

## Comment Index

### Clydesdale Ridge Wind Project

Publication Date: September 26, 2024

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**Nova Scotia Mi’kmaq**

Number	Source	Date
1	KMKNO	September 6, 2024

**Public**

Number	Source	Date
1	Anonymous	August 8, 2024
2	Maritime Aboriginal Aquatic Resources Secretariate (MAARS)	September 6, 2024



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August 8, 2024

Allison Fitzpatrick  
Environmental Assessment Officer  
Nova Scotia Environment and Climate Change  
[Allison.fitzpatrick@novascotia.ca](mailto:Allison.fitzpatrick@novascotia.ca)

**SUBJECT : Clydesdale Ridge Wind Project**

Dear Allison Fitzpatrick:

Thank you for the opportunity to review the registration document for the Clydesdale Ridge Wind Project (the Project), received on July 31, 2024

The federal environmental assessment process is set out in the [Impact Assessment Act](#) (IAA). The [Physical Activities Regulations](#) (the Regulations) set out a list of physical activities considered to be “designated projects” under the IAA.

While it is the responsibility of proponents to determine whether their proposed project includes physical activities described in the Regulations of the IAA, based on the information submitted to the Province of Nova Scotia on the proposed Project, the Impact Assessment Agency of Canada (IAAC) is of the opinion that, as proposed, the project does not appear to be described in the Regulations. As such, the proponent would not be expected to submit an Initial Project Description of a Designated Project. If the project changes from what has been described in its provincial registration, the proponent is advised to contact IAAC if, in their view, any proposed project activities may be described in the Regulations.

The proponent is advised that under section 9(1) of the IAA, the Minister may, on request or on the Minister’s own initiative, by order, designate a physical activity that is not prescribed by regulations made under the Regulations if, in the Minister’s opinion, the carrying out of that physical activity may cause adverse effects within federal jurisdiction or direct or incidental adverse effects. Should IAAC receive a request for a project to be designated, IAAC would contact the proponent with further information.

Please note that for physical activities not described in the Regulations, should the Project be carried out in whole or in part on federal lands, section 82 of the IAA would apply if any federal authority is required to exercise a power, duty or function under an Act other than IAA in order for the Project to proceed, or if a federal authority is providing financial assistance for the purpose of enabling the Project to be carried out. In that case, that federal authority must ensure that any Project assessment requirements under the applicable sections of the IAA are satisfied.

We also note that in proceeding with the Project, the proponent may still be required to obtain or seek amendment to other federal regulatory permits, authorizations and/or licences.

The proponent is encouraged to contact IAAC at (902) 426-0564 if it has additional information that may be relevant to IAAC or if it has any questions or concerns related to the above matters.

Diane Kettle  
(she/her|elle)  
Environmental Assessment Officer  
Impact Assessment Agency of Canada / Government of Canada  
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Date: August 20, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

From: Tiffany MacAulay, Linear Development, Regulatory Review Biologist, Fish and Fish Habitat Protection Program; Sign-off by BI-03 Sarah Rombaut, A/Senior Biologist

Subject: Clydesdale Ridge Wind Project, Colchester & Pictou Counties, Nova Scotia

**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 review focused on the impacts of the works outlined in the Clydesdale Ridge Wind Project Environmental Assessment Registration Document, 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: Watercourse Crossing Designs:	
Identify Gap/Risk	Specific information related to anticipated alterations or replacements of existing structures (i.e., 12 crossing upgrades to existing road crossings and 12 new construction road crossings) is not yet determined.
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. All new watercourse crossings will require DFO review to address local and cumulative impacts to fish and fish habitat, including potential impacts to aquatic species at risk.
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.
<b>Risk Assessment: Priority Species &amp; Fish Habitat</b>	
Identify Gap/Risk	In the EARD, Atlantic Salmon (Inner Bay of Fundy and Gaspé-Southern Gulf of St. Lawrence populations; <i>Salmo salar</i> ), American Eel ( <i>Anguilla rostrata</i> ), Striped Bass ( <i>Morone saxatilis</i> ), Brook Stickleback ( <i>Culaea inconstans</i> ), Northern Pearl Dace ( <i>Margariscus nachtriebi</i> ), Brook Trout ( <i>Salvenius fontinalis</i> ) and Lake Trout ( <i>Salvenius namaycush</i> ) are identified as priority species potentially occurring within the Study Area. However, detailed information on the fish and fish habitat within the Study Area was 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. 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:

- Submit detailed information on the proposed watercourse crossing and wetland alteration designs, detailed descriptions of the fish and fish habitat found at the location of the 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;
- Consider open bottom structures, such as clear span bridges, open bottom arch

culverts, and embedded structures for fish bearing watercourse crossings where possible; and

- 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 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 Act* permit is required.

**From:** [Land Use](#)  
**To:** [Fitzpatrick, Allison](#)  
**Subject:** RE: 23-3235 | REMINDER Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024  
**Date:** August 22, 2024 4:22:54 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[23-3235 LTP.msg](#)

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**\*\* 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

Hello Allison,

Please find attached NAV CANADA's response letter that was sent to Natural Forces Developments LP on 2024-01-03.

Regards,

**Simon Le Bon**

Supervisor, Land Use / Superviseur, Utilisation de terrains  
**NAV CANADA | Aeronautical Information Management (AIM)**  
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---

**From:** Fitzpatrick, Allison <Allison.Fitzpatrick@novascotia.ca>

**Sent:** Thursday, August 22, 2024 2:05 PM

**To:** Birch-Caza, Melissa J <Melissa.Birch-Caza@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>; Wildlife EA <WildlifeEA@novascotia.ca>; Crewe, Tara <Tara.Crewe@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>; Paddock, Robert J <Robert.Paddock@novascotia.ca>; MacPherson, George E <George.MacPherson@novascotia.ca>; Hearn, Scott <Scott.Hearn@novascotia.ca>; Webber, Diane E <Diane.Webber@novascotia.ca>; Dickie, John <John.Dickie@novascotia.ca>; Wickson, Mark <Mark.Wickson@novascotia.ca>; Creamer, Amber <Amber.Creamer@novascotia.ca>; MacDonald, Brent A <Brent.MacDonald@novascotia.ca>; MacQuarrie, Rebecca M



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**Subject:** [EXT] REMINDER Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

Good Afternoon,

A reminder that comments for the **CLYDESDALE RIDGE WIND PROJECT** must be provided by **AUGUST 28, 2024**, to be considered in this environmental assessment. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

Regards,  
Allison

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**From:** Fitzpatrick, Allison

**Sent:** Wednesday, July 31, 2024 4:47 PM

**To:** Birch-Caza, Melissa J <[Melissa.Birch-Caza@novascotia.ca](mailto:Melissa.Birch-Caza@novascotia.ca)>; Alward, Emily <[Emily.Alward@novascotia.ca](mailto:Emily.Alward@novascotia.ca)>; Mitchell, David A <[David.Mitchell@novascotia.ca](mailto:David.Mitchell@novascotia.ca)>; Mosher, Elaine <[Elaine.Mosher@novascotia.ca](mailto:Elaine.Mosher@novascotia.ca)>; Hurlburt, Donna D <[Donna.Hurlburt@novascotia.ca](mailto:Donna.Hurlburt@novascotia.ca)>; Wildlife EA <[WildlifeEA@novascotia.ca](mailto:WildlifeEA@novascotia.ca)>; Crewe, Tara <[Tara.Crewe@novascotia.ca](mailto:Tara.Crewe@novascotia.ca)>; Drake, Carrie L <[Carrie.Drake@novascotia.ca](mailto:Carrie.Drake@novascotia.ca)>; Mahoney, Meagan <[Meagan.Mahoney@novascotia.ca](mailto:Meagan.Mahoney@novascotia.ca)>; Blackburn, Lori M <[Lori.Blackburn@novascotia.ca](mailto:Lori.Blackburn@novascotia.ca)>; Boudreau, Susan M <[Susan.Boudreau@novascotia.ca](mailto:Susan.Boudreau@novascotia.ca)>; Steele, Cynthia <[Cynthia.Steele@novascotia.ca](mailto:Cynthia.Steele@novascotia.ca)>; Paddock, Robert J <[Robert.Paddock@novascotia.ca](mailto:Robert.Paddock@novascotia.ca)>; MacPherson, George E <[George.MacPherson@novascotia.ca](mailto:George.MacPherson@novascotia.ca)>; Hearn, Scott <[Scott.Hearn@novascotia.ca](mailto:Scott.Hearn@novascotia.ca)>; Webber, Diane E <[Diane.Webber@novascotia.ca](mailto:Diane.Webber@novascotia.ca)>; Dickie, John <[John.Dickie@novascotia.ca](mailto:John.Dickie@novascotia.ca)>; Wickson, Mark <[Mark.Wickson@novascotia.ca](mailto:Mark.Wickson@novascotia.ca)>; Creamer, Amber <[Amber.Creamer@novascotia.ca](mailto:Amber.Creamer@novascotia.ca)>; MacDonald, Brent A <[Brent.MacDonald@novascotia.ca](mailto:Brent.MacDonald@novascotia.ca)>; MacQuarrie, Rebecca M <[Rebecca.MacQuarrie@novascotia.ca](mailto:Rebecca.MacQuarrie@novascotia.ca)>; Cormier, John <[John.Cormier@novascotia.ca](mailto:John.Cormier@novascotia.ca)>; Lewis, Beth J <[Beth.Lewis@novascotia.ca](mailto:Beth.Lewis@novascotia.ca)>; Hernould, Alexandra S <[Alexandra.Hernould@novascotia.ca](mailto:Alexandra.Hernould@novascotia.ca)>; Slauenwhite, Melissa <[Melissa.Slauenwhite@novascotia.ca](mailto:Melissa.Slauenwhite@novascotia.ca)>; Poirier, Colin <[Colin.Poirier@novascotia.ca](mailto:Colin.Poirier@novascotia.ca)>; Rideout, Bill E <[Bill.Rideout@novascotia.ca](mailto:Bill.Rideout@novascotia.ca)>; Power, Terrance <[Terrance.Power@novascotia.ca](mailto:Terrance.Power@novascotia.ca)>; David, Ashley D <[Ashley.David@novascotia.ca](mailto:Ashley.David@novascotia.ca)>; Ramen, Satya <[Satya.Ramen@novascotia.ca](mailto:Satya.Ramen@novascotia.ca)>; NSE-SAS-Division <[NSE-SAS-Division@novascotia.ca](mailto:NSE-SAS-Division@novascotia.ca)>; Mackley,

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**Subject:** Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

Good Afternoon,

This is to advise that on August 7 2024, **Clydesdale Holdings Ltd** will register the **CLYDESDALE RIDGE WIND PROJECT** for environmental assessment, in accordance with Part IV of the Environment Act.

**PROJECT DESCRIPTION:**

The proposed undertaking is for the construction of an up to 18 wind turbines up to 126MW wind energy project. The proposed project is located in Colchester and Pictou Counties, near the communities of Mount Thom and Earltown. The Project include the construction of wind turbines, new roads, upgrades to existing roads, electrical collector lines and temporary laydown areas. The proposed wind turbines will be up to 200 m tall to the tip of the blade and individually produce up to 7 MW. The Proponent is developing and will own and operate the Project in partnership with Mi'kmaq communities in Nova Scotia. Construction is intended to begin in 2025 and is expected to be operational for 25 years beginning in 2027.

**DEADLINES:**

Please note that **all comments must be provided by August 28, 2024**, to be considered in this environmental assessment. We understand this a slight change from the usual 30-day comment period. It is necessary to ensure adequate time to support analysis and decision-making processes under the legislative timeframe. Reviewers will still have 28 days to consider the document and we are hopeful that our efforts over the past year to streamline and standardize review process will help with an efficient review. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

On or before **September 26, 2024**, the Minister of Environment and Climate Change will decide if the project can be granted conditional environmental assessment approval. On the decision day, all submissions received will be posted on the Department's website for public viewing.

**ACCESSING EA DOCUMENTS AND DATA:**

Documents can be downloaded from the proponent's **Sharepoint site** (Link:).

[Clydesdale Ridge Wind Project EARD Submission \(Shared with NSECC\)](#)

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.**

On August 7, 2024, the Registration Documents (except the GIS data) will also be available on our website at <http://www.novascotia.ca/nse/ea/>.

**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 and guidance to support you, in your role as reviewer, to help achieve this goal.** This template requests sign off by Managers/Directors (for provincial departments) prior to submission of final comments to the EA Branch. Therefore, please consider the attached 3 documents to provide your comments:

1. EA Reviewer Template (this is a suggested format for comments, not a requirement).
2. EA Reviewer Guidance (**this should not be included back as part of comments to the EA Branch**)
3. Standard T&C's for Wind

If you have difficulties accessing the documents or any questions on this registration, please contact me at any time.

Kind regards,  
Allison

  
NOVA SCOTIA  
Environment and  
Climate Change

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Halifax, NS, B3J 2P8

**Allison Fitzpatrick**  
Environmental Assessment Officer  
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**From:** [Land Use](#)  
**To:** [Jessica Pitman](#)  
**Cc:** [Jessica Pitman](#); [Atlantic Region Transport Canada](#)  
**Subject:** 23-3235 LTP  
**Attachments:** [image001.png](#)  
[23-3235 Coords.xlsx](#)  
[23-3235 Letter to proponent.pdf](#)  
[23-3235 Construction Start Notice.pdf](#)

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Hello Jessica,

Please find attached a letter from NAV CANADA regarding your wind turbine(s) (Clydesdale Ridge Wind Project - 180 Gunshot Rd) submitted on 2023-08-08.

**We ask that you notify us at least 90 business days prior to the start of construction.** This notification requirement can be satisfactorily met by returning a completed, signed copy of the attached form and an Excel copy of the attached spreadsheet. If you have any questions, please don't hesitate to contact me.

NAV CANADA's land use evaluation is based on information known as of the date of this letter and is valid for a period of 18 months, subject to any legislative changes impacting land use submissions. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Innovation, Science and Economic Development Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA Engineering as deemed necessary.

Thank you for your patience during the evaluation process.

Regards,

**Simon Le Bon**

Supervisor, Land Use / Superviseur, Utilisation de terrains  
**NAV CANADA | Aeronautical Information Management (AIM)**

[landuse@navcanada.ca](mailto:landuse@navcanada.ca)

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[www.navcanada.ca](http://www.navcanada.ca)





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### Obstacle Information for As

Obstacle ID	LAT dd mm ss.ss	LONG -ddd mm ss.ss	Ground Elevation (Feet)
W1	45 36 30.55	-63 05 46.33	919.0000
W2	45 36 27.97	-63 04 47.09	964.0000
W3	45 36 15.89	-63 05 17.88	1005.0000
W4	45 35 58.21	-63 05 39.16	998.0000
W5	45 36 03.52	-63 03 57.05	920.0000
W6	45 35 44.23	-63 06 07.42	981.0000
W7	45 35 54.69	-63 04 46.67	984.0000
W8	45 35 36.86	-63 05 13.67	998.0000
W9	45 35 40.78	-63 04 02.80	903.0000
W10	45 35 16.85	-63 05 27.93	982.0000
W11	45 35 24.86	-63 04 51.23	1036.0000
W12	45 35 21.99	-63 04 08.22	914.0000
W13	45 34 12.69	-63 03 34.82	816.0000
W14	45 32 18.44	-63 01 24.33	995.0000
W15	45 32 22.39	-63 00 44.93	961.0000
W16	45 32 05.05	-63 01 10.86	960.0000
Crane			
Crane-W1	45 36 30.55	-63 05 46.33	919.0000
Crane-W2	45 36 27.97	-63 04 47.09	964.0000
Crane-W3	45 36 15.89	-63 05 17.88	1005.0000
Crane-W4	45 35 58.21	-63 05 39.16	998.0000
Crane-W5	45 36 03.52	-63 03 57.05	920.0000
Crane-W6	45 35 44.23	-63 06 07.42	981.0000
Crane-W7	45 35 54.69	-63 04 46.67	984.0000
Crane-W8	45 35 36.86	-63 05 13.67	998.0000
Crane-W9	45 35 40.78	-63 04 02.80	903.0000
Crane-W10	45 35 16.85	-63 05 27.93	982.0000
Crane-W11	45 35 24.86	-63 04 51.23	1036.0000
Crane-W12	45 35 21.99	-63 04 08.22	914.0000
Crane-W13	45 34 12.69	-63 03 34.82	816.0000
Crane-W14	45 32 18.44	-63 01 24.33	995.0000
Crane-W15	45 32 22.39	-63 00 44.93	961.0000
Crane-W16	45 32 05.05	-63 01 10.86	960.0000

Z-LDU-100 Version 2

Assessment			Upon completion	
Structure Height (Feet)	Total Height (Feet)	Crane Swing Radius (Feet)	Lighted Y/N	Painted Y/N
661.0892	1580.0892			
661.0892	1625.0892			
661.0892	1666.0892			
661.0892	1659.0892			
661.0892	1581.0892			
661.0892	1642.0892			
661.0892	1645.0892			
661.0892	1659.0892			
661.0892	1564.0892			
661.0892	1643.0892			
661.0892	1697.0892			
661.0892	1575.0892			
661.0892	1477.0892			
661.0892	1656.0892			
661.0892	1622.0892			
661.0892	1621.0892			
	0.0000			
643.0000	1562.0000	524.0000		
643.0000	1607.0000	524.0000		
643.0000	1648.0000	524.0000		
643.0000	1641.0000	524.0000		
643.0000	1563.0000	524.0000		
643.0000	1624.0000	524.0000		
643.0000	1627.0000	524.0000		
643.0000	1641.0000	524.0000		
643.0000	1546.0000	524.0000		
643.0000	1625.0000	524.0000		
643.0000	1679.0000	524.0000		
643.0000	1557.0000	524.0000		
643.0000	1459.0000	524.0000		
643.0000	1638.0000	524.0000		
643.0000	1604.0000	524.0000		
643.0000	1603.0000	524.0000		
	0.0000			
	0.0000			
	0.0000			

1.0 2 August 2023

**pletion**

**Construction  
Date**

1697.0892

|





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January 3, 2024

Your file  
 Clydesdale Ridge Wind Project - 180 Gunshot Rd  
 Our file  
 23-3235

Mrs. Jessica Pitman  
 Natural Forces Developments LP  
 1200-1701 Hollis Street  
 Halifax, NS  
 B3J 3N4

**RE: Wind Structures: Wind Turbine(s) - Dalhousie Settlement, NS  
 (See attached document(s))**

Mrs. Pitman,

NAV CANADA has evaluated the captioned proposal and has no objection to the project as submitted, provided that the following is adhered to:

- In the interest of aviation safety, it is incumbent on NAV CANADA to maintain up-to-date aeronautical publications and issue NOTAM as required. To assist us in that end, we ask that you notify us at least 90 business days prior to the start of construction. This notification requirement can be satisfactorily met by returning a completed, signed copy of the attached form and an Excel copy of the attached spreadsheet by email at [landuse@navcanada.ca](mailto:landuse@navcanada.ca) or fax at 613-248-4094. If you should decide not to proceed with this project or if the structure is dismantled, please advise us accordingly so that we may formally close the file.

Here are the impacts that were identified by our assessment:

- Instrument Flight Procedures: CZQM Airspace
  - Area Minimum Altitude (AMA): NW (N46 W64) SW (N44 W64) NE (N46 W60) SE (N44 W60)
    - AMA to be raised from 2,600 feet to 2,700 feet.
    - This impact would be removed if all turbines were under 1,600 feet ASL.
- All turbines are visible on the HALIFAX Radar. Any changes to this proposal would need to be re-assessed for possible impact.

The nature and magnitude of electronic interference to NAV CANADA ground-based navigation aids, including RADAR, due to wind turbines depends on the location, configuration, number, and size of turbines; all turbines must be considered together for analysis. The interference of wind turbines to certain navigation aids is cumulative and while initial turbines may be approved, continued development may not always be possible.

Our assessment does not constitute an approval and/or permit from other agencies. If you have any questions, contact the Land Use Department by email at [landuse@navcanada.ca](mailto:landuse@navcanada.ca).

**NAV CANADA's land use evaluation is based on information known as of the date of this letter and is valid for a period of 18 months, subject to any legislative changes impacting land use submissions. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Innovation, Science and Economic Development Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA engineering as deemed necessary.**



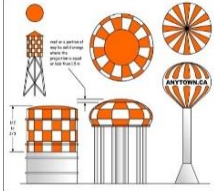

This document contains information proprietary to NAV CANADA. Any disclosure or use of this information or any reproduction of this document for other than the specific purpose for which it is intended is expressly prohibited except as NAV CANADA may otherwise agree in writing.

Regards,

Land Use Office  
 NAV CANADA

cc ATLR - Atlantic Region, Transport Canada

# Construction Start Notification

File Information		
<b>NC File No</b> 23-3235	<b>TC File No</b>	<b>Proponent File No</b> Clydesdale Ridge Wind Project - 180 Gunshot Rd
<b>To:</b> NAV CANADA, Land Use Email: <a href="mailto:landuse@navcanada.ca">landuse@navcanada.ca</a>	<b>From:</b> Natural Forces Developments LP	
<b>Site Information:</b>	<b>Nearest town:</b> Dalhousie Settlement, NS <b>Latitude (N)</b> <b>Longitude (W)</b> <b>Ground (above sea level)</b> <span style="float: right;">ft</span> <b>Structure Height (above ground level)</b> <span style="float: right;">ft</span> <b>Total Height (above sea level)</b> <span style="float: right;">ft</span>	
Construction Timeline		
In the interest of aviation safety, NAV CANADA must be notified at least 90 days in advance of the start of construction. Please enter the construction start date (and end date if required) in the space provided below along with any lighting and marking information (as required by Transport Canada).		
<b>Construction start date:</b> (permanent structures)	<input style="width: 100%; height: 20px;" type="text"/>	
<b>Construction date(s):</b> (temporary structures or cranes)	<b>From:</b> <input style="width: 100%; height: 20px;" type="text"/>	<b>To:</b> <input style="width: 100%; height: 20px;" type="text"/>
<b>Construction daily time(s):</b> (temporary structures or cranes)	<b>From:</b> <input style="width: 100%; height: 20px;" type="text"/>	<b>To:</b> <input style="width: 100%; height: 20px;" type="text"/>
<i>Daily Usage Times – Indicate date/times for which the crane will be in operation up to the maximum height.</i>		
Structure Lighting and/or Marking		
All objects, regardless of their height, that have been assessed by Transport Canada as constituting a hazard to air navigation require marking and/or lighting in accordance with the <i>Canadian Aviation Regulations</i> (CARs) and should be marked and/or lighted to meet the standards specified in <b>CAR 621</b> .		
<b>Structure will have temporary lighting during construction:</b> Yes <input type="checkbox"/> No <input type="checkbox"/>		
If no, please provide anticipated date for permanent lighting system to be operational: <input style="width: 100%; height: 20px;" type="text"/>		
<b>Structure will have permanent lighting upon completion:</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	<b>Structure will be marked upon completion:</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	
 	 	
I hereby certify that the location, height/elevation, construction dates, as well as lighting and marking information contained herein to be true and accurate.		
<b>Name</b>	<b>Signature</b>	
<b>Title</b>	<b>Date</b>	

**From:** [Cuthbert, Robert W](#)  
**To:** [Fitzpatrick, Allison](#)  
**Cc:** [Seaboyer, Matt P](#)  
**Subject:** RE: REMINDER Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024  
**Date:** August 23, 2024 9:38:50 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)

---

Allison,

Resource Management Unit doesn't have any comments on the above noted EA.

Thanks,  
Robert

---

**From:** Fitzpatrick, Allison <Allison.Fitzpatrick@novascotia.ca>  
**Sent:** Thursday, August 22, 2024 3:05 PM  
**To:** Birch-Caza, Melissa J <Melissa.Birch-Caza@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>; Wildlife EA <WildlifeEA@novascotia.ca>; Crewe, Tara <Tara.Crewe@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>; Paddock, Robert J <Robert.Paddock@novascotia.ca>; MacPherson, George E <George.MacPherson@novascotia.ca>; Hearn, Scott <Scott.Hearn@novascotia.ca>; Webber, Diane E <Diane.Webber@novascotia.ca>; Dickie, John <John.Dickie@novascotia.ca>; Wickson, Mark <Mark.Wickson@novascotia.ca>; Creamer, Amber <Amber.Creamer@novascotia.ca>; MacDonald, Brent A <Brent.MacDonald@novascotia.ca>; MacQuarrie, Rebecca M <Rebecca.MacQuarrie@novascotia.ca>; Cormier, John <John.Cormier@novascotia.ca>; Lewis, Beth J <Beth.Lewis@novascotia.ca>; Hernould, Alexandra S <Alexandra.Hernould@novascotia.ca>; Slauenwhite, Melissa <Melissa.Slaunwhite@novascotia.ca>; Poirier, Colin <Colin.Poirier@novascotia.ca>; Rideout, Bill E <Bill.Rideout@novascotia.ca>; Power, Terrance <Terrance.Power@novascotia.ca>; David, Ashley D <Ashley.David@novascotia.ca>; Ramen, Satya <Satya.Ramen@novascotia.ca>; NSE-SAS-Division <NSE-SAS-Division@novascotia.ca>; Mackley, Doreen <Doreen.Mackley@novascotia.ca>; Theriault, Marc P <Marc.Theriault@novascotia.ca>; Bertrand, Brittany <Brittany.Bertrand@novascotia.ca>; MacDonald, Bonnie I (ENV) <Bonnie.I.MacDonald@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; beverly.ramos-casey@canada.ca; fcr\_tracker@ec.gc.ca; referralsmaritimes@dfo-mpo.gc.ca; dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca; windturbines@forces.gc.ca; Land Use <landuse@navcanada.ca>; tcfcmar@tc.gc.ca  
**Subject:** REMINDER Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

Good Afternoon,

A reminder that comments for the **CLYDESDALE RIDGE WIND PROJECT** must be provided by **AUGUST 28, 2024**, to be considered in this environmental assessment. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

Regards,  
Allison

---

**From:** Fitzpatrick, Allison

**Sent:** Wednesday, July 31, 2024 4:47 PM

**To:** Birch-Caza, Melissa J <[Melissa.Birch-Caza@novascotia.ca](mailto:Melissa.Birch-Caza@novascotia.ca)>; Alward, Emily <[Emily.Alward@novascotia.ca](mailto:Emily.Alward@novascotia.ca)>; Mitchell, David A <[David.Mitchell@novascotia.ca](mailto:David.Mitchell@novascotia.ca)>; Mosher, Elaine <[Elaine.Mosher@novascotia.ca](mailto:Elaine.Mosher@novascotia.ca)>; Hurlburt, Donna D <[Donna.Hurlburt@novascotia.ca](mailto:Donna.Hurlburt@novascotia.ca)>; Wildlife EA <[WildlifeEA@novascotia.ca](mailto:WildlifeEA@novascotia.ca)>; Crewe, Tara <[Tara.Crewe@novascotia.ca](mailto:Tara.Crewe@novascotia.ca)>; Drake, Carrie L <[Carrie.Drake@novascotia.ca](mailto:Carrie.Drake@novascotia.ca)>; Mahoney, Meagan <[Meagan.Mahoney@novascotia.ca](mailto:Meagan.Mahoney@novascotia.ca)>; Blackburn, Lori M <[Lori.Blackburn@novascotia.ca](mailto:Lori.Blackburn@novascotia.ca)>; Boudreau, Susan M <[Susan.Boudreau@novascotia.ca](mailto:Susan.Boudreau@novascotia.ca)>; Steele, Cynthia <[Cynthia.Steele@novascotia.ca](mailto:Cynthia.Steele@novascotia.ca)>; Paddock, Robert J <[Robert.Paddock@novascotia.ca](mailto:Robert.Paddock@novascotia.ca)>; MacPherson, George E <[George.MacPherson@novascotia.ca](mailto:George.MacPherson@novascotia.ca)>; Hearn, Scott <[Scott.Hearn@novascotia.ca](mailto:Scott.Hearn@novascotia.ca)>; Webber, Diane E <[Diane.Webber@novascotia.ca](mailto:Diane.Webber@novascotia.ca)>; Dickie, John <[John.Dickie@novascotia.ca](mailto:John.Dickie@novascotia.ca)>; Wickson, Mark <[Mark.Wickson@novascotia.ca](mailto:Mark.Wickson@novascotia.ca)>; Creamer, Amber <[Amber.Creamer@novascotia.ca](mailto:Amber.Creamer@novascotia.ca)>; MacDonald, Brent A <[Brent.MacDonald@novascotia.ca](mailto:Brent.MacDonald@novascotia.ca)>; MacQuarrie, Rebecca M <[Rebecca.MacQuarrie@novascotia.ca](mailto:Rebecca.MacQuarrie@novascotia.ca)>; Cormier, John <[John.Cormier@novascotia.ca](mailto:John.Cormier@novascotia.ca)>; Lewis, Beth J <[Beth.Lewis@novascotia.ca](mailto:Beth.Lewis@novascotia.ca)>; Hernould, Alexandra S <[Alexandra.Hernould@novascotia.ca](mailto:Alexandra.Hernould@novascotia.ca)>; Slauenwhite, Melissa <[Melissa.Slaenwhite@novascotia.ca](mailto:Melissa.Slaenwhite@novascotia.ca)>; Poirier, Colin <[Colin.Poirier@novascotia.ca](mailto:Colin.Poirier@novascotia.ca)>; Rideout, Bill E <[Bill.Rideout@novascotia.ca](mailto:Bill.Rideout@novascotia.ca)>; Power, Terrance <[Terrance.Power@novascotia.ca](mailto:Terrance.Power@novascotia.ca)>; David, Ashley D <[Ashley.David@novascotia.ca](mailto:Ashley.David@novascotia.ca)>; Ramen, Satya <[Satya.Ramen@novascotia.ca](mailto:Satya.Ramen@novascotia.ca)>; NSE-SAS-Division <[NSE-SAS-Division@novascotia.ca](mailto:NSE-SAS-Division@novascotia.ca)>; Mackley, Doreen <[Doreen.Mackley@novascotia.ca](mailto:Doreen.Mackley@novascotia.ca)>; Theriault, Marc P <[Marc.Theriault@novascotia.ca](mailto:Marc.Theriault@novascotia.ca)>; Bertrand, Brittany <[Brittany.Bertrand@novascotia.ca](mailto:Brittany.Bertrand@novascotia.ca)>; MacDonald, Bonnie I (ENV) <[Bonnie.I.MacDonald@novascotia.ca](mailto:Bonnie.I.MacDonald@novascotia.ca)>; Lovitt, Christina <[Christina.Lovitt@novascotia.ca](mailto:Christina.Lovitt@novascotia.ca)>; Zanth, Kathy M <[Kathy.Zanth@novascotia.ca](mailto:Kathy.Zanth@novascotia.ca)>; [projects-projets@iaac-aeic.gc.ca](mailto:projects-projets@iaac-aeic.gc.ca); [jeff.reader@dfo-mpo.gc.ca](mailto:jeff.reader@dfo-mpo.gc.ca); [beverly.ramos-casey@canada.ca](mailto:beverly.ramos-casey@canada.ca); [fcr\\_tracker@ec.gc.ca](mailto:fcr_tracker@ec.gc.ca); [referralsmaritimes@dfo-mpo.gc.ca](mailto:referralsmaritimes@dfo-mpo.gc.ca); [dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca](mailto:dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca); [windturbines@forces.gc.ca](mailto:windturbines@forces.gc.ca); Land Use <[landuse@navcanada.ca](mailto:landuse@navcanada.ca)>; [tcfcmar@tc.gc.ca](mailto:tcfcmar@tc.gc.ca)

**Subject:** Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

Good Afternoon,

This is to advise that on August 7 2024, **Clydesdale Holdings Ltd** will register the **CLYDESDALE RIDGE WIND PROJECT** for environmental assessment, in accordance with Part IV of the Environment Act.

## **PROJECT DESCRIPTION:**

The proposed undertaking is for the construction of an up to 18 wind turbines up to 126MW wind energy project. The proposed project is located in Colchester and Pictou Counties, near the communities of Mount Thom and Earltown. The Project include the construction of wind turbines, new roads, upgrades to existing roads, electrical collector lines and temporary laydown areas. The proposed wind turbines will be up to 200 m tall to the tip of the blade and individually produce up to 7 MW. The Proponent is developing and will own and operate the Project in partnership with Mi'kmaq communities in Nova Scotia. Construction is intended to begin in 2025 and is expected to be operational for 25 years beginning in 2027.

## **DEADLINES:**

Please note that **all comments must be provided by August 28, 2024**, to be considered in this environmental assessment. We understand this a slight change from the usual 30-day comment period. It is necessary to ensure adequate time to support analysis and decision-making processes under the legislative timeframe. Reviewers will still have 28 days to consider the document and we are hopeful that our efforts over the past year to streamline and standardize review process will help with an efficient review. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

On or before **September 26, 2024**, the Minister of Environment and Climate Change will decide if the project can be granted conditional environmental assessment approval. On the decision day, all submissions received will be posted on the Department's website for public viewing.

## **ACCESSING EA DOCUMENTS AND DATA:**

Documents can be downloaded from the proponent's **Sharepoint site** (Link:).

[Clydesdale Ridge Wind Project EARD Submission \(Shared with NSECC\)](#)

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.**

On August 7, 2024, the Registration Documents (except the GIS data) will also be available on our website at <http://www.novascotia.ca/nse/ea/>.

## **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 and guidance to support you, in your role as reviewer, to help achieve this goal.** This template requests sign off by Managers/Directors (for provincial departments) prior to submission of final comments to the EA Branch. Therefore, please consider the attached 3 documents to provide your comments:

1. EA Reviewer Template (this is a suggested format for comments, not a requirement).
2. EA Reviewer Guidance (**this should not be included back as part of comments to the EA Branch**)
3. Standard T&C's for Wind

If you have difficulties accessing the documents or any questions on this registration, please contact me at any time.

Kind regards,  
Allison



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

**Allison Fitzpatrick**  
Environmental Assessment Officer  
Policy, Planning and Environmental  
Assessment  
*902-237-4711*  
[Allison.fitzpatrick@novascotia.ca](mailto:Allison.fitzpatrick@novascotia.ca)

## **Agriculture**

---

Date: August 26, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

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

Subject: Clydesdale Ridge Wind Project  
Counties of Colchester and Pictou, Nova Scotia

---

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

No agricultural impacts are anticipated given that:

- The proposed expansion is located on class 7 land, which is unsuitable for agriculture.
- The closest registered farms to the proposed project area are just over 2 km away from the nearest wind turbine.
- The closest agricultural land to the proposed project area is approximately 160 m away from the nearest turbine and is classified as blueberries.

---

Date: August 26, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

From: Beth Lewis, Director of Special Places Protection

Subject: Clydesdale Ridge Wind Project, Colchester and Pictou Counties - Environmental Assessment Registration

---

**Scope of review:**

This review focuses on the following mandate: ***Archaeology and Geology***

**List of Documents Reviewed:**

*EA Document*

*Final reports for Heritage Research Permits (HRPs) A2023NS183 & A2024NS120*

**Details of Technical Review (Archaeology):**

Five areas of elevated archaeological potential were identified under HRP A2023NS183. These HPAs were recommended for avoidance, and if avoidance was not possible, these areas were recommended to be tested at 5 m intervals.

**Details of Technical Review (Geology):**

The project proposal appears to accurately describe the bedrock geology of the area. A small portion of the project area includes bedrock of the Boss Point Formation (Carboniferous). There is a low probability of significant fossils, but if fossils are encountered during excavation, the Nova Scotia Museum can be contacted for information and advice.

**Key Considerations:**

The recommendations from both HRP Final reports remain in effect and should be adhered to.



Date: August 28, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

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

Subject: Clydesdale Ridge Wind Project, Colchester and Pictou Counties

---

**Scope of review:**

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

**List of Documents Reviewed:**

Environmental Assessment Registration Document.

**Details of Technical Review:**

**7.0 MI'KMAQ OF NOVA SCOTIA**

**7.1 Mi'kmaq Engagement**

OLA is encouraged to see that early engagement with the Mi'kmaq of Nova Scotia was prioritized. OLA acknowledges the Proponent's commitment to on-going, meaningful engagement with the Mi'kmaq of Nova Scotia throughout the EA process and the construction, operation, and decommissioning phases of the Project.

This section states that early engagement efforts were focused on the Mi'kmaq communities in closest proximity to the Project Area: Millbrook First Nation, Paqtnkek Mi'kmaq Nation, and Pictou Landing First Nation. The Proponent provided information via email to these communities and gave presentations to Paqtnkek Mi'kmaq Nation and Pictou Landing First Nation. OLA is encouraged to see that engagement efforts were later expanded to include all 13 Mi'kmaq communities in Nova Scotia and the Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO).

**7.2 Summary of Issues**

This section provides a summary of issues raised during Mi'kmaq engagement. It states that the presence of Black Ash was noted in the Project Area during information collection for the MEKS. OLA is aware that black ash is a species of interest to the Mi'kmaq of Nova Scotia. Potential impacts to black ash may potentially adversely impact Aboriginal and/or Treaty rights. The Proponent states they will facilitate opportunities for the Mi'kmaq to harvest traditional plants prior to clearing activities in the Project footprint.

**7.4.2 2023 MEKS**

This section states that a MEKS was completed by Membertou Geomatics Solutions to support the Project and update the results of the 2008 MEKS. The spatial boundaries used in the MEKS for the Project Site included a 50 m buffer around proposed Project infrastructure. The results of the MEKS indicate that berry harvesting, trout fishing, and deer, rabbit and partridge hunting were the activities reported by interviewees in the highest frequencies.

### **11.3.5.3 Mainland Moose Monitoring**

This section states that the Project Area is within core habitat and concentration areas for mainland moose, and that the closest reported observation of mainland moose is 3 km from the Project Area. Moose are considered a species of significance to the Mi'kmaq of Nova Scotia.

### **13.5.1 Wetlands**

This section states that there are 89 wetlands identified within the Study Area, with anticipated direct impacts to 30 wetlands, totaling 0.95 ha. The Proponent anticipates one wetland will be designated as a Wetland of Special Significance (WSS). Wetlands support a wide variety of plants, including those that the Mi'kmaq consider to be for sacred, ceremonial, and medicinal purposes.

### **13.5.2 Surface Water, Fish and Fish Habitat**

This section states that there are 63 watercourses identified within the Study Area, with anticipated direct impact to 373m<sup>2</sup> of fish habitat at 24 separate crossing locations. Of those, 12 will involve upgrades at existing crossings and 12 will involve new infrastructure. Impacts to fish and their habitat may potentially adversely impact Aboriginal and/or Treaty rights.

### **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'kmaw 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 engaging with the Mi'kmaq of Nova Scotia and KMKNO and to provide regular updates throughout the duration of the Project.

A Mi'kmaq Communication Plan would be helpful to achieve the sharing of information and providing a mechanism for proponent-led engagement and input from the Mi'kmaq, regarding wetland mitigation, compensation, and monitoring plans, and moose monitoring.

## M E M O

**DATE:** August 27, 2024

**TO:** Allison Fitzpatrick, Environmental Assessment Officer

**FROM:** Christina Lovitt, Director of Planning

**SUBJECT:** CLYDESDALE RIDGE WIND PROJECT, MOUNT THOM, NS

---

**Comment:**

As requested, the Department of Municipal Affairs and Housing (DMAH) has reviewed the Registration Documents provided by Clydesdale Holdings Ltd. for the environmental assessment of the Clydesdale Ridge Wind Project, Mount Thom. All components considered under DMAH's areas of mandate have been adequately addressed.

**Scope of Review:**

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

**Technical Comments:**

There is currently no designated municipal zoning in this area of Pictou and Colchester counties. Beginning in 2011, the proponent has been reaching out to the municipalities to provide information on the project and asking for comment. Since 2023, they have been discussing the project with Development Officers in the two municipalities.

*Statements of Provincial Interest:*

- Drinking Water: No anticipated impact. Not near a source of municipal drinking water or residential properties.
- Agricultural Land: No anticipated impact, as there is no agricultural land in the area.
- Flood Risk: No anticipated impact, as the project is not in an identified flood risk area.
- Infrastructure: No anticipated impact.
- Housing: No anticipated impact, as there are no residential structures located within 2km of any proposed turbine.

**Summary of Recommendations (Provide in non-technical language):**

Both the municipalities of Pictou and Colchester are currently in the process of developing their Municipal Planning Strategy and Land Use By-Law. The proponent should continue to engage with the Municipality to ensure that there will not be any future land use conflicts while zoning for the area is being considered.

Date: August 26, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

From: ICE Eastern Region

Subject: **Clydesdale Ridge Wind Project, Pictou County, Nova Scotia**

---

**Scope of review:**

This review focuses on the following mandate:

surface and groundwater quality; noise; watercourse and wetland alteration; reclamation

**List of Documents Reviewed:**

- Clydesdale Ridge Wind Project EA Registration Document dated July 31, 2024

**Details of Technical Review:**

- Table 15.1 is missing Watercourse Alteration Approval Applications with NSECC, which are indicated to be required in the EA Registration Document.
- Table 15.1 is missing Borrow Pit permitting, which is indicated to be required in the EA Registration Document.
- The proponent has identified that noise levels will exceed the 40 dBa threshold guideline value at one or more nearby receptors during construction primarily but not exclusively during working hours, and during standard operations for the duration of the operation phase of the project. The proponent proposes to mitigate exceeding the guideline by operating WTG2 at a reduced capacity (de-rating the operational mode) to ensure compliance with noise guideline thresholds. The proponent has not proposed baseline or operational noise level monitoring.
- The proposed project location is considered low to high risk for arsenic in bedrock and groundwater, and medium risk for uranium. The submission states the following: "Blasting (if required) has the potential to impact the quality of the surrounding groundwater supply depending on the proximity to drinking water wells and the extent of disturbance caused by construction activities. Disturbance of arsenic and/or uranium containing bedrock can mobilize arsenic/uranium within groundwater, and subsequently degrade nearby groundwater well quality."
- Blasting may be required for road construction, and WTG base construction. Proponent has indicated they will obtain blast permits from Access Nova Scotia.


- The submission includes a draft erosion and sedimentation control plan and indicates that a finalized Erosion and Sediment Control Plan will be provided which will “show the locations of key features of the Project and erosion and sediment control measures. This will include the turbines, turbine pads, associated roads, drainage culverts, and silt fencing design. Project-specific drawings will be provided prior to construction”

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

Consideration should be given for the inclusion of Conditions for the following, where applicable:

- Watercourse and wetland alteration approvals
- Pit or quarry operation approvals
- A plan for compliance with the "Guidelines for Environmental Noise Measurement and Assessment, 2023"
- A plan to manage the risk of uranium and arsenic mobilization in groundwater
- A blast management plan
- A finalized erosion and sedimentation control plan
- A surface water management plan

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Date: 26 August 2024  
To: Allison Fitzpatrick, Environmental Assessment Officer  
From: Department of Public Works, Environmental Services – Jason Rae, P.Eng.,  
Manager.   
Subject: Clydesdale Ridge Wind Project

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**Scope of review:**

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

**List of Documents Reviewed:**

*Clydesdale Ridge Wind Project Environmental Assessment*

**Details of Technical Review:**

The proponent is proposing to construct a new wind project for up to 18 wind turbines (as identified in the main report), along with some access roads, at several locations near the Pictou/Colchester County border. In review of the attachments in the submission, there were references of up to 19 turbines, and in other locations in the attachments, of up to 30 turbines. It's unclear why there are different references to different quantities of turbines, quantity must be finalized as the project progresses.

1. Section 6.3.2.2 New Access Roads (Pg 14) - Indicates "access roads will be built to accommodate the oversize loads and large weights". All new accesses off provincially owned local roads (as identified and referenced in Transportation Sections 12.6.3 and 13.7.3, - Trunk 4, Hwy 311, Glen Road, Bezanson Lake Road, Vanderveens Road, Biorachan Road, Gunshot Road) , must have approval from the local DPW Office through a Working Within Highway Right of Way Permit. This would include any modifications to any existing accesses which are off provincially owned roads.
2. Any work areas associated with the creation of any of these accesses on provincially owned roads must follow the appropriate section of the Nova Scotia Temporary Workplace Traffic Control Manual.
3. Section 6.4 Site Preparation and Construction (Pg 19) indicates "signage and traffic control will be implemented as required". All signage and traffic control plans on provincially owned roads must be supplied by the proponent and reviewed and approved through the District Traffic Authority (DTA). The DTA can be contacted via the local DPW Office through the Area Manager.

4. Under Section 9.0 Regulatory Consultation (Pg 34), several government Departments (federal, provincial and municipal) are mentioned as part of the Consultation Process for the EA. NSDPW is not listed. There will be NSDPW involvement, consultation and approvals that will be required for this project.
5. Section 11.7.3 Transportation (Pg 74) references that a review of transportation data of provincial series highways in proximity to the project was completed, but it is not specified what this transportation data was. References to traffic volumes are not provided in the report and should be included.
6. Regarding the transportation of these turbine components, a Special Moves Permit will be required. The proponent has identified this in in Table 15.1, Section 15.0 *Other Approvals Required* (Pg. 203 of the report). A transportation route reference is mentioned in Section 12.6.3 *Transportation*, indicating that that a comprehensive logistics study will be undertaken to determine the shipping route. This must be finalized as part of the Special Moves Permit application. To assess and finalize the requirements for Special Moves Permits, the proponent must contact our Departmental Special Moves contact, as soon as possible, to begin this process. Our contact is Darcey MacBain and he can be reached at [Darcey.MacBain@novascotia.ca](mailto:Darcey.MacBain@novascotia.ca).
7. Table 15.1 references a requirement for a blasting permit. It's not clear from the report where the blasting would be required. Consultation with the local DPW office is required to assess and mitigate any impacts if near any provincially owned road for any potential road closures while the blasting is occurring, as well as notifying the public as required for any potential road closures and/or detours if necessary.

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Date: August 28, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

From: Climate Change Division – Anthony Weatherby, Executive Director (Acting)

Subject: Clydesdale Ridge Wind Project, Colchester and Pictou Counties

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**Scope of review:**

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

**List of Documents Reviewed:**

- *Clydesdale Ridge Wind Project Environmental Assessment Registration Document*

**Details of Technical Review:**

**Adaptation**

- In Section 12.1.1 “Weather Conditions,” the proponent does not provide 30-year climate normal or extreme conditions. The proponent does not include data on climate projections for the project area.
- In Section 14, “Effects of the Environment on the Undertaking,” the proponent considers climate impacts on the project in the form of extreme storms (wind, lightning, snow, flooding) and forest fires. The descriptions in the section are general and do not include specific climate projections. Without specific climate projections for the project area, it is difficult to determine whether the listed mitigation measures are adequate.

**Mitigation**

- The proponent has identified and listed the sources and activities that will contribute to GHGs.
- The proponent includes emissions related to manufacturing, installation, and commissioning. This goes beyond the scope expected for Nova Scotia.
- Projected annual Total GHG emissions from Project manufacturing, installation, and commissioning were calculated as 1,049.58 tCO<sub>2</sub>e/yr. The emission factors and estimation approach used are sufficient for the level of emissions expected.
- The assumption used to estimate the potential emission displaced during operation of the project are well documented.
- Proponent’s mitigation practices that adequate for the sources and levels of the emissions have been documented.



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

### **Adaptation**

- We suggest the proponent analyse 30-year climate normals for its baseline weather data, use the latest climate projections for the local area available through ClimateData.ca, and adopt the risk management framework in the *Guide to Considering Climate Change in Project Development in Nova Scotia* to assess the potential climate impacts and risks to the project and identify any risk mitigation measures.

### **Mitigation**

- There are no further recommendations or requests at this stage due to the adequacy of the information for the level of emissions expected.

**Fisheries and Aquaculture**

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Date: August 28, 2024

To: Allison Fitzpatrick

From: Lesley O'Brien-Latham, Executive Director, Policy and Strategic Advisory Services

Subject: Clydesdale Ridge Wind Project

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**Scope of review:**

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

**List of Documents Reviewed:**

- Clydesdale Wind Farm Project EA July 2024
- 24-10018 Environmental Assessment Registration Document - Clydesdale Ridge Wind Project

**Details of Technical Review:**

There 12 licensed NS commercial marine fisheries buyers and processors found within Colchester and Pictou Counties, which are next to the proposed project site:

- Davis Restaurant Ltd. is located 107km West of the site,
- 334346 NS Ltd. is located 29km North of the site,
- Gary Heighton's business is 34km East of the site,
- James Gunning's business is 42km Northeast of the site,
- Langille's Fish Ltd. is 34km East of the site,
- Lismore Seafood Co. is 79km East of the site,
- Murray Porter's business is 34km East of the site,
- North Nova Seafoods Ltd. is 43km Northeast of the site,
- Northumberland Fish Co-op is 30km North of the site,
- Quality Seafoods East Ltd. is 79km East of the site, Seabright Fisheries Ltd. is 28km of the site,
- Pristine Bay Premium Oysters is 46km East of the site, and
- Shandaph Oyster Co. is 80km East of the site.

With regards to commercially harvested species, lobster is the most lucrative fishery next to the project site. The waters next to the project site are known as Lobster Fishing Area (LFA) 26A and 35. Fishing in LFA 26A occurs from April 26<sup>th</sup> to June 26<sup>th</sup>, while fishing occurs in LFA 35 from October 14<sup>th</sup> to December 31<sup>st</sup> and opens again from the last day in February until July 31<sup>st</sup>. In addition, communal-commercial, livelihood, and Food, Social, and Ceremonial (FSC) fishing activities of Indigenous communities occur within LFA 26A and 35. However, as this project is land-based with no proposed marine activities or interactions, it is not expected to pose any negative impacts to lobster and other commercial marine fisheries next to the project site.

The main potential impact on fish habitat are crossings that will be installed/upgraded on 24 watercourses and follow NSECC permitting (p79). This will have an impact on 373m of fish habitat. Wind Turbine Generator pads will be outside the 30m buffer around watercourses in all but two sites. Mitigative measures include compliance with DFO and NSECC Guide to altering watercourses and fish rescues during watercourse crossing construction activities, erosion sediment control structures, minimization of equipment use in 30m buffers. One site on the West Branch, River John was electro fished and the data was presented in a manner that will allow for comparison with other electrofishing surveys.

There are a total of zero (0) rockweed leases and 18 aquaculture sites within 25km of the proposed project. Of these, 10 are marine sites, three (3) are marine sites eligible for reallocation, one (1) is a proposed land-based site, and four (4) are land-based aquaculture facilities.

Sediment is projected to be generated during blasting (if needed), grubbing, stockpiling material, and travel of trucks on unpaved roads during this project. Active mitigation steps have been provided and should result in minimal risk of negative effects of sedimentation on aquaculture sites and rockweed leases if applied appropriately. There is no monitoring currently planned. The applicant should be made aware of the aquaculture operations within the area and ensure mitigations are implemented appropriately to prevent impacts on aquaculture activities. Sediment can cause high turbidity levels, which can affect the ability of fish gills to absorb dissolved oxygen. Sediment can house pathogens and undesired microorganisms, increasing the risk of disease outbreaks among aquatic species. Please refer them to the following link to identify the sites and operators within their area, [Site Mapping Tool - Government of Nova Scotia, Canada](#)

There is no mention of power supply disruption in the EARD; if a power disruption is needed during this project, outages should be planned whenever possible and adequate notice should be given to aquaculturists to allow back-up power sources to be used to prevent equipment disruptions. Aquaculture facilities can be negatively affected by unexpected power outages. These implications can vary depending on the species, the scale of the operation, the duration of the power outage, and the specific technologies used. Power disruptions to equipment can be detrimental to aquatic animal health through inability to keep water flow, monitor and maintain water conditions, or feeding system operations. Fluctuations in environmental conditions caused by power outages can generate cumulative stress and weaken the immune systems of aquatic animals, making them more susceptible to disease. Interruptions in power can also affect data logging and record-keeping systems, making it challenging to track daily production and feeding data.

The EARD does not mention that water withdrawal will be needed for the project. Substantial amounts of water withdrawal can cause issues for aquaculture facilities by reducing the resources available to aquatic animals. Land-based facilities are particularly vulnerable to this. In addition to limiting the water available for aquaculture operations, substantial amounts of water withdrawal can lead to degradation of water quality. When water levels are reduced it has a concentrating effect on all materials (nutrients, toxic chemicals, salinity, plankton, etc.) being carried by the water body and can increase water temperature. These changes can negatively affect the health of aquatic animals within the water. At the moment water for things like dust suppression is planned to come from a truck, but if water withdrawals are needed to complete the project, care should be taken to ensure water is not withdrawn at a rate that would affect water amounts and quality at land-based facilities.

As there is no inclusion of water withdrawal in the EARD, there is also no mention of water discharge. Water discharge can hold excess nutrients and potential pollutants, and can result in nutrient enrichment, excessive plant and algal growth (due to the increased availability of one or more limiting growth factors needed for photosynthesis), algal blooms, dissolved oxygen depletion, habitat degradation, and altered water quality in the receiving waters. Such impacts can disrupt

aquatic ecosystems, harm aquatic species, and threaten the sustainability of aquaculture practices. Excess nutrient load can stimulate the growth of algae and aquatic plants, resulting in harmful algal blooms. These blooms can deplete dissolved oxygen when they decay, causing hypoxia and anoxia in the water. Fluctuations in environmental conditions can generate cumulative stress and weaken the immune systems of aquatic animals, making them more susceptible to disease. These changes in water quality can reduce health, limit growth, or cause mortality of aquatic animals. If water is discharged as part of this project, mitigations should be taken to ensure water is not discharged at a rate that would affect water amounts and quality at land-based facilities.

Project proponent should 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](#). They should also be directed to the Department's [Site Mapping Tool](#) for more information on the location of sites and leases in the area of their proposed project.

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

- The Department does not anticipate risks to commercial fishing or marine activities within the Department's mandate as the project is land-based.
- Potential adverse impacts on the aquaculture and rockweed harvesting industries from sediments are expected to be minimal provided that the mitigation measures identified by the proponent are effectively implemented. Appropriate mitigation should be implemented if the project will entail power supply disruption, water withdrawal, or water discharge.
- The Department does not anticipate any risks to Nova Scotia's sportfishery provided the proponent follows its identified mitigation measures.



**Date:** August 28, 2024

**To:** Allison Fitzpatrick, Environmental Assessment Officer

**From:** Jason Flanagan  
A/ Regional Manager  
Transport Canada  
Environmental Programs and Indigenous Relations

**Subject:** Clydesdale Ridge Wind Project, Colchester and Pictou Counties

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**Scope of review:**

**This review focuses on the following mandate:**

Transport Canada's Mandate related to navigation in water (*Canadian Navigable Waters Act*) and air (*Aeronautics Act*) and any *Impact Assessment Act* (IAA) requirements.

**List of Documents Reviewed:**

Environmental Assessment Registration Document

**Details of Technical Review:**

**Civil Aviation:**

Marking and lighting requirements under the *Aeronautics Act* and its associated *Canadian Aviation Regulations* (CARs).

- Table 15.1, first 2 rows (Page 201): refers to the turbine lighting requirements and Aeronautical Obstruction Clearance (should be changed to Aeronautical Assessment Form (AAF)) being "Complete".
- Appendix M - Radiocommunication System Impact Study, Table 2: refers to the Aeronautical Assessment Approval being 'Approved' in April 2023 and is provided in Appendix C (pdf pages 934-936) of this study. See Key Considerations below.

**Navigation Protection Program:**

Throughout the document, 24 watercourse crossings (12 existing and 12 new) are mentioned. See Key Considerations below.

**Impact Assessment:**

Considering the above and below, it is not likely that Transport Canada will have any IAA, Section 82 requirements as the project is not located on federal lands, nor any requirements to participate in the provincial environmental assessment.

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

**Civil Aviation:**

The completed AAF form provided in Appendix C of Appendix M – Radiocommunication System Impact Study, is not complete and should not be considered 'Approved' as noted. Transport Canada's section of this form is not filled out. The Proponent should include a copy of the Transport Canada completed assessment form to consider it reviewed and approved.

**Navigation Protection Program:**

The 24 watercourse crossings mentioned within the EA Registration document do not appear to involve Scheduled waterways under the *Canadian Navigable Waters Act*.

The proponent can assess these against the criteria in the **Minor Works Order** (Section 16 – Aerial Cables -Power and Telecommunication) AND can assess the individual access road 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 road watercourse crossing meets ALL the criteria in the relevant section, they are considered Minor Works and do not require a *Canadian Navigable Waters Act* 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 road crossing does NOT meet ALL the criteria, the proponent may be required to submit an application for approval.

Under the *Canadian Navigable Waters Act* (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 NPP 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>

NPP Contact coordinates:

**Navigation Protection Program | Programme de protection de la navigation**

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

Transports Canada - Région de l'Atlantique / Place Héritage, 6<sup>e</sup> 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](mailto:NPPATL-PPNATL@tc.gc.ca)

Date: August 8<sup>th</sup>, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

From: Air Quality Unit

Subject: Clydesdale Ridge Wind Project, Colchester and Pictou Counties

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**Scope of review:**

This review focuses on the following mandate: Noise

**List of Documents Reviewed:**

Clydesdale Ridge EARD

Clydesdale Ridge Appendix D

**Details of Technical Review:**

The Clydesdale Ridge Wind project is located across the border between the counties of Colchester and Pictou, near to the communities of Mount Thon and Earltown. It is comprised of 18 wind turbines each generating up to 7MW, with a combined output of 126MW. The turbines are 200m high from the ground to the blade tip. The proposed development includes the construction of the turbines and associated infrastructure, new and upgraded roads, electrical collector lines and temporary laydown areas.

No baseline monitoring was undertaken. A description of the noise environment was provided, and an estimated baseline was given as 34.5dBA, which was based on an average provided by a California Department of Transportation report. The range was 25 to 45dBA. The construction noise assessment included anticipated noise levels from site equipment and used an attenuation of -7.5dBA per doubling of distance. Using this attenuation factor, the noise level was estimated to be less than 48.5dBA at the nearest receptor. Conservative calculations use an attenuation factor of -6dBA per doubling of distance – this would result in a noise level of 54dBA at the nearest receptor, based on the reported cumulative construction noise level of 86dBA at 15.2m. The estimated noise levels from construction activities were not compared with permissible sound levels in the Guidelines for Environmental Noise Measurement and Assessment (2023). However, a noise level of 54dBA at the receptor location would be above the daytime permissible sound level for rural areas.

Modelling was conducted using a ground attenuation factor of 0.5 and a baseline noise level of 35dBA. The modelled results show that predicted noise impacts at all identified receptors are below 40dBA, although the predicted impacts at receptor I (38.1dBA) and receptor O (39.7dBA) could exceed 40dBA if the baseline noise level is higher than 35dBA.

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

The Air Quality Unit notes the following key considerations:



- If approved, the project has the potential to impact receptors during the construction phase and the operation phase.
- If the baseline noise level exceeds 35dBA, it is possible noise levels could exceed the 40dBA noise limit at receptor locations once the windfarm is operational.

Date: August 25, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

From: Water Branch, Sustainability & Applied Science Division

Subject: Clydesdale Ridge Wind Project, Colchester and Pictou Counties

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**Scope of review:**

This review focuses on the following mandate: surface water quality and quantity, groundwater quality and quantity, and wetlands.

**List of Documents Reviewed:** Environmental Assessment Registration Document (EARD) Submission, including Appendices.

**Details of Technical Review:**

**Surface Water**

Generally speaking, the submission provides sufficient detail in the assessment of impacts and proposed mitigations for this stage of assessment.

The project outlines 29 km of access road as a project component, including 13 km of existing roads. Newly constructed roads represent 16 km of the 29 km total. It is proposed that electrical collector lines will be installed adjacent to the access roads, connecting to the existing Dalhousie Mountain 91N substation north of Highway 104. As a result, it is understood that the construction of transmission lines is not within the scope of the project.

The submission outlines that "The Project will not require surface water collection or surface water re-routes; as a result, no indirect impacts based on hydrological changes are expected", and that "Culverts will be installed to maintain natural drainage according to the erosion and drainage controls specified by the civil engineering drawings." It is proposed that 24 watercourse crossings will take place, 12 of which represent upgrades to existing infrastructure, and 12 representing new construction, for a total of 373.08 m<sup>2</sup> of fish habitat that is predicted to be directly impacted. It is also proposed that three watercourses that flow into the Gully Lake Wilderness Area will be altered through the construction of watercourse crossings, with the impacts of this to be mitigated through erosion and sediment control planning. It is outlined that drainage culverts will be built along the access road and direct collected water to nearby streams or retention ponds. Details related to their proposed locations have not been provided. General information on project Erosion and Sediment Control planning and approaches is outlined in Appendix Q and Appendix R, with additional general information related to Surface Water Management Planning included as Appendix V. The information provided is very high-level, but it is stated that the Proponent will engage qualified engineers to deliver finalized site-specific erosion and sediment control designs for the proposed works.

Section 13.5.2.4 in the EARD outlines that no monitoring is proposed for the Surface Water, Fish and Fish Habitat VEC, which is contradicted through information provided in Appendix R Section 2.8.4, which outlines requirements for surface water and erosion and sediment control inspection and monitoring.

Appendix R, Section 2.7.3 outlines requirements for the contractor related to the identification and management of sulphide bearing materials that may be encountered during construction activities. It is noted in the EARD that “The Project Area is in an area with low bedrock ARD potential... impacts to water quality and indirect effects to fish habitat are not expected”, and that “Construction staff will be instructed to stop work if acid generating rock is identified”.

It is noted that the EARD proposes that a Mobile Concrete Batch Plant be used to supply the concrete needed for the project. Details surrounding the plant are not provided.

### Groundwater

According to the EARD, the potential for impacts to groundwater is considered low. The EARD identified proposed mitigations to reduce the potential for impacts on groundwater quality and quantity. Blasting is not anticipated but may be necessary during construction. According to the EARD, a pre-blast survey will be completed for water supply wells within 800 meters. The presence and location of private wells within 800 meters of any blasting site should be verified in the field. Blasting within 800 meters of any existing residences should be avoided where possible. The EARD also included a Complaint Resolution Plan, which details how concerns can be reported to the Proponent regarding the project, and how the Proponent will address those concerns.

### Wetlands

The Proponent did a sufficient job at delineating and assessing wetlands within the PDA. The EARD identified five (WL58, WL59, WL60, WL61, and WL73) Wetlands of Special Significance (WSS).

WL 73 is considered a WSS since it is a fen and shrub swamp complex that had field observations of Canada Warbler (provincially and federally endangered) identified within it. The proponent suggests crossing it within the cleared treed swamp portion of the wetland, where little suitable habitat occurs for Canada Warbler. Due to the project meeting the definition of necessary public function project, NSECC would allow alteration to WSS, but a higher ratio (4:1) of compensation would be required. Micro-siting during detailed design to avoid Canada Warbler habitat and consultation with DNRR is suggested.

WL 58-61, have portions of the wetlands falling within the Gully Lake Wilderness Area. The portions falling within the wilderness area would be considered WSS. It is suggested that micro-siting occur during the design phase to minimize impacts to these wetlands inside and outside of the protected area. A higher ratio (4:1) of compensation would be required for alteration of these wetlands.

The EARD provides a thorough and comprehensive overview of wetland mitigations that will be deployed during the construction and monitoring phases of the Project.

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

## **Surface Water**

The main NSECC regulatory touch points related to managing risk and impacts to surface water will be the watercourse alterations related to the construction of the access roads and site infrastructure. A water withdrawal approval may also be required to support the use of the Mobile Concrete Batch Plant outlined in the submission.

To evaluate the effectiveness of the planned mitigation measures proposed, a detailed surface water monitoring plan as outlined in Appendix R should be included in the surface water management plan.

To ensure adequate mitigative measures are taken if sulphide bearing material is encountered, the proponent should consider developing a plan that outlines how the material will be identified and evaluated.

## **Groundwater**

In general, the proponent's proposed mitigations should reduce the potential for impacts on groundwater quality and quantity. Should blasting occur, a pre-blast survey should be completed for all private water supply wells located within 800 meters of a blasting site. The location of private wells within an 800 m radius of all blasting sites should be verified in the field.

## **Wetlands**

Additional micro-siting should be completed to reduce and avoid additional wetland alteration, to the extent possible, during the detailed design phase. If the project is approved, the proponent should also submit a Wetland Alteration Approval Application for review and approval for any wetlands proposed to be directly or indirectly altered and complete any necessary compensation and monitoring. The proponent should utilize Nova Scotia's Wetland Alteration Application's Guided Template for the permit applications. Flagging of the wetland boundaries adjacent the construction areas should occur to prevent un-intended wetland alterations.

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Date: August 13<sup>th</sup>, 2024

To: Allison Fitzpatrick, Environmental Assessment Officer

From: Air Quality Unit

Subject: Clydesdale Ridge Wind Project, Colchester and Pictou Counties

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**Scope of review:**

This review focuses on the following mandate: Air Quality

**List of Documents Reviewed:**

Clydesdale Ridge EARD

**Details of Technical Review:**

Wind power projects support the Government goals of achieving 80% of provincial electricity requirements from renewable sources by 2030 (*Environmental Goals and Climate Change Reduction Act S.7 (l)*) and progress towards cleaner air for Nova Scotians (*Environmental Goals and Climate Change Reduction Act S.11 (c and d)*).

The Clydesdale Ridge Wind project is located across the border between the counties of Colchester and Pictou, near to the communities of Mount Thon and Earltown. It is comprised of 18 wind turbines each generating up to 7MW, with a combined output of 126MW. The turbines are 200m high from the ground to the blade tip. The proposed development includes the construction of the turbines and associated infrastructure, new and upgraded roads, electrical collector lines and temporary laydown areas.

No baseline monitoring was undertaken, instead the baseline review relied on reported Air Quality Health Index levels and data from the Province's monitoring station in Pictou. The Air Quality Health Index provides health-based guidance, but it is not a regulatory tool. Annual mean pollutant concentration data reported for Pictou were presented in the EARD, and no exceedances of the ambient air quality standards were noted.

Air quality impacts are potentially derived from the construction phase of the project, with total suspended particles being the primary pollutant of concern. The EARD provides a list of proposed mitigations that could be used on-site, including a Complaints Resolution Plan. These mitigations are appropriate and would reduce impacts if they are employed.

**Key Considerations:**

The Air Quality Unit notes the following key consideration:

- It is unclear how effective dust management will be in the absence of a dust management plan with a clear chain of responsibility for actions, including timely complaint resolution.

**From:** [Wade,Suzanne \(ECCC\)](#)  
**To:** [Fitzpatrick, Allison](#)  
**Cc:** [Hingston,Michael \(il | he, him\) \(ECCC\)](#); [Wade,Suzanne \(ECCC\)](#); [Aikens,Marley \(elle | she, her\) \(ECCC\)](#); [Mailhiot,Joshua \(il | he, him\) \(ECCC\)](#)  
**Subject:** Clydesdale Ridge Wind Project, Colchester & Pictou County NS – Environmental Assessment (EAS# 23-NS-019)  
**Date:** August 29, 2024 8:34:09 AM  
**Attachments:** [image003.png](#)  
[image004.png](#)  
[image005.png](#)

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**\*\* 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 Allison,

Environment and Climate Change Canada (ECCC) has reviewed the EA Registration Document for the proposed Clydesdale Ridge Wind Energy Project by Clydesdale Holdings Ltd, located in Colchester and Pictou Counties, Nova Scotia, and we offer the following comments:

## **WILDLIFE COMMENTS**

### **References**

- Davy et al. 2020. *Estimation of spatiotemporal trends in bat abundance from mortality data collected at wind turbines.*  
<https://conbio.onlinelibrary.wiley.com/doi/10.1111/cobi.13554>
- Horton et al. 2016. *Where in the air? Aerial habitat use of nocturnally migrating birds.*  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5134037/>

### **General**

1. ECCC-Canadian Wildlife Service (CWS) notes that comments on the Proponent's proposed pre-construction Avian and Bat Survey Methods were provided to McCallum Environmental Limited (since been acquired by Strum Consulting) during the pre-EA phase of this project (October 23, 2023). These comments remain applicable to the project.
2. Given that the project is registered under Nova Scotia's (NS) *Environmental Assessment Regulations*, it remains the discretion of the province whether sufficient information has been provided to assess the potential effects of the Project under their jurisdiction and responsibility. ECCC does not have any permits (or authorizations) or approvals in relation to the proposed project. Any advice provided by ECCC is intended to support Nova Scotia's Department of Environment and Climate Change environmental assessment review process. The Proponent is responsible for identifying measures which ensure their compliance with the *Migratory Birds Convention Act* (MBCA) and the *Species at Risk Act* (SARA).
3. The province's Department of Natural Resources and Renewables (NSDNRR) may

have further comments to provide for birds not protected by the MBCA (e.g., raptors) and terrestrial species at risk (SAR) including bats, reptiles, amphibians, land-mammals, insects, plants, and lichen, as NSDNRR holds the holds technical expertise, jurisdiction, and management authority for these species. ECCC-CWS advice on these species is derived from federal recovery documents produced as per the federal SARA. ECCC-CWS comments reflect that SAR are a shared responsibility between the federal government and the provinces.

4. The Environmental Assessment Registration Document (EARD) includes hedging and ambiguous wording, such as, “*where possible*” and “*to the extent practicable*” when describing mitigation measures.

ECCC-CWS recommends removing ambiguous wording from the EARD and associated plans. The EARD should clearly describe commitments to mitigation measures to avoid/minimize potential effects of the Project on migratory birds and species at risk (SAR), and where effects cannot be avoided/minimized, a proposed plan to mitigate residual impacts should be described (e.g., monitoring plan, scheduling, buffers, offsetting measures, etc.). Contingency plans identifying mitigation measures should be prepared to address all scenarios that may impact migratory birds and SAR during all of times of the year and all project phases.

5. The proponent should retain raw survey data (e.g., radar, breeding bird surveys) until appropriate data standards have been developed. Additionally, proponents are encouraged to share and store data with:
  - The Atlantic Canada Conservation Data Center (SAR/SOCC observations; <http://accdc.com/en/contribute.html>)
  - NA Bat (acoustic bat data; <https://www.nabatmonitoring.org/upload-data>)
  - The Wind Energy Bird and Bat Monitoring Database (bird and bat data; [NatureCounts - Wind Energy Bird & Bat Monitoring Database](#))
6. In addition to the data sources provided in Section 11.4.1 (pg. 56), ECCC-CWS recommends that the proponent consult additional sources of data (e.g., the Maritimes Breeding Bird Atlas, eBird, iNaturalist, Christmas Bird Count, existing remote wildlife tracking data such as Motus Wildlife Tracking System, Movebank, WildTrax, SEATRACK – SEAPOP, and local naturalist groups) for information on usage of the area by migratory birds and species at risk during all seasons to inform and support baseline surveys.
7. If considering wildlife protection, mitigation, monitoring and (final) adaptive management plans as part of potential approval conditions related to avifauna and/or migratory bird SAR, ECCC recommends clarifying what elements are expected to be included, and that the consultation process is clear for all parties.

ECCC’s preference is that any documents and requests for advice from the proponent be submitted and coordinated through NSECC as part of their EA process via the ECCC-EA window ([FCR\\_Tracker@ec.gc.ca](mailto:FCR_Tracker@ec.gc.ca)).

## **Terrestrial Species At Risk**

-  
Lichens

8. Quote (Section 11.3.4.2, pg. 70 of pdf): *"Meandering transects were completed on foot and targeted mature trees appropriate for hosting priority lichen species."*

In comments on the proponent's Avian and Bat Survey Methods for the Project (provided Oct. 20, 2023), ECCC-CWS recommended that a lichenologist complete a comprehensive Eastern Waterfan survey of appropriate streams in the project area and extending approximately 1 kilometer downstream within the streams that pass through the project area. Based on the information provided in the EARD, it is unclear whether the proponent followed this advice.

ECCC-CWS notes that **25** new occurrences of Eastern Waterfan (SARA-listed Threatened) were discovered within the project area. Based on this finding and to identify other potential occurrences, ECCC-CWS reiterates the baseline survey recommendation provided above.

9. Quote (13.3.1.1, pg. 150): *"The At-Risk Lichens – Special Management Practices (NSNRR, 2018a) considers eastern waterfan a very rare and highly sensitive lichen and recommends a 200 m buffer with no forest harvesting or road construction to occur within the buffer area on Crown lands."*

Although buffers to protect at-risk lichens discussed in the EARD, ECCC-CWS notes that the mitigation measures presented in Section 13.3.1.3 of the EARD (pg. 151), Environmental Management and Protection Plan (EMPP; Appendix R), and Wildlife Management Plan (WMP; Appendix T) do not include clear commitments by the proponent to implement buffers for Eastern Waterfan or other at-risk lichens (e.g., Frosted Glass Whiskers).

ECCC-CWS is of the view that a 200-meter (m) radius buffer is insufficient to protect Eastern Waterfan, given its strong sensitivity to sedimentation. Project-related sedimentation could lead to direct destruction of Eastern Waterfan occurrences and/or reduce habitat quality, making streams unsuitable for this lichen. Eastern Waterfan has specific habitat needs, including:

- Clear streams in regions with perhumid climate
- Intact riparian habitat
- cool, mineral-enriched, water (generally <18°C)
- waterfalls, exposed boulders/rocks and/or sinuous stream configurations that create protective eddies and calm backwaters
- stones, boulders and bedrock substrata
- typical seasonal summer pH 6.0 to 7.0
- sediment/silt-free substrate
- low Nitrate levels (generally <5mM); and
- shade provided by trees, large boulders and intact native riparian vegetation

ECCC-CWS provides the following recommendations for Eastern Waterfan lichen:

- Implement a 50-m riparian buffer (50 m from the stream, landward) on both sides of all occupied streams, including tributaries, within a **1-kilometer (km) radius** of each occurrence of Eastern Waterfan during all phases of the project. This buffer is crucial for maintaining hydrological regimes (such as temperature and pH), water quality, and preventing siltation around the species. No entry or disturbance activities (such as vegetation clearing, road upgrades, culvert upgrades, stream



crossings, or infilling) should occur within this zone, both upstream and downstream of the lichen occurrences;

- Complete water quality monitoring during and following project construction to ensure Eastern Waterfan habitat remains suitable;
- Implement the sediment mitigation measures presented in the Project's Contingency Plan (Appendix P of EARD) for any stream with a lichen occurrence up to 1 km downstream of any culvert installed or modified for the project; and
- Develop a lichen SAR monitoring program and adaptive management measures in the event that adverse effects to lichen SAR are detected.

The federal Recovery Strategy and Action Plan for Eastern Waterfan (*Peltigera hydrothyria*) in Canada is available at: [https://species-registry.canada.ca/index-en.html#/species/1245-904#recovery\\_strategies](https://species-registry.canada.ca/index-en.html#/species/1245-904#recovery_strategies)

10. Quote (Section 12.3.3, pg. 95): *"There were three observations of frosted glass-whiskers in the Lichen Study Area [during baseline surveys]. [...] Frosted glass-whiskers is included in the At-Risk Lichens – Special Management Practices (NSNRR, 2018a); therefore, a 100 m buffer is recommended."*

ECCC-CWS notes that the proponent does not include clear commitments to implement the recommended buffer for Frosted Glass-whiskers (SARA-listed Special Concern) in the EARD, EMPP, or WMP. ECCC-CWS agrees with this buffer recommendation and provides the following recommendations:

- Confirm whether a **100 m habitat buffer** would be maintained for all Frosted Glass-whiskers occurrences in the project area. For any locations where a 100 m habitat buffer would not be implemented, the proponent should identify alternative measures to avoid/minimize effects; and
- Develop a lichen SAR monitoring program and adaptive management measures in the event that adverse effects to lichen SAR are detected.

- The federal Management Plan for Frosted Glass-whiskers (*Sclerophora peronella*) in Canada is available at: [https://species-registry.canada.ca/index-en.html#/species/739-578#management\\_plans](https://species-registry.canada.ca/index-en.html#/species/739-578#management_plans)

## - Bats

11. ECCC-CWS recommends that monitoring, mitigation measures, and adaptive management plans consider the COSEWIC-assessed Endangered migratory bat species (i.e., Hoary Bat, Silver-haired Bat and Eastern Red Bat) as though they are SARA-listed species at risk, in the event that they become listed during the lifetime of the Project.

12. ECCC-CWS notes that the proponent collected acoustic bat data for one full active bat period over two years (June-October 2023 and April to June 2024). It is unclear whether a second year of monitoring is planned.

To account for interannual variation in bat abundance, ECCC-CWS recommends completing a second year of baseline bat monitoring for the project that captures the full bat activity period (early April to late October).

13. Quote (Section 12.3.4.2, pg. 100): *"There are low levels of bat activity across the*

*Project Area. Peak bat activity occurred in early August 2023, with five bat passes recorded in a single night. [...] 31 total bat passes were recorded."*

Quote (Section 13.3.3.6, pg. 163): *"The Project is predicted to have a low magnitude of impact on bats."*

The proponent indicated that *Myotis* sp. Bats, Hoary Bat, and Silver-haired Bat were detected during baseline bat monitoring for the Project. ECCC-CWS notes that low bat activity pre-construction is sufficient to conclude risks to SOCC/SAR bats are low. The populations of the three SARA-listed Endangered bat species (Little Brown Myotis, Northern Myotis, and Tricolored Bat) are highly depressed in NS, primarily due to introduction of White-nosed Syndrome (WNS) in 2011, and therefore few acoustic detections are expected. Additionally, the three "migratory" COSEWIC-assessed Endangered bats are highly vulnerable to mortality due to wind turbines. Any additional loss of SOCC/SAR bat individuals, maternity roosts, or and/or hibernacula remaining on the landscape can be biologically significant for these long-lived, k-selected species, and affect their recovery. Therefore, ECCC-CWS disagrees with the proponent's conclusion that the project will have a low-magnitude impact on bats.

ECCC-CWS notes that the draft Adaptive Management Plan (Appendix U of EARD) presents high-level tiered management responses to be implemented *after* "unanticipated mortalities" occur at the site. While ECCC-CWS agrees with implementing a tiered adaptive management framework for unanticipated residual effects, preemptive mitigation measures can reduce anticipated mortalities known to occur during specific seasons (i.e., migration) and weather events (e.g., heavy fog, storms). Therefore, we recommend that the proponent commit to mitigation measures for minimizing potential impacts to SARA and COSEWIC-listed Endangered bat SAR during the project's operational phase *before* impacts occur, such as increasing cut-in speeds or altering the pitch/feathering the blades during high-risk collision periods (e.g., during migration or swarming or when wind velocity is low).

14. While ECCC-CWS acknowledges that there is currently no regulatory threshold available for "acceptable" levels of bat mortality at wind farm sites, the Proponent's use of the *Government of Alberta's Bat Mitigation Framework for Wind Power Development (2013)* to assess potential impacts to bats is inappropriate for this project.

The Government of Alberta (2013) thresholds are based on SAR bat populations in Alberta over ten years ago, and therefore likely do not reflect the current level of risk, particularly in Nova Scotia. Although some studies report fewer bat mortalities at wind energy sites in recent years, this likely reflects a decline in overall abundance of bats rather than avoidance of turbines (Davy et al. 2021). Given the population trends of migratory SAR bats in Canada, ECCC-CWS is of the view that there is no level of mortality that is acceptable for these species.

Additionally, the bat passes per detector night metrics presented in the Government of Alberta (2013) guidance were developed as a benchmark for data collected during fall migration only. Therefore, the proponent's metric should have been calculated for number of detector nights between August to early September, rather than the entire survey period.

15. Quote (Section 12.3.4.2, pg. 100): *"No potential bat hibernacula were identified during biophysical surveys. Potential roosting habitat (i.e., snags and mature stands) for bats was observed in select sites within the Study Area. No confirmed roosting sites were*

*observed.”*

ECCC-CWS notes that it is unclear what methods the proponent used to identify potential bat hibernacula, identify potential roosting habitat, or confirm roosting sites. Additionally, the proponent has not identified any measures to avoid project-related impacts to potential roosting habitat at the site.

Site selection is the most important component of a successful mitigation strategy for wind power development, with turbines located as far away as possible from important bat habitat features (hibernacula, potential maternity roosts). ECCC-CWS recommends that the proponent identify and map areas with suitable maternity roosting habitat (e.g., tolerant old hardwood) and avoid siting turbines and roads in these areas.

Acoustic emergence surveys can be completed at potential maternity roost trees in areas to be cleared to confirm occupancy, noting that it can be challenging to confirm roosting for species that forage in high-clutter habitats (e.g., Northern Myotis). Moreover, due to roost switching within a season, a single emergence survey is not sufficient to confirm roosting. Therefore, siting infrastructure away from suitable habitat should be the primary avoidance measure for SAR bats.

#### **Avifauna and Avifauna Species at Risk**

16. ECCC-CWS notes that the proponent did not complete avian surveys during the winter season, as recommended in ECCC-CWS' comments on the Project's Avian and Bat Survey Methods (provided Oct. 23, 2023).

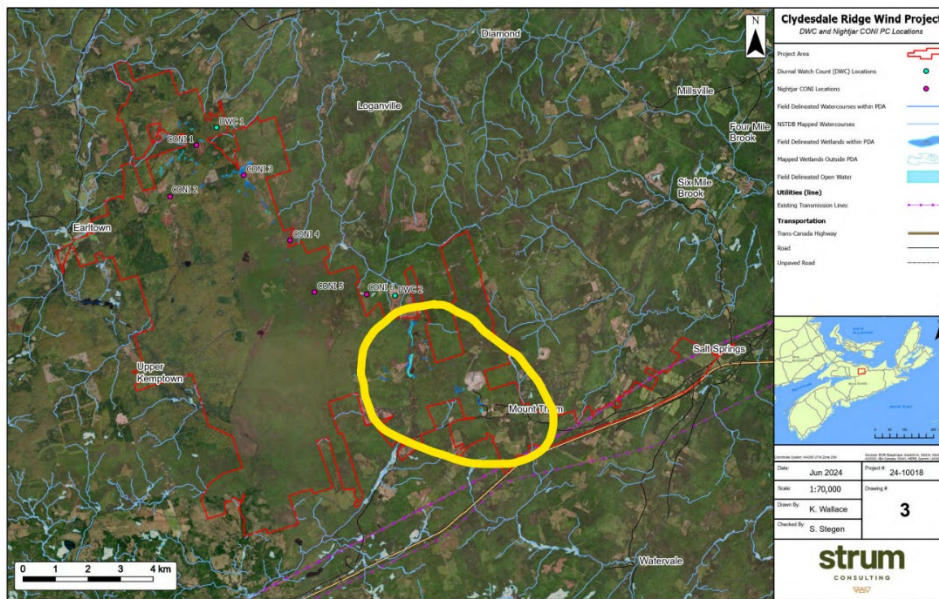
In the absence of site-specific field data during the winter, ECCC-CWS recommends that the proponent, at minimum, review Christmas Bird Count (CBC) data for nearby survey circles (Truro, New Glasgow, etc.) to complete a high-level assessment of wintering avian populations in the region. This review is especially relevant for the Carduline finches, which are highly nomadic and eruptive based on food availability (i.e., cone crops). If the CBC identifies years with large influxes, then it will indicate that winter population and density of birds will change from one year to the next. ECCC-CWS acknowledges that overwintering birds generally do not fly much higher than treetop level, as they are more interested in conserving energy, so collision risk is expected to be lower during this period. However, project-related habitat loss could have negative impacts on wintering birds at the site.

17. Quote (Appendix I, Section 2.3.1.2 – Diurnal Watch Count Surveys, pg. 17): *“Each [diurnal watch count] survey was three hours in length (30-minute time blocks, completed in sets of 3 to 4). DWCs occurred in the morning between 10 am and 12:30 pm in 30-minute time blocks.”*

As stated in ECCC-CWS comments on the proponent's Avian and Bat Survey Plan (provided Oct. 2023), ECCC-CWS protocols recommend that diurnal watch counts be completed for a duration of six hours. The survey period presented in Appendix I (10:00-12:30) misses the key time period for raptor migration, which occurs in the afternoon once thermals develop.

18. ECCC-CWS notes that there is a spatial gap in survey effort for the Nightjar Survey in

the southeastern portion of the Study area (see Appendix I Part 1 – Drawing 3 or yellow markup in figure below).



Additionally, ECCC-CWS reiterates, from comments provided on the Avian and Bat Study Plan, that the breeding bird and migration point count stations appear to be predominantly (perhaps exclusively) roadside, which may miss some habitat types and avian species that favour interior habitats.

ECCC-CWS recommends that the proponent complete a second year of baseline avian surveys in the Project area aimed at addressing the survey gaps described above.

19. Quote (Section 12.4.1, pg. 118 of pdf): "*Canada Warbler, Eastern Wood-Pewee (Contopus virens), and Olive-sided Flycatcher were the SAR observed during the breeding season, though none displayed evidence of confirmed breeding.*"

ECCC-CWS notes that territorial males singing in suitable habitat during the breeding season is sufficient evidence to assume these SAR are breeding in the Project area. ECCC-CWS recommends referring to the following recovery documents to guide mitigation and monitoring efforts for these species:

- Recovery Strategy for Canada Warbler (*Cardellina canadensis*) in Canada [Final] (2016): [https://species-registry.canada.ca/index-en.html#/species/1008-699#recovery\\_strategies](https://species-registry.canada.ca/index-en.html#/species/1008-699#recovery_strategies)
- Recovery Strategy for Olive-sided Flycatcher in Canada [Final] (2016): [https://species-registry.canada.ca/index-en.html#/species/999-683#recovery\\_strategies](https://species-registry.canada.ca/index-en.html#/species/999-683#recovery_strategies)
- Management Plan for the Eastern Wood-pewee (*Contopus virens*) in Canada [Proposed] (2023): [https://species-registry.canada.ca/index-en.html#/species/1198-877#management\\_plans](https://species-registry.canada.ca/index-en.html#/species/1198-877#management_plans)

20. The EARD's Avifauna Biophysical Baseline Report (Appendix I) indicates that eight species of waterfowl were observed during the 2023 avian surveys.

ECCC-CWS notes that there is an Eastern Waterfowl Survey plot approximately 100

meters southwest of the Project area. In this plot, ECCC-CWS has consistently observed breeding American Black Duck, Ring-necked duck, Canada Goose, Common Merganser, Hooded Merganser, Mallard, and Green-winged Teal. Given that the Project area is relatively undisturbed (only 3% classified as disturbed, as indicated in Section 12.3.1.1), ECCC-CWS is concerned that this project will result in the loss of breeding habitat for a variety of waterfowl species. ECCC-CWS recommends that the proponent provide additional targeted measures to avoid and minimize impacts to breeding waterfowl in the Project area.

21. Quote (Section 12.2.1, pg. 78): *“...the Project Area records its lowest elevation at 224 metres above sea level (masl) along existing infrastructure adjacent to Bezanson’s Lake. The highest elevation within the Project Area is at approximately 324 masl along a ridge in the northern portion of the Project Area.”*

Quote (Section 13.4.1, pg. 164): *“The project is in a region of Nova Scotia that has not been observed to support a significant migratory route, as was observed during field surveys and remote sensing.”*

ECCC-CWS notes that radar data collected for the Project indicated there are some nights during migration, particularly during fall, with >1000 targets detected at altitudes within the proposed rotor-swept zone (<200 m; see Appendix H). Additionally, the diurnal watch count surveys completed during migration had a temporal survey gap, as surveys were not completed in the afternoon. Therefore, it is unclear how the proponent determined that the Project area is not a significant migratory route.

ECCC-CWS is concerned about the risk of collisions for migratory waterfowl and other migratory birds (e.g., landbirds, shorebirds) crossing the isthmus of Nova Scotia and interacting with the proposed turbines. ECCC-CWS satellite tracking data shows that seaducks (eiders and scoters) cross this area during migration. Additionally, the proposed turbine heights of up to 200 meters above ground level (magl), coupled with the high elevation (224-324 masl) at the site, means that the tops of turbine blades will reach a minimum of 424 and a maximum of 524 meters above sea level (masl) in the Project area. This elevation is well within the known nocturnal flight corridor of migratory songbirds (150-600 m; Horton et al. 2016).

22. ECCC-CWS notes that the proponent calculated mortality estimates for avifauna resulting from turbine collisions at the Project site using the Scottish National Heritage / Band Collision Risk Model (CRM) (Appendix J). ECCC-CWS supports the use of this modelling approach, with the caveat that CRMs have many assumptions and inherent biases. Should the project be approved, we recommend that the proponent assess the accuracy of these pre-construction estimates using post-construction mortality monitoring data.
23. Quote (Appendix T, Wildlife Management Plan, pg. 1): *“Vegetation management will be planned outside of breeding bird season (April 5 – August 28), however, in the event that clearing is required during breeding season, nesting sweeps will be conducted at intervals deemed appropriate by registered professional biologists, and best practices will be employed.”*

ECCC-CWS notes that nests in complex habitats (e.g., forests, wetlands) are difficult to locate, and adult birds avoid approaching their nests in a manner that would attract predators to their eggs or young. In many circumstances, disturbance and/or harm to

migratory birds is still likely to occur even when nest sweeps are conducted prior to vegetation management activities. Therefore, ECCC-CWS generally does not recommend nest searches or “nest sweeps” in vegetation prior to clearing or land disturbance activities during the breeding season. Rather, ECCC-CWS recommends that activities that may result in incidental take of nests or eggs, such as vegetation clearing and maintenance, occur outside the migratory bird nesting period (mid-April to late August in this region).

However, nest searches may be carried out successfully by experienced observers using appropriate scientific methodology in the event that activities are proposed in simple habitats (often in human-made settings) with only a few likely nesting areas or a small community of migratory birds. Examples of simple habitats include:

- An urban park consisting mostly of lawns with a few isolated trees;
- A vacant lot with few possible nest sites;
- A previously cleared area where there is a lag between clearing and construction activities and where ground nesters may have been attracted to nest in cleared areas or in stockpiles of soil; or
- A structure such as a bridge, a beacon, a tower, or a building (often chosen as a nesting spot by robins, swallows, phoebes, Common Nighthawk, gulls and others).

Nest searches can also be considered when looking for:

- Conspicuous nest structures (such as nests of Great Blue Herons, Bank Swallows, Chimney Swifts);
- Cavity nesters in snags (such as woodpeckers, goldeneyes, nuthatches); or,
- Colonial-breeding species that can be located from a distance (such as a colony of terns or gulls).

For additional information, please visit:

- ECCC’s General Nesting Periods for Migratory Birds:  
<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html>
- ECCC’s Guidelines for Avoiding Harm to Migratory Birds:  
<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html>

24. ECCC-CWS notes that the Wildlife Management Plan (WMP) (Appendix T) does not include specific measures to avoid potential impacts of accidents and spills on migratory birds, SAR, and their habitats.

The proponent must ensure that all precautions are taken by the contractors to prevent fuel leaks from equipment, and that a contingency plan in case of oil spills is prepared. Additionally, the proponent should ensure that contractors are aware that under the



MBCA, “no person shall deposit or permit to be deposited oil, oil wastes or any substance harmful to migratory birds in any waters or any area frequented by migratory birds.”

Biodegradable alternatives to petroleum-based chainsaw bar oil and hydraulic for heavy machinery are commonly available from major manufacturers. ECCC-CWS recommends that biodegradable fluids be considered for use in place of petroleum products whenever possible, as a standard for best practices. Additionally, fueling and servicing of equipment should not take place within 30 meters of environmentally sensitive areas, including shorelines and wetlands.

For consideration in emergency response and contingency planning related to accidents and malfunctions, ECCC has prepared *Guidelines for Effective Wildlife Response Plans* (ECCC 2022) available online at:

<https://www.canada.ca/en/services/environment/wildlife-plants-species/national-wildlife-emergency-framework.html>. ECCC-CWS recommends that plans include:

- Measures to deter migratory birds from coming into contact with the oil or polluting substance;
- Measures undertaken if individuals of migratory birds and/or sensitive habitat become contaminated; and,
- The type, extent of monitoring, and reporting in relation to various spill events.

ECCC-CWS recommends adding the following emergency contact procedure to Appendix B, Table 2.0 – Communication Protocol (pg. 18 of pdf) for migratory birds and SAR:

- *Type of Observation*: Event involving a polluting substance (e.g., fuel leak/spill).
- *Regulatory Agencies to be Notified*: ECCC’s 24-hour environmental emergencies reporting system: **1-800-565-1633**. Note: Bird mortality incidents of 10 or more birds in a single event, or an individual species at risk, should be reported via ECCC-CWS Main Office **(506) 364-5044** or via email to [SCFATLEvaluationImpact-CWSATLImpactAssessment@ec.gc.ca](mailto:SCFATLEvaluationImpact-CWSATLImpactAssessment@ec.gc.ca).
- *Communication Type and Timing*: Immediately (to ECCC’s Environmental Emergencies system for fuel leaks) and within 24h (to ECCC-CWS for mortality incidents, regardless of cause)

25. ECCC-CWS notes that the WMP (Appendix T) does not include specific measures to avoid impacts of noise on migratory birds.

Anthropogenic noise produced by construction and human activity can have multiple impacts on birds, including causing stress responses, avoidance of certain important habitats, changes in foraging behavior and reproductive success, and interference with songs, calls, and communication. Activities that introduce loud and/or random noise into habitats with previously no to little levels of anthropogenic noise are particularly disruptive.

ECCC-CWS recommends the following general best management practices:

- The proponent should develop mitigations for programs that introduce very loud and random noise disturbance (e.g., blasting programs) during the migratory bird

breeding season for their region.

- The proponent should, where possible, prioritize construction works in areas away from natural vegetation while working during the migratory bird breeding season. Conducting loud construction works adjacent to natural vegetation should be completed outside the migratory bird breeding season.

The proponent should keep all construction equipment and vehicles in good working order and loud machinery should be muffled if possible.

26. Quote (Appendix U – Draft Adaptive Management Plan, Section 3.2, pg. 2): “*Under Section 6 of the Migratory Birds Regulations (MBR), it is forbidden to disturb, destroy, or take a nest or egg of a migratory bird; or to be in possession of a live migratory bird, or its carcass, skin, nest or egg, except under authority of a permit.*”

ECCC-CWS notes that the above references a repealed version of the *Migratory Bird Regulations* (MBRs). The modernized MBRs under the *Migratory Birds Convention Act* (MBCA) came into effect on July 30, 2022 (see: <https://www.gazette.gc.ca/rp-pr/p2/2022/2022-06-08/html/sor-dors105-eng.html>). Under the modernized MBRs, Section 5 prohibits the capture, kill, take, injury, or harassment of a migratory bird without a permit. Additionally, under the modernized MBRs the nests of all migratory bird species are protected when they contain a live bird or a viable egg (i.e., during the nesting period), excluding the nests of 18 species listed in Schedule 1 of the regulations whose nests are reused and remain protected year-round.

For more information on the amended nest protections, frequently asked questions on how these protections apply to migratory birds and your responsibilities for reporting abandoned nests, please visit:

- Fact Sheet: Nest Protection Under MBR 2022: <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/fact-sheet-nest-protection-under-mbr-2022.html>
- Frequently Asked Questions: MBR 2022: <https://www.canada.ca/en/environment-climate-change/services/migratory-bird-permits/faq-migratory-birds-regulations-2022.html>.

## **Wetlands**

27. ECCC-CWS advocates for the conservation of wetlands in areas where wetland losses have already reached critical levels (e.g., NB, NS, PEI, southern Ontario, Prairies), regionally important wetlands, and wetlands used by avian SAR and SOCC as part of their lifecycle (e.g., Canada Warbler, Chimney Swift, Olive-sided Flycatcher, Common Nighthawk, Lesser Yellowlegs, Greater Yellowlegs, Spotted Sandpiper, Upland Sandpiper, etc.).

## **Applicable Legislation and Standard Advice**

### **Migratory Birds Convention Act**

The federal [Migratory Birds Convention Act](#) (MBCA) 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: <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html>

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.”

The proponent is responsible for ensuring that activities are managed to ensure compliance with the MBCA and associated regulations.

#### 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 bird species at risk (SAR), this prohibition immediately applies on all lands or waters (federal, provincial, territorial and private) in which the species occurs.

ECCC-CWS notes that all comments it provides concerning species at risk that are not migratory birds derive from federal recovery/management plans as posted on the Species at Risk Registry (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>), and thus comments may not be comprehensive to the body of knowledge for the species.

For species which are not 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.

### Vegetation Clearing

Clearing vegetation may cause disturbance to migratory birds and inadvertently destroy their nests and eggs. Many species use trees, as well as brush, deadfalls and other low-lying vegetation for nesting, feeding, shelter and cover. This would apply to songbirds throughout the region and waterfowl in wetland areas. Disturbance of this nature would be most critical during the breeding period. The breeding season for most birds within the project area occurs between mid-April and mid-August in this region, however some species protected under the MBCA do nest outside of this time period. Please see the webpage "Nesting Periods" (<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html>) for more specific information concerning the breeding times of migratory birds. This project area falls within zone "C3".

ECCC-CWS provides the following recommendations:

- The proponent is recommended to avoid certain activities, such as clearing, during the regional nesting period for migratory birds. The breeding season for most birds within the project area occurs between mid-April and late August in this region (see above website for more specific time periods by zone).
- Active nests can be discovered during project activities outside of the regional nesting period. To reduce the risk of impacting nests or birds caring for pre-fledged chicks at those times, ECCC-CWS recommends implementation of 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 comply with the MBCA.
- The proponent should be cognizant that while most migratory bird species construct nests in trees (sometimes in tree cavities) and shrubs, mitigations should be appropriate for migratory birds with different strategies. For example, 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.

- The proponent should develop and implement a management plan that includes appropriate preventative measures to minimize the risk of impacts on migratory birds (Please see 'Guidelines to reduce risk to migratory birds' at <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html>). For beneficial management practices regarding how to avoid the incidental take of migratory bird nests and eggs, please refer to the Avoidance Guidelines (Website: <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/guidelines.html>). The management plan should include processes to follow should an active nest be found at any time of the year.

#### Working near Waterbodies or Riparian Environments

ECCC-CWS has the following recommended beneficial management practices for working on/near waterbodies or riparian environments:

- Project staff should not approach concentrations of migratory birds (e.g. seabirds, shorebirds, waterfowl, etc.).
- Project staff should use the main navigation channels or access roads to get to and from the site; and should have well muffled vessels and machinery.
- Project staff should undertake any measures that may minimize or eliminate discharge of oily waste into the marine or riparian environment.
- Food scraps and other garbage left near waterbodies or riparian environments can artificially enhance the populations of avian and mammalian predators of eggs and chicks. The proponent should ensure that no litter (including food waste) is left in coastal areas by their staff and/or contractors
- If there is any noticeable change in migratory bird numbers or distribution at the location during operations, ECCC-CWS should be notified.

#### Stockpiles

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 (mid-April through late August). 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.

For additional information on designing mitigation measures for Bank Swallow, refer to the following guidance: <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/related-information/bank-swallow-sandpits->

[quarries.html](#).

### Revegetation

A variety of species of plants native to the general project area should 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.

### Noise Disturbance

Anthropogenic noise produced by construction and human activity can have multiple impacts on birds, including causing stress responses, avoidance of certain important habitats, changes in foraging behavior and reproductive success, and interference with songs, calls, and communication. Activities that introduce loud and/or random noise into habitats with previously no to little levels of anthropogenic noise are particularly disruptive.

ECCC-CWS recommends the following best management practices:

- The proponent should develop mitigations for programs that introduce very loud and random noise disturbance (e.g., blasting programs) during the migratory bird breeding season for their region.
- The proponent should, where possible, prioritize construction works in areas away from natural vegetation while working during the migratory bird breeding season. Conducting loud construction works adjacent to natural vegetation should be completed outside the migratory bird breeding season.
- The proponent should keep all construction equipment and vehicles in good working order and loud machinery should be muffled if possible.

### Light Attraction and Migratory Birds

Attraction to light at night or in poor visibility conditions during the day may result in collision with lit structures or their support structures, or with other migratory birds. Disoriented migratory birds are prone to circling light sources and may deplete their energy reserves and either die of exhaustion or be forced to land where they are at risk of depredation.

To reduce the risk of disturbance to migratory birds related to human-induced light, ECCC-CWS recommends implementation of the following beneficial management practices:

- The fewest number of site-illuminating light possible should be used in the project area. Only strobe lights should be used at night, at the lowest intensity and smallest number of flashes per minute allowable by Transport Canada.
- Lighting for the safety of the employees should be shielded down and only to where it is needed.
- LED lights should be used instead of other types of light where possible. LED light fixtures are less prone to light trespass (i.e., are better at directing light where it needs to be, and do not bleed light into the surrounding area), and this property reduces the incidence of migratory bird attraction.

### Infrastructure, Buildings and Bridges

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.

ECCC-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 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.

### Power Transmission – Risks to Migratory Birds

Power grids have the potential to harm, injure, or kill migratory birds. Birds can get electrocuted when they contact charged transmission or distribution lines. Additionally, birds can get injured when they fly into lines.

ECCC-CWS recommends the following beneficial management practices to avoid potential harm to migratory birds associated with power transmission:

- Avoid building transmission or distribution lines over, adjacent, or near areas where high numbers of birds are known to congregate or move, including:
  - Important breeding, staging, moulting areas;
  - Breeding colonies; and
  - Between breeding and foraging areas.
- Design “avian-safe” configurations to reduce the risk of electrocutions, including:
  - Providing sufficient separation between energized phase conductors and between phases and grounded hardware;
  - Insulating exposed surfaces in high-risk areas;
  - Installing perch-management (e.g. perch guard) devices on poles; and
  - Removing or minimizing vegetation around poles and lines (please see “Vegetation Clearing” guidance provided above.
- Install measures on lines that reduce the risk of collisions:
  - Provide minimal vertical separation between lines;
  - Use self-supporting structures to reduce the number of guy wires; and
  - Use line-marking devices to increase the visibility of the lines.

## **WATER QUALITY**

Pollution prevention and control provisions of the *Fisheries Act* are administered and enforced by ECCC. Subsection 36(3) of the *Fisheries Act* prohibits “anyone from depositing or permitting the deposit of a deleterious substance of any type in water frequented by fish,

or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter such water”.

It is the responsibility of the proponent to ensure that activities are managed so as to prevent the release of substances deleterious to fish. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters. Additional information on what constitutes a deposit under the *Fisheries Act* can be found here: <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/effluent-regulations-fisheries-act/frequently-asked-questions.html>

## **ACCIDENTS AND MALFUNCTIONS**

Hazardous materials (e.g. fuels, lubricants, hydraulic oil) and wastes (e.g. waste oil) should be managed so as to minimize the risk of chronic and/or accidental releases. For example, the proponent should encourage contractors and staff to undertake refueling and maintenance activities on level terrain, at a suitable distance from environmentally sensitive areas including watercourses, and on a prepared impermeable surface with a collection system.

The proponent is encouraged to prepare contingency plans that reflect a consideration of potential accidents and malfunctions and that take into account site-specific conditions and sensitivities. The Canadian Standards Association publication, *Emergency Preparedness and Response*, CAN/CSA-Z731-03, reaffirmed 2014), is a useful reference.

All spills or leaks, such as those from machinery or storage tanks, should be promptly contained and cleaned up (sorbents and booms should be available for quick containment and recovery), and reported to the 24-hour environmental emergencies reporting system (Maritime Provinces 1-800-565-1633)

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If you have any questions, please direct any further correspondence to ECCC's environmental assessment window for coordination at: [FCR\\_Tracker@ec.gc.ca](mailto:FCR_Tracker@ec.gc.ca).

-

Suzanne Wade

Environmental Assessment Analyst, Environmental Stewardship Branch  
Environment and Climate Change Canada/Government of Canada  
[Suzanne.Wade@ec.gc.ca](mailto:Suzanne.Wade@ec.gc.ca) / Tel: 902 426-5035

Analyste d'évaluation environnementale, Direction générale de l'intendance  
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Environnement et Changement climatique Canada / Gouvernement du Canada  
[Suzanne.Wade@ec.gc.ca](mailto:Suzanne.Wade@ec.gc.ca) / Tél: 902 426-5035

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**From:** Fitzpatrick, Allison <[Allison.Fitzpatrick@novascotia.ca](mailto:Allison.Fitzpatrick@novascotia.ca)>

**Sent:** Wednesday, July 31, 2024 4:47 PM

**To:** Birch-Caza, Melissa J <[Melissa.Birch-Caza@novascotia.ca](mailto:Melissa.Birch-Caza@novascotia.ca)>; Alward, Emily <[Emily.Alward@novascotia.ca](mailto:Emily.Alward@novascotia.ca)>; Mitchell, David A <[David.Mitchell@novascotia.ca](mailto:David.Mitchell@novascotia.ca)>; Mosher, Elaine <[Elaine.Mosher@novascotia.ca](mailto:Elaine.Mosher@novascotia.ca)>; Hurlburt, Donna D <[Donna.Hurlburt@novascotia.ca](mailto:Donna.Hurlburt@novascotia.ca)>; Wildlife EA <[WildlifeEA@novascotia.ca](mailto:WildlifeEA@novascotia.ca)>; Crewe, Tara <[Tara.Crewe@novascotia.ca](mailto:Tara.Crewe@novascotia.ca)>; Drake, Carrie L <[Carrie.Drake@novascotia.ca](mailto:Carrie.Drake@novascotia.ca)>; Mahoney, Meagan <[Meagan.Mahoney@novascotia.ca](mailto:Meagan.Mahoney@novascotia.ca)>; Blackburn, Lori M <[Lori.Blackburn@novascotia.ca](mailto:Lori.Blackburn@novascotia.ca)>; Boudreau, Susan M <[Susan.Boudreau@novascotia.ca](mailto:Susan.Boudreau@novascotia.ca)>; Steele, Cynthia <[Cynthia.Steele@novascotia.ca](mailto:Cynthia.Steele@novascotia.ca)>; Paddock, Robert J <[Robert.Paddock@novascotia.ca](mailto:Robert.Paddock@novascotia.ca)>; MacPherson, George E <[George.MacPherson@novascotia.ca](mailto:George.MacPherson@novascotia.ca)>; Hearn, Scott <[Scott.Hearn@novascotia.ca](mailto:Scott.Hearn@novascotia.ca)>; Webber, Diane E <[Diane.Webber@novascotia.ca](mailto:Diane.Webber@novascotia.ca)>; Dickie, John <[John.Dickie@novascotia.ca](mailto:John.Dickie@novascotia.ca)>; Wickson, Mark <[Mark.Wickson@novascotia.ca](mailto:Mark.Wickson@novascotia.ca)>; Creamer, Amber <[Amber.Creamer@novascotia.ca](mailto:Amber.Creamer@novascotia.ca)>; MacDonald, Brent A <[Brent.MacDonald@novascotia.ca](mailto:Brent.MacDonald@novascotia.ca)>; MacQuarrie, Rebecca M <[Rebecca.MacQuarrie@novascotia.ca](mailto:Rebecca.MacQuarrie@novascotia.ca)>; Cormier, John <[John.Cormier@novascotia.ca](mailto:John.Cormier@novascotia.ca)>; Lewis, Beth J <[Beth.Lewis@novascotia.ca](mailto:Beth.Lewis@novascotia.ca)>; Hernould, Alexandra S <[Alexandra.Hernould@novascotia.ca](mailto:Alexandra.Hernould@novascotia.ca)>; Slauenwhite, Melissa <[Melissa.Slauenwhite@novascotia.ca](mailto:Melissa.Slauenwhite@novascotia.ca)>; Poirier, Colin <[Colin.Poirier@novascotia.ca](mailto:Colin.Poirier@novascotia.ca)>; Rideout, Bill E <[Bill.Rideout@novascotia.ca](mailto:Bill.Rideout@novascotia.ca)>; Power, Terrance <[Terrance.Power@novascotia.ca](mailto:Terrance.Power@novascotia.ca)>; David,Ashley (NS) <[Ashley.David@novascotia.ca](mailto:Ashley.David@novascotia.ca)>; Ramen, Satya <[Satya.Ramen@novascotia.ca](mailto:Satya.Ramen@novascotia.ca)>; NSE-SAS-Division <[NSE-SAS-Division@novascotia.ca](mailto:NSE-SAS-Division@novascotia.ca)>; Mackley, Doreen <[Doreen.Mackley@novascotia.ca](mailto:Doreen.Mackley@novascotia.ca)>; Theriault, Marc P <[Marc.Theriault@novascotia.ca](mailto:Marc.Theriault@novascotia.ca)>; Bertrand, Brittany <[Brittany.Bertrand@novascotia.ca](mailto:Brittany.Bertrand@novascotia.ca)>; MacDonald, Bonnie I (ENV) <[Bonnie.I.MacDonald@novascotia.ca](mailto:Bonnie.I.MacDonald@novascotia.ca)>; Lovitt, Christina <[Christina.Lovitt@novascotia.ca](mailto:Christina.Lovitt@novascotia.ca)>; Zanth, Kathy M <[Kathy.Zanth@novascotia.ca](mailto:Kathy.Zanth@novascotia.ca)>; [projects-projets@iaac-aeic.gc.ca](mailto:projects-projets@iaac-aeic.gc.ca); [jeff.reader@dfo-mpo.gc.ca](mailto:jeff.reader@dfo-mpo.gc.ca); [beverly.ramos-casey@canada.ca](mailto:beverly.ramos-casey@canada.ca); RCF Surveiller / FCR Tracker (ECCC) <[FCR\\_Tracker@EC.GC.CA](mailto:FCR_Tracker@EC.GC.CA)>; [referralsmaritimes@dfo-mpo.gc.ca](mailto:referralsmaritimes@dfo-mpo.gc.ca); [dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca](mailto:dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca); [windturbines@forces.gc.ca](mailto:windturbines@forces.gc.ca); Land Use <[landuse@navcanada.ca](mailto:landuse@navcanada.ca)>; [tcfcmar@tc.gc.ca](mailto:tcfcmar@tc.gc.ca)

**Subject:** Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

You don't often get email from [allison.fitzpatrick@novascotia.ca](mailto:allison.fitzpatrick@novascotia.ca). [Learn why this is important](#)

Good Afternoon,

This is to advise that on August 7 2024, **Clydesdale Holdings Ltd** will register the **CLYDESDALE RIDGE WIND PROJECT** for environmental assessment, in accordance with Part IV of the Environment Act.

### **PROJECT DESCRIPTION:**

The proposed undertaking is for the construction of an up to 18 wind turbines up to 126MW wind energy project. The proposed project is located in Colchester and Pictou Counties, near the communities of Mount Thom and Earltown. The Project include the construction of wind turbines, new roads, upgrades to existing roads, electrical collector lines and temporary laydown areas. The proposed wind turbines will be up to 200 m tall to the tip of the blade and individually produce up to 7 MW. The Proponent is developing and will own and operate the



Project in partnership with Mi'kmaq communities in Nova Scotia. [Construction is intended to begin in 2025 and is expected to be operational for 25 years beginning in 2027.](#)

### **DEADLINES:**

Please note that **all comments must be provided by August 28, 2024**, to be considered in this environmental assessment. We understand this a slight change from the usual 30-day comment period. It is necessary to ensure adequate time to support analysis and decision-making processes under the legislative timeframe. Reviewers will still have 28 days to consider the document and we are hopeful that our efforts over the past year to streamline and standardize review process will help with an efficient review. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

On or before **September 26, 2024**, the Minister of Environment and Climate Change will decide if the project can be granted conditional environmental assessment approval. On the decision day, all submissions received will be posted on the Department's website for public viewing.

### **ACCESSING EA DOCUMENTS AND DATA:**

Documents can be downloaded from the proponent's **Sharepoint site** (Link:).

[Clydesdale Ridge Wind Project EARD Submission \(Shared with NSECC\)](#)

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.**

On August 7, 2024, the Registration Documents (except the GIS data) will also be available on our website at <http://www.novascotia.ca/nse/ea/>.

### **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 and guidance to support you, in your role as reviewer, to help achieve this goal.** This template requests sign off by Managers/Directors (for provincial departments) prior to submission of final comments to the EA Branch. Therefore, please consider the attached 3 documents to provide your comments:

1. EA Reviewer Template (this is a suggested format for comments, not a requirement).
2. EA Reviewer Guidance (**this should not be included back as part of comments to the EA Branch**)
3. Standard T&C's for Wind



If you have difficulties accessing the documents or any questions on this registration, please contact me at any time.

Kind regards,  
Allison



Environment and  
Climate Change

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

**Allison Fitzpatrick**

Environmental Assessment Officer  
Policy, Planning and Environmental  
Assessment

902-237-4711

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**From:** [Currie, Paul D](#)  
**To:** [Fitzpatrick, Allison](#)  
**Cc:** [Poirier, Colin](#)  
**Subject:** RE: Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024  
**Date:** August 29, 2024 1:39:07 PM  
**Attachments:** [image002.png](#)  
[image003.png](#)

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Good afternoon

On behalf of the Environmental Health branch, we have reviewed the submission.

In relation to the Shadow Flicker assessment, we have no specific concerns with the proponent's submission in that regard.

I hope this is sufficient. Thanks

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**From:** Fitzpatrick, Allison <Allison.Fitzpatrick@novascotia.ca>  
**Sent:** Thursday, August 29, 2024 1:00 PM  
**To:** Currie, Paul D <Paul.Currie@novascotia.ca>; Poirier, Colin <Colin.Poirier@novascotia.ca>  
**Subject:** FW: Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

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**From:** Fitzpatrick, Allison  
**Sent:** Wednesday, July 31, 2024 4:47 PM  
**To:** Birch-Caza, Melissa J <[Melissa.Birch-Caza@novascotia.ca](mailto:Melissa.Birch-Caza@novascotia.ca)>; Alward, Emily <[Emily.Alward@novascotia.ca](mailto:Emily.Alward@novascotia.ca)>; Mitchell, David A <[David.Mitchell@novascotia.ca](mailto:David.Mitchell@novascotia.ca)>; Mosher, Elaine <[Elaine.Mosher@novascotia.ca](mailto:Elaine.Mosher@novascotia.ca)>; Hurlburt, Donna D <[Donna.Hurlburt@novascotia.ca](mailto:Donna.Hurlburt@novascotia.ca)>; Wildlife EA <[WildlifeEA@novascotia.ca](mailto:WildlifeEA@novascotia.ca)>; Crewe, Tara <[Tara.Crewe@novascotia.ca](mailto:Tara.Crewe@novascotia.ca)>; Drake, Carrie L <[Carrie.Drake@novascotia.ca](mailto:Carrie.Drake@novascotia.ca)>; Mahoney, Meagan <[Meagan.Mahoney@novascotia.ca](mailto:Meagan.Mahoney@novascotia.ca)>; Blackburn, Lori M <[Lori.Blackburn@novascotia.ca](mailto:Lori.Blackburn@novascotia.ca)>; Boudreau, Susan M <[Susan.Boudreau@novascotia.ca](mailto:Susan.Boudreau@novascotia.ca)>; Steele, Cynthia <[Cynthia.Steele@novascotia.ca](mailto:Cynthia.Steele@novascotia.ca)>; Paddock, Robert J <[Robert.Paddock@novascotia.ca](mailto:Robert.Paddock@novascotia.ca)>; MacPherson, George E <[George.MacPherson@novascotia.ca](mailto:George.MacPherson@novascotia.ca)>; Hearn, Scott <[Scott.Hearn@novascotia.ca](mailto:Scott.Hearn@novascotia.ca)>; Webber, Diane E <[Diane.Webber@novascotia.ca](mailto:Diane.Webber@novascotia.ca)>; Dickie, John <[John.Dickie@novascotia.ca](mailto:John.Dickie@novascotia.ca)>; Wickson, Mark <[Mark.Wickson@novascotia.ca](mailto:Mark.Wickson@novascotia.ca)>; Creamer, Amber <[Amber.Creamer@novascotia.ca](mailto:Amber.Creamer@novascotia.ca)>; MacDonald, Brent A <[Brent.MacDonald@novascotia.ca](mailto:Brent.MacDonald@novascotia.ca)>; MacQuarrie, Rebecca M <[Rebecca.MacQuarrie@novascotia.ca](mailto:Rebecca.MacQuarrie@novascotia.ca)>; Cormier, John <[John.Cormier@novascotia.ca](mailto:John.Cormier@novascotia.ca)>; Lewis, Beth J <[Beth.Lewis@novascotia.ca](mailto:Beth.Lewis@novascotia.ca)>; Hernould, Alexandra S <[Alexandra.Hernould@novascotia.ca](mailto:Alexandra.Hernould@novascotia.ca)>; Slauenwhite, Melissa <[Melissa.Slaenwhite@novascotia.ca](mailto:Melissa.Slaenwhite@novascotia.ca)>; Poirier, Colin <[Colin.Poirier@novascotia.ca](mailto:Colin.Poirier@novascotia.ca)>; Rideout, Bill E <[Bill.Rideout@novascotia.ca](mailto:Bill.Rideout@novascotia.ca)>; Power, Terrance <[Terrance.Power@novascotia.ca](mailto:Terrance.Power@novascotia.ca)>; David, Ashley D <[Ashley.David@novascotia.ca](mailto:Ashley.David@novascotia.ca)>; Ramen, Satya <[Satya.Ramen@novascotia.ca](mailto:Satya.Ramen@novascotia.ca)>; NSE-SAS-Division <[NSE-SAS-Division@novascotia.ca](mailto:NSE-SAS-Division@novascotia.ca)>; Mackley,

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**Subject:** Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

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**ACCESSING EA DOCUMENTS AND DATA:**

Documents can be downloaded from the proponent's **Sharepoint site** (Link:).

[Clydesdale Ridge Wind Project EARD Submission \(Shared with NSECC\)](#)

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.**

On August 7, 2024, the Registration Documents (except the GIS data) will also be available on our website at <http://www.novascotia.ca/nse/ea/>.

**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 and guidance to support you, in your role as reviewer, to help achieve this goal.** This template requests sign off by Managers/Directors (for provincial departments) prior to submission of final comments to the EA Branch. Therefore, please consider the attached 3 documents to provide your comments:

1. EA Reviewer Template (this is a suggested format for comments, not a requirement).
2. EA Reviewer Guidance (**this should not be included back as part of comments to the EA Branch**)
3. Standard T&C's for Wind

If you have difficulties accessing the documents or any questions on this registration, please contact me at any time.

Kind regards,  
Allison



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

**Allison Fitzpatrick**  
Environmental Assessment Officer  
Policy, Planning and Environmental  
Assessment  
902-237-4711  
[Allison.fitzpatrick@novascotia.ca](mailto:Allison.fitzpatrick@novascotia.ca)

Date: August 28, 2024  
To: Allison Fitzpatrick, Environmental Assessment Officer  
From: Department of Natural Resources and Renewables  
Subject: Clydesdale Ridge Wind Project, Colchester and Pictou Counties

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**Scope of review:**

This review focuses on the following mandate: Geoscience health and safety, mineral exploration, mineral development, critical minerals, Clean Energy, authorities and approvals required from the Land Services Branch, wildlife, species at risk, and habitat conservation.

**List of Documents Reviewed:**

**Geoscience and Mines Branch:**

- Environmental Assessment Registration Document – Clydesdale Ridge Wind Project
  - Appendix C2
- Nova Scotia’s Registry of Claims (NovaROC)
- Mineral Occurrence Database
- Clydesdale Ridge Wind Farm Environmental Assessment Registration (2012)
  - Sections 1-5.
- Terms and Conditions for Environmental Assessment Approval (2012)

**Land Services Branch:**

- Environmental Assessment Registration Document
- Drawings 5.1-6.1
- GIS shapefiles

**Details of Technical Review:**

**Clean Energy Branch:**

Renewable energy projects such as wind projects will assist the province in achieving its goals in the Electricity Act, the Clean Power Plan, NRR mandate letter. It will also support Environment and Climate Change’s Environmental Goals and Climate Change Reduction Act (EGCCRA), and the Climate Change Plan for Clean Growth (CCPCG):

Electricity Act:

- 80% Renewable Electricity Standard by 2030;

NRR Mandate letter:

- Commit to 80% of Nova Scotia's electricity needs being supplied by renewable energy by 2030;

EGCCRA: 80% of electricity in the Province supplied by renewable energy by 2030;

- 53% emissions reduction targets from 2005 levels by 2030;
- Phase out of coal-fired electricity generation by 2030;
- Net-zero emissions by 2050;

CCPCG:

- 90% emissions reductions from the electricity sector by 2035;
- Green Choice Program (includes a subsequent renewable energy procurement) to be launched by 2023.
- 500 MW of new local renewable energy by 2026.

Clean Power Plan:

- 1000 MW of new onshore wind energy by 2030.

### **Geoscience and Mines Branch:**

The Mount Thom Cu-Co Prospect (Steele Run) is located adjacent to the proposed project area, along the southern boundary of the Gully Lake Wilderness Area and consists of five active mineral exploration licences. In addition, the Six Mile Brook Cu-Au occurrence is located ~4 km east of the proposed project boundary and is held under a single active mineral exploration licence. It is not anticipated that the proposed project will result in any negative impacts to the nearby mineral exploration licences.

The proposed project area is considered to be a medium to high level for mineral potential, specifically with Iron Oxide Copper Gold type mineralization (IOCG) in association with secondary splay structures from the Cobequid-Chedabucto Fault Zone (CCFZ), a major and economically significant fault boundary in the province. This mineral exploration potential is somewhat inhibited in the area by both the Gully Lake Wilderness Area which the proposed project area encompasses as well as Mineral Closure C000200 to the northwest of the proposed site.

### **Land Services Branch:**

The Proponent will require authorizations (such as a lease, licence, letter of authority, or easement) from NRR for any activity on Crown lands including:

- erecting, operating, maintaining, and decommissioning wind turbines and related infrastructure;
- temporary use and access of the land, such as requests to temporarily use existing Crown owned roads, install meteorological (MET) towers, or to conduct geotechnical investigations;
- installing and maintaining overhead/underground transmission wires and collector lines, including for submerged Crown lands;
- requests to construct and use new access roads, or to widen or otherwise modify existing access such as roads located on Crown lands.

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

**Forestry and Wildlife Branch:**

Eastern waterfan (Threatened - Federal *Species at Risk Act* (SARA) and NS *Endangered Species Act* (ESA)) - Project overlaps with both eastern waterfan Special Management Practice (SMP) 200m buffers and eastern waterfan federal critical habitat. Road upgrades are proposed within 200m of eastern waterfan occurrences, federal critical habitat (SARA) and provincial core habitat (ESA). These road upgrades could directly impact individuals and/or have indirect impacts on survival through the alteration of stream dynamics. Work within the 200m buffer goes against the SMP for Crown land and could violate the ESA's prohibition against destroying habitually occupied habitat – alternative access options should be explored.

Eastern waterfan has been confirmed on Crown land within 40m of the Vanderveen road that is scheduled to be upgraded to support the project. Eastern waterfan is a Table 1 species under the *At-Risk Lichens Special Management Practices*. The species is provided with a Protected Zone which limits activities within 200m of an occurrence. Of note to this project is the following:

*(3) Road construction: No construction of new roads or trails. New road construction in the Protected zone may be permitted in exceptional situations and will require an approval under DNR's Variance process.*

*(4) Existing roads: If essential for access, any existing road can only be maintained to the standard of the original road. This refers to maintenance or upgrades that may affect local microclimate or air quality. This does not refer to maintenance or upgrades (i.e. culvert replacement) that have no such effects.*

Black Ash - Project activities overlap with Black ash core habitat. Surveys could not confirm a previous occurrence from 2012. The area around the occurrence, including the wetland where it was observed, has undergone alterations and is now heavily disturbed.

Lichens - As per the at-risk lichen SMP, 200m buffers must be maintained.

Birds - Only 1 of 2 years of baseline surveys have been completed. Additional surveys are required: 1 year of breeding bird point count surveys and 1 year of migration surveys (spring and fall). Breeding bird counts should be conducted in representative habitat and not roadside, as roadside surveys may be biased towards edge-associated species and may not detect all species in the study area.

Rusty Blackbird (endangered) - PC6 - New road FID 24 proposes to alter the wetland associated with an occurrence of Rusty Blackbird. Options should be explored to use existing road infrastructure.

Gully Lake Wilderness Area - The wilderness area was included in the study area but only one moose transect was conducted in this area. It is therefore not possible to determine effects of the project on moose within the wilderness area.

Mainland Moose – The majority of moose transects were situated along existing roads or trails, as opposed to areas that are proposed to be disturbed, precluding the ability to make informed decisions about potential impacts.

New road construction - Option A was chosen by the proponent, which in the southern extent of the project, includes construction of approximately 4km of new road, whereas option B requires upgrades of existing roads and would minimize environmental disturbance, habitat loss and fragmentation. The project area is within the Mainland Moose concentration area and identified provincial core habitat; new road construction should be limited, or reasons why this is not feasible, provided. Specifically:

1. Road FID 14 - This new road does not appear to be necessary as access to turbines 14, 15 and 16 already exists within the existing road matrix. This section is immediately adjacent to black ash records and impacts multiple wetlands.
2. Road FID 29, 30 and road upgrade FID 34 - These could be avoided if option B is chosen resulting in considerably less road construction.
3. Road FID 27, 37 - Multiple occurrences of eastern waterfan overlap with the proposed road. This activity is likely to disturb known occurrences of eastern waterfan, in violation of the ESA. It also does not comply with the SMP as the road is within 200m of eastern waterfan.

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

#### **Clean Energy Branch:**

The proposed project has applied to the Green Choice Program Request for Proposals that closed for bids on June 28, 2024 according to their website.

Wind energy projects such as Clydesdale Ridge help Nova Scotia transition its electricity system from the use of coal-fired generation that has direct negative environmental impacts, including air pollution and greenhouse gas emissions.

The transition of our electricity system to renewable energy is part of the province's plans and commitments to climate change mitigation.

Wind energy is the lowest cost of energy world-wide and local deployment of wind energy is anticipated to save rate payers of Nova Scotia millions of dollars over the lifetime of their operation while also reducing the emissions and pollution intensity of the electricity system.

Wind energy will help the electricity system avoid output-based price compliance for greenhouse gas emissions in Nova Scotia resulting in less upward pressure on rate payers through fuel.

Transitioning the electricity system to renewable energy is the most cost effective and significant action the province can undertake to reduce its greenhouse gas emissions in the near term.

Replacing coal-fired electricity generators with renewable energy such as onshore wind is the most cost effective and reduces the most greenhouses gases in Nova Scotia.

#### **Geoscience and Mines Branch:**

1. Landowner permission is required for mineral license holders to access land and perform exploration. As the prospectivity is noted to be medium-high for the area, should mineral exploration be proposed for this site to explore the area for economic mineralization of critical minerals, specifically IOCG related deposits, we look to encourage dialogue among potential parties to ensure access for mineral exploration activities in the province.



2. While not considered to be an area of high-risk, monitoring of pad conditions for both acid generating rock potential (ARD) conditions and potential uranium occurrences as development progresses should be undertaken and measures in place as part of the Proponent's Environmental Protection Plan (EPP).

**Land Services Branch:**

No further comments.

**Forestry and Wildlife Branch:**

- Obtain all permits necessary to undertake the project as required under legislation related to wildlife, species at risk, watercourses and wildlife habitat alterations.
- Provide digital way points and/or shapefiles for all flora and fauna surveys, including for Species at Risk and Species of Conservation Concern to NRR (those species listed and/or assessed as at risk under the Species at Risk Act, Endangered Species Act, COSEWIC, as well as all S1, S2 and S3 species). Data should adhere to the format prescribed in the NRR Template for Species Submissions for EAs and is to be provided within two months of collection.
- Develop a Wildlife Management Plan (WMP) in consultation with NRR and ECCC 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 Species at Risk, non-Species at Risk wildlife, and other important biodiversity features they may encounter on-site and how to appropriately respond to those encounters.
  - Noise, dust, and lighting mitigations.
  - Measures to protect and mitigate against adverse effects to migratory birds during construction and operation. The incidental take of breeding birds, as well as their nests and/or eggs, is not permitted under the Migratory Birds Convention Act and the NS Wildlife Act. This may include avoidance of certain activities (such as vegetation clearing) during the regional nesting period for most birds, buffer zones around discovered nests, limiting activities during the breeding season around active nests, and other best management practices.
  - Mitigation measures consistent with recovery documents (federal and/or provincial recovery and management plans, COSEWIC status reports) and provincial Special Management Practices for Crown land to avoid and/or protect Species at Risk/Species of Conservation Concern, including eastern waterfowl and Rusty Blackbird.
  - Consideration should be given to avoiding the construction of new roads and maintenance of existing roads within the 200m at-risk lichen buffer or a clear explanation provided for why option A is necessary, and what mitigations will be put in place to manage impacts. Option A will result in a higher degree of habitat alteration and fragmentation.
  - Details on monitoring and inspections to assess compliance with the WMP.

- The following surveys would inform appropriate mitigations in the Wildlife Management Plan:
  - Surveys, by a provincially approved lichenologist, for lichen species in all areas where the project footprint overlaps with potential suitable lichen habitat for species identified in the At-Risk Lichens SMP, with particular attention to eastern waterfan where watercourses identified as suitable habitat overlaps with road construction, including Vanderveen Road.
  - An additional year of breeding bird surveys in representative habitat, to determine the extent of all SAR and SOCI birds.
  - As the proposed work is within identified Mainland Moose Core Habitat, surveys for Mainland Moose should be conducted for a minimum of two years during the operation phase of the project, in a buffered zone of influence extending up to 2km from the project footprint, to assess potential effects of disturbance.
- Revegetate cleared areas using native vegetation or seed sources following consultation with NRR.
- Develop a plan to prevent the spread of invasive species both on and off site in consultation with NRR. The plan should include monitoring, reporting, and adaptive management components.
- Develop a monitoring program to assess mortality for birds and bats in consultation with NRR and ECCC, implemented for a minimum of two years post-construction during the operation stage of the project. Guidance on monitoring requirements will be provided by NRR. Reporting of the results of the monitoring program shall be on an annual basis to the appropriate regulatory agencies. Pending review of results of the monitoring program, additional monitoring or mitigation measures may be required.
- Engage with NRR and ECCC to develop an adaptive management plan to inform decision-making related to adverse effects of the project on migratory bird and bat species. Additional surveys or mitigations may be required following a review of the effectiveness of the plan.
- Describe the impacts of the project on landscape-level connectivity for wildlife and habitat (e.g., habitat fragmentation, loss of intact forested habitat, increased road density). Include an assessment of the cumulative effects of the project on landscape-level connectivity and habitat loss, and the measures proposed to mitigate those effects.

**From:** [Cuthbert, Robert W](#)  
**To:** [Fitzpatrick, Allison](#)  
**Cc:** [Seaboyer, Matt P](#)  
**Subject:** RE: REMINDER Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024  
**Date:** August 23, 2024 9:38:50 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Allison,

Resource Management Unit doesn't have any comments on the above noted EA.

Thanks,  
Robert

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**From:** Fitzpatrick, Allison <Allison.Fitzpatrick@novascotia.ca>  
**Sent:** Thursday, August 22, 2024 3:05 PM  
**To:** Birch-Caza, Melissa J <Melissa.Birch-Caza@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>; Wildlife EA <WildlifeEA@novascotia.ca>; Crewe, Tara <Tara.Crewe@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>; Paddock, Robert J <Robert.Paddock@novascotia.ca>; MacPherson, George E <George.MacPherson@novascotia.ca>; Hearn, Scott <Scott.Hearn@novascotia.ca>; Webber, Diane E <Diane.Webber@novascotia.ca>; Dickie, John <John.Dickie@novascotia.ca>; Wickson, Mark <Mark.Wickson@novascotia.ca>; Creamer, Amber <Amber.Creamer@novascotia.ca>; MacDonald, Brent A <Brent.MacDonald@novascotia.ca>; MacQuarrie, Rebecca M <Rebecca.MacQuarrie@novascotia.ca>; Cormier, John <John.Cormier@novascotia.ca>; Lewis, Beth J <Beth.Lewis@novascotia.ca>; Hernould, Alexandra S <Alexandra.Hernould@novascotia.ca>; Slauenwhite, Melissa <Melissa.Slauenwhite@novascotia.ca>; Poirier, Colin <Colin.Poirier@novascotia.ca>; Rideout, Bill E <Bill.Rideout@novascotia.ca>; Power, Terrance <Terrance.Power@novascotia.ca>; David, Ashley D <Ashley.David@novascotia.ca>; Ramen, Satya <Satya.Ramen@novascotia.ca>; NSE-SAS-Division <NSE-SAS-Division@novascotia.ca>; Mackley, Doreen <Doreen.Mackley@novascotia.ca>; Theriault, Marc P <Marc.Theriault@novascotia.ca>; Bertrand, Brittany <Brittany.Bertrand@novascotia.ca>; MacDonald, Bonnie I (ENV) <Bonnie.I.MacDonald@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; beverly.ramos-casey@canada.ca; fcr\_tracker@ec.gc.ca; referralsmaritimes@dfo-mpo.gc.ca; dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca; windturbines@forces.gc.ca; Land Use <landuse@navcanada.ca>; tcfcmar@tc.gc.ca  
**Subject:** REMINDER Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

Good Afternoon,

A reminder that comments for the **CLYDESDALE RIDGE WIND PROJECT** must be provided by **AUGUST 28, 2024**, to be considered in this environmental assessment. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

Regards,  
Allison

---

**From:** Fitzpatrick, Allison

**Sent:** Wednesday, July 31, 2024 4:47 PM

**To:** Birch-Caza, Melissa J <[Melissa.Birch-Caza@novascotia.ca](mailto:Melissa.Birch-Caza@novascotia.ca)>; Alward, Emily <[Emily.Alward@novascotia.ca](mailto:Emily.Alward@novascotia.ca)>; Mitchell, David A <[David.Mitchell@novascotia.ca](mailto:David.Mitchell@novascotia.ca)>; Mosher, Elaine <[Elaine.Mosher@novascotia.ca](mailto:Elaine.Mosher@novascotia.ca)>; Hurlburt, Donna D <[Donna.Hurlburt@novascotia.ca](mailto:Donna.Hurlburt@novascotia.ca)>; Wildlife EA <[WildlifeEA@novascotia.ca](mailto:WildlifeEA@novascotia.ca)>; Crewe, Tara <[Tara.Crewe@novascotia.ca](mailto:Tara.Crewe@novascotia.ca)>; Drake, Carrie L <[Carrie.Drake@novascotia.ca](mailto:Carrie.Drake@novascotia.ca)>; Mahoney, Meagan <[Meagan.Mahoney@novascotia.ca](mailto:Meagan.Mahoney@novascotia.ca)>; Blackburn, Lori M <[Lori.Blackburn@novascotia.ca](mailto:Lori.Blackburn@novascotia.ca)>; Boudreau, Susan M <[Susan.Boudreau@novascotia.ca](mailto:Susan.Boudreau@novascotia.ca)>; Steele, Cynthia <[Cynthia.Steele@novascotia.ca](mailto:Cynthia.Steele@novascotia.ca)>; Paddock, Robert J <[Robert.Paddock@novascotia.ca](mailto:Robert.Paddock@novascotia.ca)>; MacPherson, George E <[George.MacPherson@novascotia.ca](mailto:George.MacPherson@novascotia.ca)>; Hearn, Scott <[Scott.Hearn@novascotia.ca](mailto:Scott.Hearn@novascotia.ca)>; Webber, Diane E <[Diane.Webber@novascotia.ca](mailto:Diane.Webber@novascotia.ca)>; Dickie, John <[John.Dickie@novascotia.ca](mailto:John.Dickie@novascotia.ca)>; Wickson, Mark <[Mark.Wickson@novascotia.ca](mailto:Mark.Wickson@novascotia.ca)>; Creamer, Amber <[Amber.Creamer@novascotia.ca](mailto:Amber.Creamer@novascotia.ca)>; MacDonald, Brent A <[Brent.MacDonald@novascotia.ca](mailto:Brent.MacDonald@novascotia.ca)>; MacQuarrie, Rebecca M <[Rebecca.MacQuarrie@novascotia.ca](mailto:Rebecca.MacQuarrie@novascotia.ca)>; Cormier, John <[John.Cormier@novascotia.ca](mailto:John.Cormier@novascotia.ca)>; Lewis, Beth J <[Beth.Lewis@novascotia.ca](mailto:Beth.Lewis@novascotia.ca)>; Hernould, Alexandra S <[Alexandra.Hernould@novascotia.ca](mailto:Alexandra.Hernould@novascotia.ca)>; Slauenwhite, Melissa <[Melissa.Slaunwhite@novascotia.ca](mailto:Melissa.Slaunwhite@novascotia.ca)>; Poirier, Colin <[Colin.Poirier@novascotia.ca](mailto:Colin.Poirier@novascotia.ca)>; Rideout, Bill E <[Bill.Rideout@novascotia.ca](mailto:Bill.Rideout@novascotia.ca)>; Power, Terrance <[Terrance.Power@novascotia.ca](mailto:Terrance.Power@novascotia.ca)>; David, Ashley D <[Ashley.David@novascotia.ca](mailto:Ashley.David@novascotia.ca)>; Ramen, Satya <[Satya.Ramen@novascotia.ca](mailto:Satya.Ramen@novascotia.ca)>; NSE-SAS-Division <[NSE-SAS-Division@novascotia.ca](mailto:NSE-SAS-Division@novascotia.ca)>; Mackley, Doreen <[Doreen.Mackley@novascotia.ca](mailto:Doreen.Mackley@novascotia.ca)>; Theriault, Marc P <[Marc.Theriault@novascotia.ca](mailto:Marc.Theriault@novascotia.ca)>; Bertrand, Brittany <[Brittany.Bertrand@novascotia.ca](mailto:Brittany.Bertrand@novascotia.ca)>; MacDonald, Bonnie I (ENV) <[Bonnie.I.MacDonald@novascotia.ca](mailto:Bonnie.I.MacDonald@novascotia.ca)>; Lovitt, Christina <[Christina.Lovitt@novascotia.ca](mailto:Christina.Lovitt@novascotia.ca)>; Zanth, Kathy M <[Kathy.Zanth@novascotia.ca](mailto:Kathy.Zanth@novascotia.ca)>; [projects-projets@iaac-aeic.gc.ca](mailto:projects-projets@iaac-aeic.gc.ca); [jeff.reader@dfo-mpo.gc.ca](mailto:jeff.reader@dfo-mpo.gc.ca); [beverly.ramos-casey@canada.ca](mailto:beverly.ramos-casey@canada.ca); [fcr\\_tracker@ec.gc.ca](mailto:fcr_tracker@ec.gc.ca); [referralsmaritimes@dfo-mpo.gc.ca](mailto:referralsmaritimes@dfo-mpo.gc.ca); [dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca](mailto:dfo.fppmar-pppmar.mpo@dfo-mpo.gc.ca); [windturbines@forces.gc.ca](mailto:windturbines@forces.gc.ca); Land Use <[landuse@navcanada.ca](mailto:landuse@navcanada.ca)>; [tcfcmar@tc.gc.ca](mailto:tcfcmar@tc.gc.ca)

**Subject:** Clydesdale Ridge Wind Project – Environmental Assessment – Comments due August 28, 2024

Good Afternoon,

This is to advise that on August 7 2024, **Clydesdale Holdings Ltd** will register the **CLYDESDALE RIDGE WIND PROJECT** for environmental assessment, in accordance with Part IV of the Environment Act.

## **PROJECT DESCRIPTION:**

The proposed undertaking is for the construction of an up to 18 wind turbines up to 126MW wind energy project. [The proposed project is located in Colchester and Pictou Counties, near the communities of Mount Thom and Earltown.](#) The Project include the construction of wind turbines, new roads, upgrades to existing roads, electrical collector lines and temporary laydown areas. The proposed wind turbines will be up to 200 m tall to the tip of the blade and individually produce up to 7 MW. The Proponent is developing and will own and operate the Project in partnership with Mi'kmaq communities in Nova Scotia. [Construction is intended to begin in 2025 and is expected to be operational for 25 years beginning in 2027.](#)

## **DEADLINES:**

Please note that **all comments must be provided by August 28, 2024**, to be considered in this environmental assessment. We understand this a slight change from the usual 30-day comment period. It is necessary to ensure adequate time to support analysis and decision-making processes under the legislative timeframe. Reviewers will still have 28 days to consider the document and we are hopeful that our efforts over the past year to streamline and standardize review process will help with an efficient review. Please provide comments via email if possible. If there are no comments, please also reply indicating so.

On or before **September 26, 2024**, the Minister of Environment and Climate Change will decide if the project can be granted conditional environmental assessment approval. On the decision day, all submissions received will be posted on the Department's website for public viewing.

## **ACCESSING EA DOCUMENTS AND DATA:**

Documents can be downloaded from the proponent's **Sharepoint site** (Link:).

[Clydesdale Ridge Wind Project EARD Submission \(Shared with NSECC\)](#)

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.**

On August 7, 2024, the Registration Documents (except the GIS data) will also be available on our website at <http://www.novascotia.ca/nse/ea/>.

## **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 and guidance to support you, in your role as reviewer, to help achieve this goal.** This template requests sign off by Managers/Directors (for provincial departments) prior to submission of final comments to the EA Branch. Therefore, please consider the attached 3 documents to provide your comments:

1. EA Reviewer Template (this is a suggested format for comments, not a requirement).
2. EA Reviewer Guidance (**this should not be included back as part of comments to the EA Branch**)
3. Standard T&C's for Wind

If you have difficulties accessing the documents or any questions on this registration, please contact me at any time.

Kind regards,  
Allison



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

**Allison Fitzpatrick**

Environmental Assessment Officer  
Policy, Planning and Environmental  
Assessment

902-237-4711

[Allison.fitzpatrick@novascotia.ca](mailto:Allison.fitzpatrick@novascotia.ca)



September 6<sup>th</sup>, 2024

Allison Fitzpatrick  
Environmental Assessment Officer  
Environmental Assessment Branch  
Nova Scotia Environment and Climate Change  
E-mail : [allison.fitzpatrick@novascotia.ca](mailto:allison.fitzpatrick@novascotia.ca)

**RE: Consultation with the Mi'kmaq of Nova Scotia on the Clydesdale Ridge Wind Project, Pictou and Colchester Counties**

Ms. Fitzpatrick

I write to acknowledge receipt of your letter dated August 6, 2024, with respect to the *Terms of Reference for a Mi'kmaq- Nova Scotia – Canada Consultation Process (ToR)* as ratified on August 31, 2021, on the above noted project. We wish to proceed with Consultation.

Kwilmu'kw Maw-klusuaqn (KMK) would like to acknowledge Natural Forces and their commitment to operating this project in partnership with Mi'kmaw Communities in Nova Scotia. It is encouraging to see the Mi'kmaq at the forefront of various renewable energy developments happening in Mi'kmaki. (Unceded Land of The Mi'kmaq). These relationships are encouraged as we transition Nova Scotia away from fossil fuels and work towards NetZero.

Our office remains concerned of the cumulative impacts of the number of onshore wind projects being approved in Mi'kma'ki. Most wind projects being approved in Mainland Nova Scotia are being approved in Mainland Moose Corridor. While it is encouraging to see renewable energy developments happen in Nova Scotia as we transition away from fossil fuels, these developments must not compromise the habitat of this endangered species. With the number of proposed developments in the last number of years under the most recent provincial government, KMK is requesting a summary and map outlining all onshore wind project that have been approved since August 2021.

As stated in the Environmental Assessment Registration Document (EARD): “Mi'kmaq significant species findings identified land/water use areas within the Mi'kmaq Ecological Knowledge Study (MEKS) Project Site and MEKS Study Area that continue to be used by the Mi'kmaq of Nova Scotia”, The MEKS highlights a high level of historic, and current use. This level of use must continue as this project is developed, constructed, and commissioned. Any impeding of this ability will be a direct impact to The Mi'kmaq's Section 35 Rights.

**Section 6.2.5 - Parks and Protected Areas**

Wilderness areas are protected areas used for scientific research, education and a variety of recreation and nature-tourism related activities such as hiking, canoeing, sea-kayaking,

sportfishing and hunting. Gully Lake Wilderness Area is situated within the Project Boundary area as seen in Drawing 5.1 of the EARD. What impact will this project impose on this Wilderness Area?

#### Section 11.3.4 Lichens

The importance of lichens to our environment can not be limited to just one value. Lichens in general have the ability to provide us with very valuable information about our surrounding environment. Some lichens can only be present in areas of low pollution, others can inhabit areas of moderate to high pollution converting that atmosphere into a healthier, more sustainable one. Lichens also hold a strong value within the Mi'kmaw nation in Nova Scotia. Many teachings have been identified in the Mi'kmaw language to reference lichens proving their importance to Nova Scotia Mi'kmaq. Further, traditional use of various lichens has been documented and noted to medicinal and ceremonial. Any changes to habitat supporting endangered lichens should be done with full collaboration of the Mi'kmaq.

#### Section 11.3.5.3 – Mainland Moose Monitoring

There have been Greater than 60 wind energy projects proposed within the mainland moose corridor from Wentworth Valley to the Gully Lake Wilderness Area.

On March 11, 2024 North Nova Forest Co. documented and reported a visual sighting of a moose and moose tracks on the Gully Lake Trail entrance. On March 14, 2024, our staff technical followed up on this sighting and further documented scat and moose track impressions on Kemptown Road. Aligning with these sightings, the EARD also notes occurrence of moose within 3 km of the project area. This a strong indicator of presence.

When in moose habitat, these activities should be carefully accessed and mitigated. Continued industry development may result in long-term or permanent impacts including but not limited to water degradation and the immediate and future loss of secure habitat and safe food sources. It has been implied that moose will alter movement due to the sensory disturbance; and have documented that they may not inhabit an area within 3-4 km of a mine due to destructive aliments of mining activity. With wind projects, the biodiversity in the immediate surrounding within a >200 – meter buffer is significantly decreased creating “ghost forests”. These activities combined force moose into tight corridors whereby they are becoming vulnerable to disease and fatality as other animals that inhabit these corridors outgrow their carrying capacity.

While all species should be allowed to live in harmony the invasive nature of humans through forest degrading activities including wind energy projects, forestry, mining, agricultural practices, road building, and climate change have made harmony within our forests ever difficult.



As our demands on these forests grow, as does the stress on our animals and our environment. More consideration is needed for the forest inhabitants.

The moose in Cape Breton (The Cape Breton Highlands in particular) are currently dwindling in an alarming rate with The Mi'kmaq and Natural Resources and Renewables announcing there will be no harvesting for this coming season. Greater efforts are needed to preserve the population in Mainland Nova Scotia for the next seven generations of harvesters.

#### 11.3.5.4 Bat Acoustic Monitoring

According to the research article, The Journal of Wildlife Management Volume 80, Issue 8, p, 1360 – 1369 Wind Turbines account for greater than 70% of mortalities within at-risk long-distance migratory bat species, including the hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), eastern red bat (*Lasiurus borealis*) and 13% of mortalities of the endangered brown myotis (*Myotis lucifugus*).

All bat species found in Nova Scotia have a provincial SRank of S1 or SUB, and according to the EARD, the potential for presence of at-risk bat species is increased. Whereby these bat species have been documented within 4 km of the project area, this should be of concern.

The KMK Archaeological and Research Department (ARD) has reviewed the Clydesdale Wind Project EARD, particularly Sections 11.7.5 and 13.7.6, a MEKS, and an Archaeological Resources Impact Assessment (ARIA) (HRP A2023NS183) conducted by Cultural resources Management Group Limited (CRM Group). It was noted that an additional ARIA has been conducted, due to a proposed infrastructural plan update, and has yet to be reviewed or approved by the Special Places Program of CCTH. Reference has been made that a copy of the ARIA will be provided to KMK when approval has been granted.

The ARIA (A2023NS183) conducted by CRM Group was a Phase 1 study informed by background research, field reconnaissance, and two exploratory shovel tests, “designed to search for, document, interpret, and make management recommendations for cultural heritage resources and areas of archaeological resource potential for the Project” (CRM Group, A2023NS183: 1). Five (5) high potential areas for encountering archaeological resources were identified. Two of these five areas (**HPA-01 and HPA-05**) are associated with watercourses. CRM Group recommended avoidance of ground impacts to HPAs to the extent possible during Project Design and if HPAs 1, 2, 4, or 5 cannot be avoided that a program of shovel testing be conducted in advance of ground disturbance to further assess cultural heritage resource potential. Disturbance is defined, for archaeological purposes, as the dislocation of soils and/or sediments, such as that by heavily treaded or tracked vehicles, as well as purposeful excavation by heavy equipment.

KMK's ARD can support the ARIA (A2023NS183) recommendations, at this time. We look forward to reviewing the supplementary ARIA, that has yet to be approved once it has been received by our office. "The remainder of the proposed Project infrastructure alignment is ascribed low potential to contain archaeological resources or other cultural heritage elements" (CRM Group, A2023NS183: 63). We do not support clearances without subsurface testing. Mi'kmaw archaeological sites have developed since time immemorial and may not be identified from the surface character of the current landscape, one cannot conclusively eliminate potential for Mi'kmaw archaeological heritage without subsurface testing. Any impact to Mi'kmaw archaeological heritage, including lack of detection, loss, or disturbance, has the potential to negatively impact Mi'kmaw Rights and Title.

The Assembly of Nova Scotia Mi'kmaw Chiefs expects a high level of archaeological diligence with evidence-based decisions grounded in an understanding of the subsurface environmental data. The Maw-lukutijik Saqmaq (Assembly of Nova Scotia Mi'kmaw Chiefs) expects subsurface data, adequate to eliminate concern for presence, protection, and management of Mi'kmaw archaeological and cultural heritage as part of assessment of potential in advance of any development. We wish to clarify that negative tests and negative evidence of presence (evidence of absence) are considered relevant and important data.

Please contact \_\_\_\_\_, Senior Energy & Mines Advisor, at Kwilmu'kw Maw-klusuaqn with any questions.

Yours in Recognition of Mi'kmaw Rights and Title,

Director of Consultation  
Kwilmu'kw Maw-klusuaqn

Cc:

Kwilmu'kw Maw-klusuaqn  
Kwilmu'kw Maw'klusuaqn  
Melissa Slauenwhite, Nova Scotia Office of L'nu Affairs  
Bonnie MacDonald, Nova Scotia Environment and Climate Change  
Marc Theriault, Nova Scotia Environment and Climate Change  
Cynthia Steele, Natural Resources and Renewables

Dear Minister Halman,

I am writing to express my full support for the Clydesdale Ridge Wind Project, planned for Colchester and Pictou counties. As a resident and small business owner in our province, I believe this project represents a crucial advancement in our efforts towards sustainable energy infrastructure. It addresses the rising demand for clean, renewable energy while creating significant employment opportunities within our community.

The Clydesdale Ridge Wind Project aims to generate up to 126MW of clean, renewable energy. This will greatly enhance our energy independence and reduce our reliance on coal imports to meet our growing energy needs. Moreover, it aligns with our ambitious goal of achieving 80% renewable energy for our grid by 2030.

Beyond its environmental benefits, this project will provide a substantial economic boost locally. During the construction phase, it will create numerous job opportunities, ranging from skilled labor to professional services. This influx of employment will stimulate local businesses, generate new revenue streams, and improve the overall economic vitality of the area. Once operational, ongoing maintenance and operational roles will provide stable employment, retaining local talent and potentially attracting new residents seeking well-paying jobs.

Additionally, the project will contribute long-term economic benefits to both municipalities through increased tax revenue. The tax revenue collected will exceed \$1.1M annually, and these funds can be reinvested into community infrastructure, educational initiatives, and other essential services.

In conclusion, I wholeheartedly endorse the Clydesdale Ridge Wind Project and respectfully urge you to approve the Environmental Assessment.

Kind Regards,



## Forums

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

MAPC Regional  
Administrative Office  
172 Truro Heights Road  
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Tel: 902-895-2982  
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Toll Free: 1-855-858-7240  
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### 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: [chieflaugustine@ncns.ca](mailto:chieflaugustine@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](mailto: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@ncpei.com](mailto:chief@ncpei.com)

September 6<sup>th</sup>, 2024

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

## RE: Natural Forces Wind Project – Clydesdale Ridge Wind Farm

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 Application for the Clydesdale Ridge Wind Project, being undertaken by Natural Forces and RMS Energy. We would like to thank the proponent for taking time on August 21<sup>st</sup>, 2024, to discuss this project further with MAARS. During our discussion, the proponent was able to answer most of the questions and concerns we had; however, we wanted to follow up and summarize these comments to ensure they were captured for the Environmental Assessment Review.

Firstly, MAARS raised concerns over the impacts to wetlands and the watershed water balance from development. Natural Forces has stated that there is not a requirement for wind developments to complete a water balance analysis to assess impacts on the water flow. While we understand this explanation, we believe that any project which is impacting wetlands and/or watercourses should be required to complete this type of analysis. Without an in-depth analysis of the impacts to the watershed, we find it difficult to accept that the proponent is 'certain' that impacts to the wetlands and watercourses are 'not significant', as stated in Section 13.5.1.5 of the EARD.

Secondly, we discussed impacts to at-risk lichens from this development. Our primary concerns relate to the proximity of road construction to the presence of the frosted glass-whiskers, and how construction will be completed to ensure that impacts to at-risk lichens are avoided. The proponent stated that they have made significant efforts to avoid any impacts to lichens through the road layout, and that

areas containing at-risk species will be flagged to ensure avoidance by construction staff. Staff will also be educated on the locations of any at-risk species. The proponent has also stated that the Environmental Management and Protection Plan (EMPP) will provide further details on the mitigation measures that will be undertaken for these species. MAARS has requested that, when completed, the EMPP is forward to us for review.

The Mainland Moose Recovery Plan indicates that Core Habitat overlaps with the Study Area for this project. Given the potential for Mainland Moose to use this area, as well as the adjacent Gully Lake Wilderness Area, MAARS has significant concerns over the continued development across Mainland Moose core habitat. Despite no evidence of Mainland Moose during the 2023/2024 surveys, the 2012 EARD did find evidence of Mainland Moose within the project area. MAARS has concerns over continued development across Mainland Moose core habitat as we continue to shrink the area acceptable to an already at-risk species that is also culturally significant to the Mi'kmaq people.

Given the proximity of this project to the Gully Lake Wilderness Area, we have concerns over the potential effects of this project on the Wilderness Area. Specifically, the locations of turbines T10-T16 which fall very close to the Wilderness Area boundary. The proponent stated that they have consulted the Protected Areas branch of NSECC and have used a 200-metre setback distance. While we discussed the overall lack of consistent monitoring within the Wilderness Area, we continue to have concerns about the proximity to a *protected area*.

Lastly, we discussed the potential for avian interactions, for both birds and bats, of this development. This development is near the Cobequid Bay Important Bird Area and the Gully Lake Wilderness Area, both of which may provide important habitat for avian species, specifically migratory species. The proponent has stated that there are no significant migratory pathways nearby, despite being near the above-mentioned sites. As well, MAARS noted that the proponent has opted not to consider the advice of Environment and Climate Change Canada's branch the Canadian Wildlife Service (CWS), in the development of the diurnal watch surveys for birds. In Table 1.2 of Appendix I: Avifauna Biophysical Baseline Study, CWS requests that the proponent follows their protocols, which recommend that diurnal watch count surveys be completed for a duration of 6 hours, dividing observations into one-hour blocks. While we understand the proponent does not feel that this change impacts the efficacy of these studies, MAARS raises concerns that the proponent has chosen not to follow the recommendations from the experts in this field, the CWS.

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 Indians, and Lands reserved for the Indians" and that the word "Indians" in s.91(24) includes the Métis and non-Status Indians<sup>1</sup>. Since 2004, in multiple decisions

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

passed by the Supreme Court of Canada: *Haida Nation*<sup>2</sup>, *Taku River Tlingit First Nation*<sup>3</sup>, and *Mikisew Cree First Nation*<sup>4</sup>, 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.

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,

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

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

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

through the: Najiwsetaq 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 appreciate this opportunity to engage directly with the proponents, Natural Forces and RMS Energy, on the Clydesdale Ridge Wind Project. We also appreciate the opportunity to attend a site visit with Natural Forces and RMS Energy to provide a better understanding and visualization of the proposed project. We look forward to continued 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.

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

Fish and Fish Habitat Coordinator, MAARS    Executive Director, MAARS & MAPC Projects

CC:

Chief & President, NCNS  
Netukulimkewe'l Commission, NCNS  
Project Manager, Natural Forces  
Development Manager, Natural Forces  
Environmental Permitting Specialist, Natural Forces  
Rotor Mechanical Services