Summary of Issues

Black Bear Power Plant Project

Table I – Issues to Inform the Impact Assessment Agency of Canada's Decision on Whether an Impact Assessment is Required

The following table provides a high-level summary of key issues within areas of federal jurisdiction that were submitted to the Impact Assessment Agency of Canada (IAAC) about the Black Bear Power Plant Project (the Project) during the public comment period on the Summary of the Initial Project Description, submitted by Kiwetinohk Energy Corp. (the Proponent). In addition to issues raised by federal and provincial authorities, Indigenous groups, and the public, IAAC also included issues it considers relevant in this table. The issues included below relate to information that will support decision making by IAAC on whether an impact assessment is required under section 16 of the *Impact Assessment Act*. The original submissions are available online, on the Canadian Impact Assessment Registry Internet site for the Project (Reference Number 88747).

Where there are cross-cutting issues relating to multiple areas of federal jurisdiction, IAAC has included these issues under the heading for the primary effect pathway and noted the other areas of federal jurisdiction that would apply.

Issues

Fish and Fish Habitat

Describe potential effects to fish and fish habitat and identify waterbodies (streams, lakes, wetlands) that have the potential to be directly or indirectly affected by project activities. Provide additional information on the Project's potential to cause direct or indirect effects on the identified waterbodies during construction and operation.

Migratory Birds and their Habitat

Clarify how the Project will comply with the *Migratory Birds Convention Act*, 1994 and its regulations, and provide details of planned monitoring measures for migratory birds that nest in or around project infrastructure.

Provide additional information on potential project effects on migratory birds (e.g. habitat loss, sensory disturbance from light, noise, and vibrations, worker presence, accidental spills, etc.), and proposed monitoring, avoidance, and mitigation measures to address these effects.

Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes

Provide additional information on species of vegetation used for cultural purposes that are or may be found in the project area, including species of cultural significance to Indigenous peoples.

Provide additional information regarding potential project effects to Indigenous peoples' current use of lands and resources for traditional purposes, including consideration of potential cumulative effects of other industrial land use in the region, and proposed mitigation measures to address these effects. If project-related effects are not anticipated, provide a clear rationale to support this conclusion.

Describe potential project effects to culturally significant fish species in the Freeman River, including walleye, northern pike, and rainbow trout.

Provide additional information regarding mitigation measures that will be implemented to address effects to the current use of lands and resources for traditional purposes and

Indigenous peoples' health as a result of noise from project-related components and activities. Include a discussion of the noise disturbance communication plan and noise complaint resolution process.

Clarify whether any potential traditional land use by Indigenous peoples occurs on or near the project site and describe potential effects that the Project may have on this use, including effects on cultural and traditional practices (e.g. medicines, ceremonies, teachings, etc.), food security (e.g. hunting, gathering, subsistence farming), and spiritual practices. Recommend using a traditional land use study to gain insight into traditional land use by Indigenous peoples.

Indigenous Peoples' Health, Social and Economic Conditions

Provide additional information regarding potential project effects on Indigenous people's use of lands and resources for current and future economic development purposes, considering the adjacent heavy industrial land use and potential cumulative effects.

Describe potential effects of the Project on Indigenous peoples' health, including access to healthcare and emergency services. Describe mitigation measures, including plans for contingency measures in the event of accident and malfunctions scenarios, timely communication, and plans to address any unexpected emergencies that may strain existing healthcare resources.

Indigenous Peoples' Rights

Describe engagement efforts that will be carried out with all Indigenous groups, including Indigenous youth, who may be impacted by the Project or have interests in the project area. Provide a summary of potential issues, concerns, and/or benefits of the Project that have been expressed through Indigenous engagement efforts to date.

Describe potential impacts of the Project on the rights of the Indigenous peoples of Canada, as recognized and affirmed by section 35 of the *Constitution Act, 1982,* and proposed mitigation measures to address these impacts. Include a summary of key issues or concern and any issues that relate to the adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the *Constitution Act, 1982.*

Describe potential project impacts on Indigenous navigation and the associated exercise of rights as a result of the water intake on the Freeman River.

Indigenous Peoples' Physical and Cultural Heritage and any Structure, Site, or Thing of Historical, Archaeological, Paleontological, or Architectural Significance

Describe potential project effects on Indigenous peoples' spiritual, physical, and cultural heritage, including sites of archaeological and paleontological significance, considering the cumulative effects of other industrial land uses in the project area. Describe mitigation measures that will be implemented to address these effects.

Other Factors that IAAC Considers Relevant

Clarify when carbon capture and storage technology will be operational in relation to the Project's proposed timelines.

Provide additional details on the carbon capture and storage hub, including ownership, the proposed location, construction timing, what the potential effects within federal jurisdiction may be, longevity of storage, whether the hub would be constructed if the Project did not proceed, and any applicable provincial and federal regulatory mechanisms. Discuss any additional pipelines that may be required for the Project with and without the hub, including length and routing options.

Provide details of how the carbon capture and storage system, and associated substances, will be stored and maintained during extended periods when it is not operating, such as during initial station operation if a viable hub has not been identified, or when the hub is undergoing maintenance or is otherwise unavailable for use.

Table II - Other Comments, Advice, and Recommendations

The Impact Assessment Agency of Canada (IAAC) is providing the following table for consideration by Kiwetinohk Energy Corp. (the Proponent). The table includes other comments, advice, and recommendations received from participants on the summary of the Initial Project Description. The issues identified below may relate to areas of federal jurisdiction; however, IAAC is of the view that they are not necessary to inform its determination on whether an impact assessment is required at this time. The issues below will be considered should an impact assessment be required. The Proponent can respond to the following comments as part of its response to the Summary of Issues (Table I) noting that any responses may support the tailoring of the Impact Statement Guidelines and other Planning phase documents, as appropriate. IAAC encourages the Proponent to review and consider all original participant comments available online, on the Canadian Impact Assessment Registry Internet site for the Project (Reference Number 88747).

Issues

Accidents and Malfunctions

Clarify on the potential accident and malfunction scenarios that could lead to the release of contaminants into the surrounding environment for each phase of the Project. Describe potential effects that may occur and proposed mitigation measures to address these effects.

Acoustic Environment

The Alberta Utilities Commission noted that the Proponent will be required to comply with Rule 012: Noise Control, which would require the implementation of noise mitigation measures and sound level surveys following construction.

Recommend that the noise impact assessment for the Project be delineated by project phase and take into consideration seasonal use of the land by Indigenous groups.

Alternative Means of Carrying Out the Project

Consider the use of alternative and more environmentally friendly energy sources to supply fuel for the Project.

Request that additional information be provided regarding the emissions intensity of facilities that utilize similar technologies as the Project to verify the emissions intensity predicted for the Project.

Request alternative pipeline and transmission line routes be considered to avoid new disturbance and, where possible, restoration of construction areas to functional habitat.

Atmospheric Environment

Consider providing an air quality assessment, including baseline information, for all substances or air pollutants generated during each phase of the Project, including nitrogen oxides, sulphur oxides, dust, particulate matter (PM, PM2.5, and PM10), carbon monoxide, hydrogen sulphide, ozone, diesel particulate matter, volatile organic compounds, polycyclic aromatic compounds, metals, and other substances that may be released from project activities and components. Address the inconsistencies in air quality modelling between Appendix N and Appendix O in the Initial Project Description.

Consider using the most up to date 2025 Canadian Ambient Air Quality Standards values for nitrogen dioxide in the Emissions Intensity Report as construction begins in 2026.

Provide a rationale for the representativeness of the chosen air quality monitoring stations within the project area, including distance from the Project, nearby industrial activities, potential nearby receptors, and historic geographic data.

Climate Change and Greenhouse Gas Emissions

Concerns regarding the efficacy and efficiency of carbon capture technology as a mitigation measure for greenhouse gas emissions. Recommend that project-related greenhouse gas emissions and associated contributions to climate change be assessed under the assumption that carbon capture technology is not used for the Project.

Clarify the length of time that the Project is predicted to emit greenhouse gases at a rate of 383 tonnes of carbon dioxide per gigawatt hour and whether the Project's greenhouse gas emissions are likely to exceed the allowable limits set by the Government of Alberta.

Clarify whether the Project will be subject to a Technology Innovation and Emissions Reduction credits program prior to the incorporation of carbon capture and storage technology.

Provide an estimate of potential greenhouse gas emissions associated with the maximum power output of 460 MW.

Consider assessing the Project's greenhouse gas emissions and climate change impacts in accordance with the Strategic Assessment of Climate Change, including development of a plan to achieve net zero emissions by 2050.

Engage with Indigenous groups regarding how to incorporate Indigenous knowledge and experience into the assessment of the potential effects of climate change from greenhouse gas emissions on Indigenous peoples and to inform sustainable project development.

Describe the Project's resilience to future climate change and how this has been or will be considered in project design, where relevant. Include considerations of climate change in quantifying project-related water needs and the estimate of the stormwater pond capacity, including the use of more suitable intensity duration frequency data.

Cumulative Effects

Provide information on the potential cumulative environmental, social, health, and economic effects of past, present, and reasonably foreseeable future projects within the vicinity of the Project, in combination with project effects, and their potential to affect public and Indigenous peoples' health and impact on Indigenous peoples' rights.

Drinking Water

Assess the potential effects of the Project on human health from changes to drinking water quality (i.e. through drinking water usage of the Freeman River), including details of the proposed industrial runoff plan.

Economic Conditions

Clarify how the predicted \$400 million and \$30 million in value-added contributions to the local economy from the construction and operation phases of the Project, respectively, was calculated. Delineate this information by municipal benefits, provincial benefits, and federal benefits.

Provide additional information on the Project's plan for employment, including how the number of attributed jobs during construction was calculated, expected salaries, how many employees would be hired directly by the Proponent, and how the employment opportunities during construction and operation will be distributed among local, provincial, national, and/or international job markets.

Clarify where or how the 350 to 700 employees will be housed during construction and what mitigation measures would be in place to address project effects to housing in local communities.

Consider undertaking additional studies to understand the health, social, and economic context of the region in order to inform how to best address the effects of the Project on health, social, and economic conditions, and what solutions are necessary to deal with those effects appropriately.

Fish and Fish Habitat

Fisheries and Oceans Canada recommends that the Proponent submit a Request for Review, given that the Project may overlap with areas in which aquatic species at risk may be present.

Fisheries and Oceans Canada noted that they require additional information regarding the construction methods to be employed, location of disturbances, and proposed mitigation measures to limit potential effects to fish and fish habitat, in order to determine whether residual project effects may trigger the requirement for a *Fisheries Act* authorization.

Indigenous Knowledge

Consider integrating Indigenous Knowledge into project development and the assessment of cumulative effects, taking into consideration that Indigenous groups are disproportionately affected by the effects of climate change.

Indigenous Peoples' Rights

Conduct an assessment of potential project impacts on the rights of Indigenous peoples, disaggregated by Indigenous group, and identify potential mitigation and accommodation measures to address these impacts, in consultation with Indigenous groups.

Indigenous Peoples' Social and Economic Conditions

Consider inclusion of disaggregated data in the assessment of effects to Indigenous peoples' socio-economic conditions, particularly for the three closest First Nation reserves and District 21 of the Otipemisiwak Métis Government.

Clarify the hiring and retention approaches, including how principles of Gender-based Analysis Plus (GBA Plus) will be integrated into hiring processes, particularly with respect to local, Indigenous, and underrepresented populations.

Describe the Project's potential to offer economic benefits for Indigenous groups, such as through employment opportunities, training, increased economic activity in the region, or opportunities for becoming financial stakeholders.

Provide additional demographic information about the Indigenous groups that may be affected by the Project.

Provide additional information regarding the benefits of the proposed Indigenous micro-loan program.

Navigation

Transport Canada noted that the Proponent should determine the regulatory requirements for an intake on the Freeman River (i.e. a navigable waterway) using the Project Review Tool on the Navigation Protection Program's website.

Species at Risk, Terrestrial Wildlife, and their Habitat

Provide additional information about potential effects to wildlife due to the Project, including loss of habitat, attractiveness of the stormwater pond to birds and amphibians, risks of wildlife accessing food sources like garbage, and details of the planned ethical management of wildlife. Discuss proposed mitigation and monitoring measures.

Provide additional information regarding species at risk, including species identified by the Committee on the Status of Endangered Wildlife in Canada, and critical habitat that may interact with the Project, potential effects to species at risk, and mitigation and monitoring measures to be implemented.

Consider the development of additional mitigation measures, in consultation with Indigenous groups, to ensure project effects to wildlife are minimized, including restoration of habitat in areas adjacent to the project site or elsewhere to offset habitat loss, restoration using native plants, and monitoring of wildlife.

Vulnerable Population Groups (GBA Plus)

The incorrect acronyms and definitions for "GBA Plus" and "2SLGBTQIA+" are used in the glossary of the Initial Project Description and should be revised.

Discuss the Project's potential to increase gender-based violence and include any mitigation measures proposed to address this effect. Consider the Project's workforce, including a potential increase in transient, non-local workers, and how different populations (e.g., women, youth, children, (dis)abled, etc.) in the participating Indigenous groups may be affected by project-related social effects.

Discuss employment opportunities for diverse groups using a GBA Plus lens.

Water – Groundwater and Surface Water

Provide information on the proposed water withdrawal from the Freeman River, including seasonal river flow rates and how they would be affected, potential effects to riparian zones, any other sources of water withdrawals that may affect flow. Discuss proposed mitigation measures to address project effects to the Freeman River and planned monitoring to ensure that the amount of water withdrawn does not affect fish and plant species in the river.

Provide additional information on potential direct and indirect effects of project components or activities on wetlands, including changes to wetland function, and proposed mitigation measures that will be implemented to offset permanent wetland loss due to the construction of the Project, such as wetland restoration and/or compensation.

Other Factors that IAAC Considers Relevant

Discuss potential positive social and economic benefits to the surrounding municipalities that may occur as a result of carrying out the Project.

Provide additional information on natural gas demand requirements for the Project.

Describe planned monitoring of project facilities and pipelines to ensure safety and to minimize project effects to the environment.

Provide additional information to support production capacity estimates for the Project and the purpose of and need for the Project.

Discuss the operational status of the drilled oil well pads described in the Initial Project Description.