ENERGY Alberta

Peace River Nuclear Power Project

Response to Summary of Issues

Report No. CA0038431.4096-R-DCN 2025026 Rev 0

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ABBREVIATIONS AND UNITS OF MEASURE

Abbreviation	Definition
AESO	Alberta Electric System Operator
CEA	Cumulative Effects Assessment
CNSC	Canadian Nuclear Safety Commission
CSA	Canadian Standards Association
GBA+	Gender Based Analysis Plus
HHRA	Human Health Risk Assessment
IA	Impact Assessment
IAAC	Impact Assessment Agency of Canada
IAA	*Impact Assessment Act*
IAEA	International Atomic Energy Agency
IPD	Initial Project Description
IS	Impact Statement
MWe	Megawatts electric
NWMO	Nuclear Waste Management Organization
PAD	Peace Athabasca Delta
PERA	Predictive Environmental Risk Assessment
SOI	Summary of Issues
TFO	transmission facility owner
The Project	Peace River Nuclear Power Project
TISGs	Integrated Tailored Impact Statement Guidelines
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNESCO	United Nations Educational, Scientific and Cultural Organization

1 INTRODUCTION

Energy Alberta is proposing to develop a nuclear power generating facility in the Peace River region, approximately 30 km north of the Town of Peace River, Alberta. The Peace River Nuclear Power Project (the Project) includes the permitting, construction, operation, and decommissioning of four (4) CANDU MONARK 1000MWe-class power reactors, arranged as a pair of twin-unit MONARK plants.

2 APPROACH TO RESPONSE TO SUMMARY OF ISSUES

The Initial Project Description (IPD) for the Project was submitted to the Impact Assessment Agency of Canada (IAAC) on 11 April 2025 (Energy Alberta 2025). Following submission, IAAC, in collaboration with the Canadian Nuclear Safety Commission (CNSC), completed a public comment period from 14 April to 14 May 2025, and subsequently prepared the Summary of Issues (SOI) document. The SOI, which outlines the key issues relevant to the federal Impact Assessment (IA) process for the Project, was generated by input from federal and provincial authorities, Indigenous Nations and Communities and the public. The SOI was provided to Energy Alberta on 23 May 2025.

Energy Alberta has prepared responses to the key issues provided in the SOI in Section 5 of this document. Responses include how Energy Alberta plans to address the key issues, as well as identifying if the issue will be addressed through existing legislations and/or regulations or a commitment to best practices, policies and/or standards.

During preparation of key issue responses, Energy Alberta reviewed the original submissions available on the Canadian Impact Assessment Registry, as well as comments submitted after the close of the comment period. It is understood that IAAC will continue to accept comments from Indigenous Nations and Communities and interested parties and that IAAC will consider all comments received in its concluding decision.

Energy Alberta has provided responses based on currently available information, acknowledging that these responses will help determine if an IA is needed under Section 16 of the *Impact Assessment Act* (IAA) and guide the development of the Integrated Tailored Impact Statement Guidelines (TISGs). In addition, pursuant to subsection 15(1) of the IAA, Energy Alberta has included how each key issue will be addressed in the description of each response.

3 UPDATE ON STUDIES

Energy Alberta is considering two potential options for the location of the Project siting, both options are approximately 30 km north of the Town of Peace River, within the Peace River region, part of the larger area of northern Alberta. Option 1 is located on the west bank of the Peace River, within the local government boundaries of the County of Northern Lights. Option 2 is located on the

east side of Peace River, within the local government boundaries of Northern Sunrise Country (Energy Alberta 2025).

Additional studies are being planned for the next few years and will be undertaken to correspond with the final TISGs which will be provided to Energy Alberta.

4 UPDATE ON ENGAGEMENT

Energy Alberta is committed to open, extensive and thorough engagement as a vital component to the success of the Project. The aim is to build and sustain meaningful relationships based on mutual respect and trust with Indigenous Nations and Communities, non-Indigenous stakeholders, local communities and other potentially affected parties. Energy Alberta recognizes the importance of engaging early and often to understand each group's unique interests and concerns.

In alignment with its corporate, environmental, and social responsibilities, Energy Alberta is committed to undertaking engagement that will meet or exceed consultation and engagement requirements from federal and provincial agencies, and it will also draw upon current best practices for engagement in resource development.

Energy Alberta is currently in the Early Engagement stage of the Project. Ongoing dialogue and comprehensive engagement will continue throughout the IA process and the lifecycle of the Project.

4.1 Indigenous Engagement

Energy Alberta's engagement efforts are intended to be inclusive of Indigenous Nations, Bands, Communities, and Métis Settlements and Groups potentially impacted by the Project. The term "Indigenous Nations and Communities" is used throughout Project documentation to represent this inclusion.

Meaningful engagement with Indigenous Nations and Communities is a corporate value of Energy Alberta, and a vital component of the Project process. Energy Alberta is committed to building meaningful, mutually-beneficial relationships with Indigenous Nations and Communities, guided by respect, integrity and a shared commitment to advancing reconciliation, and as outlined in its Indigenous Relations Policy.

Energy Alberta is also strongly considering the potential of economic participation of Indigenous Nations and Communities in the Project. In doing so, Energy Alberta aims to build meaningful partnerships so that Indigenous Nations and Communities are active participants in the economic benefits and environmental stewardship of the Project.

4.1.1 Indigenous Engagement Approach

Energy Alberta will apply an iterative and adaptive approach to engagement, respecting each Indigenous Nation and Community's unique protocols and cultural practices. Feedback received during engagement will be considered and integrated into ongoing engagement and Project planning.

Energy Alberta's Indigenous Engagement activities have been broadly organized into the five overlapping stages described below. The stages and activities described below will be designed in collaboration with each community and will be adapted to fit each Indigenous Nation and Community's unique histories, protocols and cultural practices.

Stage 1: Establish Relationship

In this first stage of engagement, which commenced in mid-2024 and is ongoing, Energy Alberta is seeking to establish dialogue with interested and potentially affected Indigenous Nations and Communities. Activities undertaken as part of this engagement stage include:

- Written outreach to introduce the Project and key contacts; and,
- Introductory meetings, conducted in-person or virtually, to provide a broad overview of the Project, gain initial feedback on interests and concerns, and to determine whether or not the Indigenous Nation or Community is interested in further engagement with Energy Alberta.

Stage 2: Framework for Dialogue

In the second stage of engagement, which commenced in April 2025, Energy Alberta will seek to establish engagement framework agreements with Interested Indigenous Nations and Communities. These agreements, which will be unique to each community, will help guide the approach to engagement on the Project. Activities that are being undertaken as part of this engagement stage include:

- Initial capacity funding has been offered to Indigenous Nations and Communities to help support the review of the Planning Phase documents and participation in discussions with Energy Alberta to establish engagement frameworks;
- Ongoing meetings at staff and leadership levels to discuss interests and concerns, approach to engagement and establishment of framework agreements; and,
- Establishment of engagement framework agreements with interested Indigenous Nations and Communities.

Stage 3: Project Input

Stage 3 engagement focuses on gathering input into the design and execution of the Impact Statement (IS) as well as overall Project design. The means and approach to providing Project input will differ for each Indigenous Nation and Community and will be driven by each community's capacity, interests and preferences. Activities that will be undertaken as part of this engagement phase include:

- Community information sessions;
- Review and comment on regulatory submissions;
- Participation in field studies as technical resource, Indigenous monitor and/or observer;
- Technical workshops to provide input into study design, data gathering, assessments or conclusions;
- Review and response to technical studies prepared by Energy Alberta experts;
- Community-led traditional land use and/or Indigenous Knowledge studies; and,
- Potential for co-development of biophysical or socio-economic assessments.

Stage 4: Community Readiness

Stage 4 engagement focuses on building readiness within Indigenous Nations and Communities to participate in economic opportunities presented by the Project. Although construction and operation are still several years away, Energy Alberta intends to work with interested Indigenous Nations and Communities to ensure community members are ready to take advantage of employment, procurement and training activities as they become available. Activities that will be undertaken as part of Stage 4 include:

- Information sharing on employment, training and procurement opportunities;
- Community capacity studies to understand employment, training and procurement capacity;
- Support for participation in training programs; and,
- Job fairs and procurement workshops.

Stage 5: Long-term Relationships

Stage 5 encompasses Energy Alberta's commitment to building and sustaining long-term relationships with potentially impacted Indigenous Nations and Communities. Energy Alberta will take direction from each community on the most meaningful ways for ongoing engagement. Stage 5 activities include:

- Participation in community events; and,
- Ongoing community dialogue during construction and operations.

In parallel with these engagements, education and learning activities, Energy Alberta will be developing an economic participation framework for presentation, discussion and development with potentially impacted Indigenous Nations and communities.

4.1.2 Indigenous Engagement Activities Completed to Date

Table 4-1 provides a high-level overview of the status of engagement with potentially impacted Indigenous Nations and Communities.

In the IPD, Energy Alberta identified 28 Indigenous Nations and Communities potentially impacted by the proposed Project. Since the release of the IPD, two additional groups have come forward and expressed an interest in engaging on the Project. Energy Alberta intends to reach out to these groups in the coming weeks.

Table 4-1: Indigenous Engagement to Date

Indigenous Nation/ Group	Intro Letter	Intro Calls	Intro Meetings	Capacity Funding Offer	Follow-up Meetings	IPD Comment	Participation in Field Work
Athabasca Chipewyan First Nation	✓			✓		✓	
Beaver First Nation	✓		✓	✓		✓	
Cadotte Lake Metis Nation	✓	✓	✓	✓	✓	✓	
Dene Tha' First Nation	✓			✓		✓	
Driftpile Cree Nation	✓	✓	✓	✓		✓	
Duncan's First Nation	✓	✓	✓	✓	✓	✓	✓
East Prairie Metis Settlement	✓			✓			
Fort Chipewyan Metis Nation	✓	✓		✓			✓
Gift Lake Metis Settlement	✓	✓		✓			
Horse Lake First Nation	✓			✓			
Kapawe'no First Nation	✓			✓			
Little Red River Cree Nation	✓	✓		✓			
Loon River First Nation	✓			✓			
Lubicon Lake Band	✓	✓	✓	✓		✓	
Mikisew Cree First Nation	✓	✓	✓	✓		✓	
Otipimesiwak Metis Government	✓	✓	✓	✓		✓	
Paddle Prairie Metis Settlement	✓			✓		✓	
Peavine Metis Settlement	✓		✓	✓			
Peerless Trout First Nation	✓			✓			
Sawridge First Nation	✓	✓	✓	✓			
Sturgeon Lake Cree Nation	✓			✓			
Sucker Creek First Nation	✓			✓		✓	
Swan River First Nation	✓		✓	✓			
Tall Cree Tribal Government	✓			✓		✓	
Whitefish Lake First Nation	✓			✓		✓	
Woodland Cree First Nation	✓	✓	✓	✓		✓	✓
Treaty 8 FNA	✓	✓	✓	✓			

4.1.3 Preliminary Topics of Interest

Engagement with Indigenous Nations and Communities is ongoing. As such, some but not all potentially impacted Indigenous Nations and Communities have identified topics of interest related to the Project. Feedback has been received through introductory meetings, correspondence, and formal responses to the IPD. Energy Alberta has compiled a list of preliminary topics of interest communicated by communities to date including, but not limited to, those listed in Table 4-2. New, or more specific topics identified through the public comment period, and SOI since the IPD was prepared are indicated in bold font. Some topics listed may overlap or intersect; in the interest of thoroughness, Energy Alberta has erred on the side of inclusion to ensure no topics of interest are overlooked.

Table 4-2: Preliminary Topics of Interest - Indigenous

■ Accidents and Malfunctions	■ Human Health Risks and **Wellbeing, including exposure to emissions and radiation from an Indigenous perspective considering traditional land and resource use**	■ Regulatory Process
■ **Atmospheric Environment**	■ **Incorporation of Indigenous Knowledge**	■ Relationship to Site C Dam
■ Broad Economic Benefits	■ Indigenous & Treaty Rights, **Culture and Way of Life** impacts, **including cumulative effects, accommodation**	■ Safety of facility and community
■ Capacity Funding	■ Indigenous Economic Inclusion and Equity Partnership	■ Sedimentation in the Peace River
■ Community Benefits and Investments	■ Indigenous Project Participation and Involvement	■ Seismic activity including fracking and earthquakes
■ Community Services impacts	■ **Infrastructure and Services**	■ Socio-Economic **Conditions** and Impacts
■ Cultural Preservation	■ **Migratory Birds and their Habitat**	■ **Timelines**
■ Cumulative Impacts	■ Nuclear science education	■ Traditional Land Use, archaeology and culturally sensitive sites
■ Economic Impacts and Opportunities	■ Options Analysis (including comparison to Solar and Wind)	■ Traditionally important species such as Bear, Elk, Fish, Moose, Caribou, Squirrel
■ **Effects of the Environment on the Project**	■ Peace River including the Peace Athabasca Delta including biophysical, cultural and spiritual aspects	■ **Transportation**
■ Employment and Training opportunities	■ Post-Closure Monitoring	■ Understandable materials (e.g., Plain Language, translation to Indigenous languages, visual representations)
■ **Engagement: lack of early and meaningful**	■ Power generation (proportion of increased power demand will be provided by the Project)	■ UNDRIP effects – free, prior and informed consent
■ Environmental Impacts and Mitigations	■ Project Scope, specifically baseline studies	■ Waste Management **and Storage**
■ **Fish and Fish Habitat**	■ Proponent participation in community and on the land	■ Water including: water use, water volume, impacts to water quality and temperature, **groundwater, surface water**
■ General Consultation and Engagement plans	■ Recreation impacts	■ **Wildlife including species at risk, terrestrial wildlife and their habitat**
■ Accidents and Malfunctions	■ Human Health Risks and **Wellbeing, including exposure to emissions and radiation from an Indigenous perspective considering traditional land and resource use**	■ Regulatory Process

4.1.4 Upcoming Indigenous Engagement Activities

Ongoing and comprehensive engagement will continue through the IA process and lifecycle of the Project. Engagement activities will be based on each Indigenous Nation or Community's interest and degree of potential impact. Energy Alberta has identified the following engagement activities for the remainder of 2025. As noted in Section 4.1.1, engagement activities for individual communities will be developed in collaboration with those communities and based upon the unique needs, interests and cultural practices of each community. Indigenous engagement activities planned for the remainder of 2025 include:

- **Introductory meetings:** Energy Alberta will continue to pursue introductory meetings with interested Indigenous Nations and Communities
- **Engagement Framework Agreements:** Energy Alberta will work with interested Indigenous Nations and Communities to establish engagement framework agreements that set out approach to engagement on the Project
- **Community Information Sessions:** Energy Alberta will make community information sessions available to interested Indigenous Nations and Communities. Topics covered and format for the sessions will be determined in consultation with communities.
- **Participation in Baseline Biophysical Studies:** Energy Alberta will work with interested Indigenous Nations and Communities to facilitate participation in baseline biophysical studies. Study participation could include Indigenous monitors, observing data collection, review of raw data, and engagement with technical experts on study design.
- **Siting Workshops:** Energy Alberta plans to hold siting workshops for Indigenous Nations and Communities to seek input into the criteria used for facility siting.
- **Socio-economic Workshops:** Energy Alberta plans to hold socio-economic assessment workshops with interested Indigenous Nations and Communities to seek input into the scope of the socio-economic effects assessment.

Engagement plans for 2026 and beyond will be informed by feedback received in the current stage of engagement and through the establishment of engagement framework agreements with Indigenous Nations and Communities.

4.2 Stakeholder Engagement

Energy Alberta seeks to identify opportunities for collaboration and build long-term relationships that provide value to the Peace River Region. Stakeholder engagement activities are intended to maximize information available to stakeholders, increase understanding of the Project, and gather input from stakeholders to be incorporated into Project plans, where practicable.

Stakeholder engagement planning and execution will continue throughout the lifecycle of the Project with stakeholder input helping shape the development of the Project. Feedback loops will be created to maximize two-way dialogue between stakeholders and Energy Alberta.

4.2.1 Local Governments

Engaging with local governments is essential for Energy Alberta to understand community considerations and concerns, including the capacity of local infrastructure and services to support the construction and operation of the Project. Energy Alberta also engages with local governments to build positive, long-term partnerships in the communities in which we plan to operate.

Energy Alberta has undertaken the following engagement activities with local governments and inter-governmental committees since the submission of the IPD:

- Municipal District of Peace No. 135 — In-Person Meeting June 10, 2025
- Northern Sunrise County — In-Person Meeting June 10, 2025
- Peace River Energy Committee (PREC) — Virtual Meeting May 9, 2025; Conference Call June 12, 2025
- Town of Peace River — In-Person Meeting June 9, 2025

Upcoming in-person meetings are planned for the week of June 23, 2025 with the following local governments:

- County of Northern Lights
- Town of Grimshaw
- Town of Manning

The following local governments also hosted hard copies of the IPD to assist in public access to the documentation during the Public Comment Period:

- County of Northern Lights
- Municipal District of Peace No. 135
- Town of Grimshaw
- Town of Peace River
- Northern Sunrise County
- MD of Peace

4.2.2 Chambers of Commerce

Energy Alberta is committed to providing economic benefits to the local community and area residents. Engaging with local Chambers of Commerce will help to identify the opportunities and challenges to realizing these economic benefits.

The Peace River and District Chamber of Commerce hosted hard copies of the IPD to assist in public access to the documentation during the Public Comment Period.

4.2.3 General Public, Residents and Landowners

Providing opportunities for education, enhancing general understanding about the Project and the associated potential impacts and benefits, is a key objective of engagement with neighbouring residents, landowners and members of the public. For the general public, residents and landowners who may prefer to not engage in person, or in direct, verbal dialogue, Energy Alberta will provide online engagement tools.

4.2.3.1 General Public

Public Open House

As described in the IPD, Energy Alberta conducted a public open house on March 11, 2025 at the Weberville Community Hall and welcomed approximately 350 individuals including Indigenous Peoples, community members and government officials. Since the summary of feedback provided in the IPD Energy Alberta has published a report entitled “Listening First: What We Heard at the Peace River Open House” which can be found on our website at : https://www.energyalberta.com/blog-posts/peace-river-open-house-march2025]

Public Information Lines

Energy Alberta has received 45 email inquiries via info@EnergyAlberta.com since filing the IPD and has either responded, or is in the progress of responding, to each of the messages received.

4.2.3.2 *Landowner Engagement*

Early engagement efforts with landowners and residents have been ongoing since the spring of 2024. Below is a summary of landowner engagement activities completed to since the submission of the IPD.

- **Notification of IPD:** On April 14, 2025 Energy Alberta provided landowners and residents within the identified potential site areas with a notification letter distributed by mail to registered landowner mailing addresses, and in-person to residents. The letter provided a Project update and advised that Energy Alberta had formally submitted the IPD to IAAC and CNSC and that a public comment period was open from April 14 to May 14, 2025. The letter provided website links to the English and French versions of full IPD report and summary and a list of locations where hard copies of the IPD could be accessed

- **In-Person Landowner Engagement:** Between June 9 and 24, 2025, Energy Alberta contacted 95% of the 22 total private landowners inside both Option 1 and Option 2 areas (not inclusive of the Crown land parcels).

  Of the 22 total private landowners inside both Option areas, 21 (95%) have been contacted by either an in-person meeting, phone call or were left with an Energy Alberta letter and contact card. In-person meetings or direct discussions via phone have occurred with 14 (64%) of the total landowners.

  General landowner sentiments varied between support for or acceptance of the project and some who questioned the need for the Project in this area. Topics of interest, questions and concerns ranged from safety buffer zones, access, increased traffic, light, noise and human impacts, storage of waste, seismicity, engagement to date and local economic benefits and employment.

4.2.4 Business Associations

Energy Alberta engages with industry and business associations to share and hear about emerging best practices, through attendance and participation at events such as the Small Modular Reactor Canada Summit, the Independent Power Producer Society of Alberta Conference, the Canadian Nuclear Association Conference, the Peace Region Energy Show and various tradeshows, such as the County of Northern Lights Regional Tradeshow.

Energy Alberta also participated in a panel discussion that included the Peace Regional Energy Committee at the Small Modular Reactor Canada Summit in March 2025.

4.2.5 Preliminary Topics of Interest

Energy Alberta has compiled a list of preliminary topics of interest communicated by stakeholders to date including, but not limited to, those listed in Table 4-3. Some topics listed may overlap or intersect; in the interest of thoroughness, Energy Alberta has erred on the side of inclusion to ensure no topics of interest are overlooked.

Table 4-3: Preliminary Topics of Interest - Stakeholder

■ Accidents and Malfunctions	■ Hunting Impacts including: concern regarding increase in people who won't respect the area	■ Socio-Economic Conditions and Impacts
■ Agricultural impacts specifically to organic farming	■ Incorporation of Indigenous Knowledge	■ Support for Project
■ Atmospheric Environment	■ Infrastructure and Services including: local services and infrastructure, housing, social services	■ Technology Selection
■ Balance of the cost of social licence and value to communities	■ Investor Confidence in green energy	■ Traffic, including increase to traffic on Highway 743
■ Climate Change/Climate Action	■ Lack of Provincial Nuclear Regulation and Policy	■ Transportation
■ Community Sponsorship Opportunities	■ Light	■ Waste Management, Storage and Safety
■ Cost of Project	■ Landowner Concerns regarding lack of decision-making authority specifically on risk level, impacts to land value and lack of landowner engagement	■ Water including: water use, water volume, impacts to water quality and temperature, groundwater, surface water
■ Culture and Lifestyle including disruption of quiet, peaceful, private rural lifestyle	■ Migratory Birds and their Habitat	
■ Economic Impacts including benefits and impacts to electricity rates	■ Noise	
■ Effects of the Environment on the Project	■ Opportunities for Involvement	
■ Employment Opportunities: including specific numbers during construction and operations, training requirements and opportunities	■ Opposition to Project	
■ Energy Transition	■ Procurement and Contracting Opportunities	
■ Fish and Fish Habitat	■ Project Location including: selection process, access limitations (specifically single route on the west), population density (east vs west), why not near larger city	
■ Funding Sources, specifically questions of public/federal funding	■ Project Need including: proof of energy demand, need for nuclear, question of why not geothermal	
■ Grid Configuration and transmission line routing	■ Recreational Land Use	
■ Human Health Risks and Wellbeing, including exposure to emissions and radiation	■ Safety	
■ Human Impacts including: concern that development may attract individuals who don’t share community values, leading to issues with security	■ Seismicity	

4.2.6 Future Stakeholder Engagement Activities

For 2025 and beyond, Energy Alberta plans to continue ongoing stakeholder engagement, to share information on the proposed Project, identify issues and concerns, and help inform the IS. Planned Stakeholder Engagement activities for the remainder of 2025 include:

- **Ongoing Meetings:** Energy Alberta will continue to be available to meet with interested stakeholder groups to present Project information and address any questions or concerns;
- **Siting Workshops:** Energy Alberta plans to conduct siting workshops with local governments and key stakeholders in the fall to help inform final site selection
- **Community Information Sessions:** Energy Alberta plans to host community information sessions in Fall 2025 to cover a range of topics of interest raised in early engagement including: basic nuclear education, facility siting process, biophysical baseline studies, socio-economic IA, and employment and procurement opportunities.
- **Workshops:** Conduct topic-specific technical workshops that allow attendees to discuss the potential Project impacts, share their perspectives, and contribute to the planning process;
- **Response to Inquiries:** Prompt response to the Project dedicated toll-free and Info@ email system available for public inquiries;
- **Newsletters and Updates:** Create and distribute e-newsletters or Project updates to keep the public and other interested parties informed about milestones, changes, and upcoming events.

Stakeholder engagement activities will continue to adapt as additional input from the public and other interested parties is received on how they would prefer to be engaged.

5 RESPONSE TO SUMMARY OF ISSUES

Energy Alberta's responses to the specific SOI which were provided by IAAC are provided in Table 5-1. There were 21 new comments visible on the IAAC registry added after the 14 May 2025 closure date, along with two updated responses. These have also been included in Table 5.1. In addition, comments posted on the IAAC Registry after the May 14 deadline that were not covered off by IAAC's summary, and are relevant to the IA process, have been added to the table. Energy Alberta is providing this response that sets out how we intend to address the issues that have been identified, as part of the development of our Project. The responses are kept at a high level for the most part. For each of the specific responses we have provided a list of the sections of the draft Integrated Tailored Impact Statement Guidelines (TISGs) that are relevant to the issue. Energy Alberta's response to the SOI will be considered by IAAC to inform the final TISGs. Energy Alberta will commit to meeting all legislative and regulatory requirements that will be set out in the final TISGs that will guide the IS.

Energy Alberta is committed to working collaboratively and respectfully with landowners, stakeholders, and Indigenous communities. We are actively listening and will continue to do so as the IA process unfolds. We will maintain open and transparent communication with the communities throughout the assessment and Project development process. This includes sharing findings, discussing potential impacts, and addressing any concerns raised by community members. Energy Alberta is committed to working collaboratively with Indigenous Nations and Communities particularly on the issues of concern to them raised in the comments on the IPD and concerns raised going forward. Energy Alberta will engage with Indigenous Nations and Communities on the scope and design of biophysical and socio-economic studies to ensure the studies are reflective of the interests, concerns and knowledge of Indigenous peoples.

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
1.0 Biophysical Environment			
Atmospheric Environment	1.1	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.	Throughout the Project's lifecycle, from start to finish, it's crucial to consider the potential effects on the atmospheric environment, including air quality. The IA process is designed to thoroughly examine potential effects of the Project on people, communities, and the environment—including how nearby residents may be affected by changes in air quality during all phases of the Project (i.e., site preparation, construction, operation and decommissioning and reclamation). Air quality refers to the condition of the air within our environment, particularly in terms of the presence of pollutants and particulate matter. Regulatory agencies, both provincial and federal, define air quality criteria, which are standards set to regulate the concentration of pollutants in the air to protect human health and the environment. It is against these criteria that changes to air quality conditions arising from the Project will be evaluated. The IS will characterize the atmospheric environment baseline conditions, the potential effects of the Project on the atmospheric environment, as well as describe the mitigation measures to reduce and control potential emissions from the Project. **TISG Section 8.6 Atmospheric, acoustic and visual environment**
Atmospheric Environment	1.2	Need for a comprehensive air quality management system and plan for Project-related activities, during all phases of the Project.	To reduce the potential effects on air quality, Energy Alberta will develop a comprehensive air quality management plan. This plan will cover all phases of the Project, including site preparation, construction, operation and decommissioning and reclamation. By having a comprehensive air quality management plan, the Project can effectively address potential air quality effects at every stage, to maintain a healthier environment for employees, landowners, stakeholders, and Indigenous Nations and Communities. **TISG Section 8.6 Atmospheric, acoustic and visual environment** **TISG Section 9.1 Meteorological environment**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Groundwater and Surface Water	1.3	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.♦	Energy Alberta understands the importance of protecting water resources. To provide that water resources remain clean and safe, it's important to understand how a Project might affect groundwater and surface water throughout its lifecycle. By understanding these potential effects and implementing appropriate mitigation measures, we can protect valuable water resources and maintain a healthy environment for everyone. To reduce the potential effects on groundwater and surface water, Energy Alberta will develop a comprehensive site water management plan. This plan will cover all phases of the Project, including site preparation, construction, operation and decommissioning and reclamation. By having a comprehensive water management plan, the Project can effectively address potential effects at every stage, to maintain a healthier environment for the landowners, stakeholders, and Indigenous Nations and Communities. The IS will characterize the groundwater and surface water environment baseline conditions, the potential effects of the Project on the environment, as well as describe the mitigation measures to avoid and/or reduce potential effects on groundwater and surface water resources from the Project. **TISG Section 8.7 Groundwater and surface water** **TISG Section 13.2 Surface water hazards** **TISG Section 13.3 Groundwater, geotechnical, geological and seismic hazards**
Groundwater and Surface Water	1.4	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.♦	Energy Alberta understands the importance of protecting water resources. To provide that water resources remain clean and safe, it's important to understand how a project might affect groundwater and surface water throughout its lifecycle. By understanding these potential effects and implementing appropriate mitigation measures, we can protect valuable water resources and maintain a healthy environment for everyone. This not only benefits Indigenous Nations and Communities and local and downstream communities, but also helps preserve the health and diversity of fish and other aquatic life, wetlands and terrestrial habitats. The IS will characterize the groundwater and surface water environment baseline conditions, the potential effects of the Project on the environment, as well as describe the mitigation measures to avoid and/or reduce potential effects on groundwater and surface water resources from the Project. Additionally, a comprehensive effects assessment for fish and wildlife and associated habitats will be completed. This assessment will evaluate how the Project might impact local fish and wildlife populations and their habitats, so that necessary measures are taken to protect and preserve biodiversity. To reduce the potential effects on groundwater and surface water, Energy Alberta will develop a comprehensive site water management plan. This plan will cover all phases of the Project, including site preparation, construction, operation and decommissioning and reclamation. By having a comprehensive water management plan, the Project can effectively address potential effects at every stage, to maintain a healthier environment for the landowners, stakeholders, and Indigenous Nations and Communities. **TISG Section 8.7 Groundwater and surface water** **TISG Section 8.8 Terrestrial, riparian and wetland conditions** **TISG Section 8.9 Terrestrial wildlife and wildlife habitat** **TISG Section 8.11 Fish and fish habitat**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Groundwater and Surface Water	1.5	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.♦	To provide for the protection of water resources and ecosystems, it's important to understand the cumulative effects of water withdrawal on water quality and quantity. This includes considering several key factors including water quality and quantity, the hydrological regime, ecosystem components, and potential downstream effects. By carefully evaluating these factors, we aim to safeguard the water resources and the diverse ecosystems that depend on them. This comprehensive approach provides that we manage water withdrawals and water quality responsibly, protecting both our environment and the species that call it home. To reduce the potential effects on surface water, Energy Alberta will develop a comprehensive site water management plan. This plan will cover all phases of the Project, including site preparation, construction, operation and decommissioning and reclamation. By having a comprehensive water management plan, the Project can effectively address potential effects at every stage, to maintain a healthier environment for the landowners, stakeholders, and Indigenous Nations and Communities. **TISG Section 8.7 Groundwater and surface water** **TISG Section 8.8 Terrestrial, riparian and wetland conditions** **TISG Section 8.9 Terrestrial wildlife and wildlife habitat** **TISG Section 8.11 Fish and fish habitat**
Groundwater and Surface Water	1.6	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. ♦	To provide for the long-term sustainability of the water resources, it's crucial to gather information on the future projections of water quantity and flows in the Peace River watershed. This includes understanding how varying climate change scenarios might impact these projections. Climate change can alter precipitation patterns, temperature, and evaporation rates, affecting water resources. By studying these effects, as well as seeking to participate in appropriate regional watershed planning activities, Energy Alberta can develop strategies to adapt to changing conditions to maintain a stable water supply. The IS will identify the approach for identifying water supply adequacy for the Project and surrounding region and will describe continued data collection over the Project's lifecycle. By gathering and analyzing this information, we can make informed decisions so that sufficient water supply will be available to safely support the facility and protect the water resources. This comprehensive approach helps us plan for a sustainable future, taking into account the challenges posed by climate change. **TISG Section 8.7 Groundwater and surface water** **TISG Section 10.5 Mitigation and enhancement measures** **TISG Section 12.1 Risk Assessment** **TISG Section 13.2 Surface water hazards**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Species at Risk, Terrestrial Wildlife and their Habitat	1.7	Concerns about potential effects to large game habitat and wildlife corridors including concerns about how impacts to one species can impact the entire ecosystem.♦	Energy Alberta understands the concern about the potential effects of the Project on large game habitats, wildlife corridors and habitat connectivity. We recognize that impacts on one species can have ripple effects throughout the ecosystem. We will conduct thorough assessments to characterize the terrestrial wildlife and wildlife habitat baseline conditions, which will then allow us to understand how the Project might affect wildlife and their habitats. We will work closely with Indigenous communities to develop wildlife studies that incorporates Indigenous Knowledge. Indigenous Knowledge, where consent is given for its acquisition and use, will also be integrated into our assessments so that our mitigation measures respect and support Indigenous values and practices. The IS will describe measures to avoid and minimize potential impacts on wildlife, their habitat, and wildlife corridor disruption. This includes preserving critical areas and creating alternative habitats where necessary. We will also identify key wildlife corridors and provide that they remain connected by site design and by maintaining natural vegetation along these routes. We will take a holistic approach to our assessments, considering the interconnectedness of species and ecosystems. This helps us develop comprehensive mitigation strategies that protect the overall health of the environment. By addressing these concerns, we aim to protect large game habitats, maintain wildlife corridors, and preserve the balance of our ecosystems. **TISG Section 8.8 Terrestrial, riparian and wetland environments** **TISG Section 8.9 Terrestrial wildlife and wildlife habitat** **TISG Section 8.10 Species at risk and their habitat**
Fish and Fish Habitat	1.8	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.♦	Energy Alberta recognizes the importance of understanding how our Project might affect fish and their habitats, particularly for species that are important to Indigenous communities. We will conduct thorough assessments to understand potential effects on fish and fish habitat, and other aquatic resources and take steps to avoid and minimize disruption, and mitigate potential effects, where necessary. We will work closely with Indigenous Nations and Communities to identify and protect fish species. This involves incorporating Indigenous Knowledge into our assessments, (where consent is given for its acquisition and use), and providing that our mitigation measures respect and support Indigenous values and practices. Energy Alberta will conduct, in collaboration with Indigenous Nations and Communities, a country foods study that will include fish of importance. **TISG Section 8.11 Fish and fish habitat** **TISG Section 10.2 Current use of lands and resources for traditional purposes**
Fish and Fish Habitat	1.9	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. ♦	Energy Alberta understands the concern about the potential for fish impingement and entrainment, especially for local fish and aquatic species at risk. The IS will address potential effects on fish including the potential for impingement and entrainment. The IS will include the identification of mitigation measures that includes Project design elements. For example, we will design intake structures with appropriate screens and low approach velocities to minimize impingement. This enables fish to swim away from the screens safely. In addition, we will implement best management practices to minimize entrainment, such as using fine mesh screens and optimizing intake locations to avoid areas with high fish activity. We will conduct thorough assessments to identify species at risk and tailor our mitigation measures to protect them. By addressing these concerns, we aim to protect local fish and aquatic species at risk, so that our Project does not negatively impact these important resources. **TISG Section 8.11 Fish and fish habitat**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Fish and Fish Habitat	1.10	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.	Energy Alberta recognizes the importance of using appropriate indicators and metrics to evaluate the effects of our Project on aquatic ecosystem health. To provide a comprehensive and respectful approach, we are committed to co-developing these indicators with Indigenous Nations and Communities. The IS will describe the approach and rationale for the selection of indicators and metrics. We will engage in meaningful discussions and partnerships to identify key indicators that reflect both Indigenous Knowledge, where consent is given for its acquisition and use, and scientific understanding. These indicators will help us monitor and evaluate the health of aquatic ecosystems, including water quality, fish populations, and habitat conditions. We value the Indigenous Knowledge and expertise of Indigenous Nations and Communities. Their insights are crucial for understanding the long-term health of our ecosystems. By co-developing these indicators and metrics, we aim to create a more inclusive, transparent, and effective approach to protecting the aquatic ecosystems. **TISG Section 7.2 Baseline methodology** **TISG Section 8.11 Fish and fish habitat** **TISG Section 10 Indigenous Peoples**
Migratory Birds and their Habitat	1.11	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.♦	Energy Alberta understands the concern about the potential effects of our Project on migratory birds and their habitats, especially for species that are important to Indigenous Nations and Communities. The IS will describe the baseline conditions for birds and their habitats and evaluate the potential effects on birds and their habitats due to the Project. This will inform the selection of appropriate mitigation measures. We will work closely with Indigenous Nations and Communities to identify and protect these important species. This involves seeking, and where consent is obtained, incorporating Indigenous Knowledge into our assessments, where consent is given for its acquisition and use, and so that our mitigation measures respect and support Indigenous values and practices. By addressing these concerns, we aim to protect migratory birds and their habitats, so that our Project does not negatively impact these important resources. **TISG Section 8.12 Birds and their habitat** **TISG Section 10.2 Current use of lands and resources for traditional purposes**
Migratory Birds and their Habitat	1.12	Concern regarding process water, wastewater, or treatment ponds potentially containing chemicals harmful to migratory birds, especially waterfowl and potential mitigation measures.	We understand the concern about the potential effects of process water, wastewater, or treatment ponds on migratory birds, especially waterfowl. Energy Alberta cares about environmental stewardship, and promoting sustainable water management practices to minimize the impact of its proposed operations on local water resources, and to protect the Peace River watershed. The proposed Project plans to utilize a mechanical draft cooling system to remove the leftover heat from the steam circulating through the turbine system after the electricity is generated. This method allows less water to be pumped from the river and prevents heated water being released back into the Peace River. Instead, the water is evaporated, or consumed, in the heat removal process. Treated water must meet strict regulatory standards before it can be discharged into the environment. Monitoring of water quality is completed prior to discharge so that the treated discharged water does not pose a risk to human health or the environment. By addressing these concerns, we aim to protect migratory birds and their habitats, so that our Project does not negatively impact these important resources. **TISG Section 8.12 Birds and their habitat**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
2.0 Health, Social, and Economic Conditions			
Human Health and Well-Being	2.1	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.♦	Energy Alberta will conduct a human health risk assessment (HHRA) to evaluate the potential for exposure to contaminants that may potentially affect human health. The HHRA will identify potential contaminants, such as chemicals, particulates, and emissions, and evaluate their sources. The assessment will analyze potential exposure pathways, including air, water, soil, and direct contact, to determine how contaminants might travel through environmental media and affect people. The HHRA will estimate exposures based on Project activities and environmental interactions, identify whether risks and within acceptable limits, and inform the need for additional mitigation or monitoring. Energy Alberta will engage with local communities and Indigenous Nations and Communities on the HHRA process and outcomes. **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.2 Biophysical determinants of health**
Human Health and Well-Being	2.2	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.	Energy Alberta understands the concern about the potential contamination of drinking water, including the Grimshaw Gravels Aquifer, and associated potential public health effects. As part of the IS, Energy Alberta will evaluate the potential effects of the Project on both groundwater and surface water, and how they relate to potential receptors such as drinking water sources. The assessment will include discussion of measures to prevent any release of contaminants, such as containment systems, and regular monitoring. The IS will include mapping of locations of likely current and potential future human receptors, including residential areas, schools, healthcare facilities, and any gathering/hunting/trapping/fishing areas to understand who might be affected. We will conduct a HHRA to evaluate the potential for exposure to contaminants that may potentially affect human health. **TISG Section 8.7 Groundwater and surface water** **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.2 Biophysical determinants of health** **TISG Section 12.1 Risk assessment**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Human Health and Well-Being	2.3	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.	Energy Alberta understands the concern about the safety of handling nuclear substances and the potential health effects on workers from exposure to radioactive substances throughout the Project's lifecycle. No radioactive substances will be on the Project site during site preparation or Project construction. We will conduct a HHRA that will include potential effects of exposure to radioactive substances on human health, including facility workers, for the operations phase. The CNSC has stringent health and safety protection requirements under the *Nuclear Safety and Control Act* and related regulations. The CNSC regulates the use of nuclear energy and materials in Canada to protect health, safety, security, and the environment, and of those handling nuclear substances during all phases of a facility's life. Their comprehensive framework includes rigorous safety standards, continuous monitoring, and regular inspections to ensure that all nuclear activities are conducted safely and responsibly. Detailed plans and measures for the handling of nuclear substances is evaluated in a subsequent licencing phase, the License to Operate phase, where the applicant is required to provide a Safety Analysis Report including detailed measures, policy and procedures for handling nuclear substances and hazardous materials. Energy Alberta will implement stringent safety protocols to provide for the safe handling of nuclear substances during the facility operations. This includes using advanced containment systems, protective equipment, and regular safety training for all workers. Regular health monitoring for workers will also be completed to ensure that exposure levels are safe. We will also develop and implement robust emergency response plans to address any potential accidents or malfunctions. These plans will include procedures for immediate containment, evacuation, and medical treatment to protect workers and the community. **TISG Section 8.4 Ambient radioactivity** **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.2 Biophysical determinants of health** **TISG Section 9.3 Social determinants of health and community well-being**
Human Health and Well-Being	2.4	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.	Energy Alberta understands the concern about the current health, disease, and cancer data being too broad and not reflecting regional or community trends, especially within the exclusion zones. As part of the IS, Energy Alberta will describe baseline conditions for human health, including available disease rates. While public data is currently available according to Zones and Local Government Areas, we will engage with the appropriate health authority regarding availability or means to ascertain localized information specific to the Project area and exclusion zones. **TISG Section 9.1.1 Baseline conditions for human health, social and economic conditions** **TISG Section 10.3 Health, social and economic conditions of Indigenous Peoples**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Human Health and Well-Being	2.5	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.♦	Energy Alberta understands the interest in information on how the Project may affect the public in the unlikely event of an accident or malfunction. An assessment of the potential for, and consequences of, accidents and malfunction scenarios will be part of the IS for all Project phases. This assessment will describe the potential consequences of accidents and malfunctions in terms of potential effects on human health. The assessment for accidents and malfunctions will identify and analyze various potential hazard scenarios. This includes both internal and external events, such as equipment failures, natural disasters, and human errors. The assessment will follow a risk-based approach, meaning it will analyze the likelihood and potential impacts of various accident scenarios. This helps identify and prioritize hazard scenarios with greatest risk to human health and the environment and will guide the development of effective prevention and mitigation measures. Criteria for assessing radiological consequences considers guidelines from the CNSC and international standards. The assessment of nuclear accidents will include quantitative assessment of consequences of plausible bounding releases corresponding to the Large Release Frequency and the Small Release Frequency limits specified in REGDOC 2.5.2, Design of Reactor Facilities. The CNSC has stringent requirements for emergency preparedness and response. These requirements are designed to protect workers, the public, and the environment by ensuring that nuclear facilities are prepared to respond effectively to emergencies. Emergency response plans and procedures will comply with the requirements set by the CNSC, which will be determined during the Licence to Operate phase. **TISG Section 12 Effects of Potential Accidents or Malfunctions** **TISG Section 12.1 Risk Management**
Human Health and Well-Being	2.6	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.♦	The IS will address baseline radiological conditions at the Project location and within an identified study area. Energy Alberta will collect baseline data on a variety of environmental components, such as air, water, soils, vegetation, which will be used to describe the baseline ambient radiological conditions. These baseline studies will continue for multiple years, and once the Project operations commence, will transition into environmental monitoring programs. The data will be compiled and provided to the public in annual reports. The baseline information will also be used in the HHRA, which will analyze exposure pathways, including air, water, soil, and direct contact, to determine how contaminants might travel through environmental media and potentially affect people. The HHRA will estimate exposures based on Project activities and environmental interactions, identify whether risks are within acceptable limits, and inform the need for additional mitigation and/or monitoring. **TISG Section 8.4 Ambient radioactivity** **TISG Section 9.2 Biophysical determinants of health**
Human Health and Well-Being	2.7	Need to assess the perceptions and attitudes about safety of a nuclear Project and psychological effects on people's mental health. ♦	Energy Alberta understands the importance of considering perceptions and attitudes about nuclear safety and the potential effects on mental health and community wellbeing. Energy Alberta will continue to engage with local communities and Indigenous Nations to gather feedback on perceptions and attitudes towards the Project. Energy Alberta will include the social determinants of health in the IS, which will consider community well-being including stress related to perceptions of safety of an operating nuclear Project. As engagement of the Project unfolds, Energy Alberta will continue to understand people's concerns and ideas and develop mitigation measures aimed at reducing concerns about nuclear safety, which may include ongoing engagement, education and information activities and resources. **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.3 Social determinants of health and community well-being**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Human Health and Well-Being	2.8	Need for additional information on potential contamination of soil and potential effects to crops and food chains, including potential mitigation measures.	Energy Alberta recognizes concerns regarding crops and potential effects of the Project on crops and food chains. The IS will include an assessment of the potential effects of the Project on topography, soil and sediment including potential for contamination of soil, as well as potential effects to crops, and will include proposed mitigation measures. Energy Alberta will conduct an HHRA to evaluate the potential for exposure to contaminants that might affect human health. The HHRA will identify potential contaminants, such as chemicals, particulates and emissions, and evaluate their sources. The assessment will analyze potential exposure pathways including air, water, soil and direct contact (including ingestion), to determine how contaminants might travel through environmental media and affect people. The HHRA will estimate exposures based on Project activities and environmental interactions, identify whether risks are within acceptable limits, and inform the need for additional mitigation or monitoring. **TISG Section 8.3 Topography, soil and sediment** **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.2 Biophysical determinants of health** **TISG Section 9.5 Employment and economics**
Infrastructure and Services	2.9	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.♦	Energy Alberta understands the concern about the potential effects of increased demand on local infrastructure and services due to the Project. The IS will include a baseline description and assessment of potential effects on services and infrastructure. This will include consideration of physical infrastructure such as roads and transportation; linear municipal infrastructure (e.g., power lines, pipelines, water mains, sewer lines), and waste management facilities. A description of infrastructure capacity and constraints will be developed, with inputs from municipal and county representatives. The IS will also address community services such as emergency services (police, fire, ambulance), health services, social services, recreational services, educational services, childcare services. In terms of housing, the IS will evaluate existing and anticipated housing availability in light of Project workforce needs and anticipated population growth. Mitigation will be developed including a worker accommodation approach, considering regional growth plans and land use plans. As the Project will be a business with a long-term presence to be considered in overall community and regional planning, Energy Alberta will engage with infrastructure and service providers, Indigenous Nations and Communities and appropriate government authorities in the development of mitigation approaches and enhancements that consider both community and Project needs. **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 9.4 Services and infrastructure** **TISG Section 10.3 Health, social and economic conditions of Indigenous Peoples**
Infrastructure and Services	2.10	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. ♦	Energy Alberta understands the concern about the potential effects of the Project on county and municipal infrastructure. The IS will include a baseline description and assessment of effects on services and infrastructure. This will include consideration of physical infrastructure such as roads and transportation; linear municipal infrastructure (e.g., power lines, pipelines, water mains, sewer lines), and waste management facilities. A description of infrastructure capacity and constraints will be developed, with inputs from municipal and county representatives. The Peace River Nuclear Power Project will be a facility and business with a long-term presence to be considered in overall community and regional planning. Energy Alberta will engage with infrastructure and service providers, Indigenous Nations and Communities and appropriate government authorities in the development of mitigation approaches and enhancements that consider both community and Project needs. **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 9.4 Services and infrastructure**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Infrastructure and Services	2.11	Concerns regarding transmission infrastructure and the increase in energy and generating capacity influencing the development of other and future projects.♦	Any potential transmission infrastructure will be included in the Cumulative Effects Assessment (CEA) as transmission lines are considered a foreseeable project. The CEA will consider other potential reasonably foreseeable future projects and activities. However, the transmission line associated with the Project should not be a physical activity that is incidental to the designated project, and therefore is not part of the main Project scope for the Impact Assessment. Transmission infrastructure in Alberta is planned and approved through a rigorous technical design and public stakeholder process governed by the Alberta *Electric Utilities Act*, *the Hydro and Electric Energy Act*, and the Transmission Regulation. The determination of the need for new transmission facilities is undertaken by the Alberta Electric System Operator (AESO). The design, siting and construction (including the selection and implementation of mitigation measures) of new transmission infrastructure facilities to meet and AESO identified need is undertaken by the applicable transmission facility owner (TFO). The Alberta Utilities Commission's mandate includes the holding of public hearings to determine whether to approve an AESO identified need for transmission facilities and if a need is approved, the ultimate design and routing of such facilities proposed by the TFO. As a result, the transmission infrastructure will be under the care and control of third parties and not Energy Alberta. **TISG Section 7.7 Cumulative Effects Assessment**
Socio-Economic Conditions	2.12	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. ♦	Alberta Energy understands the importance of collaborating with municipalities and local businesses to understand local economic development plans and the concern about labour competition for established sectors. A labour market analysis will be conducted as part of the IS to understand the opportunities and constraints of the local and regional labour market in relation to the Project's workforce needs. This will involve a description of the labour requirements for each phase of the Project. The Project presents a notable economic diversification and economic growth opportunity for the region, with opportunity to create substantial job and business opportunities. The related concern about labour competition which may reduce skilled workforce availability for established sectors will inform the Project's labour strategy and be addressed in the IS. Energy Alberta will work closely with municipalities, local businesses, and Indigenous Nations and Communities to help understand economic goals and priorities, so that the Project supports and enhances local economic development efforts. The Project will also engage with educational and training organizations to identify strategies to support skill development related to Project workforce needs. **TISG Section 9.5 Employment and economics**
Socio-Economic Conditions	2.13	Concern about potential effects of the Project on local demand for and increased housing and rental prices, with higher impacts to low-income families.	We understand the concern about the potential effects of the Project on local housing demand and rental prices and the potential for disproportionate impacts on low-income families. The IS will evaluate existing and anticipated housing availability in light of Project workforce needs and anticipated population growth and evaluate Project housing needs and options for construction and operation phases. Mitigation will be developed including a worker accommodation plan and approach, which will consider regional growth plans, land use plans and opportunities to proactively increase supply to meet the workforce demand. As the Project will become a business with a long-term presence to be considered in overall community and regional planning, Energy Alberta will engage with local and provincial authorities about mutually agreeable housing options to address increased demand related to economic growth. **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 9.4 Services and infrastructure**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Socio-Economic Conditions	2.14	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).	Energy Alberta understands the interest in the labour requirements of the Project and opportunities for skill development. A labour market analysis will be conducted as part of the IS to understand the opportunities and constraints of the local and regional labour market in relation to the Project's workforce needs. This will involve a description of the labour requirements for each phase of the Project. The Project will also engage with educational and training organizations to identify strategies to support skill development related to Project labour needs. Energy Alberta is committed to maximizing local and Indigenous employment and procurement opportunities. We will provide information on our labour strategy, including information on types of jobs, hiring plans for members of local and Indigenous communities, and plans to contract local and Indigenous companies as suppliers. We will also work with training and educational institutions so that local and Indigenous companies and individuals have the required training and skills to take advantage of the economic opportunities that the Project will present. **TISG Section 9.5 Employment and economics**
Socio-Economic Conditions	2.15	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.	Alberta Energy understands the interest in additional information about the potential effects of the Project on the economic conditions of farms, agriculture and livestock in the area. The IS will evaluate and describe the potential effects of changes to economic conditions that could affect agriculture, including potential effects to crops and livestock health and productivity. Discipline specific assessments within the IS that will inform this evaluation include potential effects on air quality, surface water and groundwater, and soil. The IS will include additional information on potential accidents and malfunctions, including potential environmental and economic effects. The Project will implement best practices for waste storage and transportation, dust and noise, ensuring that all waste is handled safely and disposed of properly. We will also develop comprehensive emergency response plans and conduct regular safety drills to minimize the risk of accidents and provide for quick, effective responses if they occur. We aim to protect the existing economic conditions of farms, agriculture, and livestock in the area. **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 9.5 Employment and economics** **TISG Section 12.1 Risk management**
Socio-Economic Conditions	2.16	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.	Alberta Energy understands the interest in additional information about the potential economic impacts of the Project on farms, including the reduction of property values and the need for compensation mechanisms for potentially affected farmers. The IS will evaluate and describe the potential effects of changes to economic conditions that could affect agriculture, including potential effects to crops and livestock health and productivity. Discipline specific assessments within the IS that will inform this evaluation include potential effects on air quality, surface water and groundwater, and soil. The IS will include additional information on potential accidents and malfunctions, including potential environmental and economic effects. Energy Alberta will include the social determinants of health in its IS, which will consider community well-being including stress related to perceptions of safety of an operating nuclear Project. Farms are included in environmental monitoring programs in other parts of Canada that host nuclear power projects. Environmental monitoring and transparent communication can provide confidence of the safety of locally grown food. **TISG Section 9.2 Biophysical determinants of health** **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 9.5 Employment and economics**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Socio-Economic Conditions	2.17	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.	Energy Alberta understands the interest in how the Project will positively impact local industries and the potential benefits and challenges for municipalities and communities. An assessment of positive socio-economic effects will be included in the IS. Overall, the Project is expected to create numerous jobs and business opportunities, through its need for materials, equipment and labour, which is anticipated to boost local and regional industries and related sectors. The IS will include information and assessment of a range of socio-economic aspects including the following, and will include mitigation and enhancement measures: ■ Employment and economy, including labour, work force and employment, training, changes in land and resources used in in local and Indigenous economic activity, and procurement needs and opportunities for local and Indigenous businesses to participate in the Project. ■ Services and infrastructure, including capacity of and demand for physical services (such as roads and transportation, power lines, pipelines, water mains, sewer lines, and waste management facilities) and community services (such as emergency, health, social, recreational, educational, and childcare services). ■ Community well-being, including community safety, income, cost of living, stress, economic opportunity. ■ Health, social and economic conditions of Indigenous Peoples, including economic participation and traditional and cultural use and livelihoods. **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 9.4 Services and infrastructure** **TISG Section 9.5 Employment and economics** **TISG Section 10.3 Health, social and economic conditions of Indigenous Peoples**
Socio-Economic Conditions	2.18	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.♦	Energy Alberta understands the concern about the potential risks of increased gender-based violence (GBV) related to in-migration and change in community dynamics associated with the Project workforce and related economic growth. The IS will include an analysis of how the Project may potentially affect sub populations in the local and Indigenous communities differently. Through a GBA+ (Gender Based Analysis +) process, the IS will examine how Indigenous women and girls, people with differing abilities, racialized groups, seniors, members of the LGBTQIA2S+ or other sub-populations may be vulnerable to potential negative effects or risks from the Project or less likely to participate in benefits. The IS will also include an assessment of Community Wellbeing, wherein we will include a discussion of, and mitigations related to, potential effects on diverse groups related to a change in population dynamics. These potential effects may include the risk of increases in incidents of GBV, including the risk of recreating historical patterns of violence against Indigenous women. We will work closely with local communities and Indigenous Nations and Communities to understand their specific concerns and needs. This collaboration will help us develop tailored strategies to prevent and address the potential for GBV. We will also provide training and awareness programs for our workforce to promote respectful behavior and prevention of GBV. This includes educating workers about the importance of respecting local cultures and the consequences of GBV, as well as establishing and encouraging gender-sensitive, culturally sensitive and accessible means of reporting incidents. **TISG Section 1.3 Gender-Based Analysis Plus (GBA Plus)** **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.3 Social determinants of health and community well-being**
Socio-Economic Conditions	2.19	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. ♦	Energy Alberta is committed to building strong partnerships with Indigenous Nations and Communities. This involves working together on various aspects of the Project, from planning to implementation, so that Indigenous voices are heard and Indigenous interests are addressed. The IS will describe how Energy Alberta will provide opportunities to Indigenous Nations and Communities through benefit enhancement measures and other means. Benefit enhancement measures are designed to promote the uptake of local employment. which requires training, procurement opportunities, and other community investments. We will collaborate with Indigenous Nations and Communities to identify ways to enhance procurement and employment opportunities and provide support for job training programs. These initiatives aim to enhance skills that support long-term career paths and provide business experience and capacity development that will support future economic success. **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 10.3 Health, social and economic conditions of Indigenous Peoples**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
3.0 Indigenous Peoples			
Indigenous Interests	3.1	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. ♦	Energy Alberta recognizes the importance of providing Indigenous Nations and Communities sufficient time and access to comprehensive information to evaluate the proposed Project and its potential impacts. Energy Alberta is committed to providing clear and transparent updates and Project information throughout our engagement and the rigorous regulatory review processes conducted by the IAAC and CNSC. Energy Alberta recognizes that we are still in early stages of both engagement and the Project application, and we are committed to ongoing engagement and collaboration on Indigenous review of, and participation in, the Project application. The IA process requires engagement with Indigenous Nations and Communities to inform the integrated assessment and identify measures to avoid, minimize, offset or otherwise accommodate for potential adverse impacts on Indigenous Peoples and their rights. **TISG Section 6 Description of Engagement with Indigenous Nations and Communities**
Indigenous Interests	3.2	Concerns over lack of early and meaningful engagement with Indigenous Nations and communities. ♦	Meaningful engagement is a priority for Energy Alberta. While we are still in the early stages of developing relationships with Indigenous Nations and Communities, we are committed to continuous dialogue, so that engagement methods respect cultural practices and preferences. The IA process requires engagement with Indigenous Nations and Communities to inform the integrated assessment and identify measures to avoid, minimize, offset or otherwise accommodate for potential adverse impacts on Indigenous Peoples and their rights. This engagement may also identify potential positive outcomes from the Project. Energy Alberta welcomes input on the Project engagement approaches, Indigenous input into the IS, Indigenous concerns and potential impacts to Rights, and input to create positive outcomes. Energy Alberta aims to build strong, lasting relationships that foster informed decision-making. An Indigenous Engagement Plan was included in the IPD and updates to that plan are included in Section 4. **TISG Section 6 Description of Engagement with Indigenous Nations and Communities**
Indigenous Interests	3.3	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. ♦	Energy Alberta is guided by our Indigenous Relations Policy which aligns our practices with the spirit of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), including Free, Prior and Informed Consent (FPIC). This includes a commitment to transparent, open and respectful communication, valuing Indigenous perspectives, integrating Indigenous Knowledge, where consent is given for its acquisition and use, into the Project Design, IS, and regulatory applications, and exploring equitable economic opportunities. The specifics of how these efforts are achieved may vary between Indigenous Nations and Communities, based on feedback and ongoing engagement. **TISG Section 10 Indigenous Peoples**
Indigenous Interests	3.4	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. ♦	Understanding the potential implications of the Project is essential to good design and decision making. Energy Alberta will conduct a thorough IA process which will include evaluating potential cumulative effects with consideration of other reasonably foreseeable projects. Energy Alberta will assess the Project's cumulative effects using the approach described in IAAC's guidance document Policy Framework for Assessing Cumulative Effects under the IAA. Further detail on how this will be achieved will be informed by direction from IAAC and CNSC and input from Indigenous Nations and Communities and other stakeholders and interested parties. Energy Alberta remains committed to working closely with Indigenous Nations and Communities throughout the life of the Project. **TISG Section 7.7 Cumulative Effects Assessment** **TISG Section 10.4 Rights of Indigenous Peoples**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Indigenous Interests	3.5	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. ♦	Energy Alberta is committed to providing capacity funding to enable Indigenous Nations and Communities to participate in the Project review and support Indigenous decision-making. This process has begun with the initial offer of capacity funding to potentially impacted Nations and Communities in support of their participation in the Planning Phase of IAAC's regulatory process. As part of ongoing engagement, Energy Alberta is also exploring what capacity is required for Indigenous Nations and Communities to support their evaluation and decision-making. This could include collaborative approaches to assessment studies, and/or where appropriate and feasible Indigenous-led assessments. Capacity will be provided for specific purposes and deliverables from communities and will seek to achieve cooperation between communities for like work. **TISG Section 6 Description of Engagement with Indigenous Nations and Communities**
Indigenous Interests	3.6	The Peace River, including the Peace Athabasca Delta, is of upmost 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. ♦	Energy Alberta acknowledges the biophysical, cultural and spiritual importance of water to Indigenous Peoples, and specifically the Peace River and the Peace Athabasca Delta (PAD). Energy Alberta also recognizes the global significance of the PAD as part of the Wood Buffalo National Park United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site. The IS will include an assessment of the potential biophysical impacts of the Project on the Peace River. The consideration of cultural and spiritual impacts will be informed through ongoing engagement and Indigenous Knowledge provided by Nations and Communities, where consent is given for its acquisition and use. Alberta Energy will also consider the potential impacts of the Project on the Peace Athabasca Delta including the Outstanding Universal Values of Wood Buffalo National Park in collaboration with Indigenous communities. **TISG Section 8.7 Ground water and surface water** **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 10 Indigenous Peoples**
Indigenous Interests	3.7	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. ♦	Energy Alberta acknowledges the concern and feeling of uncertainty regarding nuclear accidents and malfunctions. Safety is not just a priority; it is at the core of Energy Alberta's values and approach to the Project. Energy Alberta is deeply committed to protecting the water, air, land and people around the Project. Energy Alberta will conduct an assessment of accidents and malfunctions as part of the IS. This involves identifying hazards for each Project phase, analyzing the likelihood and consequences of potential accidents, and assessing plausible scenarios. The assessment will include evaluating nuclear accidents based on the Large Release Frequency and Small Release Frequency limits specified in REGDOC 2.5.2. Indigenous Nations and Communities will be engaged throughout the process, particularly in the methodologies used for the assessment. Additionally, Energy Alberta will complete a Predictive Environmental Risk Assessment (PERA) as part of the IS. This will include a human health and ecological risk assessment consistent with Canadian Standards Association (CSA) N288.6 standards. The IS will follow IAAC's integrated TISGs and consider environmental effects as required by CNSC regulations. The Project will be assessed under an integrated IA by the IAAC and CNSC, ensuring a "one project-one assessment" approach. This comprehensive evaluation will include human health and ecological risk assessments to predict the Project's effects. **TISG Section 12 Potential effects of accidents or malfunctions** **TISG Section 10 Indigenous Peoples**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Indigenous Interests	3.8	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. ♦	Energy Alberta acknowledges the inherent and constitutionally protected rights of Indigenous Peoples and the significance of Indigenous Knowledge, values, and practices. We are committed to conducting a thorough and holistic IA. We will work closely with Indigenous Nations and communities to understand the specific Treaty and Indigenous rights practiced in the region. This involves engaging in meaningful discussions and incorporating Indigenous Knowledge (where consent is given for its acquisition and use) into the IS, to undertake a culturally informed assessment of the Project and its potential impacts. A holistic IA also includes evaluating how the Project might affect the exercise of these rights and identifying measures to accommodate any impacts. Our approach will consider cultural, environmental, social, and economic factors, and evaluate how various aspects of Indigenous rights may be affected. **TISG Section 10.4 Rights of Indigenous Peoples**
Indigenous Interests	3.9	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. ♦	We understand the concern about the need for a comprehensive consideration of nuclear safety and risks from our Project, not just from a Western scientific perspective, but also in accordance with the perspectives of Indigenous Peoples who are the stewards of these lands. Energy Alberta acknowledges the feelings of uncertainty regarding nuclear safety. Safety is not just a priority; it is at the core of Energy Alberta's values and approach to the Project. Energy Alberta is deeply committed to protecting the water, air, land and people around the Project. Energy Alberta is committed to engaging in meaningful discussions with Indigenous Nations and Communities to understand their views on nuclear safety and risks. This involves incorporating Indigenous Knowledge into our assessments and decision-making processes. This holistic approach allows for all perspectives to be considered, providing a more comprehensive understanding of potential risks. Recognizing Indigenous Peoples as the stewards of these lands, we will work collaboratively so that their perspectives are integrated into our Project planning and implementation. This includes respecting cultural practices and environmental stewardship principles. Energy Alberta is committed to respecting and upholding the perspectives of Indigenous Peoples, while ensuring the highest standards of nuclear safety. **TISG Section 6 Description of Engagement with Indigenous Nations and Communities** **TISG Section 10 Indigenous Peoples**
Indigenous Interests	3.10	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. ♦	We understand the need for additional information regarding the exposure of Indigenous Peoples to Project-related emissions and radiation, especially while conducting traditional land and resource use activities. We will conduct detailed assessments to understand the potential Project-related emissions and if those emissions, including radiation, might affect Indigenous Peoples during their traditional activities. The methods for considering the impacts of these potential exposures on traditional land and resource use activities and health will be determined as the Project progresses through the planning phase of the IA process, and this will be informed by input from Indigenous Nations and Communities. We will maintain open and transparent communication with Indigenous Nations and Communities throughout the life of the Project. This includes sharing findings, discussing potential impacts, and addressing any concerns raised by community members. **TISG Section 9.1 Health, social and economic conditions** **TISG Section 9.2 Biophysical determinants of health** **TISG Section 10 Indigenous Peoples**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Indigenous Interests	3.11	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. ♦	Energy Alberta understands the need to understand the potential economic impacts and opportunities available to Indigenous Nations and Communities, as well as how social conditions may change because of our Project. A complete assessment of the potential economic impacts and opportunities and change in social conditions will be part of the IS. Our Project aims to create economic opportunities for Indigenous Nations and Communities through employment, training programs, and partnerships. We will work closely with Indigenous leaders to identify and maximize these opportunities, so that the benefits are shared equitably. We will also collaborate with Indigenous Nations and Communities, local municipalities, local law enforcement and social service agencies to implement preventive measures and support programs to address the concerns on changing social conditions. This may include community outreach, addiction support services, and crime prevention initiatives. **TISG Section 9.3 Social determinants of health and community well-being** **TISG Section 9.4 Services and infrastructure** **TISG Section 9.5 Employment and economics** **TISG Section 10.2 Current use of lands and resources for traditional purposes**
Indigenous Interests	3.12	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. ♦	Energy Alberta understands that Indigenous Knowledge is deeply rooted in place, culture, and lived experience, making it highly specific to the lands, ecosystems, and communities where it originates. Energy Alberta also understands that Indigenous Knowledge must be managed under protocols agreed with Indigenous Nations and Communities, and protected against unauthorized disclosure. We are committed to conducting a thorough and holistic IA process. This involves engaging in meaningful discussions and incorporating Indigenous Knowledge into the IS to undertake a culturally informed assessment of the Project and its potential impacts, where consent is given for its acquisition and use. The details of how this will be scoped and accomplished will be determined based on continued engagement with Indigenous Nations and Communities. Where appropriate or authorized to due so, Energy Alberta will use Indigenous Knowledge to inform the selection of valued components, and identification of mitigation measures. In addition, where both necessary and appropriate Energy Alberta will support the completion of additional and/or Project-specific Indigenous Knowledge studies by Indigenous communities. Energy Alberta is committed to working collaboratively and respectfully with Indigenous Nations and Communities. We are committed to respecting and upholding Indigenous Knowledge so that our Project supports the well-being and sovereignty of Indigenous communities. **TISG Section 10.1 Indigenous physical and cultural heritage, and structures, sites or things of significance** **TISG Section 10.2 Current use of lands and resources for traditional purposes** **TISG Section 10.4 Rights of Indigenous Peoples** **TISG Section 10.5 Mitigation and enhancement measures**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Indigenous Interests	3.13	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. ♦	We understand the concern about how the Project's construction and long-term operation could adversely impact Indigenous rights, harvesting, culture, and way of life, as well as preferred and culturally important sites. Energy Alberta is committed to working closely with Indigenous Nations and Communities to understand their rights and cultural practices. This involves engaging in meaningful discussions and incorporating Indigenous knowledge into the IS, where consent is given for its acquisition and use. We will also work with Indigenous Communities to map out culturally important sites and develop strategies to avoid or mitigate impacts, so that they are preserved and respected throughout the Project's lifecycle. The details of how this will be scoped and accomplished will be determined based on continued engagement with Indigenous Nations and Communities. The IS will include assessments to understand the nature and scope of the Project's impacts on the ecosystem. This includes evaluating potential effects on water, soil, wildlife, and plant life, which are directly related to Indigenous rights, culture and way of life; and developing measures to protect and restore the environment. **TISG Section 10.1 Indigenous physical and cultural heritage, and structures, sites or things of significance** **TISG Section 10.2 Current use of lands and resources for traditional purposes** **TISG Section 10.4 Rights of Indigenous Peoples** **TISG Section 10.5 Mitigation and enhancement measures**
4.0 Other Key Issues Related to the Federal Undertaking			
Accidents and Malfunctions	4.1	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. ♦	Energy Alberta understands the need for clarity on how the Project may affect the public in the event of accidents and malfunctions. A preliminary high-level risk assessment, suitable for the stage of the Project, will form part of the IS. The assessment will identify the relevant hazards for the Project lifecycle and provide preliminary assessment of the potential resulting accidents and malfunctions, and their consequences. As part of the assessment for accidents and malfunctions, we will identify and analyze various hazard scenarios specific to the Project. Criteria for assessing radiological consequences considers requirements and guidelines from the CNSC and international standards. assessment will include identification of all pathways to release, including water and airborne releases, where applicable. Going forward, the site and plant design work is underpinned and driven by detailed probabilistic and deterministic safety analysis, which will be conducted during the site-specific design stage and submitted to the regulators and public for awareness, review and comment during the Licence to Construct stage. Furthermore, the CNSC has stringent requirements for emergency preparedness and response. These requirements are designed to protect workers, the public, and the environment by ensuring that nuclear facilities are prepared to respond effectively to emergencies. Our emergency response plans and procedures will comply with the requirements set by the CNSC. We will ensure that emergency response plans are effectively communicated to all potentially impacted local populations. In accordance with the CNSC requirements, we will conduct regular emergency response exercises and drills to test the effectiveness of our plans and procedures. These exercises will involve local residents, emergency services, and other stakeholders so that everyone is prepared and knows their role in an emergency. Water management process in nuclear power plants is highly regulated, including permits and mitigation requirements put in place by local, provincial and federal governing bodies to maintain effective conservation and stewardship. Efforts are undertaken to protect the habitat of the local watershed, including rigorous environmental programs that monitor, track and analyze surrounding ecosystems to safeguard the health of people and the environment. **TISG Section 8.7 Groundwater and surface water** **TISG Section 12 Effects of Potential Accidents or Malfunctions** **TISG Section 13 Effects of the Environment on the Project**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Accidents and Malfunctions	4.2	Concerns about the adequate development and communication of emergency response plans, procedures, and program exercises in rural settings to potentially impacted local populations. ♦	Energy Alberta recognizes the concern about the development and communication of emergency response plans, procedures, and program exercises, especially in rural settings. The safety of workers and nearby communities is utmost priority. The CNSC has stringent requirements for emergency preparedness and response. These requirements are designed to protect workers, the public, and the environment by ensuring that nuclear facilities are prepared to respond effectively to emergencies. The CNSC mandates that all major nuclear facilities maintain comprehensive emergency preparedness programs, including dedicated response facilities, specialized equipment, trained personnel, and emergency response plans agree with both provincial and local response organizations. The CNSC requires all nuclear facilities to conduct regular tests of their emergency management systems and response organizations. In the unlikely event of an incident, facility staff along with trained and enabled emergency response personnel are prepared to respond quickly, safely and effectively in line with the strict planning, training and testing programs governed by the CNSC. CNSC staff with extensive experience and expertise in nuclear emergency response would oversee the response to ensure that appropriate actions are taken to limit the risk to health, safety, security and the environment. Nuclear reactor sites in Canada must have an emergency exclusion zone, determined through analysis of the reactor technology accident evolution and agreement with provincial and local emergency response organizations where they plan to mitigate required actions for the differing levels and types of release, based on distance from the plant. These zones allow for appropriate responses to the highly unlikely event of a severe accidents, including evacuation, public protection, land use control following an event, security measures, and environmental protection. Energy Alberta's emergency response plans and procedures will comply with the stringent requirements set by the CNSC. These emergency response plans will also be tailored to the specific needs of rural communities. We will also ensure e that emergency response plans are effectively communicated to all potentially impacted local populations. In accordance with the CNSC requirements, we will conduct regular emergency response exercises and drills to test the effectiveness of our plans and procedures. These exercises will involve local residents, emergency services, and other stakeholders so that everyone is prepared and knows their role in an emergency. **TISG Section 7.9 General Criteria for Site Evaluation**
Accidents and Malfunctions	4.3	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. ♦	Energy Alberta understands the concern about how seismicity, both natural and human-induced, could affect the Project. During the licencing and design phases of the Project, we will conduct a thorough assessment of seismic activity in the region, including both natural earthquakes and those induced by human activities such as oil and gas extraction. The assessment will evaluate how seismic events could potentially impact the Project, including the risks of accidents and malfunctions. We will use current best-practice methods to analyze the Project's seismic risks and ensure the design can withstand the required seismic events, in line with CNSC REGDOC-1.1.1 and REGDOC-2.5.2, as well as International Atomic Energy Agency (IAEA) safety guidance provided in IAEA SSG-9. **TISG Section 8.2 Geology, geochemistry and geological hazards**
Accidents and Malfunctions	4.4	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. ♦	Prior to addressing these issues, Energy Alberta wishes to state that the transportation of radioactive materials to and from the Project site should not be considered a physical activity that is incidental to the designed Project within the scope of the IA. We understand the concern with respect to potential accidents and malfunction scenarios related to the transportation of radioactive materials. The transportation route and packaging of fuel for the Project must be approved by the CNSC. Energy Alberta's role is limited to arranging delivery times and facilitating fuel handling at the Project site. The responsibility for fuel production and transportation lies with other entities, in compliance with existing regulations. The transportation of radioactive material is highly regulated, meeting the requirements of *the Transportation of Dangerous Goods Act* and the Packaging and Transport of Nuclear Substances Regulations. The CNSC's security regulations prohibit the disclosure of transport routes or schedules unless licensed. Possession and control of fuel requires a CNSC license, ensuring that applicants are qualified and make provisions for environmental protection, health and safety, national security, and international obligations. Energy Alberta will continue to listen to concerns regarding the Project, including those related to the transportation of radioactive material, throughout our engagement activities. **TISG Section 12 Effects of Potential Accidents or Malfunctions**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Accidents and Malfunctions	4.5	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.	Energy Alberta understands the need for clarity on how potential radiological consequences to the public will be assessed in the event of a nuclear accident. A preliminary high-level risk assessment, suitable for the stage of the Project, will form part of the IS. The assessment will identify the relevant hazards for the Project lifecycle and provide preliminary assessment of the potential resulting accidents and malfunctions, and their consequences. As part of the assessment for accidents and malfunctions, we will identify and analyze various hazard scenarios that could potentially lead to a nuclear accident specific to this Project. Criteria for assessing radiological consequences considers requirements and guidelines from the CNSC and international standards. These criteria ensure that our assessments are comprehensive and based on the best available science. The assessment will include identification of all pathways to release, including water and airborne releases, where applicable. Going forward, the site and plant design work is underpinned and driven by detailed probabilistic and deterministic safety analysis, which will be conducted during the site-specific design stage and submitted to the regulators and public for awareness, review and comment during the Licence to Construct stage. **TISG Section 12 Effects of Potential Accidents or Malfunctions**
Accidents and Malfunctions	4.6	Need for additional information on emergency preparedness procedures during the operation phase should a shutdown be required.	Energy Alberta understands the concern about the development and communication of emergency response plans, procedures, and program exercises, especially in rural settings. The safety of workers and nearby communities is utmost priority. The CNSC has stringent requirements for emergency preparedness and response. These requirements are designed to protect workers, the public, and the environment by ensuring that nuclear facilities are prepared to respond effectively to emergencies. The CNSC mandates that all major nuclear facilities maintain comprehensive emergency preparedness programs, including dedicated response facilities, specialized equipment, trained personnel, and emergency response plans agree with both provincial and local response organizations. The CNSC requires all nuclear facilities to conduct regular tests of their emergency management systems and response organizations. In the unlikely event of an incident, facility staff along with trained and enabled emergency response personnel are prepared to respond quickly, safely and effectively in line with the strict planning, training and testing programs governed by the CNSC. CNSC staff with extensive experience and expertise in nuclear emergency response would oversee the response to ensure that appropriate actions are taken to limit the risk to health, safety, security and the environment. Nuclear reactor sites in Canada must have an emergency exclusion zone, determined through analysis of the reactor technology accident evolution and agreement with provincial and local emergency response organizations where they plan to mitigate required actions for the differing levels and types of release, based on distance from the plant. These zones allow for appropriate responses to the highly unlikely event of a severe accidents, including evacuation, public protection, land use control following an event, security measures, and environmental protection. Energy Alberta's emergency response plans and procedures will comply with the stringent requirements set by the CNSC. These emergency response plans will also be tailored to the specific needs of rural communities. We will also ensure that emergency response plans are effectively communicated to all potentially impacted local populations. In accordance with the CNSC requirements, we will conduct regular emergency response exercises and drills to test the effectiveness of our plans and procedures. These exercises will involve local residents, emergency services, and other stakeholders so that everyone is prepared and knows their role in an emergency. **TISG Section 12 Effects of Potential Accidents or Malfunctions** **TISG Section 12. 3 Emergency Management**
Accidents and Malfunctions	4.7	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. ♦	Energy Alberta understands the need for additional information on regional co-development regarding emergency management plans. As a requirement of the Project and CNSC licensing conditions, Energy Alberta is required to work with provincial and local emergency response agencies to develop and agree an emergency response plan that is specific to the facility technology and site location. We will work closely with host and neighboring communities, including Indigenous Nations and Communities, to co-develop comprehensive emergency management plans for agreement with local and provincial government. This may include initiatives such as resource for training to enhance emergency preparedness and response capabilities, and targeted education initiatives to inform and prepare the community for emergency situations. **TISG Section 12. 3 Emergency Management**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Effects of the Environment on the Project	4.8	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. ♦	The Project will be designed and constructed in accordance with stringent design standards and codes, which include natural hazards and human activities, as well as climate change. Canadian design standards for nuclear facilities are developed by organizations such as the Canadian Standards Association (CSA). The National Building Code of Canada also sets out technical requirements for the design and construction of buildings, including those related to nuclear facilities. These standards ensure the safety, reliability, and efficiency of nuclear power plants and other infrastructure. **TISG Section 7.9 General Criteria for Site Evaluation** **TISG Section 8.2 Geology, geochemistry and geological hazards**
Effects of the Environment on the Project	4.9	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.	We understand the community's concerns about how potential flooding events have been considered in the evaluation of the storage and management plans for spent nuclear fuel at the Project site. The CNSC has stringent requirements for the storage of spent nuclear fuel to ensure the safety of the public and the environment. The Project will be designed and constructed in accordance with stringent design standards and codes, which include suitable and sufficient considerations of the natural hazards and human activities, as well as climate change that could influence the Project location. Canadian design standards for nuclear facilities are developed by organizations such as the CSA. These standards ensure the safety, reliability, and efficiency of nuclear power plants and other infrastructure. Specifically, the storage facility will be designed and constructed to meet these design standards and codes taking into consideration site-specific flood risks. This may include such design features as elevating storage areas, using flood-resistant materials, and incorporating robust drainage systems to prevent water ingress. We will also implement suitable protective measures on the site as required, dictated by both regulation or standards requirements and analysis results, to safeguard the spent nuclear fuel storage facility from flooding. This may include mitigation such as constructing levees and floodwalls and installing advanced monitoring systems to detect and respond to rising water levels. Energy Alberta is committed to the safety and resilience of the spent nuclear fuel storage facility in the event of potential flooding. The safety of workers and nearby communities is our top priority. **TISG Section 12 Effects of Potential Accidents or Malfunctions** **TISG Section 13 Effects of the Environment on the Project**
Effects of the Environment on the Project	4.10	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. ♦	Energy Alberta understands the concern about the Project's resilience to climate change and the need for clarity on how climate change was considered in our Project design. Throughout the Project lifecycle, we will evaluate the potential impacts of climate impacts such as increased temperatures, changing precipitation patterns, and extreme weather events, on the facility and site. The design standards we use include suitable safety factors or “buffer” in both the hazard analysis assumptions and the design to ensure that the Project can either withstand the expected climate change conditions or be easily augmented to mitigate against more severe unexpected changes and remain resilient over time. As part of the IS, a climate change assessment will be conducted to understand how climate change might affect the local environment, and the impact on assessed risks from the related hazards on the plant and site. This includes analyzing potential impacts on water resources, soil stability, and local ecosystems. Building resilience to climate change is an ongoing process. We will continue to monitor climate trends and update our strategies as needed to maintain the Project's long-term resilience. This includes regular reviews and updates to our emergency management plans and infrastructure design. We recognize the importance of understanding how climate change and our Project might affect Indigenous Nations and Communities. Energy Alberta will continue to engage with Indigenous leaders and communities to gather their insights and incorporate their knowledge into our assessments. This collaborative approach helps us identify and address potential impacts on traditional land use, cultural practices, and community well-being. **TISG Section 13 Effects of the Environment on the Project**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Transportation	4.11	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. ♦	Energy Alberta understands concerns with respect to the transport of Project-related materials, as well as the potential accidents and malfunction scenarios related to the transportation of materials including radioactive materials. The IS will include an assessment of the road infrastructure and the use of the municipal and provincial roadways that are within the geographic extent of the IA scope, for all Project phases. It is important to note that the transportation route and packaging of nuclear fuel for the Project must be approved by the CNSC. Energy Alberta's role is limited to arranging delivery times and facilitating fuel handling at the Project site. The responsibility for fuel production and transportation lies with other entities, in compliance with existing regulations. The transportation of radioactive material is highly regulated, meeting the requirements of the *Transportation of Dangerous Goods Act* and the Packaging and Transport of Nuclear Substances Regulations. **TISG Section 9.4 Services and Infrastructure**
Transportation	4.12	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. ♦	Prior to addressing these questions, Energy Alberta wishes to state that the transportation of nuclear fuel to the Project site should not be considered a physical activity that is incidental to the designated Project within the scope of the IA. For nuclear fuel transportation a CNSC licenced third-party supplier will be responsible for transporting any fuel to the site for the Project. Therefore, Energy Alberta will not be including transportation routes as part of the scope of the Project. The transportation route and packaging of fuel must be approved by the CNSC. Energy Alberta's involvement in the transportation to the Project site is expected to be limited to arranging for a suitable delivery time at the Project site, and ensuring Energy Alberta resources are available to receive the shipment and facilitate fuel handling activities. All aspects of fuel production, from mining through to transportation of new, fully fabricated fuel to the Project site are the responsibility of other entities in compliance with existing regulations. Hence, it is not reasonable to include new fuel transportation as an incidental Project activity as this does not fall under the responsibility of Energy Alberta as a Project applicant, nor would it be the responsibility of Energy Alberta during the operating phase of the Project.
Transportation	4.13	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.	Prior to addressing these questions, Energy Alberta wishes to state that the transportation of nuclear fuel to the Project site, and the transportation of spent fuel off-site, should not be considered a physical activity that is incidental to the designated Project within the scope of the IA. We understand the communities concern with respect to potential accidents and malfunction scenarios related to the transportation of radioactive materials. The transportation route and packaging of fuel for the Project must be approved by the CNSC. Energy Alberta's role is limited to arranging delivery times and facilitating fuel handling at the Project site. The responsibility for fuel production and transportation lies with other entities, in compliance with existing regulations. Energy Alberta will not have “care and control” of the material until it reaches the site. The transportation of radioactive material is highly regulated, meeting the requirements of the *Transportation of Dangerous Goods Act* and the Packaging and Transport of Nuclear Substances Regulations. The CNSC’s security regulations prohibit the disclosure of transport routes or schedules unless licensed. Possession and control of fuel requires a licence to be issued by the CNSC, ensuring that applicants are qualified and make provisions for environmental protection, health and safety, national security, and international obligations. Energy Alberta is committed to working collaboratively and respectfully with landowners, stakeholders, and Indigenous communities. The safety of workers and nearby communities is our top priority.
Transportation	4.14	Need for additional information around potential effects of increased traffic on community safety, accident risks, and wildlife injury. ♦	Energy Alberta understands the concern regarding the potential effects of increased traffic in the area. A complete assessment of the increased traffic demand for the construction and operation of the facility will be included in the IS. The socio-economic assessment will consider the capacity of the current community infrastructure to support the construction and operation of the Project. The assessment will evaluate how increased traffic from the Project may affect community safety, transportation infrastructure, and accident risks. Understanding these risks will help implement effective traffic management and emergency response strategies to protect all road users. Energy Alberta will work with local, provincial and federal governments to so that the needed infrastructure is in place to support the construction and operation of the facility. **TISG Section 9.4 Services and Infrastructure**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Transportation	4.15	Concerns around the engagement process for communities along transportation routes for nuclear materials and wastes.	Prior to addressing these questions, Energy Alberta wishes to state that the transportation of nuclear fuel to the Project site, and the transportation of spent fuel off-site, should not be considered physical activities that are incidental to the Project within the scope of the IA. We understand the communities concern with respect to potential accidents and malfunction scenarios related to the transportation of radioactive materials. The transportation route and packaging of fuel for the Project must be approved by CNSC. Energy Alberta's role is limited to arranging delivery times and facilitating fuel handling at the Project site. The responsibility for fuel production and transportation lies with other entities, in compliance with existing regulations. The transportation of radioactive material is highly regulated, meeting the requirements of the *Transportation of Dangerous Goods Act* and the Packaging and Transport of Nuclear Substances Regulations. the CNSC's security regulations prohibit the disclosure of transport routes or schedules unless licensed. Possession and control of fuel requires the CNSC licence so that applicants are qualified and make provisions for environmental protection, health and safety, national security, and international obligations.
Waste Management - Storage	4.16	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. ♦	Energy Alberta understands the concern about the storage requirements and management plans for spent nuclear fuel at the Project site. The CNSC has stringent requirements for the storage of spent nuclear fuel to ensure the safety of the public and the environment. Information regarding nuclear waste management and storage on-site will be provided in the IS. Canadian design standards for nuclear facilities are developed by organizations such as the CSA. These standards ensure the safety, reliability, and efficiency of nuclear power plants and other infrastructure. The Project will be designed and constructed in accordance with all stringent design standards and codes, which include natural hazards and human activities, as well as climate change. Specifically, the waste storage facility will be designed and constructed to meet these design standards and codes that account for flood risks. Our emergency response plans and procedures will comply with the stringent requirements set by the CNSC. These emergency response plans will also be tailored to the specific needs of rural communities. We will also provide that emergency response plans are effectively communicated to all potentially impacted local populations. In accordance with CNSC requirements, we will conduct regular emergency response exercises and drills to test the effectiveness of our plans and procedures. These exercises will involve local residents, emergency services, and other stakeholders so that everyone is prepared and knows their role in an emergency. **TISG Section 3.4 Project Components and Activities** **TISG Section 7.9 General Criteria for Site Evaluation** **TISG Section 12.3 Emergency Management**

Table 5-1: Summary of Key Issues and Responses

Topic	No.	Issue	Response to Issue
Waste Management - Storage	4.17	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. ♦	Energy Alberta understands the concern with the location of radioactive waste and hazardous materials storage at the proposed facility. Information regarding the location of radioactive waste and hazardous materials storage, for all Project phases, will be provided in the IS as part of a waste management strategy. The CNSC has stringent waste management requirements for the storage of radioactive waste on a facility site, to ensure the safety of the public and the environment. These standards ensure the safety, reliability, and efficiency of nuclear power plants and other infrastructure. The CNSC and the IAEA monitor and inspect nuclear waste sites and waste management facilities to ensure compliance with national and international nuclear safety regulations. Energy Alberta will adhere to the robust regulations and best practices set by the CNSC and the IAEA so that all forms of conventional and nuclear waste are handled in a safe, secure and responsible manner. In Canada, the Nuclear Waste Management Organization (NWMO) is responsible for the long-term management of intermediate-level waste (ILW) and high-level waste (HLW). The NWMO's mandate includes developing and implementing strategies for the safe, secure, and environmentally responsible disposal of nuclear waste under its mandate. The NWMO is implementing Canada's plan for the safe, long-term management of used nuclear fuel. The NWMO has begun public engagement to refine the site selection approach for the next deep geological repository. The IS will include an assessment of the workforce requirements for the Project, which will include waste management expertise requirements. **TISG Section 3.2 Project Location** **TISG Section 3.4 Project Components and Activities** **TISG Section 3.5 Workforce Requirements** **TISG Section 7.9 General Criteria for Site Evaluation**
Waste Management - Storage	4.18	Need for additional information on how much spent fuel is expected during Project operations (e.g., after 10 years, 30 years, 70 years).	The IS will describe Project components including nuclear waste and interim spent fuel storage facilities, for the lifecycle of the facility. The requirements for these storage facilities at the IS stage will be based on conservative estimates of the amount of spent fuel and radioactive waste resulting from operations. As the design is developed, more accurate calculations of expected spent fuel and nuclear waste will be derived and the design of the facility and site facilities developed accordingly. **TISG Section 3.4 Project Components and Activities**
5.0 Issues posted on the Registry after May 14			
Alternatives to the Project	5.1	Need for a comparison between nuclear power and the alternatives, including wind, solar, geothermal, and hydroelectric power.	The IS will include an assessment of Alternatives to the Project. An alternatives assessment is a systematic process used to evaluate different options to achieve a specific goal or solve a problem. By evaluating different options, an alternatives assessment can identify potential risks and benefits associated with each alternative. The alternatives assessment will include a comparison between nuclear power and the alternatives, including wind, solar, geothermal, and hydroelectric power. **TISG Section 4 Project Purpose, Need and Alternatives Considered**
Financial Security	5.2	Need for information on what insurance and/or financial securities will be required of the project, to ensure the public and environment are protected in the event of an incident.	Nuclear power plant licensing in Canada includes matters related to financial security which is regulated by the CNSC. The CNSC ensures that licensees have sufficient financial resources to cover the costs of decommissioning and waste management. This part of the CNSC's licensing process involves a comprehensive review of the applicant's financial guarantees. The financial guarantees must cover the costs associated with the eventual decommissioning and termination of licensed activities which includes dismantling, decontamination, closure of the facility, post-decommissioning monitoring, and long-term waste management. **TISG Section 9.5 Employment and Economics**
Increase in operating costs for local residents	5.3	I am a beekeeper and run 300 bee colonies in the potential nuclear plant site. The potential nuclear plant will affect my beekeeping directly and will lose 30% of my whole bees' good forage area. I would have to move my bee colonies to remote area and have to increase my operating cost significantly.	Alberta Energy understands the concerns about the potential negative economic impacts of the Project including on farms, and the need for compensation mechanisms for potentially affected farmers. The IS will evaluate and describe the potential effects of changes to economic conditions that could affect agriculture, including apiculture, along with potential measures that could mitigate negative impacts. **TISG Section 9.5 Employment and Economics**

Note: the symbol "♦" identifies issue(s) raised by Indigenous Nations and communities.
AESO = Alberta Electric System Operator; CEA = Cumulative Effects Assessment; CNSC = Canadian Nuclear Safety Commission; CSA = Canadian Standards Association; GBA+ = Gender Based Analysis; GBV = gender-based violence; HHRA = Human Health Risk Assessment; IA = Impact Assessment; IAAC = Impact Assessment Agency of Canada; IAEA = International Atomic Energy Agency; IS = Impact Statement; NWMO = Nuclear Waste Management Organization; TFO = transmission facility owner; TISG = Integrated Tailored Impact Statement Guidelines; UNDRIP = United Nations Declaration on the Rights of Indigenous Peoples.

6 REFERENCES

6.1 Government Acts

Alberta Electric Utilities Act. SA 2003, c E-5.1 | Electric Utilities Act | CanLII

Hydro and Electric Energy Act. RSA 2000, c H-16 | Hydro and Electric Energy Act | CanLII

Impact Assessment Act. https://www.canlii.org/en/ca/laws/stat/sc-2019-c-28-s-1/latest/sc-2019-c-28-s-1.html

Nuclear Safety and Control Act. https://www.canlii.org/en/ca/laws/stat/sc-1997-c-9/latest/sc-1997-c-9.html

Transportation of Dangerous Goods Act. SC 1992, c 34 | Transportation of Dangerous Goods Act, 1992 | CanLII

6.2 Literature Cited

Alberta Energy. 2025. Peace River Nuclear Power Project Initial Project Description. Report No. CA0038431-24003-R-Rev0. 11 April 2025. iaac-aeic.gc.ca/050/documents/p89430/161347E.pdf