

APPLICATION FILING REQUIREMENTS FOR SUBSTATION PROJECTS

**PUBLIC SERVICE COMMISSION OF WISCONSIN
WISCONSIN DEPARTMENT OF NATURAL RESOURCES**



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Application Filing Requirements

Substation Construction Projects

This document lists information required for a sufficient application for the construction of a new substation or modification of an existing substation, whether as a stand-alone project or as part of a larger transmission or power plant project. Proposed projects that would exceed the cost thresholds described in Wis. Admin. Code § PSC 112.05(3) require a Certificate of Authority (CA) under Wis. Stat. § 196.49 from the Public Service Commission of Wisconsin (PSC).

Often, substations are part of transmission or power plant application which may require either a CA under Wis. Stat. § 196.49 or a Certificate of Public Convenience and Necessity (CPCN) under Wis. Stat. § 196.491. If the proposed substation or substation modification is part of a larger project, it is recommended to combine the substation application materials into the power plant or transmission application. The combined application should be organized in the most logical manner possible and contain all filing requirement information for all proposed facilities.

Overall, the filing requirements are intended to assist applicants in organizing information consistently and to facilitate PSC and DNR application reviews.

Joint PSC/DNR Pre-Application Consultation Process

An applicant must consult with both the PSC and DNR prior to submitting its application under Wis. Stat. § 30.025(1m) and Wis. Admin. Code § PSC 4.70(1). This pre-application consultation process is a series of discussions with the staff of these two agencies. Each agency has its own requirements, but the two agency reviews interrelate.

A proposed project may require wetlands, waterway, construction storm water, and any other applicable permits from DNR. DNR Office of Energy staff can help determine permitting requirements during pre-application discussions. During the pre-application process, the PSC and DNR staff will identify the number of paper copies of the application that both state agencies may require.

Topics discussed during the pre-application process include:

- PSC and DNR staff contacts
- Applicable portions of the filing requirements for each agency
- Appropriate application formats and subject matter, such as for maps and diagrams
- Specific permits and approvals required for the project
- PSC's and DNR's projected review timelines and important milestones

- Appropriate type, scope, and timing of required field work (habitat assessments, wetland delineations, biological surveys, etc.)

During the pre-application period, the applicant should also solicit additional information from other interested persons through public outreach.

DNR Joint Application Needs

Like the PSC, the DNR requires a thorough joint application for the project review to proceed. The applicant must also consult DNR staff to ensure that particular requirements for the joint application review are met.

Permits and Application Requirements

DNR permits required for the project will be identified during the pre-application process.

Under Wis. Stat. § 30.025, the two agencies must follow a common review timetable if impacts to wetlands and/or navigable waters are involved. For this reason, a complete application containing both DNR and PSC required information is submitted to both agencies at the same time. Specific DNR permit application requirements can be confirmed by the DNR Office of Energy's Energy Project Liaison staff (<https://dnr.wi.gov/topic/Sectors/Energy.html>). The requirements include information and materials needed for analysis of potential impacts to rare species and natural communities, and wetland or waterway construction permits.

Endangered Resources

Applications must include an Endangered Resources (ER) Review from the DNR or a Certified ER Reviewer, an ER Verification Form if the project is covered by the Broad Incidental Take Authorization (BITA) for No/Low Impact Activities, or a 'No actions required/recommended' finding from the DNR Natural Heritage Inventory (NHI) Public Portal, accessed at: <http://dnr.wi.gov/topic/erreview/publicportal.html>. The ER Review includes an analysis of the information contained in the NHI database to determine if there could be impacts to rare species and how to avoid/minimize those impacts. Specific ER screening requirements can be confirmed by the DNR Office of Energy's ER Review staff (<https://dnr.wi.gov/topic/Sectors/Energy.html>). The applicant should complete an ER screening early in the pre-application process to determine what, if any, field work should be completed. DNR may require fieldwork to be conducted (1) prior to submitting an application, (2) while the application is under review, (3) prior to the start of construction, and (4) post construction.

Wetlands and Waterways

The project area must be evaluated for the presence of wetlands and waterways and documentation of the evaluation must be submitted at the time of filing.

Wetlands:

Project areas limited to temporary impacts may be evaluated for the presence of wetlands through conservative desktop methods or through a field evaluation. The conservative desktop method assumes that all areas mapped under "Mapped Wetlands" and "Wetland Soils &

Indicators” layers on the DNR’s Surface Water Data Viewer (SWDV) are wetland. Field evaluations are required for all projects that involve permanent wetland fill, regardless of desktop wetland mapping.

Waterways:

All waterways mapped under the “Surface Waters” layer on the DNR’s SWDV, and any additional field-identified waterways, shall be assumed navigable unless a navigability determination has been conducted by the DNR. If a navigability determination is requested, a navigability determination package shall be included in the application filing (see Section 6.1.3).

The applicant must submit a Waterway/Wetland Impact Location Table (DNR Table 1) and a Waterway/Wetland Environmental Inventory Table (DNR Table 2) for the entire project (including any alternative routes/areas). To complete the waterway sections of the DNR Tables, all DNR-mapped waterways plus any field identified waterways must be included in these tables, regardless of a navigability determination being requested.

The tables must be updated throughout the review process as more accurate information becomes available. The wetland and waterway unique features that are used in the DNR tables must also be included in the attributes tables of the submitted Geographic Information Systems (GIS) data, as well as the wetland and waterway maps, that are part of the project application.

Submitted GIS data should be shapefiles only. Do not provide geodatabases or aerial imagery raster data.

Other State Agencies

WisDOT Permits and Reviews

Wisconsin Department of Transportation (WisDOT) oversize and overweight permits may be required for transporting project components to construction sites. In addition, a review for high structure permits issued by WisDOT Bureau of Aeronautics may also be required. Applicants should contact WisDOT at an early stage in project development and before submitting an application to the PSC to discuss the likely permitting needs for the project.

DATCP Application Needs

Utility-proposed projects may require an Agricultural Impact Statement (AIS) from the Department of Agriculture, Trade and Consumer Protection (DATCP). If the project is subject to AIS requirements, DATCP requires the submittal of a complete Agricultural Impact Notice for Non-Linear Projects and associated tables and GIS data. Applicants should contact the DATCP AIS program prior to submitting an application to the PSC to determine DATCP filing requirements. DATCP may require a paper copy of the PSC application and associated GIS data.

Application Formats

Application Tables

All filings on ERF must be as PDF or Excel files. The tables submitted as part of the application such as cost and mailing list spreadsheets are to be submitted in Adobe Acrobat (*.pdf) as well as Microsoft Excel spreadsheets. All documents that are part of the application must be submitted

to ERF directly, not as documents that are attachments to (embedded within) a single PDF. Mailing lists as part of the application should be submitted to the ERF.

Any submitted mailing lists must be uploaded to ERF as Microsoft Excel spreadsheets, be identical to the example shown below, and must meet the following format criteria as demonstrated below:

- Submit tables in Microsoft Excel.
- For property owners in the project area, replace full name or business name with “LANDOWNER(S) OR CURRENT RESIDENT(S)” in the “name” column.
- Do not use punctuation marks.
- Capitalize all data entries.
- Comply with current U.S. Postal Service mailing standards.
- Only use the Email Column if addresses are not more than one year out-of-date.
- Mailing list(s) should be able to be cross-referenced with the submitted GIS parcel data through the name or address column, but do not add additional columns or formatting. Mailing lists should include property owners located up to 300 feet from the facilities that are part of the application.

Sample Mailing List Table

attention	name	address	city	state	zip	email
CITIZENS UTILITY BOARD	COREY SINGLETARY	625 NORTH SEGOE ROAD STE 101	MADISON	WI	53703	SINGLETARY@CUBWI.ORG
CLEAN WISCONSIN	KATHRYN NEKOLA	634 WEST MAIN STREET STE 300	MADISON	WI	53703	KNEKOLA@CLEANWISCONSIN.ORG
	LANDOWNER/CURRENT RESIDENT	123 EAST STREET	MADISON	WI	53703	
	LANDOWNER/CURRENT RESIDENT	456 WEST STREET	MADISON	WI	53703	

Contact PSC staff regarding any questions about mailing list submittals.

Contact DNR Office of Energy’s Energy Project Liaison staff (<https://dnr.wi.gov/topic/Sectors/Energy.html>) for questions regarding the two DNR tables.

Geographic Information System Submissions

GIS data files are now compatible with ERF and must be submitted to the docket via the ERF “[Upload GIS Files \(Public\)](#)” page¹. GIS data files must be submitted in a format that is compatible with the current version of ArcGIS. Data file names should be descriptive of the contents.

Provide the following GIS-related items as part of the application:

- GIS data used to produce all maps submitted as part of the application as detailed in Section 1.9. **Only provide shapefiles. Do not provide geodatabases or aerial imagery raster data.**

¹ Total file size limit per submission is 20 MB. Split files into multiple submissions as appropriate.

- A spreadsheet listing all GIS data files, a file description, the source of the data, and the date when the data was collected or published.

All GIS data from local to statewide resolution must be projected in “NAD 1983 HARN Wisconsin TM (Meters)” projection system.

Photographic and Line Drawing Submissions

- Line drawings must be in AutoCad and may be in either *.dwg or *.dxf format. The preference is *.dwg.
- Any photographic renderings (photo simulations) of proposed facilities on the existing landscape must be submitted in a high-resolution raster format.
- Scanned maps and diagrams that cannot be submitted in any other format must be submitted in *.gif format at a depth of 256 colors or less.

Application Size

Applicants are required to minimize the physical size of their applications by eliminating superfluous information not material to the case.

Only submit those pages relevant to the information requirement. Do not submit multi-page ordinances, land use plans, etc. unless the entire document would be helpful for context. Minimize duplicative information. An appendix is the appropriate location for information that is referred to in several different sections of the application.

Submit only official correspondence between the applicant and state, local and federal government agencies. PSC staff needs to review this correspondence to verify that the applicant has applied for the necessary permits and to ascertain the status of the permit review. Do not include unofficial minutes of meetings, records of telephone conversations, or billings from the PSC or DNR.

Applications should be printed double-sided. Exceptions to this requirement are maps sized larger than 11 x 17 inches.

Confidential and CEII Materials

Organize the application so that all confidential materials are only in Appendices and separated from non-confidential materials. Submit confidential materials in compliance with the confidential materials handling procedures of each agency.

Confidential project documents, such as an Endangered Resources Review and cultural resource documents, must be submitted confidentially to the PSC and DNR.

Prior to submitting any critical energy infrastructure information (CEII) related to the project, contact the Commission staff docket coordinator for instructions regarding how to do so.

PSC Electronic Regulatory Filing (ERF) System

The ERF system is the official file for all dockets considered by the Commission. Use the ERF system to post all confidential and non-confidential application materials, including all materials provided to DNR. No joint application materials should be provided separately to DNR through the DNR's E-Permitting site, unless specifically requested to do so, but should be posted to ERF. Both the initial application and the complete application must be submitted using the ERF system.

Instructions for submitting documents to the ERF system can be found on the PSC web site. Search for "ERF Policy/Procedure" on the PSC Homepage search bar for the current instructions.

Filing the Application

Check with PSC case coordinator and the DNR during the pre-application process to determine how the application should be filed and how many paper copies are necessary. Electronic versions of all submitted application materials must be sent to both the PSC and DNR.

Prior to submitting any CEII related to the project, contact the Commission staff docket coordinator for instructions regarding how to do so.

Public Copies of CA Applications

There are no requirements for distributing copies of CA applications to the public.

Contact for Questions

If you have questions about the Application Filing Requirements, visit the PSC website at: <https://psc.wi.gov/Pages/ForUtilities/Energy/FilingRequirements.aspx> for information. Initial questions can be directed to the Environmental Review Coordinator listed on that website.



Application Filing Requirements

Substation Construction Projects

An application must contain the following information or a showing must be made as to why the information is not applicable. The application's organization should follow the major format and numbering system of these filing requirements. If the proposed substation is part of a larger project such as a proposed transmission line or power plant, it is recommended to combine the substation application materials into the larger application, provided the organization of the application remains clear and easy-to-understand. Questions about the applicability of specific information requirements should be discussed with PSC and DNR staff during pre-application consultation.

1. Project Overview

- 1.1 Identify the owners and investors of the proposed project including their names, addresses, and percent of ownership.**
- 1.2 Provide contractual agreements between developer and utilities to construct, finance, lease, use or own transmission facilities.²**
- 1.3 Describe the location of the proposed substation site(s).**
- 1.4 Provide the city, village, and/or township and counties of the proposed substation sites and any other areas of proposed construction activities.**
- 1.5 PSC Review**
 - 1.5.1 Identify the expected type of Commission action under Wis. Admin Code § PSC 4.10.
 - 1.5.2 Discuss if the proposed substation is contingent or part of a transmission or generation project under another docket.
- 1.6 Project Details and Project Area Information**

Provide descriptions of the project area(s) including the following:

 - 1.6.1 Generalized description of the project area, including land cover and zoning.
 - 1.6.2 Special or unique natural or cultural resources in the project area.
 - 1.6.3 Areas of residential concentrations and urban centers in the project area.

² PSC confidential procedures may be used for the submittal of sensitive information.

1.7 Other Agency Correspondence/Permits/Approvals

- 1.7.1 Provide copies of all official correspondence between the applicant and all state, federal, or local government agencies.³
- 1.7.2 Provide a list of all state and federal permits/approvals that would be required for this project and their status.
- 1.7.3 Provide a list of all local permits and/or ordinances that apply to the proposed project and the status of those permits.
- 1.7.4 If any portion of the associated facilities would occupy property or easements owned by railroad or pipeline companies or WisDOT, provide documentation from these entities that the sharing is acceptable to the entity, if possible.

1.8 Construction Schedule

- 1.8.1 Provide the anticipated general construction schedule, identifying any potential seasonal or regulatory construction constraints.
- 1.8.2 Generally discuss any generation or transmission outage constraints that may have to be accommodated.

1.9 Project Area Maps

- 1.9.1 Provide project maps that use the best and most recent data available. Maps must clearly portray the project in a format and scale that is unambiguous and easy to understand. Labels and symbology used on the maps must be clearly visible. The scale of the maps, the number of map sets necessary to show all relevant data, and whether they will be submitted electronically or on paper will be discussed during pre-application consultations.
 - Aerial imagery not more than three years old⁴.
 - Project Data
 - Proposed substation
 - Proposed substation fenced area
 - Proposed access roads
 - Proposed electric poles (distribution and transmission) outside of the fenced area
 - Proposed new or altered distribution and transmission right-of-way (ROW)
 - Proposed associated facilities and features including storm water detention ponds
 - Project Area Environmental Data
 - Rivers, lakes, and other waterways
 - Wetlands
 - Soils
 - NHI rare species occurrences (confidential)
 - Topographic maps
 - Floodplains

³ The applicant must continue to submit copies of all official correspondence between the applicant and any federal, local government, or other state agency while the application is under review.

⁴ Aerial imagery raster data is no longer required to be submitted with GIS data. Do NOT submit aerial imagery raster data.

- Parcel Data Within One-half Mile of the Proposed Site
 - Private properties.
 - Public properties (symbolized differently than private properties)
 - Tribal or other types of properties
 - Political subdivision boundaries
 - Township, range, section divisions
- Land Use Within One-half Mile of the Proposed Site
 - Land cover
 - Zoning
 - Active mines and quarries
 - Sensitive sites (for example daycare centers, schools, hospitals, cemeteries, etc.)
 - Airports, airstrips (public and private)
 - Recreation areas, trails
- Utility/Infrastructure Data
 - Roads, highways, interstates
 - Existing transmission, pipelines, and other applicable infrastructure
 - Existing distribution lines that would be modified or relocated due to the proposed project or are in the project area
 - Applicable infrastructure ROWs (e.g., DOT, pipeline, electric distribution, electric transmission, railroad, trail)
- DNR-required information such as locations of possible Chapter 30 activities (e.g., grading, riprap), temporary clear span bridges, Wisconsin Wetland Inventory, wetland/waterway field data, hydric soils, etc.

1.10 ESRI ArcGIS Data Files (see Introduction, page ii)

- 1.10.1 Provide GIS data files that support all maps submitted for the application as described in Section 1.9 above. **Do not provide geodatabases or aerial imagery raster data.**
- 1.10.2 Provide a spreadsheet that lists each GIS file (clearly named and organized), a description of the data, data source, and the date when the data was generated or collected for field data.

1.11 Mailing Lists.

- 1.11.1. Provide Microsoft Excel mailing lists in an acceptable format that are able to be cross referenced with GIS parcel data as described in the Introduction, pages iii, iv, v.
- 1.11.2. Identify the sources of the information contained in the mailing lists and discuss the potential for inaccuracies in the data set (new development, poor data, etc.).
- 1.11.3. Provide a list of libraries that the application will be mailed to.
- 1.11.4. Mailing lists must include:
 - 1.11.4.1. All property owners within one-half mile of the proposed and alternative substation sites. It is strongly recommended that applicants consult with PSC staff in order to ensure that the coverage is appropriate considering the

project type, surrounding land use, etc. Include properties on both sides of a street or road.

1.11.4.2. All public property owners such as schools or other government entities within 0.5 mile.

1.11.4.3. The clerks and chief executive officers of the counties, towns, villages, or cities in which the substation, routes or other proposed facilities would occupy. Also include on this list the main public library in each county the proposed facilities would occupy.

1.11.4.4. The Regional Planning Commissions in whose jurisdictions the facilities would be built.

1.11.4.5. Applicable state and federal agencies.

1.11.4.6. Tribal government representatives for Native American Tribes that hold off reservation treaty rights in Ceded Territory. This only applies to projects within the following counties: Ashland, Barron, Bayfield, Burnett, Chippewa, Clark, Douglas, Dunn, Eau Claire, Florence, Forest, Iron, Langlade, Lincoln, Marathon, Marinette, Menominee, Oconto, Oneida, Polk, Portage, Price, Rusk, Sawyer, Shawano, St. Croix, Taylor, Vilas, Washburn, and Wood County.

The following Tribes hold off-reservation treaty rights in Ceded Territory:

- Bad River Band of Lake Superior Chippewa Indians
- Lac Courte Oreilles Band of Lake Superior Chippewa Indians
- Lac du Flambeau Band of Lake Superior Chippewa Indians
- Red Cliff Band of Lake Superior Chippewa Indians
- St. Croix Chippewa Indians of Wisconsin
- Sokaogon Chippewa Community (Mole Lake Band of Lake Superior Chippewa Indians).

2. Engineering

2.1 Project Need

Describe the purpose or need for the project with supporting data. Provide a project one-line diagram showing the proposed electrical changes to the system. Discuss system configuration alternatives considered and the reasons as to why they were rejected.

2.2 Area Load Information

Submit historical peak load by substation, if available, for the study area for at least the past ten years. In the cases where coincident peak load data is not available by substation, provide annual peak load data by substation. Indicate for each substation whether the load data is coincident peak or annual peak. Explain each component of the forecasted load with quantitative detail. Any changes in the projected growth rates over the forecast period should be fully explained.

Area load information requirements will be discussed at the pre-application consultations. Based on the need and scope of the proposed project, different historical data may be required.

2.3 Equipment Outage Information

Submit historical outage data for the existing substation equipment within the study area for at least the past ten years. Provide any evidence of historical failure rates of the existing equipment. Explain how the proposed project may impact the reliable operation of the substation with quantitative detail.

2.4 Discuss no-build options and their potential electrical supply and environmental impacts.

2.5 Provide an analysis of the ability of energy conservation and efficiency and load response to reduce, alter, or eliminate the need for this project. Analysis should include:

- 2.5.1 A description of the energy conservation and efficiency and load response programs and services available to customers in the project area.
- 2.5.2 An indication of the amount of additional energy efficiency and demand response, not already included in the forecast, needed to reduce, alter, or eliminate the need for this project.
- 2.5.3 A discussion of the feasibility of achieving the level of energy efficiency and demand response identified in Section 2.4.2.

2.6 Discuss the potential for alternative solutions to the identified problem, as prioritized in Wis. Stat. §§ 1.12(4) and 196.025(1)(ar).

- 2.6.1 Noncombustible renewable energy resources
- 2.6.2 Combustible renewable energy resources
- 2.6.3 Nonrenewable combustible energy resources in the following order:
 - 2.6.3.1 Natural gas
 - 2.6.3.2 Oil or coal with a sulphur content of less than 1%
 - 2.6.3.3 All other carbon-based fuels

3. Magnetic Fields

Magnetic field information may be determined during pre-application consultations.

3.1 For existing substations, submit magnetic field readings at the secured fence line and in the area from the fence outward to the property boundary or 150 feet, whichever is the shortest distance as follows:

- 3.1.1 At each corner of the fence line and outward toward the property perimeter at 25-foot intervals.
- 3.1.2 At the midpoint along each linear fenced section and outward toward the property perimeter at 25-foot intervals
- 3.1.3 At the fence line where existing overhead or underground electric lines cross the fence.

- 3.2** *For new substations that would tap existing transmission lines, estimate the power flow changes and magnetic fields of the existing transmission lines.*
- 3.3** *For substations associated with new generation, state how the new generation source would change the magnetic fields on the existing transmission lines connected to the substation with the generating plant operating at full capacity.*

4. Project Costs

Cost tables should be based on the projected in-service year and should specify whether or not the costs include Allowance for Funds Used During Construction (AFUDC). Tables must be submitted in a Microsoft Excel format, in addition to Adobe Acrobat (*.pdf) format.

4.1 Substation Cost Estimate Tables

Provide table(s) detailing the projected total costs for each proposed substation broken into the major categories listed below. Each major category of costs should be broken down into logical components and/or contracts.

- Material Costs
- Labor Costs
- Other Costs
- Pre-certification Costs

4.2 *For 345 kV projects: Provide a summary table of total costs (transmission and substation) for each proposed route, broken down by the following voltage classes.*

- 345 kV
- Less than 345 kV
- Distribution

5. Site and Construction Information

5.1. Provide descriptions, diagrams, and graphics for the proposed project that include the following details:

- 5.1.1 The location, size, and dimensions of the proposed substation, access roads, detention ponds, and associated facilities
- 5.1.2 Provide a list of major new equipment
- 5.1.3 The topography, land cover, zoning, and land use of the proposed site(s)
- 5.1.4 Layout of the proposed substation equipment
- 5.1.5 Dimensions of the property boundaries and substation fenced area
- 5.1.6 Vertical profile and topography of the proposed substation and property

5.2. For any electric structures or lines (transmission and distribution) that would be constructed outside of the fence line of the proposed substation, including the following:

- 5.2.1 Electric line configuration (such as single-circuit or double-circuit with existing line, overhead or underground, conductor replacement or new construction, etc.).

- 5.2.2 A description and location of the proposed ROWs (for example new ROW, partially overlapping existing transmission ROW, completely within existing ROW, etc.).

5.3. Describe the construction impacts of the proposed project and any proposed associated facilities, including:

- 5.3.1 The area and depth of excavations.
- 5.3.2 The type of construction machinery that would be used.
- 5.3.3 The construction disturbance zone, including access from public roads and laydown areas.
- 5.3.4 How spoil materials would be managed on and off-site.
- 5.3.5 For transmission or distribution electric lines proposed to be constructed outside of the substation fenced area, provide the following:
- 5.3.5.1 Construction methods for the electric lines.
- 5.3.5.2 A description of any unique construction methods (*e.g.*, directional boring, jack and bore, helicopter, vibratory caissons, etc).
- 5.3.5.3 Details on additional laydown areas or access roads

6. Natural Resource Impacts

6.1 Forested Lands

Forested lands⁵ are defined as an upland area of land covered with woody perennial plants reaching a mature height of at least 6 feet tall with definite crown (closure of at least 10%). For the purposes of these AFRs, forested lands would not include narrow windbreaks located between agricultural areas, but would include shrublands and forested riparian areas.

- 6.1.1 For each substation property describe the forested lands that would be impacted by the proposed project. Include the following information in the description.
- Type of forest
 - Dominant species
 - Average age, size of trees
 - Ownership (private, county, etc.)
 - Use (recreation, timber, riparian habitat, etc.)
- 6.1.2 Identify any substation site land that is enrolled in either Managed Forest Law or Forest Crop Law and discuss how the proposed project would affect their enrollment.
- 6.1.3 Provide specific details for mitigating or minimizing construction impacts in and around forest lands.

6.2 Grasslands

Grasslands⁶ are defined as lands covered by non-cultivated herbaceous (non-woody) vegetation predominated by perennial grasses and forbs.

⁵ Forested lands definition adopted from Wisland 2 Land Cover User Guide 2016 accessed at: https://p.widenedn.net/8ghipa/Wisland_2_User_Guide_September_2016

⁶ Grasslands definition adopted from Wisland 2 Land Cover User Guide 2016 accessed at: https://p.widenedn.net/8ghipa/Wisland_2_User_Guide_September_2016

- 6.2.1 For each substation property describe the grasslands that would be impacted by the proposed project. Include the following information in the description.
- Type of grassland (prairie, pasture, old field, etc.)
 - Dominant species
 - Ownership (private versus public)
 - Use (agricultural, non-productive agricultural, recreation, natural area, etc.)
- 6.2.2. Provide specific details for mitigating or minimizing construction impacts in and around grasslands.

6.3 Invasive Species

- 6.3.1 Describe areas where invasive species or disease-causing organisms have been observed or are a concern for the construction of the project (*e.g.*, invasive plants, oak wilt, emerald ash borer, etc.). State if invasive species surveys have occurred or will be conducted. If invasive species surveys have been conducted, provide documentation showing where surveys occurred and locations of invasive species found, indicating which species.
- 6.3.2 Describe mitigation methods that would be used to avoid the spread of invasive plants or disease-causing organisms and comply with Wis. Admin. Code ch. NR 40, such as cleaning of machinery, etc.

6.4 Archaeological and Historic Resources

Confidential information includes only the specific location and other sensitive details of archaeological and human burial sites (*e.g.* maps).^{7,8} Confidential information should be submitted on ERF as a confidential version in addition to a redacted public version. The Wisconsin Historical Society (WHS) can provide a list of qualified archaeologists, architectural historians, human burial specialists, or tribal preservation officers who may be required to perform steps of this review. Access to the Wisconsin Historic Preservation Database (WHPD) is required to complete this review. Access to WHPD is free at the WHS headquarters or can be used online for a fee. Depending on the outcome of this review, the Commission may be required to consult with the State Historic Preservation Office (SHPO). SHPO consultation may take up to an additional 30 days. The *Guide for Public Archeology in Wisconsin*, provides information about best management practices.⁹

- 6.4.1 Provide maps and a description of all archaeological sites, historic buildings and districts, and human burial sites within the project's area of potential effect (APE). For archaeological and historic sites, the APE is comprised of the physical project area where any ground disturbing activity may occur (*e.g.* digging, heavy equipment movement, etc.). For historic buildings and districts, the APE consists of the distance that the project may be visible from the outside

⁷ Wis. Stat. 157.70(2)(a): Any information in the catalog related to the location of any burial site, the disclosure of which would be likely to result in the disturbance of the burial site or the cataloged land contiguous to the burial site, is not subject to s. 19.35(1).

⁸ Wis. Stat. 44.48(1)(c): The director may keep any specific information regarding archaeological resources closed to the public if the director determines that disclosure of the information would be likely to result in disturbance of the archaeological resources.

⁹ *Guide for Public Archeology in Wisconsin*. The Wisconsin Archeological Survey. August 2012.

of the project area. Maps of archaeological and burial sites must be submitted confidentially.

- 6.4.2 For archaeological sites and historic buildings or districts within the APE, determine the boundaries, historic significance, and integrity of each resource. Additional field surveys may be required to make these determinations. In some cases, such as a landowner not granting land access, field surveys may instead be performed following the approval of a project.
- 6.4.3 Identify the potential project effects on each resource.
- 6.4.4 Describe modifications to the project that would reduce, eliminate, avoid, or otherwise mitigate effects on the resources. Examples of modifications include changes to construction locations, modified construction practices (e.g. use of low-pressure tires, matting, etc.), placement of protective barriers and warning signage, and construction monitoring.
- 6.4.5 For any human burial sites within the APE, contact WHS to determine whether a Burial Site Disturbance Authorization/Permit is required.
- 6.4.6 Provide an unanticipated archaeological discoveries plan. The plan should outline procedures to be followed in the event of an unanticipated discovery of archaeological resources or human remains during construction activities for the project.
- 6.4.7 Notify Wisconsin Tribal Historic Preservation Officers of any Native American human burial sites and significant prehistoric archaeological sites within the APE. Provide copies of all correspondence.

6.5 Conservation Easements

Identify conservation easements that may be impacted by any proposed construction activities.

6.6 Restoration of Disturbed Areas

Provide a detailed re-vegetation and site restoration plan which discusses the following items:

- 6.6.1 Type of re-vegetation proposed for impacted areas (e.g. traditional restoration seed mixes, specialty native seed mixes for restoration of high quality habitats or habitat enhancement such as seeding with a pollinator species).
- 6.6.2 Vegetative monitoring criteria (number of post-construction years or percent cover achieved) and methods.
- 6.6.3 Invasive species monitoring and management.

7. Community Impacts

7.1 Communication with Potentially Affected Public

- 7.1.1 List all attempts made to communicate with and provide information to the public.
- 7.1.2 Provide a description of public information meetings and who was invited.
- 7.1.3 Submit copies of public outreach mailings and handouts
- 7.1.4 Provide electronic copies of written public comments (e.g., letters, emails, forms, etc.) submitted prior to filing the application with the PSC.

7.2 Community Issues

Discuss any concerns that groups or potentially impacted communities have raised.

7.3 Land Use Plans

Provide relevant portions of land-use plans that describe future land uses potentially impacted by the project. (Land use plans include recreational plans, agricultural plans, etc.)

7.4 Agriculture

For each substation site, provide the following:

- 7.4.1 Type of farming that could be impacted by the proposed project, such as pasture, row crops, or other type (*e.g.* orchards, tree plantations, cranberry bogs, etc.).
- 7.4.2 The amount of land that would no longer be farmed.
- 7.4.3 Any impacts to farming operations from the construction or operation of the substation, such as irrigation systems, windbreaks, organic farming practices, and/or drainage systems (tiles, ditches, laterals) as applicable.
- 7.4.4 Specific details for mitigating or minimizing construction impacts in and around agricultural lands.
- 7.4.5 Agricultural Impact Statement¹⁰ (AIS) - Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP). If the project would affect any properties used for agricultural purposes, submit one of the following, either:
 - 7.4.5.1 A completed Agricultural Impact Notice (see DATCP website and search “Agricultural Impact Notice” for appropriate form or contact DATCP).
 - 7.4.5.2 A release letter from DATCP stating that an AIS will not be written for this proposed project.
- 7.4.6 Identify the number and size of parcels enrolled in farmland preservation programs and permanent agricultural or conservation easements that may be affected by the proposed project.

7.5 Residential and Urban Areas

- 7.5.1 Discuss anticipated impacts to residential/urban neighborhoods and communities such as noise, dust, duration of construction, time-of-day of construction, road congestion, impacts to driveways, etc.
- 7.5.2 Discuss how anticipated impacts would be mitigated.

7.6 Aesthetic Impacts

- 7.6.1 Discuss the potential aesthetic issues associated with the proposed substation as it relates to the surrounding land uses.
- 7.6.2 Describe the plans for landscaping or other measures used to mitigate the potential aesthetic impacts to the surrounding land uses.

7.7 Parks and Recreation Areas

- 7.7.1 Identify any parks and recreation areas or trails that may be impacted by the proposed project and the owner/manager of each recreation resource.
- 7.7.2 Provide any communications with these owners/managers

¹⁰ http://datep.wi.gov/Environment/Agricultural_Impact_Statement/index.aspx

- 7.7.3 Discuss how short- and long-term impacts to these resources would be avoided and minimized, including access.

7.8 Airports

- 7.8.1 Identify the location of all private and public airports/airstrips in the project area.
- 7.8.2 Describe the airports/airstrips, their runways (length, orientation), and type of use.
- 7.8.3 Describe any potential for impact to aircraft safety and intrusion into navigable airspace (runway approaches).

7.9 Shared Revenue

- 7.9.1 For modifications of existing substations, provide a brief overview of the current shared revenue payments and how it might change as a result of the proposed project.
- 7.9.2 For new substations, provide a general idea of the potential shared revenue distributions.

8. Waterway /Wetland Permitting Activities

This section covers information required by DNR for wetland and waterway permits. The following subsections apply to all proposed project sites or routes. These sections should be consistent with the wetlands and waterways included in DNR Tables 1 and 2 and associated wetland and waterway maps. See the Wetlands and Waterways section of the Introduction portion of this document on what to include in DNR Tables 1 and 2 regarding waterway resources. Questions about this section should be directed to DNR Office of Energy's Energy Project Liaison staff.

8.1 Waterway Activities

This section should be consistent with the waterways included in DNR Tables 1 and 2 and associated maps. This section should apply to the proposed and alternative sites/routes (if applicable) and their associated facilities (for example, off-ROW access roads, staging areas, permanent structures, new substations and/or expansion of existing substations (including associated driveways and permanent storm water management features to be constructed).

- 8.1.1 Identify the number of waterways present, including DNR-mapped waterways and additional field identified waterways. Also identify the number of times the waterway meanders in and out of the project area and indicate the number of waterway crossings.
- 8.1.2 Identify any waterways in the project route(s) that are classified as Outstanding or Exceptional Resource Waters, Trout Streams, Wild Rice Waters, and/or Wild or Scenic Rivers.
- 8.1.3 State if you are requesting DNR staff perform a navigability determination on any of the DNR mapped waterways and/or field identified waterways that will be impacted and/or crossed by project activities. If a navigability determination is requested, provide the following information in a separate appendix with the application filing:
 - A table with columns for:

- The crossing unique ID,
 - Waterbody Identification Code (WBIC) for each waterway (found in the Surface Water Data Viewer or in the GIS data for the DNR mapped waterways),
 - Latitude and longitude for each crossing,
 - Waterway name,
 - Waterway characteristics from field investigation, and;
 - Any other pertinent information or comments.
 - Site photographs, clearly labeled with the photo number, direction, date photo taken, and crossing unique ID. A short description of what the photo is showing, and any field observation must also be included in the caption.
 - Aerial photograph review of multiple years, including historical photos.
 - Project map showing the following:
 - Aerial imagery (leaf-off, color imagery is preferred),
 - DNR mapped waterways (labeled with their unique ID),
 - Field identified waterways (labeled with their unique ID),
 - The location of each site photograph taken (labeled with the photo number),
 - The project area , and;
 - Call out box/symbol for each DNR mapped waterway crossing where the navigability determination is requested (labeled with their unique ID).
- 8.1.4 Provide the following information:
- 8.1.4.1 How many waterway crossings are proposed to be traversed with equipment and how that crossing will be accomplished (i.e. placement of temporary clear span bridges (TCSB), use of existing bridge or culvert, driving on the bed, etc.).
 - 8.1.4.2 How many structures are proposed to be placed below the ordinary high water mark (OHWM) of a waterway. Indicate if structures are temporary or permanent.
 - 8.1.4.3 Indicate if any other waterways would be impacted and/or crossed by other construction activities regulated under Chapter 30 Wis. Stats. (i.e. placement of a new storm water pond within 500 feet of a waterway, stream relocation, staging areas, placement of riprap, etc.).
 - 8.1.4.4 For underground installation only: Indicate the amount of waterway crossings via underground installation and specify the installation method (i.e. X waterways will be bored, Y waterways will be trenched, etc.)
- 8.1.5 Provide the methods to be used for avoiding, minimizing, and mitigating construction impacts in and near waterways. This discussion should include, but not be limited to, avoiding waterways, installation methods (i.e. directional bore versus open-cut trenching or plowing), equipment crossing methods (i.e. for temporary access, the use of TCSB versus temporary culvert; for permanent access, the use of permanent bridge versus permanent culvert), sediment and erosion controls, invasive species protocols for equipment, etc.
- 8.1.6 For waterways that will be open-cut trenched, provide the following:

- 8.1.6.1 State if any waterways are wider than 35 feet (measured from OHWM to OHWM).
- 8.1.6.2 The machinery to be used, and where it will operate from (i.e. from the banks, in the waterway channel) and if a TCSB is needed to access both banks.
- 8.1.6.3 The size of the trench (length, width, and depth) for each waterway crossing.
- 8.1.6.4 Details on the proposed in-water work zone isolation/stream flow bypass system (i.e. dam and pump, dam and flume, etc.).
- 8.1.6.5 Duration and timing of the in-stream work, including the installation and removal of the isolation/bypass system and the trenching activity.
- 8.1.6.6 How impacts to the waterway will be minimized during in-water work (i.e. energy dissipation, sediment controls, gradually releasing dams, screened and floating pumps, etc.).
- 8.1.6.7 How the waterway bed and banks will be restored to pre-existing conditions.
- 8.1.7 For waterways that will be directionally bored, provide the following:
 - 8.1.7.1 The location and size of any temporary staging and equipment storage.
 - 8.1.7.2 The location and size of bore pits and their distance from waterways.
 - 8.1.7.3 Provide a contingency plan for bore refusal and a plan for the containment and clean-up of any inadvertent releases of drilling fluid (e.g. a frac-out).
- 8.1.8 For waterways that will have a TCSB installed across them, provide the following:
 - 8.1.8.1 Description of the TCSB proposed, including dimensions, materials, and approaches. Verify the TCSB will completely span the waterway.
 - 8.1.8.2 State if any waterways are wider than 35 feet (measured from OHWM to OHWM), and/or if any in-stream supports will be used.
 - 8.1.8.3 State how the TCSB placement and removal will occur (i.e. carried in and placed with equipment, assembled on site, etc.) and if any disturbance would occur to the bed or banks for the installation and removal, including bank grading or cutting.
 - 8.1.8.4 Duration of the placement of the TCSB.
 - 8.1.8.5 Sediment controls that will be installed during the installation, use, and removal of the TCSB's.
 - 8.1.8.6 How the TCSB's will be inspected during use and how they will be anchored to prevent them from being transported downstream.
 - 8.1.8.7 State if the required 5-foot clearance will be maintained, or if the standards in NR 320.04(3), Wis. Adm. Code will be complied with.
 - 8.1.8.8 How the waterway bed and banks will be restored when the TCSB is removed.
- 8.1.9 Describe the proposed area of land disturbance and vegetation removal at waterway crossings. Include a description of the type of vegetation to be removed (e.g. shrub, forest), and if this vegetation removal will be temporary (allowed to regrow) or permanent (maintained as cleared).

- 8.1.10 If any of the following activities are proposed, provide the information as detailed on the applicable permit checklist:
- New culvert placement:
<https://dnr.wi.gov/topic/waterways/documents/PermitDocs/GPs/GP-CulvertWPEDesign.pdf>
<https://dnr.wi.gov/topic/Waterways/documents/PermitDocs/IPs/IP-culvert.pdf> (General Permit) or (Individual Permit).
 - New permanent bridge placement:
<https://dnr.wi.gov/topic/waterways/documents/PermitDocs/GPs/GP-ClearSpanBridge.pdf>
<https://dnr.wi.gov/topic/Waterways/documents/PermitDocs/IPs/IP-bridgeTempCross.pdf> (General Permit, no in-stream supports) or (Individual Permit, in-stream supports).
 - New storm water pond placed within 500 feet of a waterway:
<https://dnr.wi.gov/topic/waterways/documents/PermitDocs/GPs/GP-StormwaterPond.pdf>.

8.2 Wetland Activities

This section should be consistent with the waterways included in DNR Tables 1 and 2 and associated maps. This section should apply to the proposed and alternative sites/routes (if applicable) and their associated facilities (for example, off-ROW access roads, staging areas, permanent structures, new substations and/or expansion of existing substations (including associated driveways and permanent storm water management features to be constructed).

- 8.2.1 Describe the method(s) used to identify wetland presence and boundaries within the project area (i.e. wetland field delineation, wetland field determination, conservative desktop review, etc.). If conservative desktop review was the only method used to identify the presence of wetlands, state if any areas will be field-verified (and when). If a combination of methods were used, describe which project areas utilized which method. The associated delineation report and/or desktop review documentation should be uploaded to the PSC's website as part of the application filing.
- 8.2.2 Identify the number of wetlands present and by wetland type, using the Eggers and Reed classification. Provide as an overall project total, as well as broken down by the proposed site and the alternative site(s) (if applicable) and their associated facilities.
- 8.2.3 Wetland functional values:
- 8.2.3.1 Discuss the existing functional values of the wetland present. Functional values include but are not limited to floristic diversity, fish and wildlife habitat, flood storage, water quality, groundwater discharge and recharge, public use, etc.
 - 8.2.3.2 Discuss how the project may impact existing functional values of wetlands.
 - 8.2.3.3 Provide Wisconsin Rapid Assessment Methodology (WRAM) forms, or other assessment methodology documentation, if completed.

- 8.2.4 Identify any wetlands in the project area that are considered sensitive and/or high-quality wetlands, including, but not limited to:
 - 8.2.4.1 Any wetlands in or adjacent to an area of special natural resource interest (ASNRI) (NR 103.04, Wis. Adm. Code).
 - 8.2.4.2 Any of the following types: deep marsh, northern or southern sedge meadow not dominated by reed canary grass, wet or wet-mesic prairie not dominated by reed canary grass, fresh wet meadows not dominated by reed canary grass, coastal marsh, interdunal or ridge and swale complex, wild rice-dominated emergent aquatic, open bog, bog relict, muskeg, floodplain forest, and ephemeral ponds in wooded settings.
 - 8.2.4.3 Any wetlands with high functional values based on factors such as abundance of native species and/or rare species, wildlife habitat, hydrology functions, etc.
- 8.2.5 Provide the following:
 - 8.2.5.1 The number of wetlands that would have construction matting placed within them to facilitate vehicle access and operation and/or material storage. Provide the total amount of wetland matting, in square feet
 - 8.2.5.2 The number of structures that would be constructed within wetlands. Indicate if structures are temporary or permanent. Provide the total square footage of permanent and temporary wetland impact for the placement of structures.
 - 8.2.5.3 How many wetlands will have permanent fill placed within them. Provide the total amount of permanent wetland fill, in square feet.
 - 8.2.5.4 How many shrub and/or forested wetlands would be cleared for construction. Provide the total amount of shrub and/or forested wetland conversion, in square feet.
 - 8.2.5.5 How many wetlands will be impacted and/or crossed by other construction activities regulated under 281.36 Wis. Stats. (i.e. road building activities such as grading and cutting, substation upgrades, new tie-ins, vehicle/equipment access across wetland resulting in soil mixing or soil rutting, etc.).
 - 8.2.5.6 For underground installation only: how many wetlands will be crossed by collection lines and specify the installation method (i.e. X wetlands will be bored, Y wetlands will be trenched, etc.).
- 8.2.6 Describe the sequencing of matting placement in wetlands and the anticipated duration of matting placement in wetlands. For matting placed in any wetland for longer than 60 consecutive days during the growing season, prepare and submit a wetland matting restoration plan with the application filing.
- 8.2.7 For wetlands that will be open-cut trenched, provide the following:
 - 8.2.7.1 Provide details on the total disturbance area in wetland, including how total wetland disturbance was calculated. Include the size of the trench (length, width, and depth), where stockpiled soils will be placed (i.e. in upland, in wetlands on construction mats, etc.), and where equipment will operate.

- 8.2.7.2 Provide details on the proposed trench dewatering, including the method(s) that may be used (pumps, high capacity wells, etc.), how discharge will be treated, and where the dewatering structure will be located.
- 8.2.7.3 Duration and timing of the work in wetlands.
- 8.2.7.4 How the wetlands will be restored to pre-existing conditions.
- 8.2.8 For wetlands that will be directionally bored, provide the following:
 - 8.2.8.1 How bored wetlands and associated bore pits will be accessed.
 - 8.2.8.2 The location and size of any temporary staging and equipment storage.
 - 8.2.8.3 The location and size of bore pits and the distance from wetlands.
 - 8.2.8.4 Provide a contingency plan for bore refusal and a plan for the containment and clean-up of any inadvertent releases of drilling fluid (e.g. a frac-out).
- 8.2.9 For wetlands that will be plowed, resulting in a discharge of fill (soil mixing and/or soil rutting), provide the following:
 - 8.2.9.1 Provide details on the total disturbance area in wetland, including how total wetland disturbance was calculated.
 - 8.2.9.2 Duration and timing of the work in wetlands.
 - 8.2.9.3 How the wetlands will be restored to pre-existing conditions.

Note: Plowing through saturated or wet/soggy wetlands would likely result in soil mixing and rutting, and thus the plowing would then be 281.36 Wis. Stats. regulated activity.

- 8.2.10 For wetlands that will be crossed/accessed by vehicle/equipment resulting in a discharge of fill (soil mixing and/or soil rutting), provide the following:
 - 8.2.10.1 Provide details on the total disturbance area in wetland, including how total wetland disturbance was calculated.
 - 8.2.10.2 Duration and timing of the work in wetlands.
 - 8.2.10.3 How the wetlands will be restored to pre-existing conditions.

Note: Vehicle/equipment access through saturated or wet/soggy wetlands would likely result in soil mixing and rutting, and thus the plowing would then be 281.36 Wis. Stats. regulated activity.

- 8.2.11 For wetland vegetation that will be cleared or cut for construction, provide the following:
 - 8.2.11.1 Justification for why wetland trees and shrubs are proposed to be cleared, and what construction activity the clearing is associated with (e.g. transmission line installation, off-ROW access road, staging area, etc.).
 - 8.2.11.2 The timing and duration of vegetation removal
 - 8.2.11.3 Describe the type of equipment that will be used, and if the vegetation removal will result in soil disturbance, including rutting and soil mixing.
 - 8.2.11.4 The type of wetland and type of vegetation to be cleared.

- 8.2.11.5 State if tree and shrubs that are removed will be allowed to regrow or be replanted, or if cleared areas will be kept free of trees and shrubs long-term.
- 8.2.11.6 Indicate the plan for handling and disposing of the debris (brush piles, tree trunks, wood chips, etc.) resulting from vegetation clearing in wetlands. State if debris would be removed from all wetlands to be cleared and disposed of in upland or other non-wetland locations.
 - 8.2.11.6.1 If debris is not proposed to be removed from all wetlands during clearing, explain why disposal in non-wetland areas is not feasible.
 - 8.2.11.6.2 If debris is not proposed to be removed from all wetlands during clearing, state how debris left in wetland will not restrict re-vegetation growth, will not alter surface elevations, and will not obstruct water flow. If wood chips will be placed in wetlands, state the depth (in inches) proposed.
 - 8.2.11.6.3 If debris is not proposed to be removed from all wetlands during clearing, state how these wetlands will be monitored to ensure re-vegetation growth, surface elevations, and water flow are not impacted, and that the proposed depth of chip cover is adhered to. If re-vegetation growth becomes impeded, surface elevations become altered, and/or water flow becomes obstructed from wood chip placement, state how these impacts will be addressed and corrected, if they should occur.
- 8.2.12 Provide the methods to be used for avoiding, minimizing, and mitigating construction impacts in and near wetlands. This discussion should include, but is not limited to, how wetland impact was first avoided then minimized by shifting the project boundary, relocating structures and/or fill outside of wetland, minimizing construction ROW through wetland, by installation methods (i.e. directional bore versus open-cut trenching, soil segregation during trenching, etc.), equipment crossing methods (i.e. use of construction matting, frozen ground conditions, etc.), sediment and erosion controls, invasive species protocols for equipment, etc. Additional guidance to prepare this discussion can be found here: <https://widnr.widen.net/s/fxdd8pmqgg/paasupp3utility>.
- 8.2.13 Indicate if an environmental monitor will be employed during project construction and restoration activities. If so, describe the monitors roles and responsibilities, frequency of visits, etc.
- 8.2.14 Describe how all wetlands within the project area will be restored. This discussion should include details on the seeding plan, maintenance and monitoring, restoring elevations and soil profiles, restoring wetland hydrology, etc.

8.3 Mapping Wetland and Waterway Locations, Impacts, and Crossings

Provide the following map sets, as described below, for each proposed and alternative sites/routes (if applicable) and their associated components. Each map set should include an overview or index page that includes page extents for the corresponding smaller-scale map pages within the

remainder of the map set. The smaller-scale map pages should show the project and resources in greater detail, include pages numbers to reference to the overview page, and have consistent scales throughout the pages.

8.3.1 Aerial Map Imagery showing the following:

- Delineated wetlands, labeled with the feature unique ID,
- Wisconsin Wetland Inventory (“Mapped Wetlands” SWDV layer) and hydric soils (“Wetland Indicators & Soils” SWDV layer), if a delineation was not conducted,
- DNR-mapped waterways, labeled with the feature unique ID,
- Field identified waterways, labeled with the feature unique ID,
- Vehicle crossing method of waterways for both permanent and temporary access, labeled by the crossing method (i.e. TCSB, installation of culvert, installation of bridge, installation of ford, use of existing culvert, use of existing bridge, use of existing ford, driving on the bed),
- ROW,
- Locations of temporary and permanent structures,
- Transmission line route,
- Segment names and nodes,
- Access paths (both on and off-ROW). Off-ROW access roads should be labeled with an identifying name or number,
- Staging areas, laydowns, and any temporary workspaces, such as crane pads(labeled with identifying name or number),
- Footprint of new substations and/or footprint of existing substations to be expanded, and associated driveways and permanent storm water management features to be built (ponds, swales, etc.),
- Placement of construction matting in wetlands,
- Underground line installation only: symbolize the line route to indicate installation method (directional bore, open-cut trench, plow etc.). This includes the excavation areas in wetlands (i.e. bore pits, open-cut trench, etc.), and;
- Locations of any other waterway or wetland impacting activity regulated under Wis. Stats. Chapter 30 and 281.36.

8.3.2 A map showing which method(s) were used to identify wetland presence and boundaries within the project area (i.e. wetland field delineation, wetland field determination, conservative desktop review).

9. Endangered, Threatened, Special Concern Species, and Natural Communities

In the *Introduction*, page *ii* of this document, additional details are provided on how to perform an Endangered Resources (ER) screening and about performing habitat assessments, if required.

- 9.1 Provide a copy of the completed ER screening and all supporting materials for all project areas, including all applicable components such as off-ROW access routes, staging areas, new substations, and expansion of existing substations.
- 9.2 Submit results from habitat assessments and biological surveys for the proposed project, if completed or if required to be completed per the ER screening. If surveys or assessments are required to be completed prior to construction but have not yet been completed, state when these surveys will be completed. Results from additional surveys conducted during the review of the application, prior to the start of construction, and/or post-construction must be submitted as they are completed.
- 9.3 For all project facilities and areas impacted by construction, discuss potential impacts to rare species as identified in the completed ER screening and/or field assessments.
 - 9.3.1 For any required follow-up actions that must be taken to comply with endangered species law, discuss how each required action would affect the proposed project, and how the required action would be complied with.
 - 9.3.2 For any recommended follow-up actions to help conserve Wisconsin's rare species and natural communities, discuss if and how any recommended actions would be incorporated into the proposed project.
 - 9.3.3 If any recommended follow-up actions are not planned to be incorporated into project construction or operation, state the reasons why.
- 9.4 Provide communications with DNR and U.S. Fish and Wildlife Service, as applicable.

10. DNR Information regarding Erosion Control and Storm Water Management Plans (not PSC requirements)

This section serves as guidance for development of Erosion Control and Storm Water Management Plans associated with DNR NR 216 Permits. These are not requirements for a PSC CPCN or CA.

10.1 Erosion Control and Storm Water Management Plans

DNR requires a detailed description of temporary and permanent erosion and sediment control measures to be utilized during and after construction of the project.

If the project would involve one or more acres of land disturbance, the applicant's request for permits under Wis. Stat. § 30.025 must identify the need for coverage under the [Construction Site Storm Water Runoff General Permit \[PDF\]](#) from DNR. The permit application itself must be submitted through DNR's electronic Water Permits system after the PSC order. This permit may also authorize construction site dewatering discharges under certain conditions.

The Storm Water Permit and Wis. Admin. Code ch. NR 216 require a site-specific Erosion Control Plan, Site Map, and Storm Water Management Plan. The permittee would be required to implement and maintain, as appropriate, all erosion and sediment control practices identified in the plans from the start of land disturbance until final stabilization of the site. Final stabilization means that all land-disturbing construction activities at the construction site have been completed and that a uniform perennial vegetative cover has been established with a density of at least 70 percent of the cover for

the unpaved areas and areas not covered by permanent structures or equivalent stabilization measures.

The Erosion Control Plan, Site Map, Storm Water Management Plan, and any supporting documentation (such as modeling input/output, design specifications, geotech/soil report, site photos, etc.) must be submitted with the Storm Water Permit application through the DNR's ePermitting system.

Erosion Control Plan - See Wis. Admin. Code § NR 216.46 for details regarding information required in the Erosion Control Plan as part of a complete permit application. Sections include:

- Site-specific plans.
- Compliance with construction performance standards in Wis. Admin. Code § NR 151.11.
- Details about the site and the project.
- List and schedule of construction activities.
- Site map(s) with site, project, and erosion and sediment control details.
- Description of temporary and permanent erosion and sediment controls.
- Compliance with material management, velocity dissipation, and inspection schedule requirements.

Storm Water Management Plan – See Wis. Admin. Code § NR 216.47 for details regarding information required in the Storm Water Management Plan as part of a complete permit application. Sections include:

- Compliance with applicable post-construction performance standards in Wis. Admin. Code § NR 151.121 through § NR 151.128.
- Description of permanent storm water management practices at the site and technical rationale.
- Groundwater and bedrock information if using permanent infiltration devices.
- Separation distances of permanent storm water management practices from wells.
- Long-term maintenance agreement for site vegetation and any other permanent storm water management features.

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