

## SUMMARY OF ISSUES – Marguerite Lake Compressed Air Energy Storage Project

This document provides a high-level summary of issues that were submitted to the Impact Assessment Agency of Canada (the Agency) about the Marguerite Lake Compressed Air Energy Storage Project (the Project) during the public comment period on the Summary of the Initial Project Description (IPD), submitted by Federation Group Inc. (the Proponent). The issues highlight information that will be considered by the Agency in forming its opinion on whether an impact assessment would be required. If the Agency is of the opinion that an impact assessment would be required, this information will also be considered, as applicable, in the development of planning phase documents where the Proponent is willing to work collaboratively on the impact assessment. Original submissions from participants can be found online on the Canadian Impact Assessment Registry Internet Site for the Project (Reference Number 87154).

The Agency encourages the Proponent to provide a response to the Summary of Issues that details how it intends to address these issues, as part of its Detailed Project Description. The Detailed Project Description should contain the information from the IPD, with new information integrated throughout the main body of the document as appropriate to respond to the issues raised. This will facilitate understanding by assessment participants, including Indigenous Peoples, the public, federal authorities, provincial ministries and municipalities.

Issue
<b>Fish and Fish Habitat</b>
Clarify potential effects to fish and fish habitat in relation to the natural gas supply pipeline and how these effects will be addressed.
Clarify whether potential effects to surface water and subsequent effects to fish and fish habitat have been considered.
<b>Migratory Birds, Other Birds and Their Habitats</b>
Need for mitigation details and monitoring measures for migratory birds that nest on human infrastructure or man-made features.
Clarify potential effects to migratory birds related to sensory disturbances, including how potential effects will be addressed.
Comment regarding the proponent obligations stemming from the <i>Migratory Birds Convention Act, 1994</i> and its regulations.
Need for information on potential effects to migratory birds related to the stormwater pond, and how these effects will be addressed.
<b>Species at Risk, Terrestrial Wildlife and Their Habitats</b>
Clarify mitigation measures for impacts to amphibian species at risk, which may arise from loss and indirect impacts to wetlands.
Concern regarding land use change and potential effects to species at risk and terrestrial wildlife such as sensory disturbances and cumulative effects, and how potential effects will be addressed.
Need to provide an inventory of all species at risk and any critical habitat that may interact with the Project. Include avoidance, mitigation, and monitoring measures.

Concern regarding potential effects to terrestrial wildlife. Request that the Project not harm wildlife.
Outline mitigation measures to reduce on-site vehicular traffic collision with wildlife.
<b>Climate Change and Greenhouse Gas Emissions</b>
Describe the Project's resilience to future climate change, and where relevant, how it is considered in project design.
Clarify the Project's greenhouse gas emissions and contribution to climate change following the Strategic Assessment of Climate Change and the Government of Canada's long-term goal to achieve net-zero emissions by 2050. Include the Project's impacts on carbon sinks.
Concern regarding long-term investments in fossil fuel electricity generation and carbon emissions.
Clarify how carbon capture or other mitigation measures are being considered to reduce the Project's greenhouse gas emissions, including technical and economic feasibility.
Need for additional information and clarification on project greenhouse gas emissions estimates for all phases of the Project, including emissions from acquired energy.
<b>Indigenous Engagement and Consultation</b>
Need for additional information on meaningful engagement with Indigenous Peoples and clarity on engagement that has occurred, and ongoing and/or pending engagement activities.
Comment regarding the adequacy of consultation and engagement with Indigenous Peoples.
<b>Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes</b>
Clarify potential effects to wildlife and vegetation, corresponding to potential effects on harvesting rights, traditional food sources and food security of Indigenous Peoples, and how these effects will be addressed.
Concern regarding the proximity of the Project to Harvesting areas and traditional use areas. Clarify changes to access for traditional use.
Clarify potential impacts to current use of lands and resources for traditional purposes.
<b>Health Conditions of Indigenous and Non-Indigenous Peoples</b>
Need to identify and locate sensitive receptors (e.g., hospitals, schools, retirement complexes, assisted care homes) and traditional land use when determining potential project-related impacts on human health during all phases of the project.
Clarify potential surface water, groundwater and soil quality changes from the Project. Consider existing water sources, how Indigenous Peoples consume water, and potential effects on human health.
Need for additional information on country/traditional foods used by Indigenous Peoples, potential effects to these foods, food security or human health.
Need for additional information regarding noise and air quality as they relate to potential effects on human health, and how these effects will be addressed.
Need for additional information regarding potential effects on geological stability considering the subsurface storage component of the Project.
<b>Indigenous Peoples' Social and Economic Conditions</b>
Clarify Indigenous employment, economic opportunities and participation, including any barriers and how the Project ensures equitable outcomes for Indigenous communities.

Need for demographic information for Indigenous Peoples and proximity of Indigenous communities to the Project.
<b>Social and Economic Conditions of Non-Indigenous Peoples</b>
Clarify where the workforce for the Project will be sourced and whether a local workforce will be trained. Provide details on the workforce and proactive equality, diversity and inclusion measures.
Need for additional information on the project budget and local spending to help evaluate the local economic impact.
Need for additional information regarding the Project's impact to the local economy and consideration of the lack of local services in the area.
Clarify any assistance that will be given to employees once the Project has reached the end of its lifespan.
Clarify the Project's job creation, direct or indirect.
Clarify employee compensation and working conditions to help determine the Project's economic effects.
Need for engagement with Employment and Social Development Canada (ESDC) programs. Consider sharing information with the Indigenous Skills and Employment Training (ISET) service delivery providers and meeting with ISET agreement holders.
<b>Vulnerable Population Groups (Gender-Based Analysis Plus)</b>
Consider Gender-based Analysis Plus at all stages of the Project, including a Gender-based Analysis Plus assessment of possible social and health impact of various population groups within two kilometers of the disturbance area or more.
<b>Acoustic Environment</b>
Need information related to ambient noise surveys, timing of construction activities, predicted noise levels during construction and operations, mitigation of noise effects and follow-up plans.
<b>Surface Water and Groundwater</b>
Need for additional details on existing water sources for drinking and recreational use. Clarify potential effects and mitigation measures.
Comment regarding potential impacts to groundwater related to the subsurface storage activities and brine disposal. Request for details of the groundwater and stormwater management plans.
<b>Wetlands</b>
Need for additional information on wetlands to understand potential effects and mitigation measures, including the potential for direct and indirect impacts.
<b>Soils</b>
Need for additional information on baseline soil conditions and details for reclamation.
<b>Cumulative Effects</b>
Need for additional information regarding cumulative effects and potential monitoring of these effects. Clarify whether the cumulative effects analysis includes traditional knowledge.

<b>Need for the Project</b>
Need for additional information on the intended use of the proposed compressed air energy storage, to provide an estimate and justification for the yearly operating hours and the required storage duration.
<b>Alternative Means of Carrying Out the Project</b>
Need for clarification on the feasibility of fossil-free alternatives.
Clarify whether construction equipment will have the most modern and clean engines. Consider within the context of air quality and potential impacts to terrestrial and aquatic ecosystems.
<b>Accidents and Malfunctions</b>
Need for further information on potential accident and malfunction scenarios that could lead to the release of contaminants into the surrounding environment for each phase of the Project. Consider potential effects and how these effects will be addressed.
<b>Waste and Emissions</b>
Clarify the potential effects on air quality considering land clearing activities (burning) and potential deposition of materials in the surrounding environment.
<b>General Project Description</b>
Need for additional information on incidental activities (e.g. natural gas supply line, telecommunications, electrical transmission line) including routing, portions that are solely for the benefit of the Project, potential effects, and how they will be addressed.
Clarify the amount of energy used in compression mode versus energy recovered in the expansion mode.
Clarify the water volume and water source(s) for the Project, including the solution mining component.
Need for additional technical and financial details on the feasibility of hydrogen co-firing and full hydrogen retrofit.
<b>Other – Editorial Comments on the Initial Project Description</b>
Table 14-1 incorrectly lists Peregrine Falcon and Pileated Woodpecker as Species at Risk on Schedule 1 of the <i>Species at Risk Act</i> .
Table 14-1 incorrectly lists Common Nighthawk and Short-eared Owl as Threatened under Schedule 1 of SARA.