

Comment Index

NS-NB Reliability Intertie Project

Publication Date: December 15, 2023

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Public

Number	Source	Date Received
1	Canadian Parks and Wilderness Society – Nova Scotia Chapter	November 24, 2023
2	Maritimes Aboriginal Peoples Council	November 24, 2023

DATE: November 17, 2023

TO: Jeremy W. Higgins, Environmental Assessment Officer

FROM: Christina Lovitt, Provincial Director of Planning

SUBJECT: NS-NB RELIABILITY INTERTIE PROJECT, MUNICIPALITY OF CUMBERLAND AND COLCHESTER, NS

Scope of Review:

This review focuses on the following mandates: Statements of Provincial Interest and engagement with municipalities.

List of Documents Reviewed:

Registration Document

Details of Technical Review:

Electrical Power transmission lines are permitted in any zone in both Cumberland and Colchester. Letters were sent to each CAO and Mayor in the project area.

Statements of Provincial Interest:

- **Drinking Water:** Reasonably consistent. Part of the project is within the North Tyndal Protected Water Area, which provides water for the Town of Amherst. The Proponent is following the requirements of the North Tyndal Protected Water Area Regulations.
- **Agricultural Land:** Reasonably consistent. The EA document notes that agriculture is the predominate use in the project area. By twinning with an existing transmission line, the Proponent can reduce the size of the right-of-way required and will make reasonable efforts during final design and routing to minimize direct interactions and crossings with active agricultural land.
- **Flood Risk:** Reasonably consistent. A portion of the project will cross the Chignecto Isthmus (land connecting Nova Scotia to New Brunswick), which is vulnerable to flooding. The Proponents have stated that their infrastructure will be 6km away from the main flood risk areas and that the equipment will be designed for low-lying and wet areas. Salmon and North Rivers have been identified in the Canada-Nova Scotia Flood Damage Reduction Program as flood risk areas and are in close proximity to Onslow where the transmission line will start. Based on the mapping provided in the EA document and the Colchester zoning map, however, it appears that the transmission line is outside of the flood risk area.
- **Infrastructure:** N/A. This project will not have an impact on development in serviced communities.
- **Housing:** N/A. As the new transmission line will be along the same route as the existing line, there would not likely be an additional impact to residential areas.

Key Considerations *(provide in non-technical language):*

There is no outstanding information and/or conditions. All components considered under DMAH's areas of mandate have been adequately addressed.

Agriculture

Date: November 21, 2023

To: Jeremy W. Higgins, Environmental Assessment Officer

From: Heather Hughes, Executive Director, Policy and Corporate Services,
Nova Scotia Department of Agriculture

Subject: NS-NB Reliability Intertie Project
Cumberland and Colchester Counties, Nova Scotia

Thank you for the opportunity to review the documents for the above-noted project.

Departmental review of the project documents has identified the following:

- The proposed project corridor spans class 2 to class 7 lands. With approximately 31% of the land in the corridor being classified as class 7, which is unsuitable for agriculture, and approximately 69% of the land being classified as classes 2 through 6, which have varying degrees of limitations for agriculture.
- There are 11.1 ha of blueberry production and 9.4 ha of field crops identified in the proposed corridor. Together, these represent 5.6% of the total area of the corridor.

Protection of Agriculture land is a key priority for the industry and is reflected in the Nova Scotia Statement of Provincial Interest for Agriculture.

From: [ATL One Window / Guichet unique ATL](#)
To: [Higgins, Jeremy W](#)
Subject: Transport Canada Response: EA Registration - Nova Scotia Power Incorporated - NS-NB Reliability Intertie Project - Cumberland and Colchester Counties
Date: November 22, 2023 4:23:16 PM
Attachments: [image001.png](#)

You don't often get email from onewindow-guichetunique@tc.gc.ca. [Learn why this is important](#)

**** EXTERNAL EMAIL / COURRIEL EXTERNE ****

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Hello Jeremy,

Transport Canada (TC) has reviewed the EA registration documents for the NS-NB Reliability Intertie Project and is providing specialist advice/information in areas related to its mandate and responsibilities. Our advice is meant to inform the recommendation that the Environmental Assessment (EA) Branch (NSECC) will make.

Impact Assessment:

Since the Project does not appear to reside on federal lands, TC does not require an environmental review under Section 82 of the *Impact Assessment Act* (IAA). We would however appreciate clarification on whether a designated review under the IAA will be required.

Navigation Protection Program:

The watercourse crossings implicated by the proposed transmission line and access trail components of the Project do not appear to involve Scheduled waterways under the *Canadian Navigable Waters Act* (CNWA).

The Proponent can assess the individual transmission line watercourse crossings against the criteria in the **Minor Works Order** (Section 16 – Aerial Cables -Power and Telecommunication) and can assess the individual access trail watercourse crossings against the criteria in the **Minor Works Order** (Section 34 – Watercourse Crossings):

Minor Works Order

<https://laws.justice.gc.ca/eng/regulations/SOR-2021-170/index.html>

If a specific transmission line or access trail watercourse crossing meets all the criteria in the relevant section, they are considered Minor Works and do not require a CNWA approval and would only be required to follow the Deposit and Publication requirements in sections 3(2), 3(3) and 4 of the Minor Works Order.

If a specific transmission line watercourse crossing or access trail crossing does not meet all the criteria, the Proponent may be required to submit an application for approval.

Under the CNWA, owners of works – (other than a minor work or a major work) - that are located on navigable waterways not listed in the schedule, which may interfere with navigation, have the option to:

1. either apply to the Minister of Transport (approval review process and advertising and 30 day registry public review)
- or**
2. seek authorization through the public resolution process, and deposit specific information regarding their work on the new Common Project Search (online registry) inviting any interested party to comment (advertising and 30 day registry public review)

Both the application process and the public resolution process on the Registry can be accessed at the following link:

[External Submission Site for the Navigation Protection Program](#) (create an account first if needed)

Additional guidance information and links for the Navigation Protection Program regulatory process can be found here:

Canadian Navigable Waters Act

<https://www.tc.gc.ca/eng/programs-632.html>

<https://www.tc.gc.ca/eng/canadian-navigable-waters-act.html>

Navigation Protection Program, Transport Canada

<http://www.tc.gc.ca/eng/programs-621.html>

Navigation Protection Program Contact Coordinates:

Navigation Protection Program | Programme de protection de la navigation

Transport Canada - Atlantic Region / Heritage Court, 6th Floor, 95 Foundry Street, Moncton, N.B. E1C 5H7 |

Transports Canada - Région de l'Atlantique / Place Héritage, 6^e étage - 95 rue Foundry, Moncton, N.-B. E1C 5H7

Tel | Tél. : 506-851-3113 / Fax | Téléc. : 506-851-7542

Email / Courriel : NPPATL-PPNATL@tc.gc.ca

TC encourages the Proponent to review the information provided above and contact the Navigation Protection Program if they have any questions.

Civil Aviation:

The Proponent may require aeronautical clearance for the steel towers. Should this be the case, the Proponent will have to complete an Aeronautical Assessment Form (AAF) to assess for marking and lighting requirements as per:

Standard 621 - *Obstruction Marking and Lighting - Canadian Aviation Regulations (CARs)*

(<https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/standard-621-obstruction-marking-lighting-canadian-aviation-regulations-cars>).

The AAF is located in Appendix C - Aeronautical Assessment Form for Obstruction Marking and Lighting ([Form 26-0427E](#)).

The completed AAF, can be forwarded to: aviation.atl@tc.gc.ca.

If you have any questions, please let me know.

Sylvie Poirier

MHE One-Window
Transport Canada, Atlantic Region
OneWindow-Guichetunique@tc.gc.ca

Guichet unique de MHE
Transports Canada, Région de l'Atlantique
OneWindow-Guichetunique@tc.gc.ca

From: Higgins, Jeremy W <Jeremy.Higgins@novascotia.ca>

Sent: Friday, October 20, 2023 3:27 PM

To: Creamer, Amber <Amber.Creamer@novascotia.ca>; Alward, Emily <Emily.Alward@novascotia.ca>; Mitchell, David A <David.Mitchell@novascotia.ca>; Mosher, Elaine <Elaine.Mosher@novascotia.ca>; Hurlburt, Donna D <Donna.Hurlburt@novascotia.ca>; BIODIVERSITY <BIODIVERSITY@novascotia.ca>; Crewe, Tara <Tara.Crewe@novascotia.ca>; White, Shannon C <Shannon.White@novascotia.ca>; Drake, Carrie L <Carrie.Drake@novascotia.ca>; Mahoney, Meagan <Meagan.Mahoney@novascotia.ca>; Blackburn, Lori M <Lori.Blackburn@novascotia.ca>; Boudreau, Susan M <Susan.Boudreau@novascotia.ca>; Steele, Cynthia <Cynthia.Steele@novascotia.ca>; McPherson, Robyn <Robyn.McPherson@novascotia.ca>; MacPherson, George E <George.MacPherson@novascotia.ca>; Hearn, Scott <Scott.Hearn@novascotia.ca>; Webber, Diane E <Diane.Webber@novascotia.ca>; Wickson, Mark <Mark.Wickson@novascotia.ca>; Plumstead, Janice X <Janice.Plumstead@novascotia.ca>; MacDonald, Brent A <Brent.MacDonald@novascotia.ca>; MacQuarrie, Rebecca M <Rebecca.MacQuarrie@novascotia.ca>; Cormier, John Kenneth <John.Cormier@novascotia.ca>; Lewis, Beth J <Beth.Lewis@novascotia.ca>; Cosgrove, Mary <Mary.Cosgrove@novascotia.ca>; DesRoche, Gillian <Gillian.DesRoche@novascotia.ca>; Poirier, Colin <Colin.Poirier@novascotia.ca>; Lahey, Rodney <Rodney.Lahey@novascotia.ca>; Miller, Michelle <Michelle.Miller@novascotia.ca>; Ramen, Satya <Satya.Ramen@novascotia.ca>; NSE-SAS-Division <NSE-SAS-Division@novascotia.ca>; Farrell, Tanya M <Tanya.Farrell@novascotia.ca>; MacKenzie, Tanya L <Tanya.MacKenzie@novascotia.ca>; MacDonald, Mark <Mark.MacDonald@novascotia.ca>; Gillis, Neil <Neil.Gillis@novascotia.ca>; Lovitt, Christina <Christina.Lovitt@novascotia.ca>; Zanth, Kathy M

<Kathy.Zanth@novascotia.ca>; projects-projets@iaac-aeic.gc.ca; jeff.reader@dfo-mpo.gc.ca;
Ramos-Casey, Beverly (HC/SC) <beverly.ramos-casey@hc-sc.gc.ca>; 'fcr_tracker@ec.gc.ca'
<fcr_tracker@ec.gc.ca>; 'ReferralsMaritimes@dfo-mpo.gc.ca' <ReferralsMaritimes@dfo-mpo.gc.ca>;
FPP.MAR / PPP.MAR (DFO/MPO) <dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca>;
landuse@navcanada.ca; ATL One Window / Guichet unique ATL <OneWindow-Guichetunique@tc.gc.ca>

Subject: [External/Externe]: EA Registration - Nova Scotia Power Incorporated - NS-NB Reliability Intertie Project - Cumberland and Colchester Counties

Good Afternoon,

This is to advise that on October 26, 2023, **Nova Scotia Power Incorporated (NSPI)** will register the **NS-NB Reliability Intertie Project, in Cumberland and Colchester Counties** for environmental assessment, in accordance with Part IV of the Environment Act.

-

PROJECT DESCRIPTION:

Nova Scotia Power Inc. (NSPI) is proposing to construct a new 345 kilovolt (kV) transmission line twinning an existing line to the New Brunswick border (“the Project”). L8006 will traverse approximately 96 kilometres (km) from Onslow, Nova Scotia, to the New Brunswick border. The route will parallel L8001, an existing 345 kV transmission line, and this new transmission line will be strung on separate steel towers located in a parallel corridor. This section of new transmission line Right-of-Way (RoW) corridor in Nova Scotia will be 96 km long and 38.1 metres (m) wide and is part of a longer line called the NS-NB Reliability Intertie. This line will extend from the Nova Scotia provincial border to Memramcook and then Salisbury; those segments will fall under New Brunswick’s permitting process. This second interconnection to New Brunswick is intended to assist NSPI in meeting provincial renewable energy targets, balance wind generation, and strengthen grid connectivity.

The project will also require substation modifications at 67N-Onslow to accommodate the new line termination. These modifications include a pad expansion, the addition of electrical equipment, and associated protection and control equipment.

The proposed Project will require tree clearing, site preparation, heavy equipment operation, site security, and assembly and installation of the steel structures. For construction, it is anticipated that various temporary facilities will be required including the temporary installation of bridging and matting for watercourse and wetland crossings, temporary marshalling and laydown yards, temporary access roads/trails, pull sites, and where required, improvements to existing access roads/trails. Material for access construction/maintenance will be stored or disposed of in accordance with regulations and best practices. Material stored on site will be accompanied with appropriate erosion and sedimentation control measures or reused.

ACCESSING EA DOCUMENTS AND DATA:

Please find below instructions for accessing and downloading the EA documents via FTP site.

Server: <https://rts.nspower.ca/>

Domain: **Public**

Username: **NS-NB_Reliability_Intertie_EA**

Password: **r(DSQJTgT3m&Fu4,jYKwb**

(case sensitive, no extra spaces at beginning or end, copy and paste will not work)

On October 26, 2023, the Registration Documents will also be available on our website at <http://www.novascotia.ca/nse/ea/>. If you have any problems at all accessing the EA documents, please do not hesitate to contact me.

Note that GIS data regarding project location and environmental feature shapefile data can also be downloaded from the above-mentioned site. The GIS data must not be distributed outside of the government and should be used only for this review. **Additionally, information contained in the Mi'kmaq Ecological Study and the Archaeological Resource Impact Assessment may contain confidential information and should not be distributed.**

RESPONSE TEMPLATE:

Ensuring a clear, consistent and predictable review of EA projects is key to clarifying and streamlining the EA process. We have developed a template to support you, in your role as reviewer, to help achieve this goal. This template includes guiding questions to support reviewers in completing their review, requests a summary of comments to be provided, and requests sign off by Managers/Directors (for provincial departments) prior to submission of final comments to the EA Branch. Therefore, please consider the attached document to provide your comments:

1. EA Reviewer Template (this is a suggested format for comments, not required).
2. EA Reviewer Guidance (**this should not be included as part of your comments back to the EA Branch**)

DEADLINES:

Please note that **all comments must be provided by November 25, 2023**, to be considered in this environmental assessment. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

On or before December 15, 2023, the Minister of Environment and Climate Change will decide if the project can be granted conditional environmental assessment approval. All submissions received will be posted on the Department's website for public viewing.

If you have any questions, please do not hesitate to contact me.

Best Regards,
Jeremy



*1903 Barrington St.
Suite 2085
Halifax, NS, B3J 2P8*

Jeremy W. Higgins

Environmental Assessment Officer

Policy, Planning and Environmental
Assessment

902-233-4477

Jeremy.Higgins@novascotia.ca

Date: November 23, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Air Quality Unit; reviewed by Director, Air Quality and Resource Management

Subject: **NS-NB Reliability Intertie Project, in Cumberland and Colchester Counties**

Scope of review:

This review focuses on the following mandate: Air Quality

List of Documents Reviewed:

- NS-NB Reliability Intertie Project Registration Document
- Air Quality Regulations

Details of Technical Review:

Nova Scotia Power is proposing to construct and operate a new 345kV transmission line in co-ordination with New Brunswick Power. It is intended that the new transmission line, if approved, would strengthen the reliability of the current NSPI grid, while facilitating access to renewable energy generated outside of Nova Scotia. The line would run parallel to the existing transmission line, in a corridor that is 96km long and 38.1m wide.

It is stated in the registration document that '*the NS-NB Reliability Intertie Project is part of an overall plan to reduce greenhouse gases primarily by facilitating the cessation of coal-fired generation in Nova Scotia by 2030.*' If approved, this project could represent an environmental benefit with respect to air quality.

The assessment consists of a review of the regulatory context, an assessment of baseline air pollutant concentrations from the NSECC Pictou monitoring station, presentation of the potential effects, proposed mitigation, and characterization of residual effects.

Potential impacts from this project are listed as activities occurring during construction and ongoing inspection, maintenance, and vegetation management. The principal pollutants that may be generated are considered to be fugitive dusts, for example, through vehicles moving on unpaved roads, and pollutants generated as a result of combustion of fossil fuels.

Appropriate mitigation methods are proposed, and the effects are considered to be low.

Key Considerations: (provide in non-technical language)

If the project is approved, it is recommended that a Dust Management Plan is in place prior to the commencement of construction. Such a plan should include a clear chain of responsibility for actions, including timely complaint resolution.

Date: November 23, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Air Quality Unit; reviewed by Director, Air Quality and Resource Management

Subject: **NS-NB Reliability Intertie Project, in Cumberland and Colchester Counties**

Scope of review:

This review focuses on the following mandate: Noise

List of Documents Reviewed:

- NS-NB Reliability Intertie Project Registration Document
- Guidelines for Environmental Noise Measurement and Assessment (GENMA), 2023

Details of Technical Review:

Nova Scotia Power is proposing to construct and operate a new 345kV transmission line in co-ordination with New Brunswick Power. It is intended that the new transmission line, if approved, would strengthen the reliability of the current NSPI grid, while facilitating access to renewable energy generated outside of Nova Scotia. The line would run parallel to the existing transmission line, in a corridor that is 96km long and 38.1m wide.

The assessment consists of a review of the regulatory context, a qualitative assessment of existing noise levels, presentation of the potential effects, proposed mitigation, and characterization of residual effects.

Potential impacts from this project are listed as activities occurring during construction and ongoing inspection, maintenance, and vegetation management. Baseline sound levels were assessed qualitatively using a methodology published by the Alberta Energy Regulator. The assessment concentrated on three locations: Truro, Springhill and Amherst. The proposed transmission line will be located approximately 5km from Truro and Amherst, and 20km from Springhill. Each of these locations are considered to be small population centres and were estimated to have baseline noise levels of 48dBA at night and 58dBA during the day.

Potential noise impacts from construction were assessed using a screening calculation for a receptor located 250m from the Onslow terminal. The assessment indicated that sound pressure levels of 66dBA could be experienced at receptor locations, although it is not clear whether this is a maximum noise level or an equivalent sound level. An equivalent sound level of 66dBA would be above the daytime permissible sound level for the area. However, the construction phase is of a short duration, and activity will only occur during the daytime.

Potential noise impacts from the operation of the transmission line were modelled to establish compliance with Electrical Power Research Institute guidance. The modelled audible noise levels were found to comply with the established limit. Noise from the transmission lines is unlikely to impact sound levels at receptor locations, however, noise may be audible under certain meteorological conditions in areas close to the transmission line corridor. The EARD states that this has been considered in the design of the transmission line. Other potential noise impacts may occur during general maintenance of the transmission line corridor, for example, during vegetation management.

Appropriate mitigation methods are proposed with respect to the use of equipment and vehicles. The effects from construction are considered to be moderate and medium term, and low and long term for the operation and maintenance phase.

Key Considerations: (provide in non-technical language)

If the project is approved, it is recommended that a Noise Management Plan is in place prior to the commencement of construction. Such a plan should include a clear chain of responsibility for actions, including timely complaint resolution.



Date: November 23, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Tiffany MacAulay, Linear Development, Regulatory Review Biologist, Fish and Fish Habitat Protection Program; Sign-off by Sarah Rombaut, A/Senior Biologist

Subject: NS-NB Reliability Intertie Project, Colchester County, NS

Scope of review:

Fisheries and Oceans Canada (DFO) is responsible for administrating the fish and fish habitat protection provisions of the *Fisheries Act* (FA), the *Species at Risk Act* (SARA), and the *Aquatic Invasive Species Regulations*.

DFO’s review focused on the impacts of the works outlined in the NS-NB Reliability Intertie Project Environmental Assessment Registration Document (EARD) to potentially result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat, which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*;
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*; and
- The introduction of aquatic species into regions or bodies of water frequented by fish where they are not indigenous, which is prohibited under section 10 of the *Aquatic Invasive Species Regulations*.

Technical Comments:

Risk Assessment: Wetland Assessment	
Identify Gap/Risk	Direct and indirect impacts to fish and fish habitat from wetland alterations are not clearly identified. For example, Appendix C of the EARD states that 230 wetlands fall within the vicinity of the EA project; however, information on the direct and indirect benefits to fish habitat by these wetlands and potential impacts on fish and fish habitat from the works is not provided.
Can it be addressed in another permit/approval or with a T&C?	The identified gap can be addressed during the NSECC watercourse and/or wetland alteration approval process(es) and DFO regulatory review process. Works, undertakings or activities (WUAs) associated with this project in or near water that may result in potential harmful impacts on fish or fish habitat will require DFO regulatory review to avoid, mitigate or offset those impacts.

Define/provide detail	For WUAs that may result in potential harmful impacts on fish or fish habitat, additional information will be required as part of the DFO regulatory review process, including detailed information on the proposed WUAs, a detailed description of the fish and fish habitat found at the location of the proposed WUAs, a detailed description on the likely effects of the proposed WUAs on fish and fish habitat, and a detailed description of the measures and standards that will be implemented to avoid and mitigate potential harmful impacts on fish and fish habitat.
Risk Assessment: Fish Habitat Assessment	
Identify Gap/Risk	The amount of fish habitat that may be impacted by the works remains unclear. In Section 3.2.4 of the EARD, it indicates 92 watercourses were identified; however, Appendix C of the EARD states 79 watercourses were identified within the vicinity of the EA project. In addition, specific fish habitat usage at each crossing in the watercourse is not clear.
Can it be addressed in another permit/approval or with a T&C?	The identified gap can be addressed during the NSECC watercourse and/or wetland alteration approval process(es) and DFO regulatory review process. WUAs associated with this project in or near water that may result in potential harmful impacts on fish or fish habitat will require DFO regulatory review to avoid, mitigate or offset those impacts.
Define/provide detail	For WUAs that may result in potential harmful impacts on fish or fish habitat, additional information will be required as part of the DFO regulatory review process, including detailed information on the proposed WUAs, a detailed description of the fish and fish habitat found at the location of the proposed WUAs, a detailed description on the likely effects of the proposed WUAs on fish and fish habitat, and a detailed description of the measures and standards that will be implemented to avoid and mitigate potential harmful impacts on fish and fish habitat.

Summary of Recommendations: (provide in non-technical language)

DFO recommends the proponent:

- For WUAs that may result in potential impacts to fish or fish habitat, submit detailed information on the proposed WUA, detailed descriptions of the fish and fish habitat found at the location of proposed WUAs, detailed descriptions on the likely effects of the proposed WUAs on fish and fish habitat (including local and cumulative impacts, potential impacts on species at risk, and direct and indirect impacts on fish habitat), and detailed descriptions of the measures and standards


that will be implemented to avoid and mitigate potential harmful impacts on fish and fish habitat;

- If watercourse crossing are required, consider open bottom structures, such as clear span bridges and open bottom arch culverts for fish bearing watercourse crossings rather than closed bottom structures, where possible;
- Refer to DFO's website, <https://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>, for further information on DFO's regulatory review process and for further measures to protect fish and fish habitat.
 - This includes reviewing the Department's Code of Practice for clear span bridges (<https://www.dfo-mpo.gc.ca/pnw-ppe/codes/clear-span-bridges-ponts-portee-libre-eng.html>) to determine if potential risks to fish and fish habitat can be fully avoided or mitigated by following the Code of Practice.

This information can be provided through the NSECC watercourse and/or wetland alteration approval process(es) and/or through submission of a DFO Request for Review application directly to DFO. DFO will then conduct a regulatory review of the proposed project under the *Fisheries Act*, *Species at Risk Act*, and Aquatic Invasive Species Regulations to determine if an authorization under the *Fisheries Act* and/or a *Species at Risk* permit is required.

Date: 23 November 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Department of Public Works, Environmental Services – Brent MacDonald, P.Eng.,
Manager. 

Subject: Nova Scotia Power Incorporated – NS-NB Reliability Intertie Project, Cumberland and Colchester Counties

Scope of review:

This review focuses on the following mandate: Traffic Engineering and Road Safety

List of Documents Reviewed:

Nova Scotia Incorporated – NS-NB Reliability Intertie Project EA Document and Appendices

Details of Technical Review:

The proponent (NSPI) is proposing to construct a new transmission line twinning an existing line from Onslow to the New Brunswick border. This line will use existing land corridors and accesses wherever possible. A general statement is made in the report to obtain any necessary permits relating to the movement of materials and impacts to traffic, however; no specific permits or procedures are identified.

1. If there is a requirement to change accesses off provincially owned roads (an example of this is mentioned on Page 18 for an expansion off of a terminal in proximity to Old Tatamagouche Road), a Working Within Highway Right of Way Permit (WWHROW) is required. The WWHROW can be requested through the Local Area Manager (specifically Colchester and/or Cumberland Counties, as required).
2. Transmission lines that will cross over provincially owned roads (some of these roads are identified on Pages 13-16) may require traffic control depending on the type of activity involved. The EA Registration document outlines types of work expected such as creation of work areas, potential road closures, speed reductions, use of signage, etc. (Pages 230-231, 269 and 280). Traffic control plans must be prepared by the proponent and must be in compliance with the appropriate section of the Nova Scotia Temporary Workplace Traffic Manual and approved by the Local Traffic Authority. The Local Area Manager is the point of contact for the Local Traffic Authority.

3. The EA Registration document references moving of heavy equipment outside of the spring weight restrictions. This activity may require a Special Moves Permit. The proponent should contact the Departmental Special Moves contact, Manuel Abreu (Manuel.Abreu@novascotia.ca) for additional information and requirements regarding loading, weights, transportation routes, timing, and duration, etc. (as referenced on Page 22).

Key Considerations: (provide in non-technical language)

1. The proponent should submit a Working Within the Highway Right of Way permit where required.
2. Traffic control plans must comply with the Nova Scotia Temporary Workplace Traffic Manual and must be approved by the Local Traffic Authority.
3. A Special Moves Permit should be submitted to the Departmental Special Moves contact.

Date: November 23rd, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Water Resources Management Unit, Sign-off by Elizabeth Kennedy, Director, Sustainability and Applied Science Division

Subject: NS-NB Reliability Intertie Project - Cumberland and Colchester Counties

Scope of review:

This review focuses on the following mandate:

- Surface water quantity and quality
- Groundwater quantity and quality
- Wetlands

List of Documents Reviewed:

NS-NB Reliability Intertie - Environmental Assessment Registration Document, October 26, 2023. Nova Scotia Power Incorporated.

Details of Technical Review:

Surface Water Quantity and Quality

The Environmental Assessment Registration Document (EARD) did not delineate all watercourses that could potentially be impacted and/or may need to be altered for Project related activities. There are examples of both known (i.e., mapped) watercourses and potential (as shown in Wet Areas Mapping) watercourses that may be present on site but were not included in the EARD for potential project impacts. The risk of not assessing this is that design mitigations may not be able to achieve the stated conclusion that “with effective implementation of Project mitigation, the residual effects of Project activities on water resources are predicted to be not significant”. It is important to ensure the locations of and impacts to watercourses in/near the PDA are adequately assessed to avoid watercourses being altered without ECC notification receipt or approval, and/or adversely altered or impacted (e.g., damage to watercourse bank and/or bed, sediment releases).

The EARD indicates in addition to temporary bridges, temporary engineered structures such as swamp matting with design considerations of hydrological characteristics of the watercourse may be used to travel over watercourses. If temporary engineered structures are appropriately installed and used, this should prevent or mitigate sediment releases into watercourses and/or watercourses being adversely altered (e.g., damage to watercourse bank and/or bed due to the structures and associated crossing activities). As stated in the EARD, fording of watercourse will be avoided, but use of temporary

engineered structures may require notification to or approval from ECC.

The EARD indicates an Environmental Protection Plan (EPP) will be developed to clearly set out specific plans for implementation of protection procedures and mitigation measures associated with Project construction activities. The EPP will include an erosion and sediment control plan (ESCP).

The EARD concluded that the Project will not result in greater than 10% surface water runoff increase based on qualitative assessment with consideration of the linear nature of the Project and associated proposed mitigation measures. The proposed Onslow Substations expansion may involve large area clearing and development (to a total of 1.4 ha) and therefore would not be appropriate to be categorized as linear. It is unclear on the local watershed area where the substation is, and if the substation site drains to and will impact the nearby watercourse. Properly planned surface water management that includes consideration of preventing erosion and controlling sediment from large areas of cleared land should be able to prevent adverse hydrological changes and sediment releases to this watercourse due to the proposed expansion.

The EARD indicates when required, herbicide application will be in a manner consistent with the EPP, permits issued by regulators, and provincial law, and will not occur within the North Tyndal Wellfield Protected Water Area or within 30 m of a wetland or watercourse. 30 m is a commonly used set back distance.

Groundwater Quantity and Quality

The information provided by the proponent in the EARD with regards to groundwater for this project provides a sufficient base level of work to assess background conditions and level of risk appropriate to identify most general groundwater receptors. The primary relevant points from the proponent's work, and this review, are as follows:

- In the EARD the main groundwater receptors identified include:
 - the North Tyndal Well Field Protected Water Area (PWA); and
 - 238 groundwater water wells within 500 m of the Project Development Area (PDA)
- The proponent identifies in the EARD that the additional transmission line corridor crossing the North Tyndal Well Field PWA will require NSECC Minister Approval according to the Provincial PWA regulations:
*“Easement restrictions
10 Unless approved in writing by the Minister or the Administrator, no person shall grant an easement for or construct or permit the construction of any road, railway, power transmission line, gas transmission line on, over or across the Protected Water Area.”* (EARD p. 139) The proponent identifies this regulatory requirement and states: *“NSPI will seek approval from NSECC for an easement to construct a power transmission line in the Tyndal Protected Wellfield.”* (EARD p. 154)
- The EARD does not mention the Source Water Protection zone (not a PWA) for the Town of Oxford, McElmon Brook Well Field, which the Project crosses and

should be included in the EA consideration/project planning. A reference source not noted in the EARD is the *Town of Oxford McElmon Brook Wellfield Groundwater Management and Protection Plan, Dillon Consulting (2000)*.

- As not all water wells in the area are fully identified in the Provincial Well Logs Database (this database is referred to on p.145 of the EARD), it is recommended that, if approved, the proponents conduct a field verification (if not completed) to positively identify all water wells within the identified 500 m “buffer” zone
- Although not discussed in the EARD, a baseline water survey of water wells within the buffer zone may be considered for establishing baseline water quality and quantity prior to construction, if approved – particularly on the side of the transmission corridor on the NE side where the new line will be. However, it is noted there is only about a 40 m difference with the new ROW being added. The need for such a survey could be recommended as a discussion item between the proponent and identified residents with wells within the 500 m buffer zone.
- The proponent has identified the potential need for blasting “for the installation of towers and/or terminal foundations (EARD p. 151) and state “If blasting is required, a pre-blast survey for water wells within 800 m of the point of blast will be conducted in accordance with the NSE Procedure for Conducting a Pre-Blast Survey” (EARD p. 153). They also commit to “Placing transmission towers at locations that reduce the requirement for blasting or rock hammering, especially within the Tyndal Protected Wellfield” (p. 153). These items should be considered for the McElmon Brook Well Field (Town of Oxford) also.
- Temporary dewatering during construction “*for the installation of the transmission towers and foundations for the expansion of the 67N Onslow substation*” is discussed in the EARD (p. 151). However, “*excavation is expected to typically be shallow (maximum 4 m in depth)*” and thus unlikely to cause long-term affects on the water table.
- Herbicide management along the transmission route is an important feature and the proponent states “*Herbicide applications, if required for vegetation management, will be used in accordance with government regulations and will not occur within the within the Tyndal Protected Wellfield or within 30 m of a wetland or watercourse.*” (EARD, p 154). Similar considerations should be made for the McElmon Brook Well Field (Town of Oxford).
- The proponent summarizes for Groundwater significance of changes to quality or quantity “*overall, the magnitude of residual environmental effects are predicted to be low for surface water quality and negligible for quantity parameters, and negligible for groundwater quality and quantity parameters as they are anticipated to remain near baseline levels.*” (EARD p. 156-157). Also stating “*The Project will not cause a decrease in the quantity or quality of groundwater or surface water such that it becomes inadequate for its current intended use or, if used as drinking water, is no longer suitable for human consumption*” (p. 158). These conclusions for groundwater seem reasonable with the stated management practices and mitigations as proposed.

- No other groundwater receptors of note, or concerns related to groundwater have been identified, based on the EARD and the study area location at this time.

Wetlands

The proponent has considered impacts to wetlands and avoided wetlands where practicable. The mitigations highlighted in the EARD should reduce the anticipated impacts to wetlands.

There are some uncertainties on where Wetlands of Special significance (WSS) are located within the Project Area and what those impacts are. Furthermore, locations of proposed transmission structures are unknown at the time of EARD submission, and therefore, it is difficult to determine potential impacts to wetlands.

Key Considerations: (provide in non-technical language)

Surface Water Quantity and Quality

The following considerations would further help mitigate potential risks of impacts to surface water resources.

Identify all watercourses that could potentially be impacted and/or may need to be altered for Project related activities. Mitigation measures should be provided to those watercourses that may be impacted by associated Project activities. Watercourse alterations should comply with the Activities Designation Regulations. If field identification of watercourse demonstrates a discrepancy from the base mapping, this information should be provided for ECC review.

Include necessary details in the proposed EPP and ESCP to guide site staff in achieving successful environmental protection, and if any, with additional protection measures implemented when there are surface water resources present near the proposed tower structures, and to the areas with higher concentration of watercourses (e.g., the PDA near Belmont, Wentworth, and Greenville). Consider retaining a qualified professional to develop detailed ESCPs for the Project and specifically for the proposed Onslow Substation expansion. When water quality monitoring is adopted, consider including details to provide guidance to water quality monitoring and assessment to staff. These details should include but are not limited to, locations for monitoring, how to determine baseline conditions, water quality parameter(s) and associated water quality guidelines/criteria for assessment.

Consider crossing watercourses through appropriately installed temporary bridges; avoid using or appropriately design and install temporary engineered crossing structures that may cause sediment release to or adverse effects to watercourses. Installation of temporary engineered crossings structures that alter watercourses require notifications to or approvals from ECC.

Consider developing a surface water management plan for the proposed Onslow Substation expansion, if the site discharges to the nearby watercourse. The plan should

be prepared by a qualified professional and should be designed to maintain the existing drainage patterns in the local watershed area. Consider implementing surface water management at the sites of the proposed 228 transmission tower structures to minimize increases of surface water runoff and potential of sediment releases into surface water resources.

Consider avoiding application of herbicide when there is surface water resource near the PDA (e.g., a site is upstream of a surface water resource, or a surface water resource may receive surface runoff from a site). When required, consider herbicide application during dry weather conditions by following weather advisories to minimize the possibility of herbicide residuals being released into surface water resources through surface water runoff generated from storm events.

Groundwater Quantity and Quality

The NSPI NS-NB Reliability Interties Project EARD has provided information sufficient to determining the potential environmental sustainability of the proposed operations in relation to groundwater. Based on the information provided, the statements by the proponent regarding groundwater that “*overall, the magnitude of residual environmental effects are predicted to be low for surface water quality and negligible for quantity parameters, and negligible for groundwater quality and quantity parameters as they are anticipated to remain near baseline levels* (EARD p. 156-157) are found to be reasonable for the purposes of this Environment Assessment review.

The main project concerns for groundwater identified in this review include the following:

- Follow-up by the proponent with NSECC and the operators of the North Tyndal Well Field for specific regulatory approval for an easement to cross the PWA Protected Water Area (under those regulations) will be needed prior to construction, if the project is otherwise approved.
- The proponent proposes to add an additional transmission line crossing (currently crosses with an established line) through the municipal Town of Oxford McElmon Brook Source Water Protection groundwater supply zone (although this is not a PWA). If not already specifically consulted, the managers/source water protection committee, existing groundwater protection plans documentation and any municipal planning land use by-laws relevant to that water supply area should be reviewed concerning potential SWP area limitations, project impacts and mitigation (suggest using similar goals as for the North Tyndal PWA).
- Water well locations based on on-line mapping would need to be field verified along the transmission line route. Consideration for baseline water well surveys should be made for wells within the identified 500m buffer zone.
- Bedrock blasting is reported as likely to be necessary at various tower construction locations, aside from possible mitigations/alternatives for some locations. The proponent should conduct pre-blast surveys (water quantity and water quality) for water wells within 800 m of the point of blast in accordance with

the NSE Procedure for Conducting a Pre-Blast Survey, when needed during construction, as committed to in the EARD.

Wetlands

Figures and a table demonstrating which wetlands are designated as a WSS, the transmission structure placement in relation to wetlands and a list of all wetlands where SAR flora and fauna were observed would be necessary to properly evaluate impacts to wetlands from the Project.

Date: November 23, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Environmental Health

Subject: NS-NB Reliability Intertie Project, **Cumberland and Colchester Counties, Nova Scotia**

Scope of review:

This review focuses on the mandate to protect public health from physical, chemical and biological hazards present in the environment. More specifically this review concentrates on impacts to the Atmospheric Environment and Drinking Water Wells.

Atmospheric Environment

1. The project, as proposed, incorporates a number of measures designed to minimize and mitigate impacts to the atmospheric and acoustic environment.
2. The report concludes that during construction noise levels associated with the project will likely exceed NS Guidelines values.
3. The proponent has committed to establishing a complaint management process to receive and follow-up on complaints from impacted residents.
4. In the event that noise or air quality impacts to residents are significant, further evaluation and mitigation of impacts will be needed.

Drinking Water Wells

1. The project, as proposed, incorporates a number of measures designed to minimize and mitigate impacts to groundwater quantity and quality.
2. The report concludes that the likelihood of impacts to water wells is low.
3. Despite best efforts to minimize and mitigate project related impacts it must be recognized that unforeseen or unexpected impacts can occur.
4. Recognizing the potential for unforeseen impacts, a commitment or requirement for the proponent to investigate well water impacts in the vicinity of the project is warranted.

5. Upon investigation, where it is deemed that impacts to water wells are the result of project related activities, a resolution process should be provided and undertaken between the proponent and land owner.



From: [Zwicker, Stephen \(ECCC\)](#)
To: [Higgins, Jeremy W](#)
Cc: [Hingston, Michael \(il, lui | he, him\) \(ECCC\)](#); [Gautreau, Rachel \(elle, la | she, her\) \(ECCC\)](#)
Subject: RE: EA Registration - Nova Scotia Power Incorporated - NS-NB Reliability Intertie Project - Cumberland and Colchester Counties
Date: November 24, 2023 10:28:42 AM
Attachments: [image001.png](#)

**** EXTERNAL EMAIL / COURRIEL EXTERNE ****

Exercice caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Hi Jeremy,

Environment and Climate Change Canada (ECCC) has reviewed the EIA Registration document for Nova Scotia Power Incorporated's NS-NB Reliability Intertie Project - Cumberland and Colchester Counties. It is not possible to adequately evaluate the potential effects of the Project on migratory birds or terrestrial species at risk based on the information provided. It is also not possible to determine whether any species whose nests are protected year-round under Schedule 1 of the *Migratory Birds Regulations, 2022* (e.g. Pileated Woodpecker) may have nests in the transmission line Right-of-Way (RoW). ECCC can provide more detailed comments should additional information be provided to address these issues including the following:

Biophysical Data

As a first step for the assessment of migratory birds and terrestrial SAR and species of conservation concern (SOCC), the proponent should obtain information on SAR and SOCC potentially occurring in the area, including downstream habitats potentially affected by the project, from the Atlantic Canada Conservation Data Centre (ACCDC). It should be noted that the fact that a species has not been confirmed in an area does not necessarily mean that it does not occur there, especially if habitat appropriate for that species is available.

This information should be supplemented by field surveys in appropriate habitats along the entire RoW by professional biologists (with expertise in conducting the types of surveys required) at the appropriate time of year. Based on survey data, the proponent should develop mitigation measures to avoid adverse effects to migratory birds, species at risk, and species of conservation concern.

A Pileated Woodpecker nest cavity survey should be conducted in appropriate habitats along the RoW. A Pileated Woodpecker Cavity Identification Guide is available for reference at: [Pileated Woodpecker Cavity Identification Guide](#)

Information on critical habitat (CH) for species at risk can be obtained from Recovery Strategies, as well as from the Province of Nova Scotia and ECC's Canadian Wildlife Service (ECCC-CWS).

- Bird surveys conducted by the proponent

Bird surveys were only conducted in 2 sections of the 96 km long RoW: an 8km stretch from the New Brunswick border to Amherst, and a 5km stretch from Crows Mill Road to the

Onslow Substation. This is not consistent with the approach taken for other linear projects in the Maritimes, including transmission lines. Surveys should have been conducted in habitats along the entire span of the RoW.

Furthermore, for its limited bird surveys, the proponent indicates that it conducted “Breeding Bird/Habitat Use Surveys” and “Migration Infrastructure Interaction Surveys”. However, it is not clear from the descriptions provided in Appendix G if these were point counts and passage migration counts. A detailed description of bird survey methodology should be provided.

The Migration Infrastructure Interaction Surveys were conducted for a shorter period than what is recommended by CWS for Spring and Fall migration: March 15-June 7 (Spring migration) and July 15-November 30 (Fall migration). ECCC-CWS’ recommended windows allow proponents to assess not only land birds, but also waterfowl/sea duck and shorebird migration movements which can occur overland. This window is especially important in coastal areas or along known migration routes.

Species at Risk

For projects undergoing environmental assessment, ECCC-CWS recommends that adverse effects of the project on species at risk (SAR) and critical habitat (CH) are identified, and, if the project is carried out, that mitigation measures are taken to avoid or lessen those effects. We recommend that mitigation measures:

- be consistent with best available information including any Recovery Strategy, Action Plan or Management Plan in a final or proposed version; and
- respect the terms and conditions of the *Species at Risk Act* (SARA) regarding protection of individuals, residences, and critical habitat of Extirpated, Endangered, or Threatened species.

Follow-up monitoring is recommended to verify impact predictions, and adequacy of mitigation measures, and adaptive management in the event that species at risk or their critical habitat are adversely affected by the project.

The proponent should provide additional information regarding species-specific measures to avoid/minimize adverse effects of the proposed project on SAR and their CH for review, as well as a monitoring plan. The following may be useful in preparing additional information for review:

- Landbird species at risk

ECCC-CWS generally recommends buffers for landbird SAR as follows during the breeding season:

- Low disturbance activities – 50 m
- Medium disturbance activities – 150 m
- High disturbance activities – 300 m

- Eastern Wood-pewee

The Eastern Wood-pewee is a migratory bird species of Special Concern listed on Schedule 1 of SARA. Two individuals, one in each survey area, were detected during avian surveys. However, no specific measures to avoid adverse effects to this species have been proposed. Measures to avoid/minimize adverse effects of the project on this species should be provided.

- Olive-sided Flycatcher

The Olive-sided Flycatcher is a migratory bird species of Special Concern listed on Schedule 1 of SARA. This species was detected 7 times during avian surveys: 6 observations in the Amherst section, 1 observation in the Onslow section. Loss of wetland habitat function for this species would result in instances (if any) where vegetation conditions of forested wetlands would be removed or altered by the project and would not be re-established for the life of the project. As a measure to compensate for the lost habitat function for passerine SAR in instances where such habitat cannot be avoided, we recommend the use of conservation allowances as the preferred form of the compensation step in the mitigation hierarchy of avoidance, minimization, and compensation.

- Bobolink

Bobolink is a migratory bird species listed on Schedule 1 of SARA as Threatened. The RoW crosses CH grid squares identified in the *Recovery Strategy for Bobolink (Dolichonyx oryzivorus [Proposed])* (see [Bobolink \(Dolichonyx oryzivorus\) \(ec.gc.ca\)](#)). Critical habitat occurs within these units where the biophysical attributes described in section 7.1 of the Recovery Strategy are present. Project activities should be managed to ensure that they do not adversely affect the biophysical attributes of CH. Activities that are likely to destroy Bobolink CH are described in Table 5 of the Recovery Strategy.

- Eastern Waterfan

The Eastern Waterfan is listed on Schedule 1 of SARA as Threatened. The Eastern Waterfan was detected at 2 locations during plant surveys. Furthermore, the RoW crosses CH identified in the *Recovery Strategy and Action Plan for the Eastern Waterfan (Peltigera hydrothyria) in Canada* [see [Eastern Waterfan \(Peltigera hydrothyria\) \(ec.gc.ca\)](#)].

The Eastern Waterfan is a terrestrial SAR not protected under the MBCA; therefore, we recommend that provincial SAR biologists be consulted for species-specific technical information regarding this species. CWS is able to provide comments regarding the federal recovery strategy, including threats to the species. Our comments on lichen SAR are also based on available CWS expertise, but we recognize that the technical expertise and authority lies with the province.

The Eastern Waterfan is a cryptic aquatic lichen found in small clear streams. The species has been insufficiently surveyed in Nova Scotia. Therefore, to address this gap, we recommend conducting a comprehensive survey by a lichenologist of appropriate streams in the project area, extending approximately 1 kilometer downstream within the streams that pass through the project area.

ECCC-CWS recommends a 50m riparian (streamside) buffer of the occupied stream (including the streams running into the occupied stream) for a 1 km radius around the occurrence of the Eastern Waterfan. To maintain hydrology regimes and water quality, and prevent siltation in areas around this species, there should be no entry or disturbance activities (e.g., vegetation clearing, access road construction or upgrades, infilling, etc.) in the recommended buffer (upstream and downstream) of lichen occurrences.

- Frosted Glass Whiskers

Frosted Glass Whiskers is a lichen species of Special Concern listed on Schedule 1 of SARA. This species was detected once during plant surveys. Frosted Glass Whiskers is a terrestrial SAR not protected under the MBCA. It is recommended that provincial SAR biologists be consulted for species-specific technical information regarding this species.

The proponent should clarify whether it will implement the Province of Nova Scotia's Special Management Practice for SAR lichens.

- Wood Turtle

The Wood Turtle is listed on Schedule 1 of SARA as Threatened. The RoW crosses CH for this species. The Wood Turtle is a terrestrial SAR not protected under the MBCA; therefore, we recommend that provincial SAR biologists be consulted for species-specific technical information regarding this species.

Mitigation measures to avoid impacts on CH and Wood Turtle individuals during sensitive periods should be described. The proponent should identify measures to avoid/minimize effects to individuals travelling to nesting and overwintering habitats encountered during construction activities.

September is the pre-overwintering period when Wood Turtles are in the forest. Hatchlings can emerge from nests in early September to early October. If Wood Turtles are present at this site, ECCC-CWS recommends that clearing occur no earlier than mid-October to avoid risk of destruction of individual;

- Bat SAR

Little Brown Myotis, Northern Myotis, and Tri-colored Bat are small, insectivorous bats listed as Endangered on Schedule 1 of the *Species at Risk Act* (SARA). The Hoary Bat, the Eastern Red Bat, and the Silver-haired Bat have been assessed as Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). ECCC-CWS recommends considering these SOCC as though they are at risk, in the event that they become listed during the lifetime of the Project. Bat SAR are terrestrial SAR not protected under the MBCA; therefore, we recommend that provincial SAR biologists be consulted for species-specific technical information regarding these species.

It is ECCC-CWS's view that any additive mortality of the SARA listed bat species in White-nose Syndrome (WNS) affected areas has the potential to be biologically important. The mortality of even a small number of remaining individuals, particularly breeding adults, or disturbance to maternity roosts or hibernacula, has the potential to negatively impact the

survival of local populations, their recovery, and potentially, the development of resistance to the fungus that causes WNS.

The proponent should clarify how it would determine the presence of bat SAR maternity roosts, as well as mitigation measures, including proposed buffers.

Birds and Transmission Lines

- Bird collision with transmission lines is a well-known issue. Bird collisions with overhead lines have been noted since the late nineteenth century, and collisions with power lines were noted as early as 1904. The issue has grown considerably more important since then, as the number of power lines has increased throughout the world. Bevanger (1998) listed 245 species of birds recorded as victims of power lines, with numbers of collisions ranging from 1 to 2983 in documented studies. In Canada, collisions with transmission lines are estimated to be one of the top sources of human-related mortality in birds (Calvert et al. 2013), with estimated mortality ranging from 2.5 million to 25.6 million birds killed per year (Roux et al. 2013).

The EIA Registration document does not demonstrate whether (and if so how) the proposed structures and transmission line configuration are optimal for avoidance of avian collisions and electrocution. The EA should clearly identify any areas where the proposed right-of-way (RoW) crosses areas used as flight paths by birds (e.g. migration; from nesting to foraging areas). The EA should also identify any areas where lights, both existing and proposed for the project, may attract birds and thus cause an increased risk for bird collisions with structures. When evaluating effects of the project on migrating waterfowl (e.g. scoters, eiders) and shorebirds, existing data on the movements of these birds through the area should be considered, as well as their response to existing barriers. A monitoring plan to verify the effectiveness of mitigation measures should also be described.

In addition to providing the information described above, the proponent should clarify whether the pole structure of the new transmission line will mirror that of the existing line such that there will be no increased vertical stratification.

In Section 9.4.3, the proponent states that “The Project will make use of diverters in high-risk areas to make the conductors more visible, especially for birds (APLIC 2012).” However, the specific sections of line where these would be placed are not identified, and “high risk areas” are not defined. The bird flight diverters being considered by the proponent should be identified, and information regarding their efficacy in avoiding avian collisions with transmission lines should be provided. Figures showing the proposed sections of line where such markers are proposed to be placed should be provided. As a starting point, ECCC-CWS recommends the placement of bird flight diverters from the NB-NS border to Truemanville, and from the Onslow substation to the Debert River crossing (inclusively).

Birds and Lights

Bird collisions at lit and floodlit structures are a known problem. In coastal area, nocturnal migrants and night-flying seabirds (e.g. storm-petrels) are the birds most at risk of attraction to lights and lit structures. Attraction to lights may result in collision with lit structures or their support structures, or with other birds. Disoriented birds are prone to circling a light

source and may deplete their energy reserves and either die of exhaustion or drop to the ground where they are at risk of predation.

In order to minimize the risk to migrant birds, CWS recommends that the minimum amount of pilot warning and obstruction avoidance lighting should be used on tall structures. The use of only strobe lights at night, at the minimum intensity and minimum number of flashes per minute (longest duration between flashes) allowable by Transport Canada, is recommended. Also, using the minimum number of lights possible is recommended. The use of solid-burning or slow pulsing warning lights at night should be avoided.

It is recommended that proponents avoid or restrict the time of operation of exterior decorative lights such as spotlights and floodlights whose function is to highlight features of buildings, or to illuminate an entire building. Especially on humid, foggy or rainy nights, their glow can draw birds from far away. It would be best for the birds if these lights were turned off, at least during the migratory season, when the risk to birds is greatest and also during periods when Leach's storm-petrels would be dispersing from their colonies.

Lighting for the safety of the employees should be shielded to shine down and only to where it is needed, without compromising safety.

Street and parking lot lighting should also be shielded so that little escapes into the sky and it is directed where required. LED lighting fixtures are generally less prone to light trespass and should be considered.

Pileated Woodpecker

The Pileated Woodpecker is one of the species listed on Schedule 1 of the amended *Migratory Birds Regulations* (2022), and as such, the nesting cavities of this species are protected year-round, including when they are not occupied by a migratory bird or viable eggs. In the event that a Pileated Woodpecker nesting cavity is ultimately abandoned, and a proponent wishes to destroy this unoccupied nest, they must submit a notification through the Abandoned Nest Registry, and if the nest remains unoccupied by Pileated Woodpeckers and other migratory bird species for 36 months, it may at that point be destroyed by cutting down the tree.

Information on permitting related to Pileated Woodpecker is available at:

[Damage or Danger Permits for Nest Destruction: Pileated Woodpecker nesting cavities - Canada.ca](#)

[Damage to the Use of the Land: Pileated Woodpecker nesting cavities - Canada.ca](#)

Further information on the *Migratory Bird Regulations, 2022*:

[Migratory Birds Regulations, 2022 \(justice.gc.ca\)](#)

[New Migratory Birds Regulations, 2022 - Canada.ca](#)

[Continued evolution of the Migratory Birds Regulations, 2022 - Canada.ca](#)

[Notice: Abandoned Nest Registry - Canada.ca](#)

[Fact sheet: Nest Protection under the Migratory Birds Regulations, 2022 - Canada.ca](#)

[Frequently Asked Questions: Migratory Birds Regulations, 2022 - Canada.ca](#)

[Service standards and performance: permits for Migratory Birds Regulations](#)

Vegetation Clearing and Vegetation Management

For Operational vegetation management, the Proponent does not commit to avoidance of activities that may result in harm to active bird nests during the migratory bird breeding season (Section 2.6.2). And for the Construction phase, the Proponent states in Section 9.4.3 that “Vegetation clearing will be completed outside the migratory bird nesting period of April 1 to August 31 (NSPI best practice, Zone C3; ECCC 2023). Where activities may result in risk of harm to migratory bird nests if work during this season cannot be avoided, a qualified biologist will complete a pre-activity nest survey in accordance with federal guidelines (ECCC 2022).”

Active nest searches in complex habitat are not recommended by ECCC-CWS as they are unlikely to be successful, and incidental take would still be likely to occur. Rather, CWS recommends that for all Project phases, activities that may result in incidental take of active nests or eggs, such as tree or shrub removal, occur outside the migratory bird nesting period.

Nests in complex habitat are difficult to locate and adult birds avoid approaching their nests in a manner that would attract predators to their eggs or young. Except when the nests searched are known to be easy to locate without disturbing them, active nest searches are generally not recommended by ECCC-CWS; there is a low probability of locating all nests, and searches are likely to cause disturbance to nesting birds. In many circumstances, incidental take is likely to still occur during industrial or other activities even when active nest searches are conducted prior to these activities. Therefore, except for very specific circumstances (e.g. surveys for Pileated Woodpecker nesting cavities protected under Schedule 1 of the *Migratory Birds Regulations*), ECCC-CWS does not recommend nest searches in vegetation.

Some species of migratory birds, including the threatened Common Nighthawk, may be attracted to cleared areas for nesting. Should there be a delay between clearing and operational activities, ground nesters may be attracted to previously cleared areas for nesting. In such a case, nest surveys may be carried out successfully by skilled and experienced observers using appropriate methodology. Should any nests or unfledged chicks be discovered, it is expected that these would be protected by an appropriate-sized buffer. While buffers to protect nests from disturbance may be flagged, nests should never be marked using flagging tape or other similar material as this increases the risk of nest predation.

Additional Comments

- The locations of ancillary facilities (e.g. staging and storage areas, temporary offices, etc), new temporary access roads, and roads/trails requiring upgrades should have been provided.
- SAR should not be referred to as species of conservation interest (SOCI) in EA documents. Rather, species listed on Schedule 1 of SARA, or under provincial species at risk legislation, should be referred to as SAR. Species designated as at risk by the COSEWIC and/or with rarity ranks assigned by the provincial governments and/or the ACCDC may be referred to as species of conservation concern (SOCC) or SOCI.
- Many of the measures identified as “Mitigation for Wildlife, Vegetation and Habitat” in

Section 9.4.3 have qualifiers (e.g. “where practical”, “whenever possible”, etc). The Proponent should make clear commitments to implement mitigation measures, such that effects to migratory birds, SAR, and their habitats are avoided/minimized.

- CWS advocates for the conservation of wetlands in areas where wetland losses have already reached critical levels (e.g. the Maritimes) and regionally important wetlands. ECCC-CWS recommends that project effects on wetlands be avoided. Where they cannot be avoided they should be minimized, and for residual impacts there should be compensation to mitigate the effects. ECCC-CWS recommends the development of a Wetland Compensation Plan that fully describes the mitigation hierarchy, including:
 - Identification of wetlands potentially affected by the project,
 - A detailed description of potential effects, and the reasons why avoidance and minimization of impacts were determined to be not possible, and
 - Identification and justification of proposed offset ratios.
- Since even small spills of oil can have serious effects on migratory birds, every effort should be taken to ensure that no oil spills occur. The proponent should ensure that all precautions are taken by staff to prevent fuel leaks from equipment, and contingency plans in case of oil spills should be prepared.
- ECCC-CWS recommends that a variety of species of plants native to the general project area be used in revegetation efforts. Should seed mixes for herbaceous native species for the area not be available, it should be ensured that plants used in revegetation efforts are not known to be invasive.

ECCC-CWS also recommends that measures to diminish the risk of introducing invasive species be developed and implemented. These measures could include:

- cleaning and inspecting construction equipment prior to transport from elsewhere (not limited to out of province equipment) to ensure that no plant matter is attached to the machinery (e.g. use of pressure water hose to clean vehicles prior to transport); and
 - regularly inspecting equipment prior to, during and immediately following construction in wetland areas and in areas found to support Purple Loosestrife to ensure that plant matter is not transported from one construction area to another.
- Certain species of migratory birds (e.g. Bank Swallows) may nest in large piles of soil left unattended/unvegetated during the most critical period of breeding season (April 15th through August 15th). To discourage this, the proponent should consider measures to cover or to deter birds from these large piles of unattended soil during the breeding season. If migratory birds take up occupancy of these piles, any industrial activities (including hydroseeding) will cause disturbance to these migratory birds and inadvertently cause the destruction of nests and eggs. Alternate measures will then need to be taken to reduce potential erosion, and to ensure that nests are protected until

chicks have fledged and left the area. For a species such as Bank Swallow, the period when the nests would be considered active would include not only the time when birds are incubating eggs or taking care of flightless chicks, but also a period of time after chicks have learned to fly, because Bank Swallows return to their colony to roost.

See also for example the following guidance concerning beneficial management practices that should be considered for implementation when designing mitigation measures for Bank Swallows, provided at [Bank Swallow \(Riparia riparia\): in sandpits and quarries - Canada.ca](https://www.ec.gc.ca/cwsc/11301130-1130-1130-1130-11301130/Bank_Swallow_(Riparia_riparia)_in_sandpits_and_quarries_-_Canada.ca)

- Certain species of migratory birds may nest on the sides of buildings, bridges or other pieces of infrastructure. Additionally, some species may nest on equipment, if they are left unattended/idle for long periods of time.

CWS recommends the following beneficial management practices:

- The proponent should ensure that project staff are aware of the potential of migratory bird nests on infrastructure, buildings, and bridges, if applicable.
 - If a nest is discovered, the proponent should conduct no activities around the nest that may cause the nest to be abandoned or destroyed. Activities should be suspended until the chicks have fledged and left the area.
 - If the proponent anticipates that birds may nest on infrastructure, the proponent should install anti-perching and nesting exclusion devices (e.g. mesh netting, chicken wire fencing, etc.) before any nest attempts are made.
- If there is ultimately a need to decommission a building or structure used for nesting by migratory birds, ECCC-CWS should be consulted in a timely manner in advance of any proposed decommissioning activities for species-specific considerations.
 - Beaver dam removal could impact migratory birds using the associated ponds. If waterfowl and/or waterbirds are using ponds created by beaver dams for nesting or raising chicks, the proponent should not alter beaver dams until waterfowl and/or waterbirds have raised their young.
 - The Proponent should ensure that provisions for wildlife response are identified in emergency prevention & response plans. The following information should be included:
 - Mitigation measures to deter migratory birds from coming into contact with polluting substance (e.g. oil);
 - Mitigation measures to be undertaken if migratory birds and/or sensitive habitat becomes contaminated;
 - The type and extent of monitoring that would be conducted in relation to various spill events.

ECCC-CWS "*Guidelines for Effective Wildlife Response Plans*" (ECCC, 2021) (attached) are recommended as a reference in the development of emergency prevention and response.

Applicable Legislation

- ***Migratory Birds Convention Act***

The *Migratory Birds Convention Act* (MBCA) protects most bird species in Canada however, some families of birds are excluded. A list of species under MBCA protection can be found at <https://www.canada.ca/en/environment-climate-change/services/migratory-birds-legal-protection/list.html> .

The federal [Migratory Birds Convention Act, 1994 \(justice.gc.ca\)](https://www.justice.gc.ca) and its [regulations](#) protect migratory birds and their eggs and prohibit the disturbance, damage, destruction or removal of migratory bird nests that contain a live bird or a viable egg. Migratory birds are protected at all times; all migratory bird nests are protected when they contain a live bird or viable egg; and the nests of 18 species listed in [Schedule 1 of the MBR 2022](#) are protected year-round. These general prohibitions apply to all lands and waters in Canada, regardless of ownership. For more information, please visit: [Avoiding harm to migratory birds - Canada.ca](#).

For migratory birds that are listed as Endangered, Threatened or Extirpated on Schedule 1 of the *Species at Risk Act* S.32 (protection of individuals) and S.33 (protection of residences) apply to all land tenure types in Canada. For some migratory bird species listed under the *Species at Risk Act* (SARA), the residence prohibition will protect nests that are not active but are re-used in subsequent years (please note that the residence of a migratory bird may not necessarily be limited to their nest).

Section 5.1 of the MBCA describes prohibitions related to depositing substances harmful to migratory birds:

“5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

(2) No person or vessel shall deposit a substance to be deposited in any place if the substance, in combination with one or more substances, result in a substance – in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area – that is harmful to migratory birds.”

It is the responsibility of the proponent to ensure that activities comply with the MBCA and regulations. In fulfilling its responsibility for MBCA compliance, the proponent should take the following points into consideration:

- Information regarding regional nesting periods can be found at <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html>. Some species protected under the MBCA may nest outside these timeframes.
- Most migratory bird species construct nests in trees (sometimes in tree cavities) and

shrubs, but several species nest at ground level (e.g., Common Nighthawk, Killdeer, sandpipers), in hay fields, pastures or in burrows. Some bird species may nest on cliffs or in stockpiles of overburden material from mines or the banks of quarries. Some migratory birds (including certain waterfowl species) may nest in head ponds created by beaver dams. Some migratory birds (e.g., Barn Swallow, Cliff Swallow, Eastern Phoebe) may build their nests on structures such as bridges, ledges or gutters.

- One method frequently used to minimize the risk of destroying bird nests consists of avoiding certain activities, such as clearing, during the regional nesting period for migratory birds.
- The risk of impacting active nests or birds caring for pre-fledged chicks, discovered during project activities outside the regional nesting period, can be minimized by measures such as the establishment of vegetated buffer zones around nests, and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area. It is incumbent on the proponent to identify the best approach, based on the circumstances, to complying with the MBCA.

Further information can be found at <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html>

- ***Species at Risk Act***

The *Species at Risk Act* (SARA) “General prohibitions” apply to this project. In applying the general prohibitions, the proponent, staff and contractors, should be aware that no person shall:

- kill, harm, harass, capture or take an individual;
- possess, collect, buy, sell or trade an individual, or any part or derivative;
- damage or destroy the *residence* of one or more individuals.

General prohibitions only apply automatically:

- on all federal lands in a province,
- to aquatic species anywhere they occur,
- to migratory birds protected under the *Migratory Birds Convention Act* (MBCA) 1994 anywhere they occur.

Section 33 of SARA prohibits damaging or destroying the residence of a listed threatened, endangered, or extirpated species. For migratory birds species at risk (SAR), this prohibition immediately applies on all lands or waters (federal, provincial, territorial and private) in which the species occurs.

For project assessments, SARA requires that:

79 (1) Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted, and every authority who makes a determination under paragraph 82(a) or (b) of the *Impact Assessment Act* in relation to a project, must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife

species or its critical habitat.

(2) The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans.

For species which are not yet listed under SARA, but are listed under provincial legislation only or that have been assessed and designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), it is best practice to consider these species in EA as though they were listed under SARA.

For species-specific technical information for terrestrial SAR not protected under the *Migratory Birds Convention Act* (MBCA), ECCC-CWS recommends that the Province of Nova Scotia be consulted.

Please let me now if you have any questions.

Stephen Zwicker

Environmental Assessment Coordinator, Environmental Protection Operations Directorate
Environment and Climate Change Canada / Government of Canada
stephen.zwicker@ec.gc.ca / Tel: Cell: 902-402-7145

Coordonnateur, Évaluations environnementales, Direction des activités de protection de
l'environnement
Environnement et Changement climatique Canada / Gouvernement du Canada
stephen.zwicker@ec.gc.ca / Tel: Cell: 902-402-7145

From: Higgins, Jeremy W <Jeremy.Higgins@novascotia.ca>

Sent: Friday, October 20, 2023 3:27 PM

To: Creamer, Amber <Amber.Creamer@novascotia.ca>; Alward, Emily <Emily.Alward@novascotia.ca>; Mitchell, David A <David.Mitchell@novascotia.ca>; Mosher, Elaine <Elaine.Mosher@novascotia.ca>; Hurlburt, Donna D <Donna.Hurlburt@novascotia.ca>; BIODIVERSITY <BIODIVERSITY@novascotia.ca>; Crewe, Tara <Tara.Crewe@novascotia.ca>; White, Shannon C <Shannon.White@novascotia.ca>; Drake, Carrie L <Carrie.Drake@novascotia.ca>; Mahoney, Meagan <Meagan.Mahoney@novascotia.ca>; Blackburn, Lori M <Lori.Blackburn@novascotia.ca>; Boudreau, Susan M <Susan.Boudreau@novascotia.ca>; Steele, Cynthia <Cynthia.Steele@novascotia.ca>; McPherson, Robyn <Robyn.McPherson@novascotia.ca>; MacPherson, George E <George.MacPherson@novascotia.ca>; Hearn, Scott <Scott.Hearn@novascotia.ca>; Webber, Diane E <Diane.Webber@novascotia.ca>; Wickson, Mark <Mark.Wickson@novascotia.ca>; Plumstead, Janice X <Janice.Plumstead@novascotia.ca>; MacDonald, Brent A <Brent.MacDonald@novascotia.ca>; MacQuarrie, Rebecca M <Rebecca.MacQuarrie@novascotia.ca>; Cormier, John Kenneth <John.Cormier@novascotia.ca>;

Lewis, Beth J <Beth.Lewis@novascotia.ca>; Cosgrove, Mary <Mary.Cosgrove@novascotia.ca>; DesRoche, Gillian <Gillian.DesRoche@novascotia.ca>; Poirier, Colin <Colin.Poirier@novascotia.ca>; Lahey, Rodney <Rodney.Lahey@novascotia.ca>; Miller, Michelle <Michelle.Miller@novascotia.ca>; Ramen, Satya <Satya.Ramen@novascotia.ca>; NSE-SAS-Division <NSE-SAS-Division@novascotia.ca>; Farrell, Tanya M <Tanya.Farrell@novascotia.ca>; MacKenzie, Tanya L <Tanya.MacKenzie@novascotia.ca>; MacDonald, Mark <Mark.MacDonald@novascotia.ca>; Gillis, Neil <Neil.Gillis@novascotia.ca>; Lovitt, Christina <Christina.Lovitt@novascotia.ca>; Zanth, Kathy M <Kathy.Zanth@novascotia.ca>; projects-projets@iaac-aeic.gc.ca; jeff.reader@dfo-mpo.gc.ca; Ramos-Casey, Beverly (HC/SC) <beverly.ramos-casey@hc-sc.gc.ca>; RCF Surveillier / FCR Tracker (ECCC) <FCR_Tracker@EC.GC.CA>; 'ReferralsMaritimes@dfo-mpo.gc.ca' <ReferralsMaritimes@dfo-mpo.gc.ca>; FPP.MAR / PPP.MAR (DFO/MPO) <dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca>; landuse@navcanada.ca; TCFCRMAR@tc.gc.ca

Subject: EA Registration - Nova Scotia Power Incorporated - NS-NB Reliability Intertie Project - Cumberland and Colchester Counties

Good Afternoon,

This is to advise that on October 26, 2023, **Nova Scotia Power Incorporated (NSPI)** will register the **NS-NB Reliability Intertie Project, in Cumberland and Colchester Counties** for environmental assessment, in accordance with Part IV of the Environment Act.

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PROJECT DESCRIPTION:

Nova Scotia Power Inc. (NSPI) is proposing to construct a new 345 kilovolt (kV) transmission line twinning an existing line to the New Brunswick border (“the Project”). L8006 will traverse approximately 96 kilometres (km) from Onslow, Nova Scotia, to the New Brunswick border. The route will parallel L8001, an existing 345 kV transmission line, and this new transmission line will be strung on separate steel towers located in a parallel corridor. This section of new transmission line Right-of-Way (RoW) corridor in Nova Scotia will be 96 km long and 38.1 metres (m) wide and is part of a longer line called the NS-NB Reliability Intertie. This line will extend from the Nova Scotia provincial border to Memramcook and then Salisbury; those segments will fall under New Brunswick’s permitting process. This second interconnection to New Brunswick is intended to assist NSPI in meeting provincial renewable energy targets, balance wind generation, and strengthen grid connectivity.

The project will also require substation modifications at 67N-Onslow to accommodate the new line termination. These modifications include a pad expansion, the addition of electrical equipment, and associated protection and control equipment.

The proposed Project will require tree clearing, site preparation, heavy equipment operation, site security, and assembly and installation of the steel structures. For construction, it is anticipated that various temporary facilities will be required including the temporary installation of bridging and matting for watercourse and wetland crossings, temporary marshalling and laydown yards, temporary access roads/trails, pull sites, and where required, improvements to existing access roads/trails. Material for access construction/maintenance will be stored or disposed of in

accordance with regulations and best practices. Material stored on site will be accompanied with appropriate erosion and sedimentation control measures or reused.

ACCESSING EA DOCUMENTS AND DATA:

Please find below instructions for accessing and downloading the EA documents via FTP site.

Server: <https://rts.nspower.ca/>

Domain: **Public**

Username: **NS-NB_Reliability_Intertie_EA**

Password: **r(DSQJTgT3m&Fu4,jYKwb**

(case sensitive, no extra spaces at beginning or end, copy and paste will not work)

On October 26, 2023, the Registration Documents will also be available on our website at <http://www.novascotia.ca/nse/ea/>. If you have any problems at all accessing the EA documents, please do not hesitate to contact me.

Note that GIS data regarding project location and environmental feature shapefile data can also be downloaded from the above-mentioned site. The GIS data must not be distributed outside of the government and should be used only for this review. **Additionally, information contained in the Mi'kmaq Ecological Study and the Archaeological Resource Impact Assessment may contain confidential information and should not be distributed.**

RESPONSE TEMPLATE:

Ensuring a clear, consistent and predictable review of EA projects is key to clarifying and streamlining the EA process. We have developed a template to support you, in your role as reviewer, to help achieve this goal. This template includes guiding questions to support reviewers in completing their review, requests a summary of comments to be provided, and requests sign off by Managers/Directors (for provincial departments) prior to submission of final comments to the EA Branch. Therefore, please consider the attached document to provide your comments:

1. EA Reviewer Template (this is a suggested format for comments, not required).
2. EA Reviewer Guidance (**this should not be included as part of your comments back to the EA Branch**)

DEADLINES:

Please note that **all comments must be provided by November 25, 2023**, to be considered in this environmental assessment. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

On or before December 15, 2023, the Minister of Environment and Climate Change will decide if the project can be granted conditional environmental assessment approval. All submissions received will be posted on the Department's website for public viewing.

If you have any questions, please do not hesitate to contact me.

Best Regards,
Jeremy



Environment and
Climate Change

*1903 Barrington St.
Suite 2085
Halifax, NS, B3J 2P8*

Jeremy W. Higgins

Environmental Assessment Officer

Policy, Planning and Environmental
Assessment

902-233-4477

Jeremy.Higgins@novascotia.ca

Date: December 6th, 2023

To: Jeremy Higgins, Nova Scotia Environment & Climate Change

From: Coordinator Special Places, Culture and Heritage Development

Subject: Nova Scotia Power Incorporated - NS-NB Reliability Intertie Project - Cumberland and Colchester Counties - EA Registration

Staff of the Department of Communities, Culture, Tourism, and Heritage has reviewed the Nova Scotia Power Incorporated - NS-NB Reliability Intertie Project - Cumberland and Colchester Counties - EA Registration documents and have provided the following comments:

Archaeology

Staff reviewed the sections of the EA document pertaining to archaeology.

Palaeontology

Staff reviewed the sections of the EA document pertaining to Palaeontology. This review focused on the **palaeontology resources** that are likely to be present in the project areas. The eastern areas of construction that involve Horton Formation strata may encounter rare but significant vertebrate fossils. During excavation of bedrock, workers should keep an eye out for potential fossils and consult the museum palaeontologist for any items that seem significant. Fossil bone will appear black in grey/red sandstone of the Horton Group.

The expansion of the Onslow station (Fig. 2.3) will involve bedrock geology of Late Triassic, Wolfville Formation. Although rare, significant vertebrate fossils have been found in other areas of the Wolfville Formation. During excavation of bedrock workers should keep an eye out for fossils in the sandstone. Fossil bone will likely appear white in the red sandstone. Examination of the bedrock by a palaeontologist during excavation prior to cover with infrastructure could provide valuable information of the overall geology and potential for fossils in the area.

Date: November 15th, 2023
To: Jeremy Higgins, Environmental Assessment Officer
From: Climate Change Division Staff
Subject: **NS-NB Reliability Intertie, Colchester and Cumberland Counties, Nova Scotia**

Scope of review:

This review focuses on the following mandate: Climate Change Adaptation and Mitigation

List of Documents Reviewed:

Notice of Registration / Cover Letter – NS-NB Reliability Intertie
Registration Document – NS-NB Reliability Intertie

Details of Technical Review:

Adaptation

- While the proponent does not reference the *Guide to Considering Climate Change in Environmental Assessments in Nova Scotia* and *Guide to Considering Climate Change in Project Development in Nova Scotia* in the registration document, the assessment of climate change impacts on the project is fulsome.
- In Section 15.3.2.1, “Existing Conditions,” the proponent uses 30-year climate normals from ECCC, in keeping with guidance.
- On pp. 240-241, the proponent states that “Climate models are evolving but are not yet sufficiently accurate to specifically describe future events and conditions,” and lists some general high-level impacts (e.g., increasing temperatures in all seasons). The section does not use the latest climate projection data as recommended for best practice.
- In Section 15.3.2.2., “Potential Project Interactions with Climate and Climate Change,” the proponent lists of specific climate change impacts on the project. They are thorough, as are the list of mitigation measures (e.g., specific design considerations for climate adaptation, such as sag allowances for transmission lines). The proponent indicates that, taking account mitigation measures, risks from climate change impacts are expected to be low.
- In Section 15.3.4, “Flooding,” the proponent acknowledges that the project area includes the Chignecto Isthmus, which raises climate adaptation concerns. Here and in the section on public engagement (p. 51), the proponent references federal and provincial government responsibility to protect critical infrastructure along the Isthmus. The proponent indicates that the intertie line is 6km from the isthmus’s main area of concern and has been designed for low-lying/wet areas.

Mitigation

- The proponent lists greenhouse gas emissions as a result of the use of SF6 circuit breakers in the Onslow Terminal and emissions (e.g., CO₂, CH₄, and N₂O) may be generated from the combustion of fuels (e.g., diesel and/or gasoline) from heavy mobile equipment used for operation of construction and periodic maintenance activities.
- The proponent estimates greenhouse gas emissions from mobile combustion and land clearing operations to be 70,816 tonnes CO₂e and correctly describes the project to be medium impact.
- The proponent also lists a satisfactory list of mitigation measures for greenhouse gas emissions.

Key Considerations:

Adaptation

- We suggest that the proponent consider using the latest climate projections from ClimateData.ca for Section 15.3.2. The ClimateData.ca projections are based on robust models and include documentation of the range of uncertainty that can be used to assess risk and inform project design.
- We suggest the proponent confirm that design and mitigation measures are appropriate for projected future climate conditions in the Chignecto Isthmus, as the NS-NB intertie project might begin before additional adaptation interventions are undertaken along the Chignecto Isthmus.

Mitigation

- No further recommendation for other requirements

Date: November 24, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Neil Morehouse Manager Protected areas and Ecosystems

Subject: Nova Scotia Power Incorporated - NS-NB Reliability Intertie Project - Cumberland and Colchester Counties

Scope of review:

This review focuses on the following mandate: Protected Areas

List of Documents Reviewed:

Details of Technical Review:

Other than widening the existing powerline corridor through Chignecto Isthmus WA the project does not appear to have any direct impact on our program interests.

The impact on Chignecto Isthmus WA seems low. The existing corridor that would be widened runs very close to the southern edge of the wilderness area. It will be widened by 38m over a distance of 2.6km, so only 10 ha would be affected, and of that only 4 ha resembles natural forests – the remainder is plantation or recovering clearcut. It would not make sense to look for alternative alignments.

As the legal review confirmed that NSPI can widen the corridor under the conditions of their existing agreement with us, there is not much to add for an EA. I think it would be okay to provide “no comments” to EA branch.

Key Considerations: (provide in non-technical language)

Date: **November 25, 2023**

To: Jeremy Higgins, Environmental Assessment Officer

From: **Neil Gillis, ECC/ICE – Environment Officer**

Subject: **NS-NB Reliability Intertie Project, Cumberland & Colchester County, NS**

Scope of review:

This review focuses on the following mandate: NSECC Compliance

List of Documents Reviewed:

NS-NB Reliability Intertie, Environmental Assessment Registration Document, October 26, 202

Details of Technical Review:

- 1) In the anticipated permits section (table 2.1), there is no mention of watercourse alteration approvals. Although it says in the report clear-span bridges will be used whenever possible, for planning purposes, it could be assumed that watercourse alteration approvals may be required. Furthermore, for auditing purposes, it would be beneficial to get the estimated quantity of potential watercourses crossed (*i.e.*, not just the number that are present within the project area but ones that are expected to require a bridge or culvert).
- 2) In the wetlands section 8.3.2, it says the percentage land impacted by the project that consists of wetlands and that 230 areas of wetland habitat are within the project footprint. While these are beneficial quantities, an estimation of the actual quantity of wetland alteration approvals that may be required would be beneficial for planning purposes.
- 3) On page 105 it states:

“Where possible, refueling in the field will not occur within 30 m of wetlands and water supply areas (including the known location of private wells). Where equipment is located near a wetland and must be refueled at that location, special precautions will be used to prevent spilled fuel from entering any sensitive receptors (e.g., absorbent pads located below nozzles and spill response kits fully stocked and located at the refueling location)”

As part of any approval, it will require all fuelling to be 30 metres from wetlands and watercourses. Therefore, please expand on what situations would occur that would result in refuelling within 30 metres of a wetland or watercourse and what would be done in

these situations to remain in compliance with the approvals. Alternatively, remove, 'where possible'.

Key Considerations: (provide in non-technical language)

- 1) Watercourse alteration approval should be mentioned as a potential permit requirement.
- 2) An estimate of potential wetland and watercourse alteration approvals would be beneficial for project planning purposes.
- 3) Fuelling within 30 metres of a wetland or watercourse is not permitted by NSECC approvals. More information could be provided to explain the degree of necessity of this and detailed notification/approval requirements from NSECC to allow this.

Date: November 25, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Nova Scotia Office of L'nu Affairs – Consultation Division; **Reviewed by Beata Dera, Director of Consultation**

Subject: NS NB Reliability Intertie Project, Onslow to New Brunswick border.

Scope of review:

The following review considers whether the information provided by the Proponent in the EARD will assist the Province in assessing the potential of the proposed Project to adversely impact established and/or asserted Mi'kmaw Aboriginal and/or Treaty rights.

List of Documents Reviewed:

Environmental Assessment Registration Document.

Details of Technical Review:

4.3 Engagement with the Mi'kmaq

OLA is encouraged to see that early engagement with KMKNO and Mikmaw communities within close proximity to the Project (Millbrook First Nation, Sipekne'katik First Nation, Pictou Landing First Nation and Paqtnkek First Nation) was prioritized by NSPI. OLA acknowledges the Proponent's commitment to on-going, meaningful engagement with the Mi'kmaq of Nova Scotia by continuing to provide regular project updates to KMKNO, regular update meetings with Mi'kmaw communities, and Mi'kmaw community open houses as well as public open houses to which Mi'kmaw communities will be invited.

8 Assessment of Environmental Effects on Wetlands

This section states that wetland delineation identified 230 areas of wetland habitat totaling 49.5 ha within the L8006 and L8001 transmission line RoWs. NSPI notes that they are required to apply for a wetland alteration permit from NSECC, where avoidance is not possible. The EARD does not provide specific information at this time regarding the extent or amount of potential wetland alterations.

Wetlands support a wide variety of plants, including those that the Mi'kmaq consider to be for sacred, ceremonial, and medicinal purposes. In addition, Moose habitat was identified in the Mi'kmaq Ecological Knowledge (MEKS) study along the wetlands of the Chignecto Isthmus. Moose are considered a species of significance to the Mi'kmaq of Nova Scotia.

9 Assessment of Environmental Effects on Wildlife, Vegetation and Habitat

This section states that the transmission line RoW extends through core habitat for Mainland Moose, as identified in the Mainland Moose Recovery Plan 2021. Furthermore, the Mainland Moose Recovery Plan 2021, identifies "utility and service lines" as a threat to Mainland Moose, due to their potential to contribute to habitat and population fragmentation and isolation.

Moose are considered a species of significance to the Mi'kmaq of Nova Scotia. In addition, results of the MEKS demonstrate that some traditional and current use hunting activity takes place within the Project Site and Study Area, primarily for deer. Gathering activities, both traditionally and currently, for predominantly sweetgrass, berries and Black Ash, was also identified as occurring within the Project Site and Study Area.

11 Assessment of Environmental Effects on the Aquatic Environment

This section states that the watersheds crossed by the Project, include several fish species that are of significance to the Mi'kmaq of Nova Scotia, such as Atlantic salmon, brook trout, brown trout, and American eel. The rivers crossing the Project Area are also considered a traditional and cultural resource for the Mi'kmaq of Nova Scotia. In addition, results of the MEKS demonstrate that both traditional and current use fishing activities take place both within the Project Site and Study Area.

13 Use of the Land and Resources for Traditional Purposes by the Mi'kmaq

Given the results of the MEKS, this section states that Mi'kmaq traditional and current use activities, including hunting, fishing, and gathering, occurring within the Project Site will be affected during construction, and for limited and infrequent periods, during vegetation management and activities during operation and maintenance.

Key Considerations:

Crown consultation with the Mi'kmaq of Nova Scotia is ongoing for this project. The Mi'kmaq of Nova Scotia may provide additional information that informs the regulator in assessing the proposed project's potential impacts to established and/or asserted Mi'kmaq Aboriginal and Treaty rights and appropriate accommodation and mitigation measures. At this time, OLA is able to provide the following considerations:

OLA encourages the Proponent to continue to engage with Mi'kmaq communities that are located within close proximity to the Project Area, including Sipekne'katik First Nation, Millbrook First Nation, Pictou Landing First Nation and Paqtnek First Nation, as well as KMKNO. Ongoing engagement should include providing regular updates and seeking feedback throughout the duration of the Project.

A Mi'kmaq Communication Plan would be helpful to achieve the sharing of information by the Proponent and providing a mechanism for proponent-led engagement and input from the Mi'kmaq, specifically regarding wetland mitigation, compensation, and monitoring plans, Wildlife Monitoring Plans, and Vegetation Management.

As the MEKS illustrates Mi'kmaq rights traditionally and/or currently being practiced within the Project Area, the Proponent should engage in discussions directly with Mi'kmaq communities and KMKNO to develop and mitigate potential adverse impacts to Mi'kmaq rights, particularly as it relates to accessibility and vegetation management in areas where fishing, hunting, and gathering has been identified. This information should be communicated to the Province on a regular basis.

Fisheries and Aquaculture

Date: November 27, 2023
To: Jeremy Higgins, Environmental Assessment Officer
From: Lesley O'Brien-Latham, Executive Director, Policy and Strategic Advisory Services
Subject: **NS-NB Reliability Intertie Project, in Cumberland and Colchester Counties**

Scope of review:

The scope of this review follows the Department of Fisheries and Aquaculture's legislated mandate to develop, promote and support fishing, aquaculture, seafood processing and sportfishing in Nova Scotia.

List of Documents Reviewed:

NS-NB Reliability Intertie EARD
NS-NB Transmission Intertie EA
NS-NB Reliability Intertie EA

<https://www.dfo-mpo.gc.ca/fisheries-peches/decisions/fm-2020-gp/atl-16-eng.html>

<https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/maritimes/2019/inshore-lobster-eng.html#toc2>

Details of Technical Review:

Mitigation measures in the EARD for sediment and erosion control and the project's distance from large water bodies, should present a low risk to aquaculture sites if applied appropriately.

The EARD indicates that during operation and maintenance, herbicide application will follow set back distances (15 to 75 m) from water bodies. These mitigations should ensure a low risk to aquaculture sites if applied appropriately.

The proponent should be made aware of the aquaculture operations within the area and ensure mitigations are implemented appropriately, with reference to the following link to identify sites and operators within the project area: [Site Mapping Tool - Government of Nova Scotia, Canada](#)

The proponent should also be made aware of the [Fisheries and Coastal Resources Act](#), Provincial [Aquaculture License and Lease Regulations](#), Provincial [Aquaculture Management Regulations](#), and the [Nova Scotia Rock Weed Harvesting Regulations](#).

This project will include 92 watercourse crossings along the proposed transmission line (48 permanent, 27 intermittent, 17 ephemeral). Seventeen watercourses are large (>2m width). Seven designated species are SAR/SOCC inhabit watercourses. The main areas of impact include site preparation and clearing and conductor stringing. Clearing within the 30m buffer zone will be conducted by hand as a mitigative measure to reduce impact to aquatic environments. Shade and cover for instream fish could be reduced from site clearing and maintenance. The proponent states that project impacts to the aquatic environment are anticipated to be low or negligible as long as the management practices outlined in the document are followed.

Key Considerations: (provide in non-technical language)

- There are a total of 0 rockweed leases and 4 aquaculture sites within 25km of the proposed project. Of these, 0 are marine shellfish sites, 0 are marine finfish sites, and 4 are land-based aquaculture facilities.
- As the project is land-based with no proposed marine activities, the Department does not anticipate any risks to lobster and other commercial marine fisheries adjacent to the project area, or seafood buyers/processors located within proximity to the project area.
- Healthy canopies over vulnerable trout and salmon habitat provide shade and refugia for temperature sensitive species. The Department is concerned that the removal, even partially of shade over stream habitat will be detrimental to trout and salmon.

Date: November 25, 2023

To: Jeremy Higgins, Environmental Assessment Officer

From: Department of Natural Resources and Renewables

Subject: **NS-NB Reliability Intertie Project, Cumberland & Colchester Counties, Nova Scotia**

Scope of review:

This review focuses on the following mandate: Clean Electricity advancement and transmission of the electricity system, Parks, authorities and approvals required from the Land Services Branch, geological & abandoned mine hazards, mineral resources, biodiversity, species at risk status and recovery (e.g. Mainland Moose), wetland habitat, wildlife species and wildlife habitat.

List of Documents Reviewed:

Land Services Branch:

- Environmental Assessment Registration Document
- Appendices A-B

Geoscience and Mines Branch:

- NS-NB Reliability Intertie Project E.A. document
- NS Mineral Occurrence Database
- Google Earth
- NovaROC: Mineral Rights Online Registry System

Biodiversity Branch:

- NS-NB reliability Intertie Environmental Assessment Registration Document
- Appendix A – Environmental Constraints Mapping – Part 1,2
- Appendix C – Wetland Rare Species Habitat, Part 1,2,3,4,5
- Appendix G Avian Assessment, Part 1,2
- Appendix H- Rare Plant Assessment
- Appendix 1- Mainland Moose Assessment

Details of Technical Review:

Land Services Branch:

The Proponent will require authorizations (such as an easement or letter of authority) from NRR for any access, use or activity on Crown lands, including but not limited to:

- erecting transmission tower structures and installing, operating and maintaining overhead/underground transmission wires and related infrastructure, including those that cross submerged Crown land;
- construction/use of new access roads or to widen or otherwise modify/improve existing Crown roads;
- requests to temporarily use existing Crown owned roads or to conduct geotechnical investigation or preliminary studies;

Note 1: Some of the PIDs identified as being part of this project appear to overlap with a Land Management agreement between the Province and Ducks Unlimited (Missaquash Marsh).

Note 2: requests to use existing NSPI or Bell owned infrastructure located on Crown lands must be directed to the owner of the utility infrastructure.

Geoscience and Mines Branch:

- We note there is no mention of exploration licenses within the project document. There is an overlap with current mineral exploration licenses.
- There are no historic mine workings of concern in the project area.

Biodiversity Branch:

6.3.1.1 Spatial and Temporal Boundaries: The Project Development Area (PDA), Local Assessment Area (LAA) are described here. The Project Site and Study Area are not described. All four area names are used interchangeably throughout the document, resulting in lack of clarity around spatial boundaries. Spatial boundaries are also unclear in a broad illustration of the PDA. Other sections provide aerial imagery or sections of the existing and proposed right of way (ROW).

8.2.3 Spatial Boundaries: The LAA for wetlands is defined as the PDA plus a 500m buffer on either side of the ROW centre line, but no supporting information is provided. It is not clear if assessments were conducted outside of the PDA for wetlands or watercourses, which is necessary to predict and measure project effects.

8.4.3 Mitigation for Wetlands: Fueling and servicing of equipment should not take place within 30m of environmentally sensitive areas, including, wetlands, watercourses, and shorelines. The proponent must ensure that all precautions are taken to prevent fuel leaks from equipment or discharge of oil waste and ensure that equipment is maintained in good working condition.

Construction, maintenance, and operational activities should be limited to the project footprint to the extent possible, using existing access roads/trails to avoid unnecessary disturbances to flora and fauna.

9.3.1.2 Field Studies:

Avian: avian surveys completed in 2020 were limited to 2 sections of the project located at either end of the PDA (Amherst and Onslow), which were identified as being high priority for birds and bird habitat due to their proximity to important habitat features. Additional incidental occurrences were noted outside of the 2 targeted sections when completing other targeted field surveys.

Raptors were observed at both study sites, with indications of probably breeding nearby.

Targeted raptor and nocturnal owl surveys would be required to determine overall prevalence of

these species and associated mitigation. The lack of avian surveys between the two concentration areas also results in an information gap; completing avian surveys across a mixture of habitats would fill that gap.

Mainland Moose: the extent of the moose study area is not clearly defined. The legend for the Snowtracking and Pellet Group Survey mapping (Appendix) does not include all symbology. A high concentration of mainland moose observations was noted around Higgins Mountain and supported by fieldwork for another project. However, Snowtracking and Pellet Group surveys were not included along the ROW in this area of interest.

9.4.3 Mitigation for Wildlife, Vegetation and Habitat:

Information on bats and bat habitat were not included in the report. Bat core habitat is just over 5 km from the ROW and Karst topography is identified in the Black Lake area. Based on the habitat present in the study area, there is potential for bat roosting and foraging.

Key Considerations: (provide in non-technical language)

Clean Electricity Branch:

There are no concerns at this time.

Geoscience and Mines Branch:

- Recognizing that landowner permission is required for mineral license holders to access land and perform exploration, we look to encourage continued dialogue among the parties to ensure access for mineral exploration activities in this area. Preferably, engagement by the project proponent to notify the owners of the affected mineral rights is suggested to discuss potential impacts of activities.
- A review to determine which exploration licenses could be affected by this proposed project can be completed through NovaRoc. Please contact the Registry of Mineral and Petroleum Titles if assistance is required in performing this task.

Parks and Outreach:

No concerns from a provincial park or designated protected beach program perspective.

Biodiversity Branch:

1. Regulatory Considerations

It is the responsibility of the proponent to ensure compliance with federal, provincial, and municipal legislation, regulations and permitting. Any applicable approvals or permits are the responsibility of the proponent.

Should work commence prior to the development of a Wildlife Management Plan, the proponent should contact NRR (biodiversity@novascotia.ca) to discuss permits.

2. Baseline Survey Considerations

If the project is approved, baseline surveys should be completed before construction begins, and appropriate mitigations developed in the WMP. This includes:

- Clearly define the Project Development Area (PDA), Local Assessment Area (LAA), Project Site and Study Area, and avoid using names interchangeably.

- Provide maps that clearly delineate spatial boundaries for the PDA, LAA, project site and study area, in relation to important habitat features, baseline survey locations, flora and fauna observations, and project infrastructure.
- An additional year of moose and avian baseline surveys to determine presence and appropriate mitigations:
 - o Avian surveys should cover the range of habitats available along the PDA.
 - o Conduct targeted raptor and nocturnal owl surveys during the appropriate time period and over the range of habitat types available.
 - o Targeted moose surveys should be conducted along the ROW in the identified area of interest.
- Provide digital way points and/or shapefiles for all flora and fauna surveys. Data should adhere to the format prescribed in the NRR Template for Species Submissions for EAs and is to be provided within two (2) months of collection.

3. Wildlife Management Plan (WMP)

Develop a WMP based on standard, science-based practices, which shall include:

- Communication protocol with regulatory agencies.
- General wildlife concerns (e.g., human-wildlife conflict avoidance).
- Education sessions and materials for project personnel on important biodiversity features they may encounter on-site and how to appropriately respond to those encounters.
- Mitigations, including:
 - o For construction, maintenance, and operational activities. This should include:
 - Mitigations for noise, dust, blasting, and lighting.
 - Limiting activities to the project footprint where possible, using existing access roads/trails to avoid unnecessary disturbances to flora and fauna;
 - Protecting against adverse effects on migratory birds, including avoiding vegetation clearing during the regional nesting period for most birds, appropriate buffer zones around discovered nests, limiting activities during the breeding season around active nests, and other best management practices;
 - Establishment of standard practices to prevent wildlife interactions that may result in entanglement, entrapment, or injury;
 - Avoid creating artificial habitat for wildlife (e.g., wood turtle, bank swallow). The installation of exclusion fencing, or other options can be used around infrastructure if a risk is identified.
 - Training operations staff to survey the site, identify issues, and consult as appropriate for solutions to prevent conflicts with wildlife;
 - Proper handling and disposal of waste to eliminate opportunities to attract wildlife.
 - Fueling and servicing of equipment should not take place within 30m of environmentally sensitive areas, including wetlands, watercourses, and shorelines. The proponent must ensure that all precautions are taken to prevent fuel leaks from equipment or discharge of oil waste and ensure that equipment is maintained in good working condition.
 - o Avoid and/or protect SAR/SOCC and associated habitats discovered on site or which have the potential to be found on site. This includes but is not limited to Olive-sided Flycatcher, Eastern Wood-pewee, Eastern White Cedar, Wood Turtle, Snapping Turtle, Vascular Plants including Frosted Glass Whiskers and Eastern Waterfan, Brook Floater, and Mainland Moose.
 - o Protect areas of avoidance or mitigation (e.g., wetland boundaries). This may include flagging boundaries to increase visibility for workers.
 - o Plans and measures to deal with beaver dams.

- An invasive species plan to prevent the spread of invasive species both on and off site. The plan should include monitoring, reporting, and adaptive management components. Mitigations should include timely revegetation of areas that are no longer operational with native species to discourage the establishment of invasive species.
 - A vegetation management plan, including herbicide application and restoration following construction.
 - A plan for the regular maintenance of erosion and sedimentation control structures, including mitigations for serious weather events.
 - Consider cumulative effects and impacts of the project on landscape-level connectivity for wildlife and habitat (e.g., habitat fragmentation, loss of intact forested habitat, increased road density). Measures proposed to mitigate those effects should be provided.
- Provide details related to monitoring and inspections to assess compliance with the WMP.
 - The components of the WMP that address expected impacts during each phase of the project must be finalized before that phase begins (this includes the construction phase).
 - Consultation on the Wildlife Management Plan with relevant regulatory agencies is strongly recommended. Review of the WMP by NRR can reduce the risk of impacts to biodiversity and to breaching prohibitions related to statutes.



Kwilmu'kw Maw-klusuaqn Negotiation Office
Mi'kmaq Rights Initiative

75 Treaty Trail
Truro, NS B6L 1W3

Tel (902) 843 3880 **Fax** (902) 843 3882

Toll Free 1 888 803 3880

Email info@mikmaqrightrights.com

www.mikmaqrightrights.com

Our Rights. Our Future.

November 23rd, 2023

Jeremy Higgins
Environmental Assessment Officer
Nova Scotia Environment and Climate Change, EA Branch
Barrington Place
1903 Barrington Street, Suite 2085
P.O. Box 442, Halifax, N.S., B3J 2P8
Email: jeremy.higgins@novascotia.ca

RE: Continuing Consultation with the Mi'kmaq of Nova Scotia on the NB-NS Reliability Intertie Project, Cumberland and Colchester Counties

Mr. Higgins,

I write in response to your letter dated October 26th, 2023, requesting consultation under the *Terms of Reference for a Mi'kmaq-Nova Scotia-Canada Consultation Process (ToR)* as ratified on August 31, 2010, on the above noted project. We wish to proceed with consultation.

The Mi'kmaq Nation in Nova Scotia has a general interest in all lands and resources in Nova Scotia as the Mi'kmaq Nation has never surrendered, ceded, or sold the Aboriginal title to any of its lands in Nova Scotia. The Mi'kmaq have a title claim to all of Nova Scotia and as co-owners of the land and its resources it is expected that any potential impacts to rights and title shall be addressed. Clearly, this project will impact Mi'kmaq Rights and Title.

The proposed project area spans 3 traditional territories: Sipekne'katik, Epekwitk aq Piktuk and Sikniqt. Accessing and utilizing natural resources are imperative for the Mi'kmaq. Traditional hunting, fishing, harvesting and gathering in these sensitive landscapes continue to this day from time immemorial.

The Kwilmu'kw Maw-Klusuaqn (KMK) Archaeological Research Division (ARD) has not identified any concerns at the present time, based on information currently available, with the findings and recommendations in the archaeological resource impact assessment of this project.

Not captured within the Mi'kmaq Ecological Knowledge Study (MEKS) or L8006 Transmission Line Project Use maps are 100 plus documented traditional use sites within the study area. Of these 100 plus documented traditional use sites within the study area are 21 "high-risk non-mobile" traditional use sites 6 "high-risk non-mobile" directly within the project line. Traditional use 'high-risk-non-mobile' sites are those that are overnight, ceremonial, burial, sacred, or spirit being areas. Sites that can not be moved and have a continued elevated risk for spiritual and/or archaeological potential. Moderate to low-risk traditional use sites include areas

of known past and present harvesting, fishing, and foraging as well as recreational activities not connected with spiritual activity. Whereby the moderate to low-risk traditional use activity is so vast with well over 100 documented known sites, the risk of impacts to L'nu rights are elevated substantially. Activities such as gating, herbicide use, and aggressive silvicultural practices will severely impact our ability to practice traditional activities.

It is our recommendation that an environmental flora and fauna survey be conducted prior to any ground disturbance as a proactive measure against the harm of any rare, at risk, and culturally sensitive species. Additionally, we expect diligent mitigation efforts when working near any water body/course to preserve water quality and health of aquatic species.

Whereby Species at Risk are of concern, it can not be acceptable to conduct activities that will negatively impact Species at Risk habitat directly or indirectly. Should work occur, it should be done so in a way to mitigate harm to these species. I.e., no work done within migratory, breeding, or within a biome specific to those seasons.

The environmental assessment identified a number of wetlands that will be altered, disrupted or destroyed due to the construction and development of the Project. The restoration and/or creation of wetland areas is supported and encouraged, however, the no net loss policy for wetlands is in question by the Mi'kmaq of Nova Scotia, for it is our understanding that wetlands are complicated systems that cannot be easily replicated from a biological perspective. The Mi'kmaq of Nova Scotia wish to participate in the development and implementation of any Wetland Habitat Compensation Plans developed for this project.

After reviewing the proponent's Mi'kmaq Engagement in Section 5.3 of the EARD, we recommend a greater effort of engagement with Pictou Landing First Nation and Paqtnkek First Nation. These two communities are the nearest First Nation Communities to the project and with the MEKS summary mentioning "Really good hunting, fishing, and gathering in that area, concerned about effect of turbines/project on these activities.", it is strongly recommended a greater engagement with these two communities. An open house for community members and meetings with both Chief and Councils is recommended.

Nova Scotia Power Inc is actively working with the Assembly's Benefits Committee regarding the NB-NS Reliability Intertie Project. We trust these discussions will continue and remain optimistic the outcome will be positive for the Mi'kmaq Nation.

It is strongly advised that the Aboriginal and Treaty rights of the Mi'kmaq of Nova Scotia have been adversely impacted by the previous Crown land transactions associated with this project given the traditional use in the area and that the Mi'kmaq have an interest in the natural resources located on this property. It is expected that the project work plan will not deviate from what has been conceptualized and outlined. Any changes should be urgently communicated to our office.

KMK does not represent the communities of Millbrook, Sipekne'katik, or Membertou First Nations. We do encourage further Consultation with these communities as they may have an interest in the proposed project area.

Please contact _____ NSPI Early Engagement Coordinator KMK for any further questions.

Yours in Recognition of Mi'kmaw Rights and Title,

Director of Consultation
Kwilmu'kw Maw-Klusuaqn

cc:

_____, Kwilmu'kw Maw-Klusuaqn
Gillian DesRoche, Nova Scotia Office of L'nu Affairs
Bridget Tutty, Nova Scotia Environment and Climate Change EA Branch
Tanya Farrell, NSECC ICE Division
Gabriella Arsenault, Transport Canada
Beth Lewis, Communities, Culture, Tourism and Heritage

Maritime Aboriginal Peoples Council



The Maritime Regional Aboriginal Leaders
Intergovernmental Council of Aboriginal Peoples
Continuing to Reside on Traditional Ancestral Homelands

Forums

November 24th, 2023

- Leaders Congress
- MAPC Commissions/Projects
- MAARS Secretariate
- IKANAWTIKET SARA
- MAPC Administration

MAPC Regional
Administrative Office
80 Walker Street, Suite 3
Truro, Nova Scotia
B2N 4A7

Tel: 902-895-2982
Fax: 902-895-3844
Toll Free: 1-855-858-7240
Email: frontdesk@mapcorg.ca

Governmental APRO Councils

Native Council of
Nova Scotia
P.O. Box 1320
Truro, Nova Scotia
B2N 5N2

Tel: 902-895-1523
Fax: 902-895-0024
Email: chiefaugustine@ncns.ca

New Brunswick Aboriginal
Peoples Council
320 St. Mary's Street
Fredericton, New Brunswick
E3A 2S4

Tel: 506-458-8422
Fax: 506-451-6130
Email: chief@nbapc.org

Native Council of
Prince Edward Island
6 F.J. McAuley Court
Charlottetown
Prince Edward Island
C1A 9M7

Tel: 902-892-5314
Fax: 902-368-7464
Email: chief@ncepi.com

Environmental Assessment Branch
P.O. Box 442
Halifax, Nova Scotia
B3J 2P8

RE: NS-NB Reliability Intertie Project

To Whom It May Concern,

On behalf of the Native Council of Nova Scotia (NCNS), the Maritime Aboriginal Aquatic Resources Secretariate (MAARS) is providing comments to the Environmental Assessment Branch of the Nova Scotia Department of Environment and Climate Change regarding the Environmental Assessment Registration Document (EARD) for the NS-NB Reliability Intertie Project being undertaken by Nova Scotia Power Inc (NSPI). Our comments primarily relate to the matters of invasive species vectors, and employee training related to archaeological resource discoveries.

Introductory vectors for invasive alien species (IAS) are one concern given that IAS are predisposed to establish themselves in recently disturbed areas, due to the localized eradication of natural predators and the removal of resource competition from anthropogenic activity. Activities such as grubbing are one of such heavy stressors on the environment that will provide an opportunity for IAS to establish themselves. As the environment is stressed, there is an increased potential for IAS to be successfully introduced via vehicles, mobile facilities, on the boots of workers, and other vectors if no preventative measures are taken. MAARS requests NSPI develop procedures to mitigate introductory vectors for IAS. This could include mandated practices to clean mobile facilities and vehicles prior to entry of the project site, to ensure they do not act as introductory vectors.

While we can appreciate that there have been significant efforts to minimize impacts to archaeological and heritage resources, there is an equally important need to ensure employees are educated on what to look for. MAARS would like to see NSPI provide education and training programs for all involved in the construction phase to ensure that all those participating in this phase of the project are aware of what to look for and proper reporting protocols. We are sure that you can appreciate the fact that historical artifacts have been lost forever due to improper identification, theft, and destruction - a fact that we hope will not be repeated in undertaking this project.

To gather a fuller understanding of the potential impacts of this project, especially as it relates to water quality and fish habitat, of which there are many within the project boundaries, MAARS would like to request that a copy of the current Environmental Protection Plan and Spill Contingency Plan be forwarded for review.

At this time, MAARS and NCNS do not have any further commentary to provide related to this proposed undertaking; however, we would like to be kept apprised to any developments or changes to the project.

We would like to take this opportunity to reiterate that it is important for all proponents of projects to understand that the Off-Reserve Aboriginal Community represented by the NCNS is included within the definition of the word “Indian” of Section 91(24) of the *Constitution Act*, 1982. The Supreme Court of Canada in a landmark decision in *Daniels v. Canada (Indian Affairs and Northern Development)*, 2016 SCC 12, declared that “the exclusive Legislative Authority of the Parliament of Canada extends to all Indian, and Lands reserved for the Indians” and that the “word Indians’ in s.91(24) includes Métis and non-Status Indians”¹. Since 2004, in multiple decisions passed by the Supreme Court of Canada: *Haida Nation*², *Taku River Tlingit First Nation*³, and *Mikisew Cree First Nation*⁴, has established that,

Where accommodation is required in decision making that may adversely affect as yet unproven Aboriginal Rights and title claims, the Crown must balance Aboriginal concerns reasonably with the potential impact of the decision on the asserted right or title and with other societal interests.

Further, both the Government of Nova Scotia and the Government of Canada are aware that the “Made in Nova Scotia Process” and the *Mi’kmaq-Nova Scotia-Canada Consultation Terms of Reference* does not circumvent the Provincial Government’s responsibility to hold consultations with other organizations in Nova Scotia that represent Indigenous Peoples of Nova Scotia. While the proponent may have to engage with the thirteen Mi’kmaq First Nations through the Assembly of Nova Scotia Mi’kmaq Chiefs, represented by the Kwilmu’kw Maw-klusuaqn Negotiation Office (KMKNO), the KMKNO does not represent the Off-Reserve Aboriginal Community who have elected to be represented by the NCNS since 1974.

¹ *Daniels v. Canada (Indian Affairs and Northern Development)*, 2016 SCC 12, [2016] 1 S.C.R. 99

² *Haida Nation v. British Columbia (Minister of Forests)*, (2004), 2 S.C.R. 511

³ *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, (2004), 3 S.C.R. 550

⁴ *Mikisew Cree First Nations v. Canada (Minister of Canadian Heritage)*, (2005), 3 S.C.R. 388

We assert that the Off-Reserve Aboriginal Communities, as 91(24) Indians, are undeniably heirs to Treaty Rights and beneficiaries of Aboriginal Rights as substantiated by Canada's own Supreme Court jurisprudence. As such, there is absolutely an obligation to consult with the Off-Reserve Community through their elected representative body of the NCNS. The Crown's duty to consult with all Indians extends beyond that only with Indian Act Bands, or as through the truncated Terms of Reference for a Mi'kmaq Nova Scotia Canada Consultation Process.

For contextual purposes, for over forty years, the three Native Council partners of the Maritime Aboriginal People's Council (MAPC) have continued to be the Aboriginal Peoples Representative Organizations representing and advocating for the Rights and issues of the Mi'kmaq/Wolastoqiyik/Peskotomuhkati/Section 91 (24) Indians, both Status and non-Status, continuing to reside on their unceded Traditional Ancestral Homelands. In the early 1970s, the communities recognized the need for representation and advocacy for the Rights and Interests of the off-Reserve community of Aboriginal Peoples, "the forgotten Indian". Women and men self-organized themselves to be the "voice to the councils of government" for tens of thousands of community members left unrepresented by Indian Act-created Band Councils and Chiefs. Based on the Aboriginal Identity question, Statistics Canada (2016 Census - 25% sample) enumerate 21,915 off-Reserve Aboriginal Persons in New Brunswick, 42,145 in Nova Scotia, and 2,210 in Prince Edward Island.

Each Native Council in their respective province asserts Treaty Rights, Aboriginal Rights, with Interest in Other Rights confirmed in court decisions, recognized as existing Aboriginal and Treaty Rights of the Aboriginal Peoples of Canada in Part II of the Constitution Act of Canada, 1982. Each Native Council has established and maintains Natural Harvesting Regimes, and each have a co-management arrangement with DFO for Food, Social, and Ceremonial use of aquatic species, through the: Najiwsgetaq Nomehs (NBAPC), the Netukulimkewe'l Commission (NCNS), and the Kelewatl Commission (NCPEI).

The Native Council of Nova Scotia was organized in 1974 and represents the interests, needs, and rights of Off-Reserve Status and Non-Status Section 91(24) Indians/Mi'kmaq/Aboriginal Peoples continuing on our Traditional Ancestral Homelands throughout Nova Scotia as Heirs to Treaty Rights, Beneficiaries of Aboriginal Rights, with Interests to Other Rights, including Land Claim Rights.

The Native Council of Nova Scotia (NCNS) Community of Off-Reserve Status and Non-Status Indians/Mi'kmaq/Aboriginal Peoples supports projects, works, activities and undertakings which do not significantly alter, destroy, impact, or affect the sustainable natural life ecosystems or natural eco-scapes formed as hills, mountains, wetlands, meadows, woodlands, shores, beaches, coasts, brooks, streams, rivers, lakes, bays, inland waters, and the near-shore, mid-shore and off-shore waters, to list a few, with their multitude of in-situ biodiversity. Our NCNS Community has continued to access and use the natural life within those ecosystems and eco-scapes where the equitable sharing of benefits arising from projects and undertakings serve a beneficial purpose towards progress in general and demonstrate the sustainable use of the natural wealth of Mother Earth, with respect for the Constitutional Treaty Rights, Aboriginal Rights, and Other Rights of the Native Council of Nova Scotia Community continuing throughout our Traditional Ancestral Homeland in the part of the Mi'kma'ki now known as Nova Scotia.

We would appreciate an opportunity to engage on the NS-NB Reliability Intertie Project directly with the proponent, Nova Scotia Power. We look forward to further dialogue as we continue to advocate for the rights of Off-Reserve Status and Section 91(24) Indians/Mi'kmaq/Aboriginal Peoples of Nova Scotia. To continue to represent the interests and needs of the off-Reserve Aboriginal Community in Nova Scotia, we would like to request the opportunity to participate in early engagement in future Environmental Assessment Reviews.

Advancing Aboriginal Fisheries and Oceans Entities
Best Practices, Management, and Decision-making

~~CHRISTINA DAVIS~~
Habitat Impact Advisor, MAARS

~~TERESA MITCHELL~~
Executive Director, MAARS & MAPC Projects

CC: _____, Chief & President, NCNS



Environmental Assessment Branch
Department of Environment and Climate Change
PO Box 442
Halifax, NS, B3J 2P8

Friday, November 24, 2023

Re: Environmental Assessment of NS-NB Reliability Intertie Project

To: Nova Scotia Department of Environment and Climate Change,

As part of the provincial environmental assessment process, the Nova Scotia Chapter of the Canadian Parks and Wilderness Society (CPAWS-NS) provides the following comments on the proposed NS-NB Reliability Intertie project, which was registered for environmental assessment as a Class 1 undertaking on October 26, 2023.

While we acknowledge that the proposed project will provide much-needed energy stability to Nova Scotia and increase the province's capacity for renewable energy, we are concerned about the impact it will have on the Chignecto Isthmus Wilderness Area. The proposed project is to twin an existing electrical transmission line from Onslow, Nova Scotia to Salisbury, New Brunswick. The new transmission line is proposed to run parallel to the existing line, including a 2.6 km long section slated for construction through the Chignecto Isthmus Wilderness Area.

Our concerns with the proposed project are as follows:

1. Increased habitat fragmentation within the Chignecto Isthmus Wilderness Area.

The Chignecto/Sikniktewaq Isthmus is internationally recognized as an essential wildlife corridor. It is 21 km wide at its narrowest point and forms a land bridge which is the only connection between Nova Scotia and the rest of North America. The Chignecto/Sikniktewaq Isthmus is also a highly fragmented landscape. The region has some of the highest road densities in Nova Scotia and has been altered by highways, forest harvests, plantations, urban areas, agriculture and other land uses (NS DNRR 2021; Mazerolle et al 2016). Both its location and narrow size leave it vulnerable to

development pressure, conflicting land use priorities, and climate change; all of which can impact terrestrial wildlife movement.

The Chignecto Isthmus Wilderness Area (CIWA) is located near Amherst, Nova Scotia. It was originally designated in 2008 to better protect the Town of Amherst’s water supply and has since expanded to a size of 3,748 hectares. CPAWS-NS has recognized the high conservation value of this area for decades and advocated for its protection. The CIWA is essential in maintaining ecosystem connectivity in the region and allowing wildlife movement between Nova Scotia and New Brunswick. The current proposal submitted for environmental assessment includes twinning a 2.6 km section of transmission line within the CIWA. It will widen the existing corridor by 38.1 m, increasing fragmentation within the Wilderness Area. If implemented, this will impact habitat within the CIWA, further fragment one of the last remaining patches of mainly intact habitat in the area and exacerbate effects of existing landscape fragmentation across the Chignecto/Sikniktewaq Isthmus.

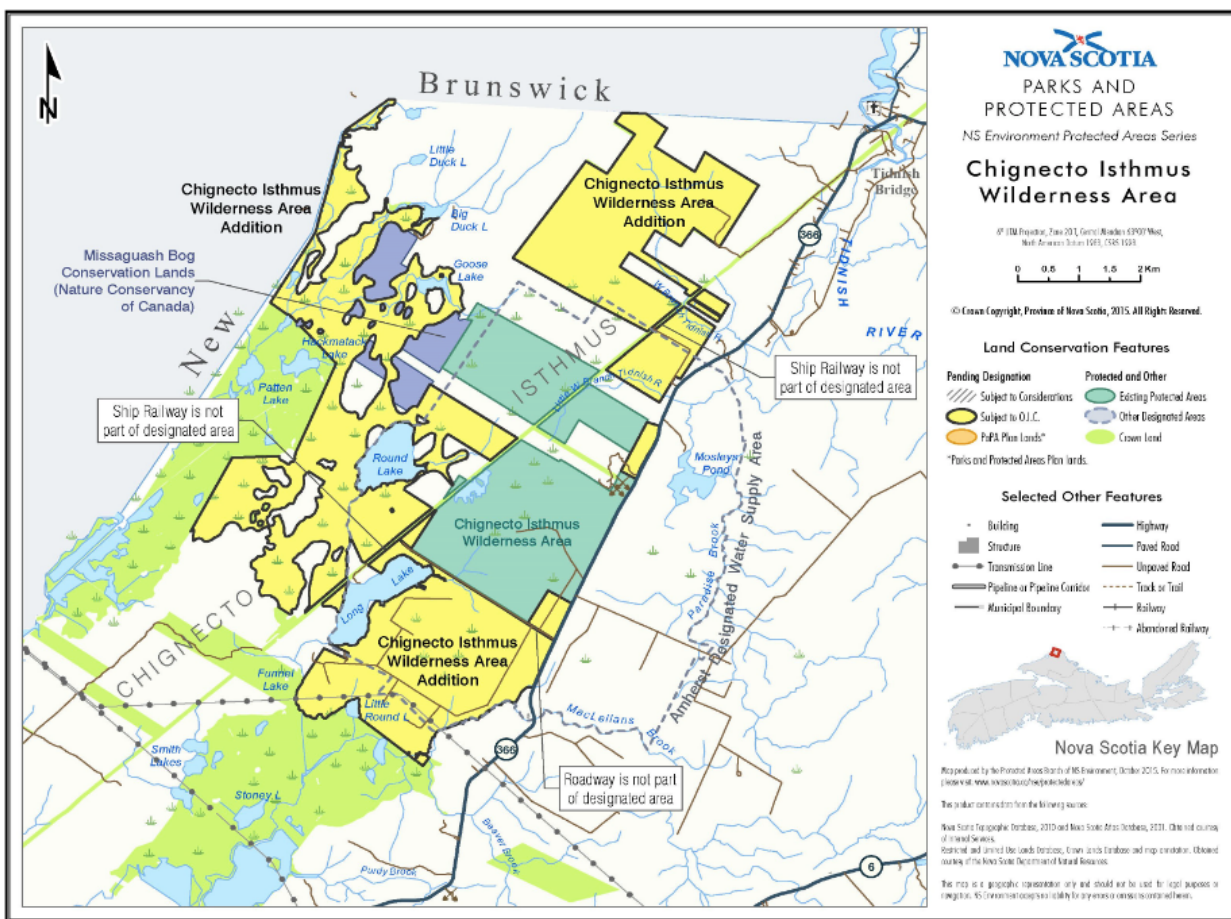


Figure 1. Map of the Chignecto Isthmus Wilderness Area showing the existing 2.6 km transmission line which runs through the southwest edge of the Wilderness Area. (Image: Province of Nova Scotia 2023).

2. Impacts on Species at Risk and wildlife movement.

Twinning the transmission line through the Chignecto Isthmus Wilderness Area may also have adverse impacts on rare species and their habitat. Much of the CIWA and nearby conservation lands consist of wetlands, floodplains, and Acadian/Wabanaki forests which support rare plants, at-risk landbirds such as Canada warbler (*Cardellina canadensis*), olive sided flycatcher (*Contopus cooperi*), and rusty blackbird (*Euphagus carolinus*) and wide-ranging mammals like the Endangered mainland moose (*Alces alces Americana*) and black bears (*Ursus americanus*) who use the area consistently.

The CIWA forms part of an essential wildlife corridor which allows mainland moose to move between Nova Scotia and New Brunswick. While moose are abundant in New Brunswick, they are Endangered in mainland Nova Scotia as listed under the *Nova Scotia Endangered Species Act* (NS ESA). The population is critically imperiled and although up to date population estimates do not exist, it is predicted that less than 700 individuals remain in mainland Nova Scotia (NSDNRR 2021). Maintaining wildlife connectivity on the isthmus is essential for allowing mainland moose to find mates, maintaining genetic diversity, and supporting the Nova Scotia population (NSECC n.d.; NSDNRR 2021). As part of the Cumberland/Colchester region, this area currently has the highest concentration of mainland moose in the province. Therefore, protection of this critical wildlife corridor has province-wide implications for the recovery of the species (NSDNRR 2021).

There is also evidence that Canada lynx (*Lynx canadensis*) have used the CIWA for travel (Mackinnon and Kennedy 2008). They are a provincially Endangered species (NS ESA) that, like mainland moose, have a large range and are sensitive to disturbance, roads, and fragmentation (Nova Scotia Lynx Recovery Team 2006). Constructing the proposed transmission line within the CIWA risks hindering travel and gene flow between Nova Scotia and New Brunswick and could negatively impact these and other terrestrial species that rely on this corridor. Furthermore, construction and maintenance of the new line will increase the use of the existing roads leading into and out of the CIWA and will degrade habitat through tree clearing and heavy equipment operation.

3. No alternative route analysis was conducted.

The environmental assessment submitted by the proponent does not contain an analysis of alternate routes for the transmission line that would circumvent the 2.6 km section proposed to run through the Chignecto Isthmus Wilderness Area. Page 18 of the Project Environmental Assessment Registration Document states the following:

“Because of the benefits of paralleling existing lines, especially in the context of limited land for alternative alignment options within the Chignecto Isthmus, it was determined that the need for an alternative route analysis was not required.” (Nova Scotia Power Incorporated 2023)

It is arrogant to reach the above conclusion without providing the proper evidence to support it. An in-depth analysis of this issue needs to be undertaken to critically evaluate alternative routes for the transmission line that do not run through the CIWA so the Minister can have confidence that the best route is selected. Due to the high levels of landscape fragmentation surrounding the CIWA, it is plausible that an alternate route through an already disturbed area would have a lessened impact on the overall connectivity of the Chignecto/Sikniktewaq Isthmus and would not further fragment the

CIWA. A detailed analysis of alternate routes should be undertaken by the proponent prior to the Minister's decision on the undertaking. A Class 2 environmental assessment, which includes an assessment report, public hearings and a longer public review period than Class 1 undertakings, would allow time to conduct the in-depth analysis needed to make an informed decision that minimizes impacts to wildlife, maintains connectivity, and keeps the CIWA intact.

Recommendations:

- 1. Move the undertaking from a Class 1 to a Class 2 environmental assessment, due to the scale and potential impacts of the proposed undertaking on wildlife and the Chignecto Isthmus Wilderness Area.**
- 2. Conduct an analysis of alternative routes for the transmission line that do not go through the Chignecto Isthmus Wilderness Area to prevent further habitat fragmentation.**

In summary, we respectfully request that the above concerns and recommendations to mitigate habitat loss and fragmentation within the Chignecto Isthmus Wilderness Area are considered and implemented when reviewing the NS-NB Reliability Intertie Project during the provincial environmental assessment and permitting processes.

Respectfully,

Conservation Campaigner
Canadian Parks and Wilderness Society – Nova Scotia Chapter

References:

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