

Prairie Lights Power Project - Summary of Issues

This document provides a high-level summary of the issues raised through comments received by the Impact Assessment Agency of Canada on the Prairie Lights Power Project (the Project) during the comment period on the Initial Project Description submitted by Prairie Lights Power GP Inc. (the proponent). Original submissions are posted on the Canadian Impact Assessment Registry (Registry Project #80324). Categories are listed in alphabetical order.

Accidents and Malfunctions
Effects of accidents or malfunctions, including spills of hazardous substances, uncontrolled releases of explosive gases, and ability of emergency services to respond. Consider spill prevention, preparedness, and response measures and systems.
Notification process to potentially affected Indigenous peoples in the case of fugitive emission leaks.
Acoustic Environment
Effects of noise on human health, including from construction activity, machinery use and increased vehicle traffic.
Alternative Means of Carrying Out the Project
Expanded list of alternatives to, and alternative means of, carrying out the Project, including options that could reduce greenhouse gas (GHG) emissions.
Atmospheric Environment
Effects on air quality including from exhaust emissions, fugitive dust, fuel combustion by-products, vehicular traffic and exposed soils during construction and operation and associated effects on human health.
Effects on air quality due to exceedances of the Canadian Ambient Air Quality Standards for nitrogen dioxide (NO ₂) emissions predicted by the proponent.
Inclusion of mitigation measures for dust control.
Climate Change and Greenhouse Gas Emissions
Effects on the Government of Canada's ability to meet its environmental obligations and commitments with respect to climate change and goal of reducing GHG emissions
Cumulative Effects
Cumulative effects on the cultural, social, health and economic conditions of Indigenous peoples, including the loss of Indigenous traditional territory due to industrial development.
Cumulative effects of climate change and GHG emissions.
Cumulative effects of flow withdrawals from the Smoky River on fish and fish habitat.
Cumulative effects to navigation with consideration for surrounding works.
Cumulative effects to sensitive ecosystems due to increases in criteria air contaminants that can potentially contribute to acid deposition.
Drinking Water
Effects on potable water sources including local alterations to groundwater.
Economic Conditions
Clarity on potential changes to the quality of life of the local population, including the accessibility and affordability of energy, and effects on domestic electricity costs.

Clarity on the economic impacts of the Project, particularly relating to a diverse labour force, including consideration for women and Indigenous peoples' employment or entrepreneurship opportunities in the energy sector.
Local labour force participation and training, including through engagement with Indigenous employment and training programs.
Clarity on current labour market conditions and any anticipated changes due to the Project.
Effects of the Environment on the Project
Effects of potential seismic activity from adjacent oil and gas development.
Effects of environmental conditions such as climate change on the Project itself.
Fish and Fish Habitat
Effects on fish and fish habitat and water quality from the use of herbicides.
Effects on fish and fish habitat in the watercourses, including from changes in flows, waterbody or wetland crossings and impingement or entrainment in the outlet.
Effects on fish and fish habitat due to the introduction of warm water to a cooler water system from the return and run-off water outlet.
Effects on sensitive fish species including Bull Trout and Arctic Grayling.
Clarity on the existing and additional water withdrawal volumes, considering the ecological flow requirements for fish.
Follow-up and Monitoring Programs
Inclusion of an Indigenous monitoring program developed with Indigenous peoples to train and employ Indigenous monitors through Project construction and operation, including monitoring for potential cultural effects and potential effects to terrestrial, wetland, and water/watershed environments.
General – Project Description
Effects on the volume of traffic on Highway 40.
Clarity on the number of incoming and outgoing power lines.
Human Health and Well-Being
Information on how effects on human health may vary based on construction timing and distance to residences.
Effects and proposed mitigation measures that could occur due to influx of workers such as an increase in crime, increased housing rates, and/or reduced access to community and health services. Include consideration for effects on vulnerable population groups.
Indigenous and Stakeholder Consultation and Engagement
Need for meaningful consultation on pre-disturbance assessments, environmental monitoring and adaptive management, and health related research.
Continuation of engagement efforts throughout the regulatory process, including in the post-decision phase.
Inclusion of information heard through engagement and consultation, specifically Indigenous knowledge and Traditional Land Use and Ecological Knowledge Studies.
Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes
Clarity on existing land use by Indigenous peoples, informed by engagement.
Effects on Indigenous peoples' current use of lands and resources for traditional purposes and ability to continue traditional practices such as trapping, hunting, harvesting, gathering

(e.g. traditional plants, medicines), teaching, and spiritual practices, including locations (e.g. changes in harvesting of caribou due to changes in migration patterns, etc.).
Effects on the quality and quantity of resources used for traditional purposes (medicinal plants, native and rare vegetation, natural and old growth dependant forests), due to cumulative effects and increased access from non-community members to remote/culturally important areas.
Clarity on the restoration of lands disturbed by Project construction, including temporary workspaces and right of ways, with consideration for potential use by trappers.
Indigenous Peoples' Physical and Cultural Heritage
Effects on sacred sites, unknown burial sites, or artifacts.
Clarity on notifying Indigenous groups if historical resources are identified.
Indigenous Peoples' Social and Economic Conditions
Effects on Indigenous people's social and economic conditions and wellbeing, including economic development, employment, training, educational and business opportunities for Indigenous peoples. Clarity on partnership opportunities with existing Indigenous service delivery organizations.
Indigenous Peoples' Rights
Impacts on the exercise of Aboriginal and Treaty rights, including from loss of land, cumulative effects and how they will be mitigated or accommodated.
Impacts to the rights of Indigenous peoples due to the location of the Project being on Provincial Crown Land within Alberta Management Unit 356, which allows for hunting for bear, moose, elk, deer, and game birds.
Migratory Birds and their Habitat
Effects on migratory birds, eggs, and their nests, through collisions with Project infrastructure, sensory disturbance due to noise and infrastructure lighting, construction activities and the potential for deposition of harmful substances in waters or areas frequented by migratory birds.
Implementation of appropriate avoidance and mitigation measures for migratory birds.
Navigation
Clarity on the existing and proposed location, size, and type of all water infrastructure, crossings and construction methodology for the proposed pipeline and transmission line to support navigational assessments.
Details on any existing infrastructure proposed to be used along the Smoky River, in order to accurately assess potential effects to navigation.
Purpose and Need for the Project
Clarity on purpose of the project in relation to where the power is being delivered.
Species at Risk, Terrestrial Wildlife and their Habitat
Effects on wildlife from habitat loss and fragmentation.
Effects on federally listed species at risk, specifically wolverine and caribou, including from noise disturbance.
Effects on sensitive species and species of interest to Indigenous peoples, including grizzly bear and trumpeter swan, as a result of the change and disruption of their habitat and migration.

Effects to the sensitive species that may come into contact with potentially hazardous chemicals in the stormwater pond.
Clarity on when wildlife field assessments were conducted for the Project to ensure seasonal changes in occurrence are captured to provide adequate baseline information. Consider the use of wildlife cameras to capture an accurate representation of wildlife using the area across the year.
Effects on moose populations as a result of heavy traffic.
Effects on wildlife from sensory disturbance and mortality during site preparation.
Vulnerable Population Groups (GBA+)
Analysis of the current environment, considering demographics, socio-economic conditions and cultural trends, including relevant laws and policies.
Assessment of positive and negative effects through a GBA+ approach on diverse groups of people, across the Project's lifecycle, including clarity on efforts to narrow gender gaps and other disparities.
Inclusion of monitoring programs to reveal inequalities and design mitigation strategies regarding effects to specific populations.
Clarity on consultation and engagement processes that ensure transparency and inclusivity, including barriers to participation in consultation for local under-represented groups.
Water – Groundwater and Surface Water
Inclusion of an operational and management plans related to the water intake, including the timing, volumes, permitting, and monitoring of water withdrawal and resulting effects to water levels, fish and fish habitat, and navigation.
Effects on water quality from construction and operation of the Project, including from wastewater, stormwater, and process water discharge, and accidental releases of solid, liquid, or hazardous waste.
Effects on nearby watercourses, including Big Mountain Creek and Smoky River.
Effects on groundwater, notably from contamination and petroleum/chemical spills.
Clarity on expected amounts and management of wastewater.