessment on impacts to key habitat functions, which in turn would disturb essential species at risk and species of cultural importance
- Concerns regarding capacity to complete a project-specific traditional land use study
- Need for the assessment of the area's history given the little archaeological information available
- Concerns about having respect for other Indigenous Nations located closer to the project footprint and a need to communicate with those nations to align our priorities within Dene Laws
- Need for assessment of the potential to support the expansion of the fossil fuel industry, thereby moving away from the net-zero commitments Canada has made
- Need for the recognition of the inherent rights on the land, waters, and wildlife
- Need to reduce barriers for local /affected communities' members by outlining training opportunities to create a workforce of local peoples to be experts in the nuclear power field
- Concerns about the lack of information on the proposed monitoring programs and the metrics used to analyze data
- Concerns that Treaty 8 must be involved in the monitoring process, from collection to analysis of the results to the interpretation of the territory's health
- Need for a method of predicting potential cumulative impacts on rights tied to ecosystem health given the development of this project combined with current and future projects
- Need for an assessment to determine whether there is enough uranium to produce fuel for the project's lifecycle and whether the project will be economically viable given the markets
- Need for the assessment of the extraction and creation of fuel, and the energy/resources used to manage waste negating climate change considerations
- Need for the assessment of the additional industries associated with nuclear power plant creation

- Need for the assessment of the additional impacts and effects from potential expansion of project facilities or partner facilities (i.e., medical isotopes, district heating, hydrogen production)
- Concerns that the information on the safety measures and emergency responses is very limited. Effective measures must be taken to ensure that the site chosen is safe from nuclear and radiological impacts

## **Beaver First Nation**

### Beaver First Nation Submission

- Concerns about how UNDRIP and Treaty 8 rights are considered in the assessment and decision-making
- Need for the assessment of impacts to Treaty and Aboriginal rights including cultural way of life
- Need for the assessment of potential impacts on wildlife and key species for harvesting
- Need for the assessment of pre-industrial baseline conditions to assess cumulative effects
- Need for the assessment of health and safety risks
- Need for the assessment of wildfire risks to facility
- Need for the assessment of nuclear waste
- Need for the assessment of long-term health effects of nuclear incidents
- Concerns regarding lack of emergency planning and preparedness information
- Need for the assessment of geological risks to facility
- Need for the assessment of risks of transportation of nuclear waste in an event of an accident
- Need for assessment of cumulative impacts to the Peace River water and flow
- Need for assessment of cumulative impacts on fish
- Need for the assessment of the everyday uses of the Peace River by Indigenous Nations
- Desire to be a co-administrator for the assessment and co-develop assessment methodology
- Need for the assessment of socio-economic impacts of the proposed project (positive and negative)
- Concerns regarding lack of information on the inclusion of transmission lines
- Need for assessment of cumulative effects from the construction phase of the facility

## **Cadotte Lake Métis**

### Cadotte Lake Métis Submission

- Need for assessment of the loss of large game and migratory bird hunting areas and fishing areas from the project and downstream effects
- Need for assessment of project impacts on wildlife and fish and fish habitat from instream works and water intake
- Need for the assessment of loss of areas for gathering medicine
- Need for the assessment of loss of areas for gathering for cultural practices
- Need for the assessment of Indigenous avoidance behavior of adjacent areas by community members as a result of altered landscape, security exclusion zone, industrial lighting at night and plant noise
- Need for the assessment of changes to large game utilization of habitat / movement corridors area due to large scale and long-term changes
- Need for the assessment of large power transmission line corridors extending from project site for many KMS allowing increased access and animal predation and human hunting success
- Need for the assessment of increased vehicle / wildlife collisions in area/region with large workforce coming to and from worksite to towns/settlements
- Project would be inserted into area heavily effected/impact landscape containing significant levels or agricultural, settlement, forestry, oil sands- heavy oil, transportation footprint and associated human activities – this level of activity has already harmed the CLMN people and their ability to use and rely on their traditional lands around Cadotte Lake 15
- The Peace River has been subjected to many changes over recent decades which has altered the natural flow regime of the Peace River

- Peace River water quality and quantity being impacted on an ongoing basis by hydro-electric operations, water withdrawals from various users, treated water/ waste deposition from the Town of Peace River, agricultural run-off, run of from forestry activity, Peace River sand and gravel operations, Mercer pulp mill effluent discharges
- Future changes to Peace River water quality and quantity with markedly warming temperatures and reduced flows from key tributaries such as the Wapiti and Smoky Rivers and reduced snowpack in the upper northern Rockies in British Columbia
- Potential Human Health Risk Considerations and Potential Community Avoidance
- Potential for accidents, malfunctions and catastrophic failure requiring risk assessment and impacts/effects to local populations
- On site storage and transportation over short and medium term of nuclear wastes
- Potential unknowns in operating new generation CANDU generating systems which have yet to be built and operated within Canada
- Increased seismicity/earthquakes in adjacent Harmon valley which correlates with uplift in oil and gas fracking operations
- Community avoidance of landscape and adjacent areas due to fears and perceptions related to toxic effects

## **Dene Tha' First Nation**

### [Dene Tha' First Nation Submission](#)

- Concerns that Dene Tha' First Nation (DFTN) is recognized as a self-determining governing Nation with constitutionally protected rights, land-based responsibilities, and decision-making authority in project assessment or decisions that may affect our lands, waters, or cultural survival
- Need for the assessment of Treaty rights to hunt, fish, trap, and carry out traditional land-based practices as part of project justification and decision-making criteria
- Need for Treaty rights and Indigenous knowledge systems to be centered in the definition of impacts and significance criteria
- Concerns that engagement with DFTN must be adequately resourced to support meaningful participation across all stages of the process, including access to information, participation, formulation of recommendations, and active involvement of community members, leadership, harvesters, and knowledge holders
- Need for joint fieldwork and Indigenous-led baseline studies
- Need for the assessment of transmission infrastructure potentially impacting caribou habitat and wetlands, wildlife displacement, increased access pressures on harvesting areas, and permanent disruptions to land use and cultural practice
- Concerns that transmission infrastructure and access routes are in the designated project scope
- Need for the assessment of regional development and the potential long-term and cumulative effects including increased industrial, agricultural, and settlement expansion
- Need for the assessment of increased recreational and tourism footprint and increased pressure preferred on hunting, fishing, and trapline areas, and non-Indigenous uses in culturally sensitive areas
- Need for the assessment of the habitat fragmentation and resulting impacts to species of importance, including moose, caribou, bear, migratory birds, lake whitefish, and bull trout that DFTN members rely upon for food, cultural use, and economic sustenance
- Need for the assessment of waste management and emergency risks, including consideration of remote communities, the Peace River ecosystem, and cross-boundary impacts and the need for Indigenous participation in defining acceptable risk thresholds
- Need for the assessment of accidents, malfunctions and natural disasters on the health and safety of the land, waters, and future generations including areas downstream and across multiple jurisdictions

- Need for the assessment of psychological, perceptual impacts surrounding nuclear energy and contamination risks eroding confidence in the safety of traditional foods, water, and land-based practices
- Need for the assessment of water withdrawals, changes to temperature and sediment regimes, risk of entrainment or thermal shock to fish populations, impacts on ice formation, downstream flows, or seasonal flood cycles, and emergency discharge scenarios during accidents, unplanned releases or radioactive discharges during operations or accidents and the cumulative stress to fish populations and the broader aquatic food web
- Need for the assessment of cumulative effects considering existing and foreseeable hydrological alterations upstream on the Peace River's seasonal dynamics and ecological integrity
- Need for the assessment of cumulative effects that includes transmission lines, induced development, and off-site infrastructure
- Need for the Peace River water use and aquatic risk assessments to include all upstream and downstream influences and Indigenous-defined indicators of ecological health

### **Driftpile Cree Nation & Sucker Creek First Nation & Whitefish Lake First Nation**

#### Driftpile Cree Nation & Sucker Creek First Nation & White Lake First Nation Joint Submission

- Concerns that the assessment have greater consideration of Indigenous rights
- Concerns of the lack of focus on Indigenous self-governance
- Need for the assessment of cumulative effects and impacts on rights of future development projects
- Concerns about including regional land use planning inclusive of unregulated cumulative impacts
- Need for Indigenous-led studies, including Indigenous-led Traditional Land and Resource Use (TLRU) studies and cumulative effects assessments
- Need for the assessment of cumulative impacts and the threat to intergenerational transfer of cultural knowledge and practices
- Need for the assessment of economic considerations around Indigenous participation in employment, procurement and equity
- Concerns that the project must align with Canada's obligations under UNDRIP

### **Duncan's First Nation**

#### Duncan's First Nation Submission

- Need for treaty interpretation to be accurately understood between all parties
- Need for the assessment of how the project contributes to cumulative impacts on rights
- Need for the assessment of how the project could increase other developments with the territory
- Need for the assessment of how the project could have significant impacts on culture, way of life, lands and waters
- Concerns about the need for a process that includes Duncan's First Nation's free, prior and informed consent for the project. Incorporate article 29.2 of the UNDRIP for nuclear waste in the context of the Kebaowek court case
- Concerns about not having capacity and time constraints for participation in the process and a request for the proponent to provide longer timelines are required for effective participation
- Desire to be a co-administrator for the assessment and co-develop assessment methodology
- Need for the assessment of the project-related pressures on treaty resources due to larger population engaging in recreational activities, including impacts on the aquatic environment
- Need for the assessment of increased workforce impacts on the safety of Indigenous women and 2SLGBTQI+ peoples
- Need for the assessment of economic impacts of the project on Duncan's First Nation including the consideration of cost-of-living increases associated with the project, information on project

specific education and training for DFN members and details about Indigenous procurement strategies

- Need for the assessment of nuclear safety risks for the perspective of Indigenous Peoples including risks to health and safety for accidents and malfunctions, how to reduce risks of accidents and malfunctions
- Need for the assessment and creation of a plan for expanded emergency response capabilities specific to the region including for wildfires and water shortages
- Need for the assessment of project-related health risks, including mental health
- Concerns about the uncertainty with respect to CANDU technology
- Need for the assessment of seismicity and the risks to the project and exploring options to reduce human caused seismicity
- Need to create and communicate a plan for radioactive waste and other hazardous materials created by the project
- Need for the assessment of how people's relationship with the lands and waters will change due to perception of risk
- Need for the assessment of project and associated infrastructure effects on the environment, including on fish and fish habitat, plants and animals, and downstream effects
- Need for the assessment of water availability in the Peace River including project impacts on water quantities, different scenarios of flows of the Peace and the viability of the project considering climate change

## **Ermineskin Cree Nation**

### Ermineskin Cree Nation Submission

- Concerns around meaningful consultation and accommodation: The proponent and the Crown must explicitly recognize and uphold Ermineskin Cree Nation's (ECN) Treaty, Aboriginal, and inherent rights through the impact assessment and all project-related processes, including through formal recognition of ECN's Consultation Policy as the guiding framework
- Concerns that consultation must exceed information-sharing and adhere to the legal standards of the duty to consult and accommodate as required under s. 35 of the Constitution and relevant case law. UNDRIP and FPIC must guide all project phases
- Concerns that a detailed and transparent Indigenous consultation plan must be developed and shared outlining how Indigenous decision-making and traditional knowledge integration will be operationalized and respected
- Concerns that the assessment must fully integrate cumulative effects as a foundational component rather than a secondary consideration
- Concerns that clean energy goals are decoupled from impact assessment outcomes
- Concerns that a comprehensive waste management strategy, including risk mitigation and emergency response protocols is developed
- Need for the assessment of effects on the Peace River and the broader watershed and tributaries with full inclusion of Indigenous knowledge
- Need for the assessment of potential impacts on wildlife, fish, and SAR must be conducted and should go beyond regulatory minimums to include cumulative effects
- Concerns that funding is available to facilitate Indigenous-led studies, including TLRU/IK studies and socioeconomic and health assessments to understand impacts to Indigenous rights
- Need for the assessment of health impacts, including physical, psychological, and cultural health concerns, in collaboration with Indigenous Nations
- Concerns about transparency and timely information sharing
- Concerns around protecting traditional land use areas used for hunting, gathering, cultivation, trapping, and cultural activities

## **Fort McKay First Nation**

### Fort McKay First Nation Submission

- Need for the assessment of cumulative effects
- Need for the assessment of the impacts on the Rights of Indigenous Peoples – as evaluated by Indigenous Nations as per their own rights assessment studies
- Need for the assessment of potential accidents and malfunctions and effects on Fort McKay and its members health and well-being and its Treaty rights
- Need for the assessment of accidents and malfunctions and prevailing winds transporting radiation from the project impacting Fort McKay's Traditional Territory, Reserves and Community
- Need for the assessment of the radiation or discharge in the Peace River water and its potential impacts on Treaty rights including navigation, fishing, hunting and gathering
- Need for the assessment of waste storage and transportation including developing detailed plans (exact routes) for fuel supply and used fuel transport to permanent storage
- Need for the assessment of technology proposed, their risks and safety operations, as well as the development of comprehensive emergency plans
- Fort McKay desires to take the lead in any assessment of impacts on its Treaty rights
- Concerns that a submission of a Preliminary Decommissioning Plan (PDP) is included as part of the formal Application
- Need for an assessment of alternatives to the project and alternative means of carrying out the project, including:
  - impacts on human health and the environment, specifically on Treaty 8 and Fort McKay's Traditional Territory and the extent and duration of impact
  - Security risks
  - Cost-benefit analysis and comparison of LCOE (levelled cost of energy per megawatt-hour) over the project life in comparison of alternative energy projects
  - Comparison of EROI (Energy Return on Energy Invested) over the full project life cycle in comparison of alternative energy projects
  - Consideration of logistical challenges (i.e., cold, remote, high labour costs, transport challenges)
  - Economic feasibility (i.e., how the technology, unit processes, and costs estimates have been made in the absence of any CANDU MONARK projects being built/completed)
  - Submission of a plan for used nuclear fuel

## **Kikino Métis Settlement**

### [Kikino Métis Settlement Submission](#)

- Need for the assessment of Kikino Métis Settlement Indigenous rights, including the right to harvest animals and plants for subsistence purposes
- Need for the assessment of cumulative impacts and infringements to rights
- Concerns about recognition and commitment to UNDRIP and the UNDA and how they will be considered
- Need for adequate resources provided to assess the potential cumulative and incremental impacts of the project on the rights, health, socio-economic status, and culture of our people to enable decision-making
- Need for the assessment of seismic activity and the potential for earthquakes
- Need for the assessment of impacts to water and wildlife, given the high levels of cumulative disturbance within Métis Harvesting Area A
- Concerns around developing Indigenous Knowledge indicators and baseline data for impacts to water, plants, and wildlife that can be assessed alongside and equal to Western science
- Need for the assessment of the storage of radioactive and other forms of highly toxic waste from the project given the lack of clarity regarding the plans for the storage of such waste
- Concerns around incorporating article 29.2 of UNDRIP for nuclear waste

## **Lubicon Lake Band**

### [Lubicon Lake Band Submission](#)

- Concerns that the Peace River area holds significant traditional and cultural value and has been used for traditional activities since time immemorial
- Any work development in traditional territory must respect and uphold Aboriginal and Treaty rights, i.e. Duty to Consult, Free, Prior and Informed Consent
- Concerns about project impacts on and access to culturally significant territory and ecosystem
- Need for the assessment of the impacts on the exercise of rights, human health and relationship with the land, i.e. aquatic thermal pollution, radioactive spills/contamination, water flow alterations, habitat fragmentation and their cumulative impact
- Industrial activity and infrastructure would disrupt spiritually significant sites, practices, and wildlife
- The project will compound existing cumulative impacts from existing industrial projects
- Not confident in proponents' ability to safely deliver on the project given lack of experience
- Provide funding and support for a fulsome Indigenous Knowledge and Land Use Study

## **Mikisew Cree First Nation**

### Mikisew Cree First Nation Submission

- Need for a comprehensive cumulative effects analysis, including transboundary and inter-provincial dynamics
- Concerns about including roles for Indigenous Guardians and environmental monitors
- Concerns about providing funding and support for capacity building, including technical review and legal support
- Need for the assessment of Indigenous procurement, training, and long-term benefit sharing
- Need for the assessment and development of a waste management plan detailing alternate waste storage site disclosed, long-term containment, transportation risk, and interjurisdictional responsibility
- Need for the assessment of water intake from the Peace River; insufficient information in the IPD on impacts to aquatic life, community water use, or downstream Nations
- Need for a long-term soil remediation strategy that considers contamination from radioactive materials or spills during the construction and operational phases
- Need for a nuclear emergency plan in collaboration with affected Nations inclusive of emergency evacuation, communication, and protection of Indigenous communities
- Need for mapping, cumulative analysis, and commitments to accommodate or avoid impacts to key cultural areas used for hunting, fishing, gathering, and ceremony
- Concerns about intergenerational health for Indigenous peoples exposed to environmental pollutants

## **Otipemisiwak Métis Government**

### Otipemisiwak Métis Government Submission

- Need for an assessment of potential impacts on Métis traditional land use including potential impacts on traditional hunting, fishing and plant gathering.
- Need for further community engagement and land use studies
- Need for additional information regarding Indigenous economic participation considerations including training, employment, scholarships and business development
- Need for additional information regarding tritium to address concerns about possible contamination of soil, groundwater and the Peace River
- Need for additional information on greenhouse gas production
- Concerns regarding cumulative impacts on the Peace River
- Concern regarding seismic activity in the Peace River area and need for additional information regarding reactor safety and risk mitigation
- Need for additional information regarding low-level waste management

- Need for additional information regarding the impact of transmission lines

## **Paddle Prairie Métis Settlement**

### Paddle Prairie Métis Settlement Submission

- Need for the assessment of water quantity and quality on the Peace River ecosystem and effects on the health, well-being, and traditional harvesting practices of members and downstream communities
- Need for the assessment of impacts on cultural and traditional Métis harvesting practices (fishing, trapping, gathering medicinal plants) as well as impacts on culturally and ecologically important fish species like Northern Pike, Walleye, and Whitefish
- Need for the assessment of potential impacts on river ecosystem and impacts on food security and cultural identity
- Need for the assessment of potential generational risks on health and safety
- Need for the assessment of on-site storage of radioactive and hazardous waste as it adds to community safety concerns
- Need for the assessment of emergency planning zones as having them undefined creates uncertainty about future land use
- Concerns that there is meaningful engagement beyond procedural formality
- Concerns for the need for technical and environmental support to ensure free, prior, and informed consent
- Need for the assessment of the ancestral, spiritual, and constitutionally protected connection to the land and river
- Concerns that the process honors the land, culture, and people of the Paddle Prairie Métis Settlement

## **Swan River First Nation**

### Registry Comment for Swan River First Nation

- Need for the assessment of treaty rights and the ability of Indigenous communities across Alberta to exercise those rights. Strong opposition to the proposed project
- Need for the assessment of environmental and safety risks, particularly in light of increasing seismic activity in the region

## **Tallcree Tribal Government**

### Tallcree Tribal Government Submission

- Need for the assessment of nuclear waste production, including short- and long-term storage, and transportation
- Need for the assessment of water usage and the effects on the flow of the Peace River and its tributaries, including short- and long-term drought considerations and dam activity
- Need for the assessment of cumulative effects of development on the environment and on Treaty 8 Rights holders, considering past, current and future development
- Need for the assessment of cumulative impacts on rights, including fishing and harvesting on the Peace River
- Need for the assessment of cumulative effects from the project on existing contaminants in the Peace River, including effects on human health
- Desire for Tallcree Tribal Government to lead parts of the assessment
- Concerns about the commitment to UNDRIP
- Need for the assessment of impacts to wildlife and wildlife habitat, fish and fish habitat needs more detail
- Need more information on project design

## **Whitefish Lake First Nation #128**

### Whitefish Lake First Nation #128 Submission

- Need for the assessment of potential adverse impacts of the project on Aboriginal and Treaty rights, including impacts on aquatic environment and impact on wildlife and wildlife habitat
- Need for the assessment of cumulative impacts to Aboriginal and Treaty rights
- Need for the assessment of nuclear waste, including safe and effect long-term storage
- Need for the assessment of socio-economic effects of this project on the area
- Need for the assessment of safety concerns and risks due to climate change (including increased forest fires, seismic activities and flooding)
- Concerns that the process will lack detail, which the proponent and the regulators intend to obtain the free, prior, and informed consent of impacted Indigenous Peoples
- Need for the assessment of water availability in the Peace River including project impacts on water quantities

## **Woodland Cree First Nation**

### Woodland Cree First Nation Submission

- Need for the assessment of cumulative impacts of radioactive waste; insufficient information on contamination risks; request for meaningful involvement in decision-making
- Need for the assessment of permanent exclusion from traditional lands; need for detailed mapping and Indigenous input on defining the “zone of influence”
- Need for the assessment of aquatic species at risk; overreliance on limited desktop data
- Need for the assessment of the potential strain on local health infrastructure due to workforce influx
- Need for the assessment of traffic-related impacts to safety, wildlife, and Indigenous communities
- Need for the assessment of psychosocial impacts on Indigenous Nations and communities
- Need for the assessment of Indigenous workers diverging from essential community roles
- Need for both qualitative and quantitative data to support a robust GBA+ analysis, from Indigenous lens
- Need for the assessment of waste types and volumes post-decommissioning
- Concerns about culturally appropriate communication strategy in place
- Concerns that there is no clear commitment to upholding Woodland Cree’s right to Free, Prior, and Informed Consent
- Need for the assessment of site-specific seismic design
- Need for the assessment of the Peace River water levels and insufficient consideration of climate change
- Need for full archaeological assessments and Indigenous-led cultural impact studies
- Concerns that Two-Eyed Seeing should guide collaborative approaches and assessment methodologies
- Concerns that Indigenous Knowledge integration must be consent-based and follow Indigenous protocols
- Concerns that Woodland Cree’s own studies must be included in the assessment process
- Concerns that early engagement was inadequate and no agreements or scoping studies are in place
- Need for Nation-specific engagement plans
- Need for the assessment of alternative means that must include Indigenous values and participation
- Concerns about the inclusion of Woodland Cree identified studies which may include a multi-party, multi-attribute alternative means assessment to attempt to identify a preferred location for the facility