

#### NIAGARA REGION WIND FARM DECOMMISSIONING PLAN REPORT

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Prepared for:

## Niagara Region Wind Corporation

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# 1.0 Introduction

The purpose of the Decommissioning Plan Report is to describe how the applicant proposes to restore the project location to a clean and safe condition suitable for the likely future use of the land on which it is located. This includes retiring the elements of the renewable energy generation facility, restoring the land and water and managing the excess materials and waste. This report is being released in conjunction with the issuance of several other Technical Reports which provide further detail of Project design and operation, construction and decommissioning.

## 1.1 PROJECT OVERVIEW

Niagara Region Wind Corporation (NRWC) is proposing to develop, construct, and operate the 230 Megawatt (MW) Niagara Region Wind Farm (the Project) within the Townships of West Lincoln and Wainfleet and the Town of Lincoln within the Niagara Region and within Haldimand County in Southern Ontario, in response to the Government of Ontario's initiative to promote the development of renewable electricity in the province. Project infrastructure such as collector lines and transmission lines will be sited along the boundaries of the Township of Pelham and Town of Grimsby, but will be sited outside of these municipalities on the opposite side of the road.

The basic components of the Project include 77 wind turbine generators (80 potential locations identified) each with a rated capacity ranging from approximately 2.3 MW to 3.0 MW for a maximum installed nameplate capacity of 230 MW. An overhead and/or underground collection system connects each turbine to one of two transformer substations along a series of 34.5 kilovolt (kV) lines. Turbines are grouped into nine collector circuits that bring power (and data via fibre optic lines) to one of the transformer substations. Voltage is stepped up from 34.5kV to 115kV at each transformer substation by means of a 100 MVA base rated transformer with two stages of cooling (via fans). A 115kV transmission line transports power from each of the two transformer substations north to the tap-in location where the Project is connected to the Hydro One Networks Inc. (HONI) owned transmission line, south of the Queen Elizabeth Way (QEW) in the Town of Lincoln. Power generated from this Project will be conveyed along the existing HONI transmission line to the Beach Transformer Station in Hamilton.

Alternate transmission and collector lines routes have been identified and assessed to provide options during detailed design, the final selection of which route to follow will be confirmed following the consultation process with local distribution companies, agency review and detailed design.

Other Project components include access roads, junction boxes (or pad-mounted disconnect switches) and associated culverts at swales and waterbody crossings. Temporary components during construction may include temporary laydown areas (for storage and staging areas at each turbine location), crane pads or mats, staging areas along access roads, delivery truck turnaround areas, central construction laydown areas and crane paths.

## 1.2 REPORT REQUIREMENTS

The Decommissioning Plan Report has been prepared in accordance with Item 3, Table 1 of O.Reg.359/09 and the Ministry of the Environment's (MOE's) "*Technical Guide to Renewable Energy Approvals*" (MOE, 2012). According to subsection 6.(3) of O. Reg. 359/09, the Project is classified as a Class 4 Wind Facility and will follow the requirements identified in O.Reg.359/09 for such a facility.

O.Reg.359/09 sets out specific content requirements for the Decommissioning Plan Report as provided in **Table 1.1**.

Table 1.1. Decommissioning Flan Report Requirements. O. Reg. 555/05			
Requirements		Completed	Section Reference
Set out a description of plans for the decommissioning of the renewable energy generation facility, including the following:			
1.	Procedures for dismantling or demolishing the facility.	✓	3.3
2.	Activities related to the restoration of any land and water negatively affected by the facility.	~	3.4
3.	Procedures for managing excess materials and waste.	$\checkmark$	3.5

Table 1.1: Decommissioning Plan Report Requirements: O. Reg. 359/09

## 1.3 DECOMMISSIONING PHILOSOPHY

The design life of the Project is estimated to be 20 years; however, it is not uncommon for wellmaintained projects to have a longer useful life than the design life. To extend the life of the Project it is possible that it will be repowered prior to considering any decommissioning activities. Repowering may involve, for example, switching/updating generators with new equipment, replacing blades, and upgrading electrical equipment.

Following any repowering activities, at the end of the useful life of the Project, decommissioning activities would be implemented. The decommissioning and restoration process comprises removal of above-ground structures; removal of below-ground structures to a depth of approximately one metre; and re-vegetation and seeding. The intent of decommissioning is to return the land to its pre-existing condition or better. Current Zoning and Official Plan designations for the properties on which Project Components are proposed are predominantly agricultural. As such, it is anticipated that the properties will most probably be returned to a similar agricultural use at the termination of the project.

Above-ground structures include the wind turbines (including blades, nacelles, and towers), overhead collector lines, transformer substations, overhead transmission lines, access roads and junction boxes/pad-mounted disconnect switches. Below-ground structures include wind turbine foundations, foundations of the junction boxes/pad-mounted disconnect switches and

transformer substations, underground collector lines, underground transmission lines and culverts.

The process of removing structures involves evaluating and categorizing all components and materials into categories of recondition and reuse, salvage, recycling, and disposal. In the interest of increased efficiency and minimal transportation impacts, components and material may be stored on-site in a pre-approved location until the bulk of similar components or materials are ready for transport. The components and material will be transported to the appropriate facilities for reconditioning, salvage, recycling, and/or disposal.

# 2.0 Decommissioning (Abandonment) During Construction

In the unlikely event that NRWC cannot successfully complete the construction of the Project, the rights to the Project (and any associated liabilities and obligations) would be sold to allow the Project to be constructed by the purchasing developer.

In the event that a delay occurs in the purchasing of the Project by another developer, NRWC would be responsible for interim environmental protection. In the event that the site has been cleared and/or excavated in preparation for installation of Project infrastructure, appropriate environmental protection measures would be implemented to prevent topsoil erosion and/or watercourse sedimentation. The extent of environmental protection measures required would be dependent on the progress made at the time of Project abandonment, and would be determined through site inspections by qualified specialists. Possible measures would include, as appropriate, erosion and sediment control fencing, filling excavated areas, replacement of topsoil and/or and revegetation.

In the event that the Project is not purchased by another developer, NRWC would be responsible for decommissioning of the Project. In such a case, the decommissioning process to be followed and the mitigation measures to be implemented would be the same as those detailed in Section 3.0 for decommissioning after ceasing operation of the Project.

# 3.0 Decommissioning After Ceasing Operation

Project components are expected to be in service for the term of the 20 year Ontario Power Authority Feed-in Tariff contract. Following the term of the agreement, a decision would be made at the end of the 20 years as whether to extend the life of the Project components or to decommission. Extending the life of the Project would potentially involve component upgrades or equipment replacement. Decommissioning would entail the removal of Project components and restoration of the land to an acceptable condition for its intended use.

In land lease agreements with landowners hosting Project infrastructure, NRWC has agreed to issue a Decommissioning Security which is a letter of credit, certified cheque or surety bond which secures NRWC's obligation to decommission the Project components as per the terms of the agreement. This Decommissioning Security protects landowners and the municipality from having to pay for removing the turbines at the end of the Project's useful life.

## 3.1 GENERAL ENVIRONMENTAL PROTECTION DURING DECOMMISSIONING

During all decommissioning and restoration activities, general environmental protection and mitigation measures would be implemented. Many activities during decommissioning would be comparable to the construction phase. The **Construction Plan Report** defines general mitigation measures and best management practices as appropriate, including erosion and sediment control, air quality and noise mitigation, and contingency plans for unexpected finds and spills. All decommissioning and restoration activities will be performed according to the requirements of relevant governing agencies, and will be in accordance with all relevant statutes in place at the time of decommissioning.

## 3.2 PRE-DISMANTLING ACTIVITIES

At the end of the Project's useful life, it will first be de-energized and isolated from all external electrical lines.

Turbine staging areas and cranepads would be delineated at each turbine prior to any dismantling or removal of equipment. All decommissioning activities would be conducted within this designated area, which includes ensuring that all vehicles and personnel stay within the demarcated areas.

Temporary erosion and sedimentation control measures will be implemented during the decommissioning phase of the Project. These measures will be installed and maintained to ensure proper functioning with consideration of industry best management practices. More detail on the erosion and sedimentation control measures are included in the **Construction Plan Report.** 

## 3.3 EQUIPMENT DISMANTLING AND REMOVAL

This section reviews the activities for dismantling and removing each specific Project component. The decommissioning activities are similar for the E101 turbine, E82 turbine and de-rated E101 turbine and for the two proposed hub heights.

#### 3.3.1 Turbines

The turbines can be disassembled into their original component parts. A crane would be used to carry out the reverse sequence of steps that occurred during construction (detailed throughout the <u>Construction Plan Report</u>), namely:

- Lowering hub and blades
- Lowering nacelle
- Decoupling and lowering the tower sections

Once the components are disassembled and at ground level (within the same staging areas beside each turbine as described in the <u>Construction Plan Report</u>), the materials will be broken down into manageable sizes to enable transport to various salvage facilities (to be determined prior to decommissioning and in discussions with Townships of West Lincoln and Wainfleet and the Town of Lincoln within the Niagara Region and within Haldimand County). The main sources of salvage material are concrete, steel, copper, fibreglass and plastic, which may be sold to recycling facilities. All non-salvageable components will be processed and safely transported to an MOE approved disposal facility. See **Section 3.5** for more info on waste removal.

#### 3.3.2 Turbine Foundations

The turbine foundations will be partially removed to a depth of approximately 1 m below grade, in accordance with the land lease agreements. This depth enables normal agricultural practices to resume over the foundation areas following soil remediation. The concrete will be removed from the site by dump truck. No blasting is anticipated to be required to remove the turbine foundations. The costs for removal of the turbines and foundations will be the responsibility of the owner of the Project or the purchaser of the turbine materials.

## 3.3.3 Electrical System

Any above-ground transmission or collector lines and poles that are no longer being used by the local distribution system will be removed from the site and recycled, reused or disposed of appropriately.

Underground collector lines on optioned properties would likely remain in place, with both ends that come to the surface excavated to approximately 1 m below grade, in consultation with the landowner and in accordance with the land lease agreements. Below ground wires, buried at a depth of greater than 1 meter do not present a significant hazard to the environment if left in place. Removal of the buried wires may present more of a disturbance to the local environment

and agricultural activities due to the required excavation. The decision of whether to remove the cables from the ground or leave them buried will be made in consultation with the landowners taking into account the potential salvage value of the cables.

Dependent on individual requirements for each municipality, underground collector and transmission lines buried within municipal road right of ways may be removed during decommissioning of the Project. If required, underground lines will be excavated, trenches backfilled with appropriate native or engineered material and sites restored to preconstruction condition either the same or better than original conditions. It is noted that the stretch of underground transmission line along the Niagara Escarpment Plan Area will be encased in concrete ductbanks and cable chambers which may cause more impacts through removal than leaving intact. As such, the Town of Lincoln and Niagara Escarpment Commission will be consulted prior to decommissioning this section of the transmission line to determine whether the ductbanks and cable chambers will be left intact.

The foundations of the transformer substation and junction box/pad-mounted disconnect switch will be removed to a depth of 1 m below grade. This approach will permit the intended future use of the site for agricultural purposes as the buried foundations will not interfere with these activities and will not have a harmful effect on the environment if left in place. Fluids contained within the equipment will be drained and disposed of in accordance with applicable waste disposal regulations. Steel, conductors, switches, and transformers will be reconditioned and reused, sold as scrap, recycled, or disposed of appropriately depending upon market value.

As practicable, unexcavated areas compacted by equipment used in decommissioning will be de-compacted in a manner to adequately restore the topsoil and sub-grade material to the density consistent and compatible with the surrounding area and prepared for re-vegetation.

#### 3.3.4 Turbine Laydown/Staging Areas and Crane Pads

As in the construction phase of the Project, a temporary laydown/staging area approximately 100 m by 120 m at each turbine location would be used for a cranepad during turbine disassembly, storage of the turbine components, parking, and the foundation spoil pile. The orientation of the turbine staging area used in the decommissioning phase will be the same as the areas used in construction. This area would be construted in the same manner as described in the Construction Plan Report and would be restored to pre-existing conditions or better at the end of the decommissioning phase in consultation with the landowner.

#### 3.3.5 Access Roads

To facilitate the disassembly of the turbines, temporary access roads would be installed at entrances from municipal roads, temporary truck turnarounds would be installed to allow for safe entry by trucks and existing access roads may be upgraded with geotextile or aggregate material if deemed necessary. The location of these components and construction techniques would be the same as those detailed in the **Construction Plan Report**.

After dismantle and removal of the turbine components all turbine access roads, truck turnarounds and widened entrances would be removed, including any geotextile material beneath the access roads and granular material. All granular and geotextile materials would be removed from the site by dump truck. The exception to removing the access roads, or their related material, would be upon specific written request from the landowner to leave all or a portion of these facilities in place for future use by the landowner.

Culverts would be removed if requested by the landowner. Such removal will be done in consultation with the municipality, local Conservation Authority and/or Department of Fisheries and Oceans.

## 3.4 SITE REHABILITATION/RESTORATION

The operator of the Project will develop a Rehabilitation Plan prior to the start of decommissioning that defines methods for restoring habitat in areas affected by Project-related equipment. This plan will be developed in consultation with the appropriate agencies prior to the decommissioning of the Project.

It is envisioned that the Rehabilitation Plan will include, but not be limited to the following;

- Agricultural areas, which comprise most of the pre-developed Project Location, will be restored such that normal farming practices may resume. Any damaged tile drains will be fixed.
- Cultural areas will be revegetated using native plant material and seeds appropriate for the Project site, or allowed to revegetate naturally.
- Areas such as turbine staging areas, crane pads and access roads which may become compacted during decommissioning will be decompacted and restored to pre-existing conditions or better.

The Rehabilitation Plan may also involve a monitoring period which allows for the Project site to experience seasonal changes and help determine if additional restoration is required.

#### 3.4.1 Watercourses

Any proposed decommissioning works within or near watercourses and/or aquatic habitat will be discussed with the Conservation Authority to determine any site specific mitigation and/or remediation plans, as well as to obtain appropriate permits and approvals. It is envisioned that the same mitigation and monitoring measures implemented during construction will be utilized for the decommissioning of the Project. The **Construction Plan Report** provides further detail on these measures.

Where Project infrastructure has been removed, disturbed areas will be seeded with quick growing native species to prevent topsoil erosion. The seed mixture would be determined at that time in consultation with the affected municipalities, and/or Conservation Authorities.

Erosion and sediment control measures at ditches would be left in place and monitored until seed is fully established.

#### 3.4.2 Agricultural Lands

Agricultural lands that have become compacted due to operation or decommissioning activities, such as turbine staging areas, crane pads and access roads, would be decompacted using chisel ploughing and/or subsoiling, as determined by an environmental advisor or land owner.

Any agricultural tile drains capped or modified during construction, and or damaged during decommissioning, would be repaired by a qualified drainage tile contractor.

Topsoil would be re-graded or added to similar depth as surrounding areas, where necessary. If necessary and approved by the land owner, imported topsoil may be added to agricultural areas and would be of the same or similar or better soil type and texture as pre-construction conditions and/or adjacent lands and would be inspected and/or tested to prevent transmission of agricultural pests from one area to another.

All areas would be graded to pre-construction conditions and restored appropriately, in consultation with the landowner.

#### 3.4.3 Spills

Strict spill prevention procedures will be in place during operation as specified in the **Design and Operations Report**. However, there is potential for small spills to occur through the routine operation, maintenance, and decommissioning processes. Should soil contaminants be noted, the impacted soils will be delineated, excavated and removed, to the standards of the day. The contaminated material will be disposed at an MOE-approved and appropriate facility. The removed soils will be replaced with appropriately compatible material.

No hazardous materials or wastes, such as used lubricating oils, will be stored on-site during operation and maintenance of the Project. Provided the Project is operated and maintained inline with industry best practices, there should be no significant environmental liabilities associated with cleanup or remediation. As noted above, the costs for removal of Project infrastructure will be the responsibility of the owner of the Project or the purchaser of the reusable materials.

## 3.5 MANAGING EXCESS MATERIALS & WASTE

Prior to embarking on the dismantling and demolition of the Project, NRWC or the Project operator would complete a waste audit of the materials to be handled and prepare a waste reduction work plan in accordance with *A Guide to Waste Audits and Waste Reduction Work Plans For Construction & Demolition Projects, as required under Ontario Regulation 102/94* (O.Reg.102/94), as amended or other applicable regulation that is in place at the time. All

wastes would be managed in accordance with Ontario Regulation 347, General – Waste Management (O.Reg.347) and with reference to Ontario Provincial Standard Specification 180 -General Specification For The Management of Excess Materials (OPSS 180), or relevant regulations and specifications in effect at that time.

Typical waste materials and modes of disposal, recycling or reuse are presented in Table 3.1 below:

Table 3.1: I ypical Facility becommissioning waste materials and modes of Disposal					
Component	Mode of Disposal				
Turbine blades	Cut and dispose in landfill				
Turbine Towers (Concrete Sections)	Crush and recycle as granular material				
Turbine Towers (Steel Sections)	Recycle				
Generators and gearboxes	Salvage for reuse or recycle for scrap				
Nacelle	Salvage for reuse or recycle for scrap				
Concrete foundations	Remove section, crush and recycle as granular material				
Cabling	Recycle				
Transformers and switchgear	Salvage for reuse or recycle for scrap				
Granular materials (roads, tower sites, etc.)	Reuse				
Lubricants	Recycle				
Hazardous materials	Dispose through licensed hauler				
Geotextile material	Dispose in landfill				
Miscellaneous non-recyclable materials	Dispose in landfill				

Table 2.4. Turing Facility Decomprises on Wester Meterials and Medeo of Dispessel

Major pieces of equipment may be recyclable or reusable. The steel tower sections and aluminum nacelles may be sold for scrap or recycled. Electrical equipment could either be salvaged for reuse or recycled. Components, such as the generators and cabling, would have a high resale value due to copper and aluminum content. Concrete from footings and tower sections could be crushed and recycled as granular fill material. Spent liquids could be recovered for recycling through existing reprocessing companies.

As much of the Project components would consist of reusable or recyclable materials, there would be minimal residual waste for disposal as a result of decommissioning the Project. Small amounts of registerable waste materials would be managed in accordance with O. Reg. 347 or subsequent applicable legislation. Residual non-hazardous wastes would be disposed at a licensed landfill in operation at the time of decommissioning.

#### 3.6 MONITORING

As defined in the Rehabilitation Plan (Section 3.4), follow-up monitoring for one year after site restoration would be conducted. This timing would allow the Project site to experience seasonal changes and help determine if additional restoration is required, as determined by an environmental advisor. For agricultural land, potential soil problem areas including trench subsidence, soil erosion and/or stoniness would be noted. Additional monitoring activities may also be conducted, depending upon the site conditions at the time of decommissioning. If negative impacts are noted during monitoring activities, appropriate remediation measures would be implemented as necessary, and additional follow-up monitoring would be conducted, as determined by an environmental advisor.

# 4.0 Decommissioning Environmental Management Plans

The following programs, plans, and procedures described within the **Construction Plan Report** will be carried forward during the decommissioning of the Project. Updates to these programs, plans and procedures may be required to reflect current conditions at the time of decommissioning.

## 4.1 ENVIRONMENTAL PROCEDURES

The following environmental procedures will be followed by the firm responsible for decommissioning the project to ensure potential impacts on the environment are minimized during decommissioning:

- *spills and releases:* to identify the specific procedures for the prevention, response, and notification of spills. In addition, it will establish the general procedures for spill clean-up, personnel training, and material handling and storage to prevent spills.
- hazardous waste management: to outline the procedures for proper identification, storage, handling, transport, and disposal of hazardous waste. In addition, the procedures will outline specific requirements for personnel training, emergency response, product review and approval, and record keeping.
- *non-hazardous waste management:* to establish alternative procedures for the management and disposal of used lubricants, used drums, and general waste.
- *transportation and traffic management:* to govern movement of material and personnel, to, from and within the workspaces areas, transport of abnormal loads, road/lane closure strategies, road upgrades/modifications and/or dust and vehicle emission controls.

## 4.2 OCCUPATION HEALTH AND SAFETY PROCEDURES

The firm responsible for decommissioning will ensure employee health and safety is maintained and will also implement the following safety procedures and protocols as appropriate in an effort to ensure employee safety is addressed throughout decommissioning activities:

- personal protective equipment (PPE), including non-slip footwear, eye protection, clothing, and hardhats, will be worn by personnel when on duty;
- elevated platforms, walkways, and ladders will be equipped with handrails, toeboards, and non-slip surfaces; and,
- electrical equipment will be insulated and grounded in compliance with the appropriate electrical code.

Incidents in the work place have the potential to cause personal injury and property damage. As appropriate, a master Incident Report that documents illnesses and accidents will be maintained. The Incident Report should document all activities resulting in incapacity to work for at least one full workday beyond the day on which the illness or accident occurred. As required, records will also be maintained noting the total number of days of absence from work as a direct result of the illness or accident.

As appropriate, the firm responsible for decommissioning will develop or have an existing training program to ensure personnel receive appropriate training in relation to decommissioning programs, environmental, health, and safety procedures, and the emergency response plan.

## 4.3 EMERGENCY RESPONSE PLAN

The Emergency Response Plan developed for the construction and operation of the Project will be carried forward and followed during decommissioning of the Project (see the **Construction Plan Report** and **Design and Operations Report** for additional detail).

## 4.4 COMPLAINTS RESPONSE PROTOCOL AND NOTIFICATION

The Complaints Response Protocol described in the **Design and Operations Report** will be utilized during the decommissioning of the Project. The Complaints Response Protocol will include details of means by which correspondence sent to the decommissioning firm and/or the Project owner will be recorded and addressed.

# 5.0 Decommissioning Notification

Actions will be taken prior to and during decommissioning to inform the public, aboriginal communities, agencies and municipalities (Townships of West Lincoln and Wainfleet and the Town of Lincoln within the Niagara Region and within Haldimand County) regarding activities occurring at the Project site. Notification of decommissioning will be provided to these municipalities, aboriginal communities, stakeholders and relevant agencies prior to decommissioning works commencing. Notification may be in the form of letters, newspaper notices, and updates on the Project or company website or direct communications.

#### 6.0 **Other Approvals**

Following notification of the intent to implement this Decommissioning Plan, NRWC or the Project owner would obtain all necessary approvals in effect at the time from appropriate government and regulatory bodies. Existing permits and approvals, which may be required at the time of decommissioning, are provided in the following table (Table 6.1).

Table 6.1: Potential Decommissioning Permits and Approvals						
Permit / Approval	Administering Agency	Rationale				
Municipal						
Building Permit	Municipality	Compliance with building codes				
Entrance Permits	Municipality	Entrance from Municipal and/or Regional roads				
Road Condition Survey	Municipality	Assessment of pre and post construction conditions of municipal roads to be used for material delivery				
Transportation and Traffic Management Plan	Municipality	Adherence to road safety and suitability, including adherence to load restrictions on municipal roads				
Demolition Permit	Municipality	Required prior to the demolition of the Project				
Trip Permit	Municipality	Permits for oversize/overweight vehicles and/or loads travelling on Municipal or Regional Roads				
Provincial						
Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Permit	Niagara Peninsula Conservation Authority / Grand River Conservation Authority	Work within floodplains, water crossings, river or stream valleys, hazardous lands and within or adjacent to wetlands. Projects requiring review, <i>Fisheries Act</i> authorization and/or assessment under the <i>Canadian Environmental Assessment Act</i> are forwarded to the Department of Fisheries and Oceans				
Record of Site Condition	MOE	For change of property use and/or ownership				
Notice of Project	Ministry of Labour	Notify the Ministry of Labour before decommissioning begins.				
Special vehicle configuration permit	Ministry of Transportation (MTO)	Use of non-standard vehicles to transport large components				
Transportation Plan	MTO	Adherence to road safety and suitability				
Highway Entrance Permit	MTO	Interference or obstruction of the highway				
Change of Access and Heavy/Oversize Load Transportation Permit	МТО	Compliance with provincial highway traffic and road safety regulations				
Wide or excess load permit	МТО	Transportation of large or heavy items on provincial highways				

Specific permits and approvals required to implement the Decommissioning Plan and to undertake the activities described herein will be confirmed with appropriate agencies prior to implementation, and will be based on the regulatory requirements in place at the time of decommissioning.

# 7.0 Closure

The Niagara Region Wind Farm <u>Decommissioning Plan Report</u> has been prepared by Stantec for NRWC in accordance with Item 3, Table 1 of O.Reg.359/09 and the Ministry of the Environment's "*Technical Guide to Renewable Energy Approvals*" (MOE, 2012). Information compiled in this report has been provided in association with Hatch Ltd., PCL Construction Ltd., Enercon and the Niagara Region Wind Corporation.

The decommissioning of the Project will be completed in a manner similar to the construction of the Project and the area will be restored to a clean and safe condition in coordination with appropriate regulatory agencies and land owners.

This report has been prepared by Stantec for the sole benefit of NRWC, and may not be used by any third party without the express written consent of NRWC. The data presented in this report are in accordance with Stantec's understanding of the Project as it was presented at the time of reporting.

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