SOUTH BRANCH WIND FARM

DECOMMISSIONING REPORT

Report 7 of 9

March 26, 2012

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TABLE OF CONTENTS

TABLE OF FIGURES

1. PURPOSE

This South Branch Wind Farm Decommissioning Plan Report is prepared for the purpose of compliance with section 13 of *Ontario Regulation 359/09*, which amends the *Environmental Protection Act for the Renewable Energy Approvals under Part V.0.1 of the Act.*

Section 13 requires supporting documentation as outlined in Table 1 of O. Reg 359/09. Item 3 in Table 1 lists a Decommissioning Plan Report as a requirement for the South Branch Wind Farm Renewable Energy Approval (REA). This report describes the proposal for restoration of the project location to a clean and safe condition upon decommissioning, including a plan to retire all elements of the South Branch Wind Farm, to restore land and water to pre-facility conditions and management of excess materials and waste.

A Feed-In-Tariff (FIT) Contract with the Ontario Power Authority is valid for a period of 20 years. As the South Branch Wind Farm approaches the end of its power purchase agreement, the Proponent may elect to negotiate a new or extended contract to continue electricity production at the site. Similarly, the expected life span of turbines at South Branch Wind Farm is 20 to 25 years. If an agreement to extend the duration of power generation at this site is established, the Proponent may choose to replace or upgrade turbine components to improve upon site efficiencies. Thus, decommissioning after operation may occur at a period of more than 20 years from commercial operation. The plan for decommissioning described in this document, as amended from time to time, will apply, regardless of the specific timing of decommissioning activities at this site.

A preliminary version of this report is made available to Aboriginal Community stakeholders, public stakeholders and agency stakeholders for review prior to the REA submission. This report is available online for download at www.prowind.ca and available in hard copy at select locations identified on the website and in newspaper advertisements.

A final version of this report is included in the REA submission to the Ontario Ministry of the Environment (MOE).

2. PROJECT OVERVIEW

Prowind Inc. (Prowind) is a Canadian wind energy developer based in Hamilton, Ontario. It is affiliated with its parent company, Prowind GmbH, based in Osnabrück, Germany. Prowind's mandate is to create small-scale, renewable and zero-emission power generation. Prowind believes in distributed generation that has a minimum impact on the surrounding environment and landscape.

The South Branch Wind Farm is a 30 MW project that will employ the use of up to 14 commercial scale wind turbines generators[1]. These wind turbines have a hub height of

[1] Earlier versions of REA reports indicated the South Branch Wind Farm would host as many as 15 turbines. One of these proposed turbine locations, that of Turbine 14, was deemed unsuitable during environmental field studies and was subsequently removed from the wind farm design. Original turbine identifiers have been preserved for clarity.

no more than 140 m and a rotor diameter of no more than 118 m for a total maximum height of 199 m. The project location is depicted in Figure 1.

The wind farm will consist of up to 14 wind turbine generators, access roads, a substation, and a combination of underground and overhead cabling.

The project is proposed on privately owned, agricultural land near the hamlet of Brinston, Ontario, primarily located in the Township of South Dundas, United Counties of Stormont, Dundas and Glengarry. A small parcel of land in the west portion of the project area extends to neighbouring Township of Edwardsburgh-Cardinal, United Counties of Leeds and Grenville. The land base is bounded by Irish Headline / Oak Valley Road to the north, Heritage Road to the east, County Road 18 to the south and County Road 22 to the west. A detailed project layout is presented in Figure 2.

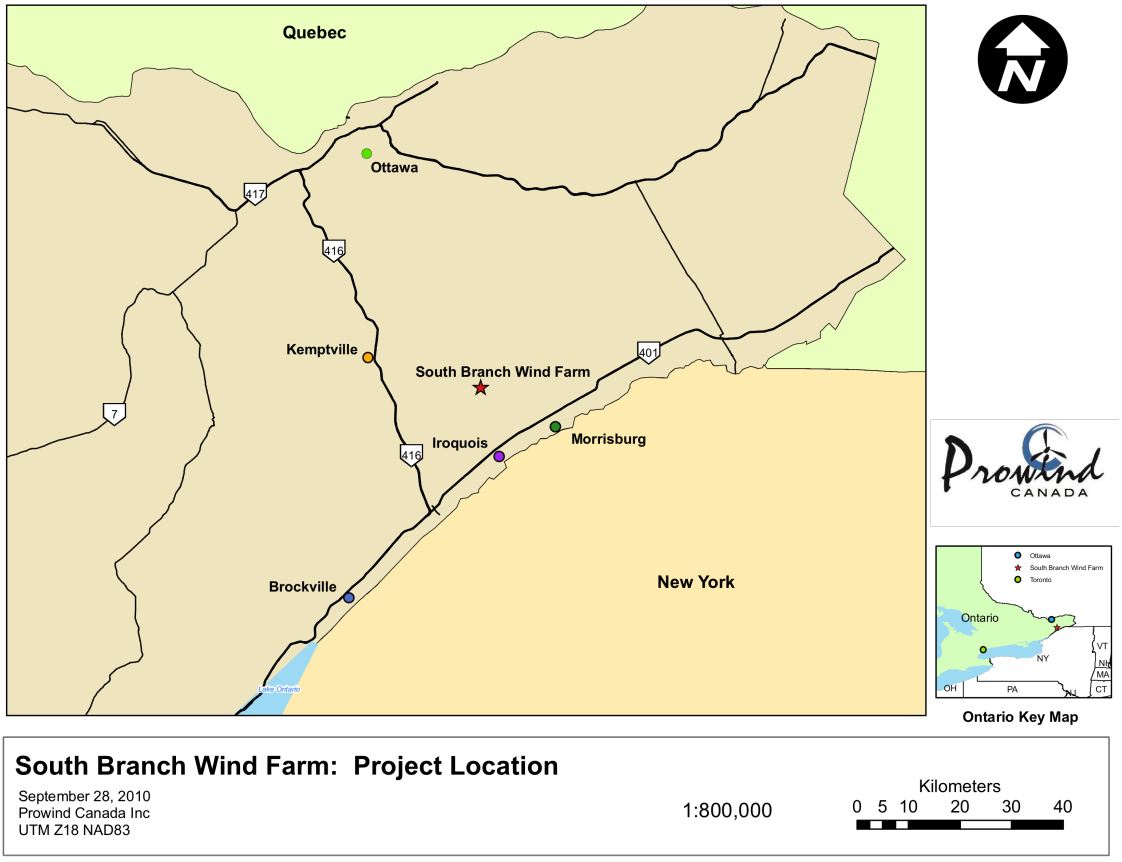

FIGURE 1 SOUTH BRANCH WIND FARM PROJECT LOCATION

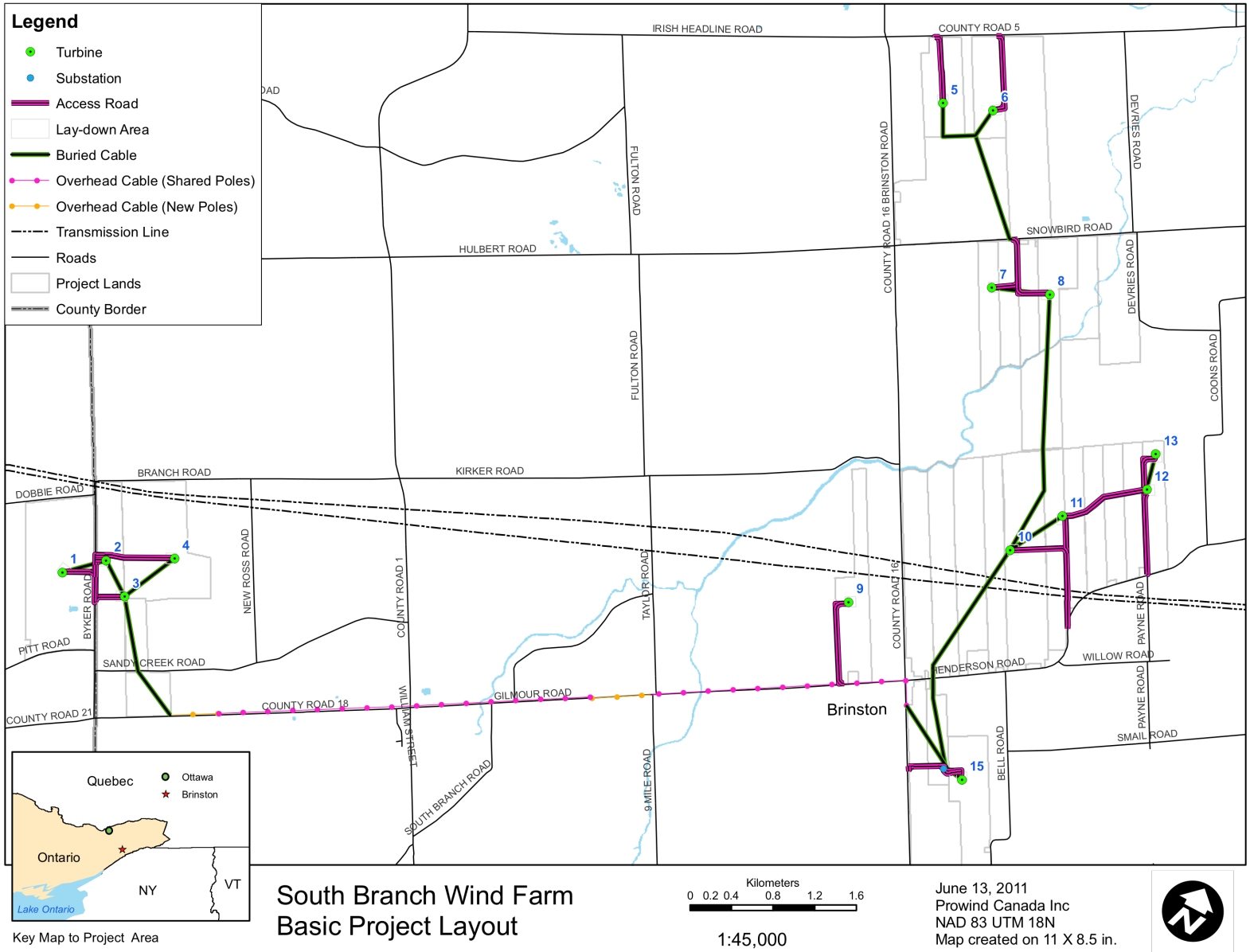

FIGURE 2 SOUTH BRANCH WIND FARM PROJECT LAYOUT

3. INTRODUCTION

The lifecycle of a typical wind farm progresses through three stages. The first stage is construction and installation. The second stage is the operation and maintenance period, which is likely twenty to twenty-five years for the South Branch Wind Farm. The third stage, and the subject of this report, is the decommissioning period. During this stage, the turbines are dismantled and the area is restored to its original state.

In the event that the project is abandoned during construction, decommissioning during construction will occur, in this case as the second stage of the wind farm lifecycle. Activities related to these two separate decommissioning scenarios are discussed in Sections 4 and 5 below.

4. DECOMMISSIONING AFTER CEASING OPERATION

The decommissioning phase includes activities such as land clearing, crane pad repair and removal, lay-down construction and removal, access road repair and removal, disassembly and removal of turbines and substation, electrical network removal and site rehabilitation.

During decommissioning, consultation with the landowner is conducted to determine the level and type of decommissioning work to be performed on their land. Some infrastructure may be useful beyond the life span of the wind farm, such as roads, while other infrastructure, such as buried cables, may cause more disturbance to farming operations if removed.

At the time of decommissioning, all project activities will be undertaken according to the then-current guidelines provided by relevant government agencies, Hydro One and the turbine manufacturer.

4.1. LAND CLEARING

The topsoil will be removed from the areas to be reconstructed into lay-down areas, upgraded access roads and electrical cabling areas, as during the construction phase.

The lay-down area will be reconstructed to the 1-hectare area used as temporary storage for turbine components. Topsoil will be scraped from the surface of the area and stored in low-lying windrows along the edge of the lay-down area.

The access roads will be assessed and if necessary repaired to the full width of 6 m needed for equipment access during decommissioning. The 43 m turning radii will be recreated at curves in the access roads. Topsoil will be removed from the sides of the existing access road and stored in low-lying windrows along the road.

If it is decided that the buried electrical network is to be removed, topsoil will be removed from the surface and stored in low-lying windrows along the edge of the cable route outside of the floodplain.

Any movement of topsoil will be completed so as not to create an adverse impact on landowners located either upstream (drainage issues) or downstream (sedimentation issues).

4.2. Lay-down Area and Crane Pad Reconstruction and Removal

The 1-hectare lay-down area will be reconstructed as it was originally constructed and is described in the *Construction Plan Report*. Any necessary upgrades or repairs to existing crane-pads within the lay-down areas will also be completed. The lay-down area will be scraped of topsoil as outlined in Section 4.1. The soil will be graded to ensure that run-off is equal in all directions. Locally sourced gravel will be placed over the surface of this area.

When disassembly of the wind turbine is complete, removal of the crane pad and lay-down area will take place. The gravel will be removed from the crane pad area and given to an off-taker, removed and reused, or disposed of in a manner outlined by the municipality at the time of decommissioning. The soil at this location will be de-compacted and the topsoil replaced so that landowners may quickly resume agricultural activities.

This process will be completed for each wind turbine.

4.3. Access Road Modification and Removal

Access roads will require upgrading to facilitate the equipment necessary for decommissioning. The roads will remain at their operation width of 6 m; and turning radii of approximately 43 m will be reconstructed to permit access for the large construction and delivery vehicles. Topsoil will be removed from the access road edge and gravel will be applied from locally sourced materials. The surface will be graded to facilitate drainage.

Once dismantling of wind turbines is complete and the turbine site rehabilitated, the access roads will be removed if desired by the landowner. Aggregate material used in road construction will be given to an off-taker, removed and reused, or disposed of in a manner outlined by the municipality at the time of decommissioning.

This process will be completed for each access road.

4.4. Disassembly of Wind Farm Components

The wind farm and its Proponent will comply with any decommissioning laws present within Ontario and Canada at the time of decommissioning.

The main components of the turbine (tower, blades and nacelle) will be disassembled in the reverse order that they were installed, starting with blades and nacelle, proceeding to the individual tower sections, followed by foundation and electrical cable network. Each turbine will have a small electrical transformer mounted either in the base of the tower or on a small pad adjacent to the tower. Transformers will thus be removed in concert with other turbine components.

Turbine components will be recycled or reused where possible. These components may be transported in their entirety, or disassembled into more manoeuvrable pieces based on the efficiency and feasibility of logistics. Large component pieces will be placed on speciality tractor-trailers and removed from the site. Smaller materials will be loaded to appropriate vehicles and transported to their final resting place. Seasonal road load limits will be observed.

The Proponent will ensure that construction and transportation contractors and subcontractors are held legally responsible to act in accordance with all regulations with respect to traffic control procedures and oversized loads.

The top metre of the concrete foundation will be removed so as not to impact future farming operations. Heavy machinery, such as excavators equipped with hydraulic jackhammers will be used to break up the concrete to be removed. The concrete will be recycled or disposed of in a manner outlined by the province and/or municipality at the time of decommissioning.

The turbine foundation below this top metre will not be removed at the time of decommissioning because the work to remove this structure creates more potential for detrimental impacts to the environment and surrounding landscape, through the operation of heavy machinery, disruption of soil and creation of concrete waste for disposal, than does leaving the inert material in place. Removal of the top metre of concrete effectively restores the land to its pre-construction purpose as the existence of the turbine foundation base does not impede or otherwise cause harm to agricultural activities at the area.

Tile drainage will be repaired over top of the remaining foundation if necessary. As per existing landowner agreements, any damages will be repaired at the Proponent's expense in a manner approved by each landowner.

The foundation area will be backfilled with soil from the site. The topsoil that was stored in the windrows around the foundation will be replaced and graded over the previous foundation location.

The substation will be dismantled and removed from the site and disposed of in a manner outlined by the province and/or municipality at the time of decommissioning. The concrete foundation will be removed and topsoil reapplied to the 14 m x 40 m = 560 m^2 area.

4.5. METEOROLOGICAL TOWER REMOVAL

Any meteorological towers that remain on the project site will be dismantled and removed from the site. Where possible, the equipment will be reclaimed or otherwise salvaged for use at other wind farm locations. All anchor points used for guy wires and tower maintenance or stability will be extracted and removed from the project area, and the topsoil will be reapplied to the impacted areas.

4.6. ELECTRICAL NETWORK REMOVAL

Consultation with each landowner will determine the amount of remediation with regard to the removal of buried electrical collection system components. It is

anticipated that in order to prevent further disruption to agricultural operations, the landowner preference will be to leave underground cabling in place. All above ground cabling and electrical infrastructure in the municipal road allowance will be removed.

If it is agreed that the buried electrical system is to be removed, topsoil will be removed from the surface of the cable routes and stored in low-lying windrows beside the corridor. Where applicable the windrows will be located outside of the floodplain. The soil will be removed to the depth of the electrical components and the electrical cabling will be removed. The electrical cabling will be disposed of in a manner outlined by the province and/or municipality at the time of decommissioning. Soil will then be backfilled and the topsoil applied to the surface to match the natural drainage pattern of the affected area.

Where cables cross watercourses, any in-water work required for removal will be conducted outside of the sensitive fish spawning and rearing period of March 15th to July 1st.

The overhead lines running along the side of Gilmour Road/County Road 18 will be removed, but poles will remain in place if they are shared with Hydro One or other parties. Consultation with the local distribution company will determine if removal work is necessary and/or desired. Any holes created by removal of hydro poles will be backfilled with soil similar to soil found in the immediate area.

4.7. Excess Materials and Waste

Upon decommissioning, there will be many project components to be disassembled and removed from the site. All attempts to reuse or recycle, and re-sell materials will be made; however, excess materials will need to be appropriately disposed to ensure the safety and environmental health of the project area.

Gravel	Removed and delivered to an off-taker, removed and reused, or disposed of in a currently approved manner
Road aggregate	Removed and delivered to an off-taker, removed and reused, or disposed of in a then-currently approved manner
Topsoil	Any topsoil that cannot be used in site remediation will be given to the landowner, distributed over adjacent agricultural fields, removed and reused, or disposed of in a manner outlined by the local municipality.
Blades	At the time of writing, the composites used in manufacturing of blades cannot be recycled. In the absence of a recycling solution at the time of decommissioning, blades will be chipped before disposal at the nearest accepting landfill.
Tower	Tower sections can and will be recycled in order to retain the residual value of the materials.
Nacelle/Transformers	The nacelle and transformer will be divided into sections for recycling, refurbishment, reuse or disposal. Transformer

	cores, generator and motor copper windings and gearbox components can be recycled in order to retain the residual value of the materials and can also be retooled (rewound) for future use depending on condition. Parts that cannot be recycled will be disposed of in a manner approved by the local municipality.
Foundation	Concrete, rebar and anchor bolts will be recycled or disposed of in a manner outlined by the municipality at the time of decommissioning.
Electrical network	Wood hydro poles that must be removed may be reused by a local distribution company or chipped and recycled. Electrical cables will be sold or otherwise salvaged where possible. If not feasible or possible to recycle, the electrical cables will be disposed of in a manner approved by the local municipality.
Substation	The concrete pad foundations will be dismantled and removed for re-use or sent to a landfill. Substation contents will be recycled, salvaged or disposed of in a manner approved by the province or local municipality.
Met Tower	Tubular steel tower sections will be re-used at other wind farms or recycled as deemed appropriate based on their condition. Support guy-wires, anchors and electrical cabling will similarly be dismantled and salvaged where possible.

A Hazardous Materials Spills Plan has been presented in the *Design and Operations Report*. This same plan will be applicable to decommissioning activities.

5. Decommissioning During Construction

In the event that the full construction of the South Branch Wind Farm is unable to occur, the project will be decommissioned during construction. Any major components of the wind farm that have been erected or otherwise completed will be removed and remediated in the same manner as for a post-operation decommissioning as presented in the summary above.

In the event that the abandonment of the project results in elements of construction in a state of partial completion, there are several preventative and restorative activities to consider.

Where there are exposed soils on the project construction site at the time of project abandonment, care will be taken to reduce or eliminate the possibility of erosion due to wind or storm water run-off until such time as a full site restoration can occur. Exposed soils may be sprayed with an erosion control seed mix, to reduce risk of erosion and dampen the creation of dust and sedimentation impacts.

Open pits, deeply disturbed earth or other shallow spots will be appropriately backfilled to reduce or eliminate the potential for sedimentation, water collection and run-off and obvious safety hazards.

Full site rehabilitation will occur according to the description in Section 6 below.

6. Site Rehabilitation

The South Branch Wind Farm project area exists within privately owned agricultural land. Farming activities on these lands are primarily limited to cash crops. Any livestock raised within the project area are confined to enclosed barnyard structures. Development and construction activities for this wind farm have been situated within tilled fields or existing roadways wherever possible so as to limit the impact of the wind farm on these agricultural activities. Rehabilitation to a pre-construction state requires that the approximate 1 hectare of land used by the turbine, crane pad and lay-down area for each turbine, and also for the 100 m^2 substation area will again be available for cash crop or similar farming endeavours and that any infrastructure remaining after decommissioning has no potential to interfere with normal land use.

Further details of the pre-construction state of the project area are also provided in the accompanying reports within this REA package.

Areas that were disturbed during the construction, operation, or decommissioning phases of the wind farm will be re-graded to compliment natural drainage patterns. Agricultural land will be remediated to the landowner's desired state. Care will be taken to ensure that the nutrient content of the soil is considered by selecting replacement soil with similar characteristics to the surrounding area.

Non-agricultural land will be returned to its pre-construction state using similar, native plants as dictated by the local environment. An erosion control seed mix, consisting of fast-growing species, may be applied in areas at risk of erosion.

7. Emergency Response and Communications Plan

The Emergency Response and Communications Plan, as described within the *Design and Operations Report* of this REA submission will continue to apply to activities related to the decommissioning phase of this project.

Since decommissioning activities are not expected to occur until many years after the commissioning, it will be important to communicate the status of the project, along with plans and timelines for decommissioning to all stakeholder groups. The wind farm operator will maintain contact information for all impacted parties throughout the life of the project to facilitate contact in regard to any major event, such as decommissioning. This list of stakeholders will include members of the public, agency representatives, Aboriginal Community leaders and local residents.

Prior to decommissioning, emergency contact information will be refreshed and any emergency response team requiring re-training or alerts will be granted sufficient lead time to prepare for decommissioning activities.

Notice of the intent to decommission the wind farm will be carried out similarly to the Notices of project development, with public notices of the planned decommissioning timelines to be delivered to local residents, emailed to the project communication list and made generally available for download on the South Branch Wind Farm website.

All stakeholders and agencies consulted during the development stage of this project will be alerted to the decommissioning of the wind farm to ensure that they are provided with sufficient notice to create or amend any records within their respective systems.

8. Other Approvals

The Proponent is presently aware that approvals, aside from REA, will be required in order to proceed with the decommissioning activities at the South Branch Wind Farm. Any work in or around open watercourses and/or the floodplain will require approval from the South Nation River Conservation Authority (SNC).

Consultation with the local conservation authority will determine whether planned decommissioning activities have potential to affect any areas of concern with regards to drainage or waterway maintenance. Work that may affect watercourses will be scheduled to avoid conflicts with any known breeding or rearing timelines for aquatic species (currently March 15th to July 1st)

The list of known approval requirements is presented below. The Proponent will confer with regulatory bodies in advance of decommissioning to ensure that the complete and appropriate set of permits is secured prior to activity commencement.

- A Permit to Construct or Demolish will need to be secured from the Townships of South Dundas, and Edwardsburgh/Cardinal.
- A separate permit or permits may also be required from the Township South Dundas for removal of the meteorological tower(s).
- SNC regulates development in accordance with Ontario Regulation 170/06. This will require prior written approval by way of an Application For Development, Interference with Wetlands and Alterations to Shorelines and Watercourses from the SNC prior to site alteration (such as decommissioning) within the regulation area.
- SNC also regulates the floodplain around the South Nation River and permits are required for any construction within the floodplain or within 15 m of the floodplain.

9. Financial Assurance of Decommissioning Costs

The Proponent will ensure the financial assurance of the decommissioning cost prior to the expected end of the 20-year project lifecycle.

As described in the landowner land use agreements for the South Branch Wind Farm, the Proponent will ensure that sufficient equity exists to allow the fulfillment of any and all decommissioning costs.

For this purpose, Prowind will establish a Decommissioning Fund to allow for a target sum in the amount of $20,000 per MW of nameplate capacity at the South Branch Wind Farm to be held within an escrow account by the date of 20 years from the date of project commissioning. This target will be reached by way of a yearly minimum payment of $ 1,000 per MW of nameplate capacity to the escrow account. These funds in addition to the residual value of the project components are expected to cover the cost of decommissioning.

Upon decommissioning of the site, any remaining balance of the Decommissioning Fund shall be returned to the Proponent.