

Hydrogen Ready Power Plant Project – Summary of Issues

This document provides a high-level summary of the issues submitted to the Impact Assessment Agency of Canada (the Agency) on the Hydrogen Ready Power Plant Project (the Project) during the comment period on the Initial Project Description submitted by the Eastern Power Inc. (the Proponent). The issues highlight the information needed to support the Agency’s decision on whether an impact assessment is required under section 16 of the *Impact Assessment Act* and— if an assessment is required — to inform the planning phase documents and further assessment. Original submissions are posted on the Canadian Impact Assessment Registry (Reference Number #83696). Categories of issues are listed in alphabetical order.

The Detailed Project Description must contain the information from the Initial Project Description in addition to the necessary information provided in response to the Summary of Issues. This necessary information should be included in the main body of the Detailed Project Description, and not just in appendices to facilitate understanding by participants, including the public and Indigenous communities.

Accidents and Malfunctions
Need for more information on accidents and malfunctions (i.e. spills, fires, and explosions), and associated mitigation measures and safeguards.
Acoustic Environment
Comments that emphasized the potential impacts of construction noise on human health.
Alternatives Assessment (including Alternatives to the Project and Alternative Means)
Need for information on the feasibility and cost effectiveness of alternatives to the Project, such as battery storage from renewable energies (i.e. solar, wind) and fuel cells.
Atmospheric Environment (e.g. air quality, vibrations)
Need for more information on potential effects of the Project on air quality during construction and decommissioning phases. Need for further details on the proposed mitigation measures and monitoring plans to address impacts to air quality.
Need for more information on air quality for the 100% hydrogen scenario, with consideration of increasing nitrogen dioxide emissions as the Project progresses towards 100% hydrogen. Need for information on any additional mitigation measures that may be required.
Comments regarding potential impacts of air emissions from the Project to wildlife and vegetation, including ground-level ozone, volatile organic compounds, polycyclic aromatic hydrocarbons and particulate matter.
Climate Change and Greenhouse Gas Emissions (GHGs)
Need for description of commitments that have been or will be made with hydrogen suppliers and contingencies for hydrogen supply delays.
Comments related to the potential for hydrogen to be sourced from production technologies that produce high GHG emissions.
Need for more information on how the schedule for conversion from natural gas to hydrogen will be adhered to so as not to impede Canada’s ability to achieve its 2030 and 2050 GHG targets.
Need for more information on how the Project will meet Canada’s commitment for a net-zero electricity grid by 2035. The current estimates for GHG emissions from the Project exceed net-zero beyond 2035.
Cumulative Effects
Comments related to potential cumulative effects from the Project in combination with existing or planned projects (e.g. transmission lines, manufacturing and production plants, natural gas pipelines) on human health, social and economic conditions, and the biophysical environment.
Economic Conditions
Comments regarding hiring strategy, including implementation of hiring practices to promote and support diversity and inclusion.

Engagement with Indigenous People
Engagement activities must be respectful of Indigenous protocols. Need for information on Proponent's future engagement activities planned with Indigenous communities, including the sharing of Project materials, efforts to contact communities and requests for engagement (i.e. funding).
Comments on how issues raised by Indigenous communities were used to inform the development of the project design.
Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes, and Exercise of Aboriginal and/or Treaty Rights
Need for information about potential effects of Project on the Bickford Oak woods Conservation Reserve, as it relates to effects on current use of lands and resources for traditional purposes (e.g., hunting, trapping, gathering, accessing sacred spaces), and impacts on the exercise of Aboriginal and/or treaty rights, and associated mitigation measures.
Need for information on potential cumulative effects from the Project on Indigenous communities (air quality – methane emissions) and their exercise of Aboriginal and/or treaty rights.
Indigenous Peoples' Health and Well-being
Comments regarding potential human health risks from changes in air quality, including contaminant exposure for which there is no safe level of exposure (i.e. nitrogen dioxide and particulate matter emissions), and exposure to ground-level ozone created from the reaction between nitrogen oxides released from the Project and sunlight.
Comments regarding potential effects of the Project on water quality, and the associated human health risks.
Comments on the potential increase in gender-based violence towards Indigenous people, in particular women and girls, due to the influx of workers into the area.
Indigenous Peoples' Social and Economic Conditions
Need for more information on the potential effects to economic conditions of local Indigenous communities, including positive (e.g. purchasing of goods and services from the communities, training and hiring of community members) and negative effects (e.g. impacts to traditional territory and to traditional economic and resource use near the project site).
Comments that emphasized the need for resources for local Indigenous Skills and Employment Training Service delivery providers to support an inclusive labour force.
Need for more information on baseline social and economic context and associated potential effects on local Indigenous communities' social and economic condition.
Indigenous Peoples' Spiritual, Physical, and Cultural Heritage
Comments on potential project effects on archaeological, physical and cultural heritage resources.
Need for further information on how the Project would meet the requirements of Ontario Ministry of Tourism, Culture and Sport's <i>Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes</i> and associated mitigation measures in the event archaeological resources are uncovered during ground disturbing activities.
Migratory Birds
Comments on the use of dated data on potential for birds to be present on the project site and surrounding area.
Need for the Project
Comments on the new Independent Electricity System Operator's procurement and mandatory requirements, and any implications to the Project.
Project Activities and Design
Need for clarification on whether the Project could impact the accessibility to known plugged or abandoned petroleum wells within the project site, and information on how the Project would meet the requirements of Ontario's <i>Oil, Gas and Salt Resources Act</i> .
Comments regarding desire for local Indigenous communities to receive draft detailed project design drawings prior to issuance for construction.

Public and Stakeholder Engagement
Comments on planned engagement activities for local residents.
Species at Risk, Wildlife, and their Habitat
Need for recent information on wildlife and the potential occurrence of species at risk within the project area. Need for information on potential adverse effects of the Project on wildlife, including species at risk and their critical habitat, and associated mitigation measures and monitoring plans.
Comments about potential adverse indirect effects to species at risk and their habitat (e.g., Clay Creek Woodland Area of Natural and Scientific Interest and Bickford Oak Woods Conservation Reserve).
Clarify any permitting requirements for project components located with the St. Clair Region Conservation Authority regulated area (Ontario Regulation 171/06).
Water
Comments on identification of mitigation measures that will be used during construction and operation to protect water quality in Government Drain #10, including their function and effectiveness.
Comments raised regarding potential for contaminants from construction fill to adversely affect water quality in Government Drain #10.
Wetlands
Need for information on potential direct and indirect effects of the Project on the function (e.g. biological, social, hydrological) of the Bickford Oak Woods Wetland Complex.