Supplementary Guidelines for Environment Act Proposals for Wind Power Generating Facilites

These supplementary guidelines apply to Environment Act Proposals (EAPs) for wind generation facilities. These facilities are Class 2 or 3 developments under The Environment Act, as identified in the Classes of Development Regulation.

In addition to the information requirements of the Environment Act Proposal Report Guidelines, the information discussed below must be provided. This improves the clarity and completeness of proposals, assisting the department with their technical and public reviews.

The proponent is responsible for ensuring compliance with all applicable provincial, federal and municipal acts, regulations and by-laws.

Description of Proposed Development

Overview

- The anticipated number of turbines, nominal capacity of turbines, and the total capacity of the proposed energy development, and the point where connection to Manitoba Hydro transmission facilities is planned to occur.
    - The overview description of the project should include details on the number of turbines; their locations, spatial arrangement and separation distance; the height of the turbine tower and sweep of blades; details on lighting design; blade colours; and other pertinent construction details.
- Project ownership structure.

Siting

- Include a project area map and land description, indicating current land uses for all areas where project facilities (generation and transmission) may be located.
- Project area land will exclude provincial and federal parks, protected areas such as wildlife management areas and park reserves, and provincial forest reserves. Areas in proximity to heritage resources and/or human remains, rare or endangered species, migratory bird nesting sites and bat habitat will comply with federal and provincial legislation and regulations as well as industry practices for setbacks.
- Identify:
    - Existing centres of population (e.g., towns, cities, communities).
    - Infrastructure in the project area such as provincial and municipal roads, railways, airports, airstrips, pipelines and electrical transmission lines, meteorological and other radars, other wind-related infrastructure, development projects, and any other relevant infrastructure.
    - Water bodies, including natural or constructed waterways, lakes and wetlands.
    - Land use designation and land ownership of surrounding lands, including any residences and dwellings within 1.5 km of the project boundary.

It is recommended that project boundary is located at least a distance of 1.5 km from any centre of population and individual residences may not be closer than 1 km. The above distances are to be measured from the edge of the project footprint.

- Other significant landmarks that may help identify the general location of the project area.
- Neighbouring municipalities, First Nations reserves and Indigenous communities, and Red River Metis communities.
- Important environmental features and sensitive areas (e.g., native prairie, waterways, waterbodies, Class 3, 4, and 5 wetlands, riparian areas, woodlands and forests, and other large contiguous blocks of natural habitat) in the project area that might attract wildlife.
- Any additional energy-related facilities within the project area.
- Areas near heritage resources, human remains, and culturally sensitive sites.
- Rare or endangered species as defined under Manitoba's Endangered Species and Ecosystems Act (ESEA) and The Species at Risk Act (SARA); Critical Habitat as defined under SARA; including all areas that support the species' key life cycle needs.

  For guidance on development setbacks and activity restrictions by bird habitat type, refer to the Manitoba Conservation Data Centre's recommendations.

  For any site-specific exceptions for setbacks, rationale should be provided.

  Contact the Wildlife Branch to determine appropriate measures required where project may impact Critical Habitat.

- A conceptual map of the specific project site showing possible transmission routes, general land locations for those transmission lines and the associated infrastructure (e.g., converter station, substation, access road- both existing and proposed) that would connect the development to the Manitoba Hydro grid.
- Identify:
  - Any other acts (e.g., The Crown Lands Act, The Water Protection Act, The Water Resources Administration Act, The Highway Traffic Act, The Heritage Resources Act, The Wildlife Act, The Endangered Species and Ecosystems Act, The Water Power Act), that may apply to the project. Identify approvals the project may require and provide the status of each of these approvals.
  - Municipal zoning and whether conditional or approved land use in that zone.
  - Any setback requirements per any municipal and provincial by-laws.
  - Crown land approval where provincial Crown land is included in the project area.
  - Land tenure requirements.
  - Heritage resource requirements for the project area including but not exclusive to, Heritage Resource Impact Assessments (HRIA), mitigation, avoidance, additional studies, and/or agreements.
- The submission must include a Geographic Information System (GIS) shapefile that contains the geographic data of each of the major components, including proposed wind turbine locations, substation locations and project boundary of the proposed development, existing and proposed access roads and any staging or hoarding areas to be used during construction.

This shapefile should reflect the information shown on the drawings and maps submitted in support of the Environment Act proposal.

Note: It is not necessary at the proposal stage to identify exact locations, as it is recognized that locations will be finalized during the detailed design phase depending on land availability. If the proposed lines significantly deviate from the proposed locations, a notice of alteration must be submitted. It might impact the approval time. A revised GIS shapefile must be submitted to the department.

Construction, Operation and Decommissioning

- **Construction:** identify estimated construction start date and applicable construction phases, including seasonal or timing considerations to avoid impacts on land use and all wildlife.
    - Outline management practices and plans to control the spread of invasive species, noxious weeds (as per The Noxious Weeds Act) and soil-based crop diseases.
- **Operation:** a concise description of the project's operational phase, including maintenance, monitoring and reporting. Outline the duration, frequency and scope of monitoring.
- **Emergency response plan:** confirm that the applicant has or will have a site-specific emergency response plan for the construction and operation of the proposed development.
- **Decommissioning:** submit a decommissioning plan and provide an overview of how the proponent will ensure sufficient funds are available at the project end of life to cover the cost of decommissioning and reclamation.

Public Engagement

- Public engagement is recommended. If any public engagement is carried out, the following information should be provided:
    - A table of summary of concerns heard and disposition of those concerns;
    - Categorization of concerns is acceptable;
    - The specifics of the concern(s);
    - Steps taken to resolve the concern(s); and
    - Whether the concern(s) was resolved or mitigated.

Indigenous Engagement

- Describe completed and planned engagement activities with potentially impacted Indigenous Nations and communities within and around the project area.
    - Proponents' engagement with Indigenous Nations and communities is strongly encouraged to inform any Crown-Indigenous Consultation.
    - Manitoba government will conduct Crown-Indigenous Consultation to fulfill the "duty to consult" requirement of Section 35 of The Constitution Act.

Description of Existing Environment in the Project Area (based on existing information)

- Biophysical information may be based on existing sources.
- Where appropriate, discuss future investigations and research gaps to confirm or extend existing information as part of project monitoring.

- Provide a wind assessment survey to indicate suitability of the site for a wind energy project development.
- Identify any biophysical research gaps or needs, to determine the need for species specific and/or general pre-construction field surveys. Field surveys should be designed to fill known data gaps and provide site-specific information where desktop sources are insufficient.
- Include significant landscape features and all wildlife including critical habitat, seasonal ranges, and areas that provide for key life cycle in the project footprint area up to 5 km.
- Identify historical species occurrences and potentially affected rare, at-risk and endangered species or habitats in the project area for species listed under ESEA and SARA, and other species of conservation concern. For more information, please contact Wildlife Branch for more information.
- Identify potential and known heritage resources and/or human remains in the project area (without disclosing specific locations).
- Identify existing other resource present use in the project area: traditional use, agricultural use for cropping or grazing, fish habitat and presence, forestry, peatlands, mining and recreational use, groundwater use in proximity to potential turbine foundations.
- Identify all aquatic invasive species as outlined in Schedule A of the Aquatic Invasive Species Regulation under The Water Protection Act present within the project area.
- Identify rural community land use outside of population centres such as cemeteries, recreational facilities (e.g., community halls, sports grounds, airfields).

Environmental Effects

Describe anticipated effects of the development on the existing environment.

- **Shadow Flicker Management:** include a shadow flicker assessment report that predicts the extent of shadow flicker at receptors within 1.5 km from the centre point of each turbine where the potential for shadow flicker is possible.
- **Noise Impact Assessment:** provide a noise impact assessment for the entire development including the expected decibel output at varying distances from the project (e.g., 15 m up to 1 km away from the development).
- Summarize engagement with Environment and Climate Change Canada regarding potential interference with nearby weather radars if applicable.
- Identify potential interference with other radar/radio frequency towers and provide mitigation measures agreed upon.
- Obtain a letter of non-objection from the Department of National Defence (DND) confirming acceptance of the proposed project layout. DND may be contacted via email at: windturbines@forces.gc.ca.
- Identify potential impacts to wildlife and wildlife habitat, including migratory bird stopover sites; nesting sites; important bird staging areas; bat hibernacula, roosting and foraging habitat; presence of rare or at-risk species and other endangered habitats that may be affected.
- **Mortality risk assessments:** provide mortality risk assessments for all bat and bird species.

Environment Mitigation Measures
Describe measures planned to mitigate the identified anticipated environmental effects. Outline the potential project effects that require mitigation. Outline potential proposed mitigation measures to address environmental effects.

Residual Environment Effects
Describe environmental effects remaining after the application of mitigation measures. Include other potential mitigation measures or alternative mitigation options if avoidance of the identified environmental effects is not possible.

Where specific impacts to wildlife or wildlife habitat cannot be avoided, mitigation may also require offsetting. Where deemed necessary, offsetting cost calculations are computed by the Wildlife Branch after review of project design and plans.

Follow-up and Monitoring

Describe follow-up activities and monitoring planned for all project phases – construction, operation, maintenance and decommissioning. Monitoring components should include the following but not be limited to turbine noise levels, wildlife collisions and mortality, habitat regrowth, persistence of species at risk and their use of habitat within the project area.

Monitoring should take place on an appropriate timeline (timing of monitoring surveys) and time scale (number of seasons of monitoring) to detect impacts of the wind energy project on the environment including wildlife and habitat. The monitoring plan should be designed to determine the effectiveness of the mitigation measures applied. Monitoring should also assess any additional residual environmental effects. The results of monitoring to be used to inform adaptive management strategies, particularly where impacts exceed expectations, and to address any unanticipated effects, whether positive, negative or neutral.

Documents are available in alternate formats upon request.

For further information, please contact:

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