

**Comment Form – Information to Inform the Summary of Issues**

**Project:** Hydrogen Ready Power Plant Project

**Proponent:** Eastern Power Inc.

**CIAR No.:** 83696

**End of comment period:** July 13, 2022

Indigenous Group Name: Chippewas of Kettle and Stony Point First Nation	
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The Impact Assessment Agency of Canada invites your community to provide information it has available at this time on the Project and its potential effects or impacts (both positive and negative) to the environment and to your community and your Aboriginal and/or Treaty Rights. We also welcome your input on how you would like to be engaged throughout the potential assessment process. Your comments will inform the Summary of Issues<sup>1</sup> with respect to the Project and will be provided to the Proponent to address. You may use this form or use another format of your choice.

All comments should be submitted via the **Submit a Comment** feature available on the Project’s Canadian Impact Assessment Registry page (Reference 83696 at <http://iaac-aeic.gc.ca/050/evaluations/proj/83696?culture=en-CA>). Letters and forms can be uploaded using this feature. If you have any difficulties submitting this way, please contact the Agency at *Hydrogen-Hydrogene@iaac-aeic.gc.ca* for assistance.

**1. General environmental effects**

Please identify any environmental effects of the Project that are of concern to your community, including any that you think of that were not identified in the Initial Project Description.

Generally, CKSPFN asks that IAAC consider the issues raised in documents IAAC was previously copied on May 13, 2022 regarding a correspondence to Eastern Power Inc. (the Proponent) and a correspondence on May 19, 2022 to the Ontario Ministry of the Environment, Conservation and Parks (MECP) regarding comments on the Proponent’s final ESRR and the Section 16 Order Request under the provincial Environmental Assessment Act, respectively. Additionally, we ask that IAAC consider the comments expressed verbally to the Agency during our June 24<sup>th</sup> meeting.

**Natural Environment**  
Bickford Oak Woods is subject to Ontario’s “Bickford Oak Woods Conservation Reserve Management Plan, which includes efforts to protect this ecologically unique area that exists in the extreme southwest region of Ontario where the eastern deciduous forest of North America has its most northern limits. The Conservation Reserve Management Plan recognizes that this type of habitat is not well represented in southern Ontario due to extensive forest loss and fragmentation. Protection of this interior Carolinian forest is highly important to the conservation of biological diversity and natural heritage in southern Ontario. CKSPFN considers all Carolinian habitat and its species in Southwestern Ontario to be of direct cultural heritage value to the community.

The Proponent has not assessed potential project impacts on tree relatives important to CKSPFN and other First Nations, including swamp cottonwood (*Polulus heterophylla*, the only strand of swamp cottonwood in Canada), rare pin oak (*Quercus shumardii*), American sycamore (*Platanus occidentalis*), flowering crabapple, tulip tree (*Liriodendron tulipifera*), yellow birch (*Betula alleghaniensis*), redbud (*Cercis canadensis*), chinquapin oak (*Quercus muehlenbergii*) and Endangered American chestnut (*Castanea dentata*).

<sup>1</sup> The Summary of Issues is a list of issues raised in the Planning Phase prepared by the Agency, as per section 14(1) of the *Impact Assessment Act*. This document provides the proponent with an understanding of issues and allows participants to see how their comments and concerns have been characterized.

In Section 2.2.2.2 of Eastern Power's Appendix-17.8-HRPP-Nat-Res-Base-IES-1, Eastern Power admits that (1) one breeding bird survey was conducted outside the breeding bird period and (2) no SAR bird species are expected to be present within the Project footprint. CKSPFN rejects these claims, given the (1) number of bird survey's conducted and (2) Project's proximity to the Clay Creek Woodland Area and the Bickford Oak Woods (which includes a Provincially Significant Wetland).

### **Species at Risk**

The project's impacts on Species at Risk (SAR) is a large gap in the ESRR. In the Final ESRR and IPD, it is concluded that "*the project will not have negative impacts on rare, threatened or endangered species of flora or fauna*", based on findings from an outdated (2012) Environmental Impact Study (EIS). It is notable that planning authorities typically treat the findings of EIS studies as insufficient and in need of updating once field data is any more than 5 years old. Given these findings, it is unreasonable and not aligned with best practices for the ESRR to conclude that there will be no impact on Rare, Threatened, or Endangered species by relying on the conclusions of an EIS that is now ten years old.

In addition to the above noted comments on Species at Risk (SAR), the NHIC shows records of the following in grid squares 17LH8337 and 17LH8338 with the noted provincial SAR status. Impacts on these species are not explicitly addressed in the ESSR:

- Cerulean warbler (*Setophaga cerulea*) – Threatened
- Eastern meadowlark (*Sturnella magna*) – Threatened
- Riddell's goldenrod (*Solidago riddellii*) – Special Concern
- Shumard Oak (*Quercus shumardii*) – Special Concern
- Additionally, there is record of the following species, which is listed as Endangered federally.
  - Striped whitelip (*Webbhelix multineata*)

### **Water**

In 2017, CKSPFN Council Resolution 2851 asserted ownership to the lakebed and waterways within the traditional land base. To date, CKSPFN has seen little Crown or project proponent honouring this assertion with respect to the Duty to Consult. The HRPP would be located approximately 200m from Clay Creek, which includes a riparian corridor through the Bickford Oak Woods Conservation Reserve. Bickford Oak Woods is the largest protected Carolinian clay plain forest in Canada and of significant ecological importance to our First Nation. Knowing this, the HRPP has the potential to create adverse impacts on our waters and constitutionally protected Aboriginal and Treaty Rights.

CKSPFN is concerned about the increased demand for water for the Hydrogen Ready Power Plant for process cooling. In Section 4.4.4 of the IDP (p. 47), the Proponent discloses that the "HRPP Project will require water supply of up to about 200 liters per second for boiler feedwater and condenser cooling circuit make-up." Given the amount of water required to service the HRPP Project, the Proponent failed to (1) notify and Consult CKSPFN on water-related matters, (2) disclose 'how' they will be acquiring water, and (3) disclose the type of permit they will need in order to take water.

### **Air Emissions**

In Section 9.5 of Eastern Power's Appendix-17.2-HRPP-AQIS-1, Eastern Power admits that NO<sub>x</sub> emitted by the project will potentially react in the presence of sunlight to produce ozone, at some location downwind of the facility. The relationship between ozone exposure and respiratory mortality and morbidity for humans, mammals, reptiles and amphibians is well-established and must be assessed to protect our Aboriginal and Treaty Rights. Current literature indicates that ground level ozone can negatively impact the growth and flowering of plants, and alter species composition and richness Furher et al., (2016). Furher et al., adds that effects can occur below-ground, such as changes in soil invertebrates, plant litter quantity and quality, decomposition and nutrient cycling and carbon pools.

The Initial Project Description (IPD) notes in Table 6 the direct GHG emissions of the Hydrogen Ready Power Plant (HRPP) over the project's lifetime. The Strategic Assessment of Climate Change (SACC) - the strategy that provides guidance related to climate change throughout the impact assessment process - defines direct emissions as "GHG emissions generated by activities that are within the defined scope of the project" which includes Scope 1 (i.e., direct emissions) as well as Scope 2 (i.e., indirect emissions from purchased electricity, steam, heating and cooling for project use) emissions. It is important to note that the SACC does not require the

Proponent to disclose Scope 3 (i.e., upstream) emissions in the IPD, which includes emissions from all stages of production that are not owned or controlled by the Proponent. Accounting for upstream emissions would only be considered in the Impact Statement, if the Tailored Impact Statement Guidelines confirms that an upstream GHG assessment is required. Given that the HRPP will predominantly source natural gas to generate energy for the province of Ontario, the IPD does not accurately capture domestic as well as non-domestic emissions from all stages of production, particularly from the point of resource extraction, which includes but is not limited to the drilling and transportation of natural gas, as well as non-intentional leakages (e.g., fugitive emissions). As such, CKSPFN strongly urges the Agency to decide that an impact assessment is required to review this project and ensure that 1) all emissions (e.g., direct and non-direct) are considered in this project; 2) IAAC consider the feasibility of hydrogen blending (i.e., integrity issues associated with hydrogen transportation in pipelines); 3) IAAC consider the source of hydrogen and whether it supports a sustainable transition towards net zero (i.e., hydrogen produced via steam methane reforming is not a clean fuel); and 4) IAAC consider whether projects such as the HRPP Project support Canada's 2030 Emissions Reduction Plan and Canada's binding national and international GHG targets.

### **Cumulative Impacts**

CKSPFN is concerned about the ongoing and cumulative impacts of methane emissions across the treaty lands due to the 110-year history of natural gas extraction, storage and use in the region, and the continued growth of natural gas use for industrial purposes and energy generation. Natural gas storage, transportation, distribution, processing and use for generating electricity constitutes a major and growing industry in our treaty lands. The natural gas industry in the treaty lands is a major source of fugitive emissions of methane, with significant sources from natural gas fueled electricity generation. The cumulative effects of methane emissions are not dealt with in the ESRR and IPD.

The proposed HRPP will contribute to the already significant cumulative effects of oil and gas infrastructure within CKSPFN treaty territory. The proposed project is less than 20 metres from the existing Green Electron 300MW gas plant, approximately 2 kilometers from the Greenfield Energy Centre 1000MW gas plant on Bickford Line in Courtright, 2.5 kilometres to CF Industries Courtright Nitrogen Complex, 3 kilometers to the OPG/Atura planned site for hydrogen production, and adjacent to a pipeline corridor with several pipelines feeding the Chemical Valley. CKSPFN's rights to hunt, fish, and trap in the area have been significantly impacted by the industrialization and fragmentation of our treaty lands over the last 100 years, and those impacts are not characterized in the ESRR and IPD.

The proponent and IAAC should include the following proposed projects in the cumulative effects assessment, including attention to effects on Agricultural Resources, Cultural Heritage Resources, Land Use and Communities, Natural Environment Resources (physical, atmospheric, surface water, groundwater, source water protection, designated or special natural areas, vegetation, fish and fish habitat, woodlands, species at risk, wildlife habitat, invasive species), Indigenous Community VECs and Interests, Recreational Resources, Visual and Aesthetic Resources, Gender Based+ related impacts, and Built Environment Infrastructure such as infrastructure crossings, and interactions with wind turbines, roads/highways/bridges, other pipelines, etc.:

- Hydro One Networks Inc. - Chatham Switching Station
- Hydro One Networks Inc. - Lake shore Transmission Stations Project Leamington Transformer Junction
- Hydro One Networks Inc. - Chatham to Lakeshore Transmission Line
- Hydro One Networks Inc. - St. Clair Transmission Line
- Highway 401 Improvements - Tilbury to London
- Enbridge - Dawn to Corunna Natural Gas Pipeline
- Enbridge Panhandle Regional Expansion Natural Gas Pipeline
- 2,000+ Megawatts of electricity generation and storage required by Ontario's Independent Electricity System Operator in the Treaty lands

## **2. Effects to physical and cultural heritage**

Please describe how Project effects to the environment, could result in impacts to your community's physical and cultural heritage (e.g. ceremonial sites, burial sites, cultural landscapes).

The project will have an immediate impact in terms of cumulative effects on the area, and CKSPFN enjoyment and use of natural heritage and the land. This area is one of the largest areas with public access to hunting and fishing for Indigenous communities in the Traditional Territory.

CKSPFN elders have knowledge of historic Indigenous agroforestry in the region, including deciduous tree relatives that hold great significance to our people. The HRPP has the potential to create adverse impacts on our constitutionally protected Aboriginal and Treaty Rights. The proponent denied CKSPFN's request for capacity funding. As such, we have not been able to further explore the current and historical use of lands with community knowledge holders. CKSPFN urges IAAC to move the project into a full federal impact assessment in part, to allow our nation to research and report back to IAAC on the impacts to our physical and cultural heritage.

CKSPFN Consultation has yet to be provided an opportunity to reach out to band members and hear their thoughts on the impact of the proposed HRPP on the environment, which can result in impacts to CKSPFN physical and cultural heritage. This is a process that could occur parallel to a federal Environmental Assessment, should Eastern Power choose to facilitate meaningful consultation through a capacity funding agreement.

### **3. Effects to current use of lands and resources for traditional purposes**

Please describe how Project effects to the environment could result in impacts to your community's current use of lands and resources for traditional purposes (e.g. hunting, fishing, trapping).

CKSPFN was denied a request for capacity funding make during a February 18, 2022, meeting with Eastern Power. As such, CKSPFN was unable to conduct studies to determine effects to the environment that could result in impacts to CKSPFN current use of lands and resources for traditional purposes.

CKSPFN elders have knowledge of historic Indigenous agroforestry in the region, including deciduous tree relatives that hold great significance to our people. The HRPP has the potential to create adverse impacts on our constitutionally protected Aboriginal and Treaty Rights.

The Bickford Oak Woods Conservation Reserve Management Plan (Section 1.3) mentions that hunting and trapping are known to have occurred in the area historically. In addition to traditional and community knowledge among the Three Fires communities, this doubly confirms the area's significance to First Nations communities in terms of inherent and treaty rights to harvesting, land-use, and lifeways.

### **4. Effects to structures, sites or things of historical, archaeological, paleontological or architectural significance.**

Please describe how Project effects to the environment could result in impacts to your community's structures, sites or things of historical, archaeological, paleontological or architectural significance (e.g. artifacts, important historic buildings, symbols).

Without proper engagement or sharing of materials (Stage 1, 2, Archaeological Assessment), and without being offered any opportunity to participate in fieldwork, CKSPFN has not had the opportunity to review the potential for these elements in the vicinity of the project area. However, the project area is identifiable as having high archaeological potential, as it is situated near historical trade routes and a historically navigable waterway.

### **5a. Effects to social conditions**

Please describe how the Project could potentially change social conditions that are important to your community.

Social relationships affect both mental and physical health. Reliance on fossil fuel energy generation has a direct impact on physical health of our band members through direct exposure to ground level ozone and particulate matter, as well as contributing to anthropogenic climate change and causing more intense and prolonged heat waves. Fossil fuel energy generation also impacts the mental health of our band members as we see more territory taken up for polluting industries. In a time of reconciliation, addressing the intergenerational trauma of residential schools, and the ongoing crisis of missing and murdered Aboriginal women, IAAC must seriously consider the effects of a project of this nature on the social conditions of our band members across the treaty lands and only a federal impact assessment will include a GBA+ analysis.

### 5b. Effects to health conditions

Please describe how the Project could potentially change health conditions that are important to your community.

CKSPFN is directly impacted by the increasing health risks of ground-level ozone in the territory. During the summer months, the Grand Bend Air Monitoring Station frequently nears or exceeds the Ontario Ambient Air Quality Criteria (AAQC) for 1-hour average ozone concentrations. The AAQC for ground-level ozone in Ontario is set at 80ppb, yet the US Environmental Protection Agency recognizes 70ppb as a more stringent ambient air quality health standard. Any further development in the region risks putting human and environmental health at a greater risk of ground-level ozone exceedances. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapours, and chemical solvents are some of the major sources of oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC). Proposed developments such as Eastern Power's Hydrogen Ready Power Plant will result in the indirect emissions of ground-level ozone. Appendix 17.2 states, "Some NO<sub>2</sub> reacts with sunlight to produce ozone and NO. Some NO reacts with the ozone in the atmosphere to produce NO<sub>2</sub>. The combustion of natural gas also produces trace quantities of various volatile organic compounds (VOC), as non-combusted fuel and trace quantities of polycyclic aromatic hydrocarbons (PAH).

### 5c. Effects to economic conditions

Please describe how the Project could potentially change economic conditions that are important to your community.

CKSPFN treaty territory has been filled with polluting industry and power generation for decades, with direct impacts on the health of our band members that are dispersed across the treaty lands. Adding yet another fossil fuel power plant will limit the ability for cleaner energy generation opportunities in the treaty territory.

### 6. Impact to exercise of rights

Please describe if you expect the Project may impact your community's exercise of rights as protected under section 35 of the *Constitution Act, 1982*, and if so, please describe how.

The Proponent claims on p.12 of the IPD that the Project will have no adverse effects, and that the project study area is not located on lands claimed or owned by any First Nation community. This is demonstrably and inextricably false; the project lies directly within the Traditional Territory of the Three Fires Confederacy, which includes the Chippewas of Kettle and Stony Point First Nation.

CKSPFN rights to hunt, fish, and trap in the area have been significantly impacted by the industrialization of our treaty lands over the last 150 years, and those impacts are not characterized in the Eastern Power ESRR and IPD. CKSPFN's current use of treaty lands includes environmental stewardship, ecological restoration, and protection of species of cultural significance to our First Nation is not characterized or assessed in the final ESRR and IPD.

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CKSPFN Consultation has yet to be provided an opportunity to reach out to band members and hear their thoughts on the impact of the proposed HRPP on their current use of treaty lands. This is a process that could occur parallel to a federal Environmental Assessment, should Eastern Power choose to facilitate meaningful consultation through a capacity funding agreement.

Eastern Power has failed to meaningfully consult CKSPFN regarding the proposed project. CKSPFN has not had any direct dialogue with the Ministry of Environment, Conservation and Parks (MECP), the ministry responsible for making Crown decisions regarding the project. Should IAAC agree with Eastern Power's position that an EA "would appear to address many of the concerns that the IAAC might have", CKSPFN could be left with no opportunity for meaningful Crown consultation on the Project.

This project's potential environmental effects (claimed to be none by the Proponent) have potential direct consequences to the land, sky, and waters of the area, as well as the animals and fish. These effects directly impacts CKSPFN treaty rights and those of other First Nations within the Traditional Territory.

### 7-9. Consultation and Engagement

Assuming a federal assessment is required for the Project, please provide information on the how you would like to be consulted by the Agency.

Please flow all consultation directly through the CKSPFN Consultation Department at [consultation@kettlepoint.org](mailto:consultation@kettlepoint.org).

If a federal assessment is required for the Project, please provide information on the how you would like the proponent to engage your community.

Please flow all consultation directly through the CKSPFN Consultation Department at [consultation@kettlepoint.org](mailto:consultation@kettlepoint.org).

Based on the information presented in the proponent's Initial Project Description, is there any information about your community that was provided to the Proponent that is not adequately documented?

Eastern Power's consultation record at page 59 of the IPD must be updated to reflect the multiple emails, comments, and requests for information from CKSPFN after April 1, 2022.

### 10. Additional considerations under the impact assessment process

Are there any additional comments, such as those considered under the impact assessment process (i.e.

## Enclosure 1

gender-based analysis plus, sustainability, Indigenous knowledge or Indigenous cultures) that you wish to note for the Agency's consideration?<sup>2</sup>

CKSPFN urges the Agency to proceed with a federal impact assessment to ensure issues such as cumulative effects, fugitive emissions, the impact of construction work forces on the sex trade, GBA+, GHG emissions and federal climate targets, protection of Aboriginal Rights and Interests, and a fulsome study of archaeological potential are all evaluated.

Please provide your comments on the Summary of the Initial Project Description using the **Submit a Comment** button on the Canadian Impact Assessment Registry **by July 13, 2022**. Thank you.

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<sup>2</sup> The text of the *Impact Assessment Act* is available online: <https://www.parl.ca/DocumentViewer/en/42-1/bill/C-69/royal-assent>