APPLICATION FILING REQUIREMENTS ELECTRIC GENERATION PROJECTS*

PUBLIC SERVICE COMMISSION OF WISCONSIN
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

* Different filing requirements apply to wind and solar generation plants.

Table of Contents

Introduction –

Joint PSC/DNR Pre-Application Consultation Process ..... **i**

DNR Joint Application Needs ..... **ii**

Permits and Application Requirements ii

Engineering Plan ii

Endangered Resources ii

Wetlands and Waterways iii

Application Formats ..... **iv**

Application Tables and Attachments or Appendices associated with PDF Files iv

Sample Mailing List Table iv

Geographical Information System Submissions v

Photographic and Line Drawing Submissions v

Application Size ..... **v**

Confidential and CEII Materials ..... **vi**

PSC Electronic Records Filing (ERF) System ..... **vi**

Application Completeness ..... **vi**

Step 1 – Initial CPCN Applications vii

Step 2 – After CPCN Application Is Deemed Complete vii

Public Copies of CPCN Applications ..... **viii**

Public Copies of CA Applications ..... **viii**

Contact for Questions ..... **ix**

Application Filing Requirements **1**

Electric Generation Facilities **1**

1. Project Proposal **1**

1.1 Project Facilities 1

1.2 Project Costs 2

1.3 Project Sites 2

1.4 Site Selection Process 2

1.5 Permits and Approvals 3

1.6 General Construction Schedule 3

1.7 Mailing Lists 4

1.8 Project Maps and Illustrations 4

1.9 ESRI ArcGIS Data Files (see *Introduction, page iv*) 6

2. Project Need Analyses **6**

2.1 Project Need 6
2.2 Discuss Energy Alternatives 8
2.3 Wholesale Market Competition 8
2.4 Excess Heat or Steam Energy 8
3. Project Engineering 8
3.1 Facilities 8
3.2 Fuel Supply 9
3.3 Water – Supply, Storage, Use, Discharge 10
3.4 Steam 12
3.5 Air Pollution Emissions Control Equipment 12
3.6 Solid, Oil, or Hazardous Wastes, including Ash 12
3.7 Electricity 13
4. Project Costs 14
4.1 Capital and Construction Costs 14
4.2 Proposed Method for Financing the Project 14
4.3 Forecasted Costs 14
4.4 Transmission Costs, if Applicable 15
5. Natural Resources Impacts 15
5.1 Mapping Requirement 15
5.2 History of Site and Grounds 15
5.3 Constructions Areas 15
5.4 Geology 15
5.5 Topography 16
5.6 Soils 16
5.7 Archaeological and Historic Resources 16
5.8 Existing Land Cover and Land Use (non-agricultural) 17
5.9 Invasive Species 18
5.10 Hydrology 18
5.11 Air Quality 22
5.12 Solid Waste Handling and Disposal 23
6. Community Impacts 24
6.1 Community Resource Maps and Imagery (see Section 1.8) 24
6.2 Current Land Ownership 24
6.3 Local Zoning 24
6.4 Land Use Plans 24
6.5 Agriculture 24

6.6 Conservation Easements and Programs 25
6.7 Communication with Potentially Affected Public 26
6.8 Demographics 26
6.9 Local Government Impacts 26
6.10 Workforce 27
6.11 Traffic, Roads, Railroads 27
6.12 Noise 28
6.13 Odors 28
6.14 Fogging and Icing 28
6.15 Residential and Urban Communities 28
6.16 Visual Impacts 29
6.17 Parks and Recreation Areas 29
6.18 Airports 29
6.19 Communication Towers 29
7. Waterway /Wetland Permitting Activities 30
7.1 Waterway Activities 30
7.2 Wetland Activities 33
7.3 Mapping Wetland and Waterway Locations, Impacts, and Crossings 36
8 Endangered, Threatened, Special Concern Species, and Natural Communities 37
8.1 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. 37
8.2 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. 37
8.3 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. 38
8.4 Provide communications with DNR and U.S. Fish and Wildlife Service, as applicable. 38
9. DNR Information regarding Erosion Control and Storm Water Management Plans (not PSC requirements) 38
9.1 Erosion Control and Storm Water Management Plans 38

Application Filing Requirements Electric Generation Projects

This document lists information required for a complete application to construct a new electric generation facility that requires either a Certificate of Authority (CA) under Wis. Stat. § 196.49 or a Certificate of Public Convenience and Necessity (CPCN) under Wis. Stat. § 196.491 from the Public Service Commission of Wisconsin (PSC).

The CPCN and CA are PSC certifications, but the applicant might also need to request certain Wisconsin Department of Natural Resource (DNR) permits. This document therefore also refers to information required for permits from the DNR under Wis. Stat. § 30.025.

Overall, the filing requirements are intended to organize information consistently and to facilitate PSC and DNR application reviews.

Utility applications must include an analysis of project need and costs. Other types of applicants may not be required to provide this information. Consult with PSC staff during the pre-application consultations to verify which filing requirements apply to a specific project.

Joint PSC/DNR Pre-Application Consultation Process

An applicant must consult with both the PSC and DNR prior to submitting its application (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 will likely require water, air, and possibly solid waste permits from the DNR. During the pre-consultation process, the PSC docket coordinator will identify the number of paper copies of these DNR applications the PSC 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
- Site alternatives and project boundary

- 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 complete application for the project review to proceed. The applicant must consult DNR staff to ensure that particular requirements for the DNR project review are met.

Permits and Application Requirements

DNR permits required for the project will be identified during the pre-application process and with the help of the applicant's Engineering Plan, described in the next subsection.

Under Wis. Stat. § 30.025, the two agencies must follow a common review timetable if wetlands 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.

Engineering Plan

An Engineering Plan required under Wis. Stat. §196.491(3)(a)3 must be submitted to the DNR before a CPCN application may be submitted to the PSC. The Plan must:

- Show the proposed facility locations.
- Describe the facilities, including major components that could have significant air, water, or solid waste pollution potential.
- Briefly describe the anticipated effects of the proposed facilities on air quality, water quality, wetlands, solid waste disposal capacity, and other natural resources.

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 Geographical Information Systems (GIS) data[1], as well as the wetland and waterway maps, that are part of the project application.

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 (See Section 5.14). 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

[1] Only shapefiles or geodatabase including feature classes will be accepted.

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 and Attachments or Appendices associated with PDF Files

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 not be submitted to the Electronic Records Filing (ERF) system. Rather, submit mailing lists to the docket's case coordinator via disc or Secure File Transfer Protocol (SFTP) site[2].

The mailing lists must be submitted in Microsoft Excel, 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[3], 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 known and not more than one year out-of-date.
- Mailing list(s) should be possible to cross-reference 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 one mile 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	

[2] Contact the PSC Case Coordinator for instructions.
[3] See section 1.7.4 of this AFR for the specifications of 'project area' for property owner/resident mailing list

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.

Geographical Information System Submissions

GIS data files are not compatible with ERF and must be submitted to the docket's case coordinator via disc or SFTP site[4]. GIS data files must be submitted in a format that is compatible with the current version of ArcGIS to both PSC and DNR staff. Only shapefiles or a geodatabase including feature classes will be accepted. Data file names should be descriptive of the contents.

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

- GIS data[5] used to produce all maps submitted as part of the application as detailed in Section 1.8.
- 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.
- Map files in ESRI ArcGIS *.mxd or *.aprx format for all GIS maps in the application.

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

Provide separate appendix on ERF with cover letter documenting that GIS data was delivered to PSC electronically.

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.

---

[4] Contact the PSC Case Coordinator for instructions.
[5] Shapefiles or a geodatabase ONLY! Do NOT provide map files (e.g. *.mxd, *.aprx, etc.) or aerial imagery.

- 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. Confidential project documents, such as ER and cultural resource documents, must be submitted confidentially to both agencies. Submit confidential materials in compliance with the confidential materials handling procedures of each agency.

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 Records 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. Both the initial application and the complete application must be submitted using the ERF system. Items submitted in native formats, such as ESRI ArcGIS data, Microsoft Excel tables, Microsoft Word versions, modeling, etc. should be documented in a letter filed on ERF.

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

Application Completeness

For CPCNs, PSC and DNR staff will examine the application during a 30-day completeness review period as required under Wis. Stat. §196.491(3)(a)2. The applicant will be notified if an application is deemed complete by the end of the 30-day period. If the application is found to be incomplete, PSC will send the applicant a letter identifying the deficiencies. The applicant may then submit revised or supplemented application materials to the PSC and DNR for a new 30-day application completeness review. There is no statutory time limit for an applicant to submit the revised or supplemental materials in order to remedy identified deficiencies.

Applicants should be aware that complete applications rarely answer all the questions that the PSC and DNR must address. It is likely that applicants will be called upon to provide additional information and data to support their applications throughout the review process. Applicants will be expected to respond to all staff inquiries made subsequent to a determination of completeness in a timely, complete, and accurate manner.

Filing the Application

For CA applications, check with PSC case coordinator and 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.

For CPCN applications, a two-step process must be followed.

Step 1 – Initial CPCN Applications

- Send to the PSC docket coordinator and DNR Office of Energy project manager the number of paper copies of the non-confidential portion of the application agreed upon by PSC staff and the applicant plus one paper copy of each of the required DNR water, waste management, and air permit applications.
- Coordinate with PSC[6] and DNR[7] to submit the following:
    - The entire non-confidential portion of the application in Adobe Acrobat (*.pdf) format.
    - Microsoft Word versions of the text portion of the application.
    - Microsoft Excel versions of tables.
    - ESRI ArcGIS data[8] with any corresponding layer files (*.lyr) for all maps submitted in the application and/or requested in these filing requirements.[9,10,11]
- File with PSC Records Management, using confidential material handling procedures, electronic versions of confidential portions of the application including spreadsheets, NHI unredacted materials, etc., as described in the PSC ERF Filing Policy/Procedures guide.[12]

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

Step 2 – After CPCN Application Is Deemed Complete

The PSC may require as many as five complete paper applications. Again, check with the PSC case coordinator to verify the appropriate number of paper applications. Applicants are encouraged to reuse applicable portions of the initial applications in order to create the required number of complete paper applications. Upon the PSC declaring the application to be complete, submit the following:

---

[6] Contact the PSC Case Coordinator of the docket for instructions.
[7] Contact the Water Reg/Zoning Specialist at DNR Office of Energy assigned to your application for instructions.
[8] Only shapefiles or geodatabase with feature classes will be accepted.
[9] Consult Section 1.8 of this document for a detailed description on how this data should be organized.
[10] Provide separate appendix on ERF with cover letter documenting that GIS data was delivered to PSC.
[11] Aerial imagery and ArcGIS map files (e.g. *.mxd, *.aprx, etc.) are no longer accepted. Do NOT submit aerial imagery files or ArcGIS map files.
[12] Contact PSC Records Management Unit at pscrecordsmail@wisconsin.gov with any questions on filing confidential materials.

- Send to the PSC case coordinator and DNR Office of Energy project manager, paper versions of the non-confidential portions of the complete application. Again, the PSC encourages the reuse of unchanged portions of the initial applications.
- Send to the PSC case coordinator and DNR Office of Energy project manager, paper copies of the confidential portions of the application. Do NOT send paper copies of CEII material.
- Coordinate with PSC[3] and DNR[4] to electronically submit the following:
    - The non-confidential portion of the complete application in Adobe Acrobat (*.pdf) format.
    - Microsoft Word versions of the text portion of the complete application.
    - Microsoft Excel versions of the PSC- and DNR-required tables.
    - Any updated GIS data or modeling data.
- Using confidential material handling procedures, as described in the ERF Filing Policy/Procedure Guide, file with PSC Records Management, confidential appendices, spreadsheets, etc.

Post to ERF the revised complete application (confidential and non-confidential).

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 CPCN Applications

Electronic copies of the initial application and of the complete application must be sent to the clerks of municipalities and towns in the project area, and to the main public libraries that serve the project area (Wis. Stat. § 196.491 and Wis. Admin. Code § PSC 111.51).

Within 10 days of filing a CPCN application, the Commission shall send electronic copies of the application to municipalities, towns, and libraries. At the request of a clerk or library, a paper copy of the application must be sent. Under Wis. Admin. Code § PSC 111.51, the Commission may fulfill this obligation by directing the applicant to conduct the mailings. In this case, proof of delivery will be required. The application must be accompanied by an approved statement on the initial page of the electronic document explaining that this is an initial application and that it may differ from the application that the Commission deems complete.

Within 10 days after the Commission determines that an application is complete or the application is considered to be complete, the Commission must send an electronic copy of the complete application to municipalities, towns, and libraries. At the request of a clerk or library, a paper copy of the application must be sent. The Commission may fulfill this obligation by directing the applicant to conduct the mailings. In this case, proof of delivery is required.

Public Copies of CA Applications

There are no requirements for distributing copies of the 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

Electric Generation Facilities

A complete 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.

Utility applications must include an analysis of project need and costs. Other types of applicants may not be required to provide this information. Consult with PSC staff during the pre-application consultations to verify which filing requirements apply to a specific project.

If substation or transmission construction is part of the application, the substation and transmission application materials may be presented within the related sections of the larger application or as separate sections, provided the organization of the application remains clear and easy-to-understand. There are separate application filing requirements for substations and transmission line construction on the PSC website.

Questions about the applicability of specific information requirements and the organization of the application will be discussed with PSC and DNR staff during pre-application consultation.

1. Project Proposal

1.1. Project Facilities

1.1.1. Identify the corporate entity or entities that would own and/or operate the proposed plant(s) including their names, addresses, and percent of ownership (Wis. Admin. Code § PSC 111.53(1)(a)4).

1.1.2. Provide a list of all cities, villages, and townships and their respective counties that would be directly affected by the proposed facilities or their connecting utility or railroad routes.

1.1.3. Provide contractual agreements between developer and utilities to construct, finance, lease, use or own facilities.

1.1.4. Identify the type of power plant proposed (technology and major components required) including any planned additions, possible expansions or other modifications that have been evaluated for the future.

1.1.5. Identify any potential for secondary industrial or commercial development that may seek to utilize excess heat or steam energy from the project. Include both the long-term potential as well as any short-term plans for future steam customers.

1.1.6. Identify each proposed generating unit, including its type, size, and fuel. (Wis. Admin. Code § PSC 111.53(1)(a)1 and 2).

1.1.7. Specify the facility's estimated capacity factors, for each generating unit and the basis for the estimate (Wis. Admin. Code § PSC 111.53(1)(a)6).

1.1.8. Identify pipelines, truck/train loading and unloading areas, and temporary or permanent on-site storage for:

1.1.8.1. Fuel supply – pipeline, train, truck, etc. plus on-site storage tanks or piles.

1.1.8.2. Water supply and discharge.

1.1.8.3. Steam delivery.

1.1.8.4. Ash or other waste disposal – pipeline, train, truck, etc. plus on-site storage tanks or piles.

1.1.9. Identify any new or modified electric transmission lines and other electric transmission facilities that might be needed. Include information on who would build the transmission line and interconnection. Describe the specific interconnection queue process the project is participating in.

1.1.9.1. If applicable, provide any associated MISO interconnection studies such as Definitive Planning Phase, Facility Interconnection Agreements, and any signed generator interconnection agreement

1.1.9.2. If applicable, provide the associated MISO interconnection queue position number

1.1.10. Provide an estimate of the expected life span for the power plant.

1.1.11. Describe how the facility would be decommissioned at the end of its life span. Describe expected decommissioning actions and timelines.

1.1.11.1. Provide an estimate of the cost of and source of funding for decommissioning. State whether financial security would be provided to cover decommissioning costs, including the amount of time it would be provided.

1.1.11.2. State how the start of decommissioning would be decided, including a description of what constitutes site abandonment.

1.2. Project Costs

Provide the anticipated overall costs for the proposed project (see Section 4.0).

1.3. Project Sites

Describe and provide in maps the following items that are applicable to the proposed project.

1.3.1. Locations and footprints of the Proposed site and Alternative site(s).

1.3.2. General geology, topography, land cover, and land use of each site.

1.3.3. Any special or unique natural or cultural resources.

1.3.4. Adjacent areas of residential concentrations.

1.3.5. Existing area utilities, including electric transmission, natural gas, and water.

1.3.6. Expected connecting utilities.

1.3.7. Railroad lines and potential connections to them.

1.4. Site Selection Process

Describe the site screening and selection process used to determine the Proposed site and Alternative site(s).

1.4.1. List individual factors or site characteristics used in site selection.
1.4.2. Provide information on how individual factors and site characteristics were weighted for your analysis and why specific weights were chosen.
1.4.3. Explain in detail how brownfields were considered in the selection of sites to propose (Wis. Stat § 196.491(3)(d)8).
1.4.4. Provide a list of all sites reviewed with weighted scores for each siting factor or characteristic, including the brownfield requirement, used in the analysis.
1.4.5. Provide a narrative describing and justifying why the final site(s) was/were chosen.
1.4.6. If two alternative sites are different configurations on the same parcel of land, explain and justify why they are the alternatives selected for the proposal.

1.5. Permits and Approvals

1.5.1. Provide copies of all official correspondence between the applicant and all state, federal, or local government agencies as described in the *Introduction, page v.*[13]
1.5.2. Provide a list of all state and federal permits/approvals that would be required for this project and their status.
1.5.3. Provide a list of all local permits or approvals that apply to the proposed project, including the local agency, contact information, and status of each permit or approval.
1.5.4. Identify railroad facilities that could be affected by the project.
1.5.4.1. Identify railroad facilities by location and owner that could be affected by the project.
1.5.4.2. Provide documentation, if possible, that the proposed construction is acceptable to the company.
1.5.5. Identify utility pipelines that could be affected by the project.
1.5.5.1. Identify the owners of the utility pipeline facilities.
1.5.5.2. Provide documentation, if possible, that the proposed construction is acceptable to the companies.

1.6. General Construction Schedule

Provide the anticipated general construction schedule.

1.6.1. Provide documentation for all discussions with pipeline operators pertaining to maintaining safety and reliability of the pipeline during construction.
1.6.2. Provide a description of all major construction activities including any temporary roads, dewatering wells, stream enclosures or re-routing, or other facilities or landscape changes required during construction.
1.6.3. Identify any potential seasonal or regulatory construction constraints by facility and major component.
1.6.4. Identify all critical path items.
1.6.5. Generally, discuss any generation or transmission outage constraints that may have to be accommodated. Include any documentation pertaining to discussions with MISO or generation facility owners about such constraints.

[13] 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.

1.7. Mailing Lists

1.7.1. 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*.

1.7.2. 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.).

1.7.3. Provide a list of libraries that the application will be mailed to.

1.7.4. Mailing lists must include:

1.7.4.1. All property owners within one mile of the Proposed and Alternative power plant 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.

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

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

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

1.7.4.5. Applicable state and federal agencies.

1.7.4.6. 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).

1.8. Project Maps and Illustrations

Provide project maps, figures, illustrations, etc. that 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 range of required maps/illustrations and whether they should be submitted electronically or in paper form will be discussed during the pre-application consultations.

- **Aerial Imagery**

  Must be the most recent aerial available, not more than three years old[14]. Encompass at least one mile beyond generation site boundaries and all connecting facilities.
- **Facilities Data**

  Must illustrate at least one-half mile from the project boundary. Project boundaries will be defined at pre-application consultations.
  - Proposed and Alternative sites
  - Proposed and Alternative facilities and footprints
  - Proposed and Alternative utility connections
  - Proposed and Alternative access roads (temporary and permanent)
  - Any necessary new railroads and barge docks
  - All temporary laydown, material storage areas, and construction parking areas
- **Environmental Data**
  - Rivers, lakes, and other waterways
  - Outstanding or Exceptional Waterways, Trout Streams, Wild or Scenic Rivers
  - Field-delineated wetlands and Wisconsin Wetland Inventory wetlands
  - Soils and hydric soils
  - Geology
  - NHI rare species occurrences[15] (confidential)
  - USGS topographic maps
  - Floodplains (Flood Insurance Rate Map data)
- **Parcel Data**

  Must include properties within one-half mile of the project boundary.
  - Private parcels with ownership information
  - Public properties (symbolized differently than private properties)
  - Tribal or other types of properties
  - Political subdivision boundaries
  - Township, range, section
- **Land Use**

  Must include properties within one-half mile of the project boundary.
  - Land use (e.g., agriculture, recreation) / land cover (e.g. forest, grasslands)
  - Zoning within one-half mile of the sites
  - Active mines and quarries
  - Sensitive sites within one-half mile of the sites (e.g. daycare centers, schools, hospitals, etc.)
  - Airports, airstrips (public and private)
  - Communication towers
  - Recreation areas and trails

[14] Aerial imagery raster data is no longer required to be submitted with GIS data. Do NOT submit aerial imagery raster data.
[15] NHI data is no longer required to be submitted with GIS data. Do NOT submit NHI GIS data.

- **Utility/Infrastructure Data**

  Must include properties within one-half mile of the project boundary.
  - Existing transmission, pipelines, and other applicable infrastructure
  - Existing distribution lines that would be modified or relocated due to the proposed project
  - Roads, highways, interstates
  - Railroads
  - Applicable infrastructure ROWs (*e.g.*, WisDOT, pipeline, electric distribution, electric transmission, railroad, trail)
- **DNR-required information**

  Include information such as locations of possible Chapter 30 activities (*e.g.*, grading, riprap), temporary clear span bridges, pole locations and ROW, Wisconsin Wetland Inventory, wetland/waterway field data (correlatable to DNR tables), hydric soils, etc.

1.9. ESRI ArcGIS Data Files (see *Introduction, page iv*)

1.9.1. Use a version of ESRI ArcGIS that is compatible with the most current version of ESRI Arc GIS to support all maps and information submitted as part of the application.

1.9.2. 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.

2. Project Need Analyses

2.1. Project Need

Describe the purpose/need for the project with supporting data, including an energy efficiency analysis.

2.1.1. Provide the annual peak demand and total energy forecast for the next 20 to 25 years. Provide a description of the demand and energy profile. Any changes in the peak demand and total energy profile over the forecast period should be fully explained.

2.1.2. (Utilities Only) The generation capacity expansion modeling should be performed in a software program like EGEAS or similar software and include a 30-year extension period. Coordinate with PSC[16] to electronically submit the the generation capacity expansion modeling data set(s). In addition to filing the generation capacity expansion modeling data set(s), a document describing the filing and making any necessary request for confidential treatment should be filed on the Commission's ERF system[17].

2.1.2.1. Describe the 25-year optimal generation expansion plan for all of the entities that are part of the generation plan.

2.1.2.2. If discussing the impact of the project on the wholesale market, the modeling should be done using PROMOD or similar software.

[16] Contact the PSC Case Coordinator at for instructions.

[17] Contact PSC Records Management staff at PSCRecordsMail@wisconsin.gov for specific filing requirements.

2.1.3. Describe how the availability of purchase power was analyzed. Describe how market purchases were analyzed and why they were rejected as alternatives.

2.1.4. Identify plant retirements forecast over the next 10 years.

2.1.4.1. Provide Attachment Y and Y-2 retirement or economic suspension studies performed by MISO.

2.1.4.2. Provide the capacity position and planning reserve margin forecast for the next 10 years

2.1.5. Describe how the existing and expected applications for generation from Independent Power Producers (IPPs) have been factored into your forecast.

2.1.6. Conduct an energy efficiency analysis. The analysis should include:

2.1.6.1. A description of the existing services available to customers, including any demand response programs or voluntary energy efficiency programs operated by the utility;

2.1.6.2. An indication of the amount of additional energy efficiency and demand response needed to reduce, alter, or eliminate the need for the project. This analysis should clearly identify and distinguish the amount of energy efficiency and demand response assumed to be achieved through Focus on Energy and utility programs from the additional energy efficiency and demand response needed to affect the project.

2.1.6.3. An analysis identifying the feasibility of achieving the amount of energy efficiency and demand response needed to reduce, alter, or eliminate the need for the project. This analysis should take into account:

2.1.6.3.1. A clear definition of the energy efficiency and demand response programming options considered by the utility, and the potential savings, defined as the reduction in energy and capacity associated with the programs, that are available through those options;

2.1.6.3.2. The cost-effectiveness of available energy efficiency and demand response options, relative to the costs per unit of the proposed project;

2.1.6.3.3. The total savings required to reduce, alter, or eliminate the need for the project, and the corresponding financial investment required to achieve those savings; and

2.1.6.3.4. The utility's ability to implement new or expanded programs to achieve available savings.

2.1.6.4. Describe how energy efficiency or demand response have been incorporated into the expansion planning model, distinguishing between modeled as included in the load forecasts or as a selectable alternative.

Provide an integrated analysis with the generation expansion planning modeling conducted under Section 2.1.1. It may be appropriate for analysis to address multiple different scenarios that distinguish between options for reducing, altering, and eliminating the project need.

2.2. Discuss Energy Alternatives

2.2.1. Describe supply alternatives to this proposal that were considered.
2.2.2. Present the justification for choosing the proposed options.
2.2.3. If the project is not a cogeneration project, explain why it is not.
2.2.4. Discuss a no-build alternative and its potential impact on electrical supply and environmental impact.
2.2.5. Summarize the analysis on load reduction (conservation and energy efficiency) as an alternative (Wis. Admin. Code § PSC 111.53(1)(d)1.).
2.2.6. Provide analyses that examines the proposed project's cost-effectiveness, technical feasibility and environmental soundness in meeting the energy demand with respect to the following energy priorities (Wis. Stat. §§ 1.12(4) and 196.025(1)(ar)):
- 2.2.6.1. Noncombustible renewable energy resources
  - 2.2.6.1.1. Advanced nuclear energy using a reactor design or amended reactor design approved after December 31, 2010, by the U.S. Nuclear Regulatory Commission
- 2.2.6.2. Combustible renewable energy resources
- 2.2.6.3. Nonrenewable combustible energy resources in the following order listed:
  - 2.2.6.3.1. Natural gas
  - 2.2.6.3.2. Oil or coal with sulfur content of less than 1 percent
  - 2.2.6.3.3. All other carbon-based fuels.

2.3. Wholesale Market Competition

Describe the potential effect of the proposed project on wholesale market competition. Provide an analysis of the Herfindahl-Hirschman Index market concentration impact of the proposed project. Discuss whether the cost of energy from the proposed plant would lower or increase the cost of energy and if so, how. Also discuss what the impact of the additional generation would have on the price of energy.

2.4. Excess Heat or Steam Energy

Identify uses for excess heat or steam energy from the project, including any potential for secondary industrial or commercial development. Include both the long-term potential as well as any short-term plans for future steam customers.

3. Project Engineering

3.1. Facilities

3.1.1. Describe the power plant proposed (technology and major components required). Support with diagrams, drawings, and simulations, as necessary. Describe separately and to the same detail any and all supporting facilities related to fuel delivery and unloading, conveyors, crushers and processors, cooling water systems, water intake and filtering, water discharge, ash loading, and air pollution control.
3.1.2. Describe the proposed additions, possible expansions or other modifications that have been evaluated for the future. Describe the purpose for each. Support with similar graphics to those of Section 3.1.1.

3.1.3. Estimate the expected hours of operation and capacity on a daily, weekly, seasonal, and annual basis. (Wis. Admin. § PSC 111.53(1)(a)(3)).
Provide an estimated duration and frequency of maintenance outages projected for the proposed project on an annual basis, and the amount of expected energy not produced during such outages.

3.1.4. Provide the facilities' physical dimensions and expected appearance.
- 3.1.4.1. Provide detailed scale drawings and/or simulations of all the Proposed and Alternative plant facilities for the sites and their footprints.
- 3.1.4.2. Photo simulations are desirable. (In order to be certain that any photo simulations provided in an application will be useful, please consult with PSC staff before preparing and submitting photos.)

3.1.5. Provide the expected operating characteristics for the project.
- 3.1.5.1. Heat rate
- 3.1.5.2. Equivalent availability and capacity factors on a seasonal basis
- 3.1.5.3. Auxiliary power usage

3.1.6. Provide heat balances for the following operating modes:
- 3.1.6.1. Minimum load operation
- 3.1.6.2. Half load operation
- 3.1.6.3. Rated load operation
- 3.1.6.4. Maximum capacity operation

3.1.7. Describe the proposed project black start capability and necessary minimum requirements, if applicable.

3.2. Fuel Supply

Describe the proposed fuel supply (Wis. Adm. Code § PSC 111.53(1)(a)(5)) if the energy is based on the combustion of fuel (*e.g.* coal, natural gas, biomass). Provide the appropriate information under this section for all types of proposed fuels.

3.2.1. Identify and describe the types of proposed primary and backup fuels.
3.2.2. Discuss the likely fuel source(s) and its (their) availability.
3.2.3. Estimate or establish the ranges of each potential fuel's heating value and chemical analysis.
3.2.4. Describe the proposed fuel transport and delivery systems.
3.2.5. ***If the fuel is coal:***
- 3.2.5.1. Describe the size and types of vehicles that will be used to deliver the coal to the operating plant, including the source locations, off-site storage and processing if applicable, and routes to on-site coal handling facilities.
- 3.2.5.2. Describe the process sequence of each type of fuel delivery.
- 3.2.5.3. Detail the frequency of anticipated deliveries and the quantities of fuel.
- 3.2.5.4. Discuss any modifications of roads, railroads, and any other facilities necessary to handle the delivery of the fuel.
- 3.2.5.5. Describe and diagram on-site fuel handling from delivery through storage, conveyance, and end use.

3.2.6. ***If the fuel is natural gas:***

3.2.6.1. Identify the pipeline supplier(s).

3.2.6.2. How much of the fuel supply is expected to be:

3.2.6.2.1. Firm

3.2.6.2.2. Secondary firm

3.2.6.2.3. Interruptible.

3.2.6.3. Describe the size, lengths, routes, and other characteristics of the proposed natural gas pipeline(s) that would serve the project. (See PSC website for Natural Gas Pipeline Application Filing Requirements.)

3.2.6.4. Describe the size and type of vehicles that would be used to deliver the fuel to the plant if, for instance, it is to be delivered by truck or train from a landfill or manure digestion facility.

3.2.6.5. Describe and diagram on-site fuel handling from delivery through gate station or other metering through storage and end use.

3.2.6.6. Describe all interconnections needed with existing natural gas piping infrastructure.

3.2.6.7. Discuss how communications with natural gas pipeline operators will be addressed to ensure safety during any interconnection process.

3.2.7. ***If the fuel is biomass:***

3.2.7.1. Describe the size and types of vehicles that will be used to deliver fuels to the operating plant, including where possible the source locations, off-site processing or storage locations, and routes to on-site biomass handling facilities.

3.2.7.2. Describe the process sequence of each type of fuel delivery, including truck trailer dumping.

3.2.7.3. Detail the frequency of anticipated deliveries and the quantities of fuel.

3.2.7.4. Discuss any modifications of roads, railroads, any other facilities necessary to handle delivery of fuel.

3.2.7.5. Describe and diagram off-site (if applicable) and on-site fuel handling from delivery through processing, storage, conveyance, and end use.

3.2.8. Estimate and describe the location(s) and expected capacity of each on-site and off-site (if any) fuel storage.

3.2.9. Provide an estimate of the fuel quantity to be used, for the following modes in million BTU per hour:

3.2.9.1. Minimum load operation

3.2.9.2. Half load operation

3.2.9.3. Rated load operation

3.2.9.4. Maximum capacity operation.

3.3. Water – Supply, Storage, Use, Discharge

3.3.1. Supply

3.3.2. Describe the water supply.

3.3.2.1. Describe, diagram, and locate water supply sources for the plant.

3.3.2.2. Describe, diagram specifications, and map water supply pipelines for the plant site(s). (See PSC website for Type 2 Water Projects Application Filing Requirements.)

3.3.2.3. Describe any low-capacity wells (less than 70 gpm) and provide the following information.
- 3.3.2.3.1. Location
- 3.3.2.3.2. Size
- 3.3.2.3.3. Depth
- 3.3.2.3.4. Maximum pumping capacity

3.3.2.4. Describe any high-capacity wells (70 or more gpm) and provide the following information.
- 3.3.2.4.1. Location
- 3.3.2.4.2. Size
- 3.3.2.4.3. Depth
- 3.3.2.4.4. Maximum pumping capacity

3.3.3. Storage

3.3.4. Describe, diagram specifications, and locate on-site water storage tanks, including any for supply water, cooling water, demineralized water, water/oil mixtures for processing, etc.

3.3.5. Consumptive Use

3.3.6. Describe and quantify water use, including consumptive use.

3.3.6.1. Provide water balances for the operating modes listed below. In the analysis include:
- 3.3.6.1.1. Volume/rates into the cooling tower
- 3.3.6.1.2. Evaporative losses
- 3.3.6.1.3. Cooling tower blowdown
- 3.3.6.1.4. Power augmentation
- 3.3.6.1.5. Evaporative coolers
- 3.3.6.1.6. Demineralizer usage
- 3.3.6.1.7. Steam system blowdown
- 3.3.6.1.8. Potable water
- 3.3.6.1.9. Fire protection/control
- 3.3.6.1.10. Any other uses

3.3.6.2. Provide alternatives for reduced water consumption in cooling towers, including anti-fog cooling tower designs and all-dry cooling tower designs. Discuss the impact of the alternative(s) on:
- 3.3.6.2.1. Cooling water consumption
- 3.3.6.2.2. Capital costs
- 3.3.6.2.3. Energy output and efficiency
- 3.3.6.2.4. Visual impact
- 3.3.6.2.5. Noise

3.3.6.3. Provide flows in gallons per hour for the following operational modes:
- 3.3.6.3.1. Minimum load operation
- 3.3.6.3.2. Half load operation
- 3.3.6.3.3. Rated load operation
- 3.3.6.3.4. Maximum capacity operation
- 3.3.6.3.5. Maximum operation in summer (90°F)
- 3.3.6.3.6. Maximum operation at average temperature (44°F)

3.3.6.3.7. Maximum operation in winter (0°F)

3.3.6.3.8. If the plant is to burn coal or biomass, provide a separate water balance for ash handling, and describe any special Wisconsin Pollution Discharge Elimination System (WPDES) requirement resulting from ash handling water discharges (see Section 5.13.3).

3.3.7. Wastewater discharge

3.3.7.1. Describe, diagram specifications, and locate wastewater discharge outfall points for the plant.

3.3.7.2. Describe, diagram specifications, and map wastewater collection points and pathways/pipelines for the plant. (See Sections 5.10.3 and 5.10.4 for environmental wastewater and storm water requirements.)

3.3.7.3. Describe, diagram specifications, and map water/oil separation points for the plant and any other protections for removing oil products or byproducts from wastewater.

3.3.7.4. Note facilities in the plant design required by WPDES permit (see Section 5.10.3).

3.4. Steam

If steam is to be taken for industrial use outside the power producing portion of the plant, as in a cogeneration project, describe the following.

3.4.1. Describe in detail the steam delivery system from the steam generator to the end use. Include details on removal from the steam generator/boiler/turbine system and on transport by pipeline.

3.4.2. Describe in detail the size (length and diameter), composition, and operating pressure of the proposed steam lines, the steam customers or clients, their expected level(s) of steam purchase and use, and where and how the pipeline(s) would be built.

3.5. Air Pollution Emissions Control Equipment

3.5.1. Describe, diagram, and map locations on the power plant site for important pollution control equipment, including precipitators, baghouses or desulfurization or selective catalytic reduction equipment.

3.5.2. Discuss where and how the pollution control equipment is integrated into the power plant processes like exhaust gas flow.

3.5.3. Discuss the auxiliary power requirements for any pollution control equipment and how the loss of power would affect the unit's ability to operate.

3.6. Solid, Oil, or Hazardous Wastes, including Ash

Describe and diagram the production, composition, handling of waste products, including ash from fuel combustion.

3.6.1. Provide a list of all hazardous chemicals to be used on-site during (1) construction and during (2) operation. Include liquid fuel as well as other process chemicals. Include also spill containment and cleanup measures. Discuss Spill Prevention Control and Countermeasure and Risk Management planning for the listed hazardous chemicals.

3.6.2. Identify the location and capacity of each solid waste reuse/recycling and disposal facility.

3.6.3. ***If coal or solid biomass is a project fuel,*** provide the following.

3.6.3.1. Identify and diagram the location(s) and paths to on-site ash handling facilities.

3.6.3.2. Provide a separate water balance for ash handling, and describe any special WPDES requirements resulting from ash handling water discharges. See Section 3.3.3.4.

3.6.3.3. Identify, locate, and describe each on-site and off-site landfill that meets DNR requirements for receiving ash from the project.

3.6.3.4. Identify, locate, and describe each on-site landfill that is no longer in use, including old landfills that have never been certified and are "grandfathered."

3.6.3.5. Identify and describe how ash would be transported off site, including potential routes to be taken by trucks or rail transporting the ash and any off-site storage or processing between the plant and the final landfill or other destination.

3.6.3.6. Identify and describe any beneficial use prospects for ash, including where the ash for beneficial use is to be transported.

3.6.3.7. In a manner parallel to that for coal ash, identify and describe any byproducts from flue gas desulfurization, including where and how these byproducts would be retrieved, handled, and transported off site.

3.6.4. If oil/water separation is necessary, identify and diagram if necessary where and how this is to occur and where and how the oily waste materials leave the plant site.

3.7. Electricity

3.7.1. Describe, diagram, and map the step up transformer substation to be attached to the plant. Identify and diagram lengths, widths, and heights of substation components. Identify voltages and exit pathways for transmission lines of different voltages.

3.7.2. Provide the completed transmission interconnection study report from the transmission provider, including all needed transmission system improvements and Midcontinent Independent System Operator, Inc. (MISO) requirements. State which type of interconnection process is being pursued (generator interconnection queue, surplus generator interconnection request, generation replacement, or similar).

3.7.3. Provide a general description of the transmission line facilities required for full operation of the proposed project. Identify transmission line end points, approximate length of line, voltage, and substation and/or switching station requirements. Include information regarding who will build the transmission line. Applicant must confer with PSC and DNR staff in order to ascertain the type of information needed concerning transmission facilities required for the project. (See PSC website for Electric Transmission Line Application Filing Requirements.)

4. Project Costs

Cost tables should be based on the projected in-service year. Tables must be submitted in a Microsoft Excel format, in addition to Adobe Acrobat (*.pdf) format.

4.1. Capital and Construction Costs

4.1.1. The estimated capital cost of the generating facility and all related facilities, broken down by major plant accounts. Indicate if project costs include Allowance for Funds Used During Construction. Identify all cost escalation factors used in the estimate (Wis. Admin. Code § PSC 111.53(1)(c)1.)

4.1.2. The construction cost of the facility.

4.1.3. Air pollution control requirements' costs that are assumed in making the project cost estimate.

4.1.4. Identification and cost of any property being retired (Wis. Admin. Code § PSC 112.06(1m)(e)). Identify potential stranded and salvage costs for any prematurely abandoned or retired assets.

4.1.5. Gross costs of alternative methods or locations that the electric utility considered for accomplishing the purpose of the project, with the reasons for rejecting the alternatives (Wis. Admin. Code § PSC 112.06(1)(f)).

4.2. Proposed Method for Financing the Project

4.2.1. The complete terms and conditions of any lease arrangements.

4.2.2. Identification of any affiliated interest approvals required for each unit.

4.2.3. If applicable, a demonstration of how the conditions of Wis. Stat. § 196.52(9)(a)3(b) on leased generation contracts have been met.

4.2.4. Comparisons of contracts between costs of the proposed project as a leased generation project, as a rate-based proposal, or as competitive bids received.

4.3. Forecasted Costs

4.3.1. Identification and justification of the costs used for the purchase power forecast.

4.3.2. Identification and justification of the fuel forecasts used for the first year of operation and levelized in nominal terms over the life of the unit or facility (over the 20-25 year study period) in $/MBTU. Identify all cost escalation factors used in the estimate (Wis. Admin. Code § PSC 111.53(1)(c)2.).

4.3.3. An estimation of the annual production cost, calculated as operating, maintenance and fuel costs for the first year of operation and levelized in nominal terms over the life of the facility. Include all cost escalation factors used and other significant supporting data (Wis. Admin. Code § 111.53(1)(c)3.).

4.3.4. An estimation of the annual total cost, calculated as capital and production costs for the first year of operation ((mills per net kWh generated) levelized in nominal terms over the life of the facility. Include all cost escalation factors used and other significant supporting data (Wis. Admin. Code § 111.53(1)(c)4.).

4.3.5. An estimation of the useful life of facility, based on depreciation rates established by the Commission (Wis. Admin. Code § 111.53(1)(c)5.).

4.3.6. The comparative costs of the fuel alternatives identified.

4.3.7. The effects of the project on costs of operation and on the quality and reliability of service (Wis. Admin. Code § PSC 112.06(1m)(d)).

4.4. Transmission Costs, if Applicable

4.4.1. Table(s) detailing the projected total costs for each proposed electric transmission route broken into the major categories listed below. Indicate if project costs include Allowance for Funds Used During Construction. Each major category of costs should be broken down into logical components and/or contracts.
- 4.4.1.1. Material Costs
- 4.4.1.2. Labor Costs
- 4.4.1.3. Other Costs
- 4.4.1.4. Pre-certification Costs
- 4.4.1.5. High-Voltage Transmission Impact Fees
- 4.4.1.6. Operation and Maintenance Costs

4.4.2. Underground construction costs (if any) separate from overhead construction costs.

4.4.3. Separate costs of any substation construction. (See PSC website for Electric Transmission Line Application Filing Requirements.)

4.4.4. For 345 kV projects, a summary table of total costs (transmission and substation) for each proposed route, broken down by the following voltage classes.
- 4.4.4.1. 345 kV
- 4.4.4.2. Less than 345 kV
- 4.4.4.3. Distribution

5. Natural Resources Impacts

5.1. Mapping Requirement

Provide maps for the Proposed site and any Alternative sites. All the maps should be the most recent version available and extend a minimum of one-half mile from the proposed project boundaries (see Section 1.8).

5.2. History of Site and Grounds

5.2.1. Describe the history of use for each generation site, including any uses that could have resulted in site contamination (petrochemical storage, fertilizer or pesticide use, etc.).

5.2.2. Describe any remediation conducted on the site(s).

5.2.3. If no remediation has been performed on a contaminated site, describe what must be done in order for the project to proceed.

5.3. Constructions Areas

5.3.1. Identify location, size, and land cover of laydown areas and material storage areas.

5.3.2. Identify location, size, and land cover of construction parking areas.

5.3.3. Describe the expected use of these areas after project completion.

5.3.4. Describe any plans for post-construction site restoration.

5.4. Geology

5.4.1. Describe the geology of each site.

5.4.2. Identify any special conditions (*e.g*. type and depth to bedrock, unusual soil conditions etc.) related to site geology that might create unusual or special circumstances requiring special methods or management during construction.

5.4.3. Describe any impact on geological formations (soils, glacial deposits, bedrock) for each site. Note location of active mines or quarries within 0.5 mile.

5.5. Topography

5.5.1. Describe the general topography of each site and surrounding area.

5.5.2. Describe the expected changes to site topography due to grading activities.

5.6. Soils

5.6.1. Identify and discuss the properties of each soil type on each site.

5.6.2. Discuss the expected impacts on soils, including volume or tonnage to be excavated, and from where on the site.

5.6.3. Describe where mitigation may be required and what techniques would be used (*e.g*. topsoil segregation, contamination remediation). Include information on how excess soils will be handled.

5.7. Archaeological and Historic Resources

Confidential information includes only the specific location and other sensitive details of archaeological and human burial sites (e.g. maps).[18,19] 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.[20]

5.7.1. Provide maps or GIS files 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 of the project area. Maps of archaeological and burial sites must be submitted confidentially.

---

[18] 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).

[19] 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.

[20] *Guide for Public Archeology in Wisconsin*. The Wisconsin Archeological Survey. August 2012.

5.7.2. 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 in stead be performed following the approval of a project.

5.7.3. Identify the potential project effects on each resource.

5.7.4. 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.

5.7.5. For any human burial sites within the APE, contact WHS to determine whether a Burial Site Disturbance Authorization/Permit is required.

5.7.6. 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.

5.7.7. 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.

5.8. Existing Land Cover and Land Use (non-agricultural)

5.8.1. List and locate the existing vegetation communities on and adjacent to each site.

5.8.2. List the total number of acres in each land cover type on all sites, and list the number of acres impacted in each land cover type for all sites.

5.8.3. Provide observations of prevalent animal and plant species observed during site visits. Information provided should be adequate to characterize the habitat quality of the site accurately.

5.8.4. Describe expected impacts to plant and animal habitats and populations.

5.8.5. Describe forested lands in particular that are on and adjacent to the site(s) or crossed by any of the potential connecting facilities. Forested lands[21] are defined as an upland area of land covered with woody perennial plants reaching a mature height of at least six 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.

5.8.6. For each site and each potential connecting facility, describe the forested lands in particular that would be potentially affected by the project. Include the following information:

- Type of forest
- Dominant species
- Average age and size of trees
- Ownership (private versus public)

[21] Forested lands definition adopted from Wiscland 2 Land Cover User Guide 2016 accessed at: https://p.widencdn.net/8ghipa/Wiscland_2_User_Guide_September_2016

- Current and past use.

5.8.7. Provide specific details for mitigating or minimizing construction impacts in and around forested lands.

5.8.8. Describe grasslands that are on and adjacent to the site(s) or crossed by any of the potential connecting facilities. Grasslands[22] are defined as lands covered by non-cultivated herbaceous (non-woody) vegetation predominated by perennial grasses and forbs.

5.8.9. For each site and each potential connecting facility, describe the grasslands in particular that would be potentially affected by the project. Include the following information:

- Type of grassland (prairie, pasture, old field, etc.).
- Dominant species.
- Ownership (private versus public).
- Use (agricultural, non-productive agricultural, recreation, natural area, etc.).

5.8.10. Provide specific details for mitigating or minimizing construction impacts in and around grasslands.

5.8.11. Provide a detailed re-vegetation and site restoration plan that discusses the following items:

- Types of re-vegetation proposed for impacted areas.
- Vegetative monitoring criteria (number of post-construction years or percent cover achieved) and methods.
- Invasive species monitoring and management.

5.9. Invasive Species

5.9.1 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.).

5.9.2 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, surveys, etc.

5.10. Hydrology

Water intake, consumption, and discharge are regulated by DNR. For water-related permits, contact DNR.

5.10.1. Potential Water Sources

5.10.1.1. Identify and fully describe all sources of water required for the project.

5.10.1.2. For each proposed generation unit estimate the volume of water usage in daily, monthly, and annual averages.

5.10.1.3. ***For low-capacity (less than 70 gpm) on-site well sources***, provide the following information:

5.10.1.3.1. Potential impacts to residential, commercial, and municipal wells.

[22] Grasslands definition adopted from Wiscland 2 Land Cover User Guide 2016 accessed at: https://p.widencdn.net/8ghipa/Wiscland_2_User_Guide_September_2016

5.10.1.3.2. Proposed mitigation/compensation plan in the event facility water usage causes impacts to nearby wells.

5.10.1.4. **For high-capacity (70 or more gpm) on-site well sources**, provide the following information:

5.10.1.4.1. High-capacity well permit applications.

5.10.1.4.2. Analyses estimating the cone of depression and potential impacts to residences within one-half mile of each site.

5.10.1.4.3. Mitigation/compensation plan in the event facility water usage causes impacts to residential, commercial, or municipal wells.

5.10.1.5. **For municipal water utility groundwater sources,** provide the following information:

5.10.1.5.1. Operating water utility and supply well(s) location(s).

5.10.1.5.2. Capacity of municipal well(s) providing service.

5.10.1.5.3. Reserve capacity of the municipal system.

5.10.1.5.4. Potential impacts on the ability of the utility to provide water to municipal customers.

5.10.1.5.5. Methods proposed for delivering the municipal water to plant sites, including the following information:

5.10.1.5.6. Size of pipeline(s) required.

5.10.1.5.7. Proposed routes for pipeline(s).

5.10.1.5.8. Length of proposed pipeline(s).

5.10.1.5.9. Entity or entities that would construct, operate and own the pipeline.

5.10.1.5.10. Property owners located along the water supply pipeline routes, identified also on maps and in the mailing list.

5.10.1.6. ***For surface water sources***, provide the following information:

5.10.1.6.1. Identify the proposed surface water source.

5.10.1.6.2. If the water source is one of the Great Lakes, submit documentation for compliance with the Great Lakes Compact.

5.10.1.6.3. Physical information for the intake structures/facilities including:

5.10.1.6.3.1. Location(s).

5.10.1.6.3.2. Depth of intake.

5.10.1.6.3.3. Detailed maps and engineering drawings.

5.10.1.6.3.4. Construction methods and sequence of construction.

5.10.1.6.4. Environmental characterization of the area at and near the intake facilities including:

5.10.1.6.4.1. Substrate at the intake location.

5.10.1.6.4.2. Fish and invertebrate species and communities present.

5.10.1.6.4.3. Mammal and bird use in the immediate area.

5.10.1.6.4.4. Vegetative cover on and near the shoreline.

5.10.1.6.5. Discuss and describe the potential impacts of the water withdrawal on the water body and downstream users, including:

5.10.1.6.5.1. Physical modeling of the effects of the expected intake structure and water withdrawal on bottom sediments and biota.

5.10.1.6.5.2. Fish and invertebrate species and communities.

5.10.1.6.5.3. Mammal and bird use in the immediate area.

5.10.1.6.5.4. Vegetative cover on and near the shoreline.

5.10.1.6.6. Discuss the minimization and mitigation of identified potential impacts.

5.10.2. Water Consumptive Use

5.10.2.1. Identify each source of water that would go through consumptive use.

5.10.2.2. For each generation unit, estimate consumptive water usage in daily, monthly, and annual averages.

5.10.2.3. Estimate the total consumptive use/net loss of water from the water source (*e.g.* through contact or non-contact cooling, plant processes, once-through cooling, evaporative cooling etc.). Refer to Wis. Stat. § 281.35 regarding water loss approvals.

5.10.3. Wastewater Discharges

5.10.3.1. Submit the DNR WPDES permit applications. (Check with the PSC docket coordinator for whether electronic or paper copies are required for the PSC.)

5.10.3.2. Provide figures and descriptions of the proposed wastewater discharge structures including:

5.10.3.2.1. Location and type of discharge site (surface water, groundwater, or municipal wastewater system).

5.10.3.2.2. Description of the proposed wastewater pipes and facilities (*e.g.*, length, composition, and location of pipes).

5.10.3.2.3. The construction methods and sequence of construction.

5.10.3.3. Provide the chemical and physical attributes of discharged waters including:

5.10.3.3.1. Use and expected concentration of biocides and metals.

5.10.3.3.2. Temperature of discharge at the discharge point and the expected variation on a yearly basis.

5.10.3.3.3. Estimated volumes of wastewater that would be discharged in daily, monthly, and annual averages.

5.10.3.3.4. Estimated average, maximum and minimum daily flows in cubic feet per second and the expected variation on a yearly basis.

5.10.3.4. ***If discharging to surface waters***, submit the following:

5.10.3.4.1. Location and depth of discharge outfall structure(s)

5.10.3.4.2. Description and engineering drawings of any structure(s) proposed to be installed at the end of a discharge pipe (diffuser, screen, etc.)

5.10.3.4.3. Characterization of the environment of the discharge pipe and outfall location including, but not limited to:

5.10.3.4.3.1. Type of substrate.

5.10.3.4.3.2. Water quality.

5.10.3.4.3.3. Fish and invertebrate species and communities present.

5.10.3.4.3.4. Mammal and bird use of the immediate area.

5.10.3.4.3.5. Vegetative cover in or near the shoreline.

5.10.3.4.4. Discussion and characterization of the potential impacts of the discharge on the water body and downstream users, including:

5.10.3.4.4.1. Modeled results of the expected effects of the discharge on bottom sediments, flora, and fauna.

5.10.3.4.4.2. The anticipated temperature mixing zone configuration, and the expected variation on a yearly basis.

5.10.3.4.5. If appropriate, the proposed methods for invasive mussel control.

5.10.3.5. **If discharging to a local municipality**, submit the following:

5.10.3.5.1. Identification of the local municipality.

5.10.3.5.2. Agreements regarding quantity and quality of discharge to be treated.

5.10.3.5.3. Identification and descriptions of any secondary impacts to the municipal treatment system and any user charges (*e.g.*, Will the municipality require any expansion or upgrades to handle new wastewater stream?)

5.10.4. Storm Water Management

5.10.4.1. Erosion control and storm water management plans must be submitted to DNR if the project involves land disturbance in excess of one acre. DNR plan approvals may also authorize construction site pit and trench dewatering wastewater discharges to surface waters or seepage systems. Permit applications should be submitted also to the PSC.

5.10.4.2. Provide a description of a storm water management plan with diagrams that complies with local and state regulations.

5.10.4.3. Describe and provide drawings detailing any proposed storm water management facilities including:

5.10.4.3.1. Any on-site wastewater and storm water treatment facilities.
5.10.4.3.2. Any solids or sludges generated from operations.
5.10.4.3.3. Any process water pretreatment facilities (demineralizers), blow-down characteristics, and solid waste by-products from water pre-treatment.
5.10.4.3.4. Estimate the amount of flow that storm water management facilities would be designed to handle.
5.10.4.3.5. Identify locations of the point(s) of collection and discharge.
5.10.4.3.6. If the generation unit would burn solid fuel (*e.g.* coal-fired or biomass-fired), describe the storm water management plan for fuel handling and storage facilities and ash handling and disposal facilities.
5.10.4.3.7. A description of an erosion control plan with diagrams that complies with local and state regulations.

5.11. Air Quality

Air pollution control and air quality impacts are regulated by DNR. For instructions on filing for DNR air quality permits, consult with DNR.

5.11.1. List the DNR air permits required for the project and the status of air permit applications, matching permits to proposed locations, units, and fuels.
5.11.2. Describe the type(s) of fuel to be used.
5.11.3. Provide a narrative of the air emissions modeling and results, including the following:
5.11.3.1. Control technologies expected to be required for the project for each type of fuel and pollutant (include specific methods or plans to control mercury emissions if the proposed plant will burn coal). Include a diagram of the boiler and any pollution controls.
5.11.3.2. Estimated hourly emission rates in pounds per hour at full, 75%, 50%, and 25% load for:
5.11.3.2.1. Carbon monoxide (CO)
5.11.3.2.2. Nitrogen oxides (NO_x)
5.11.3.2.3. Particulate matter less than 10 microns and less than 2.5 microns in diameter (PM_{10}, $PM_{2.5}$)
5.11.3.2.4. Sulfur dioxide (SO_2)
5.11.3.2.5. Mercury (Hg)
5.11.3.2.6. Volatile organic compounds (VOCs)
5.11.3.2.7. Sulfuric acid (H_2SO_4)
5.11.3.2.8. Lead (Pb)
5.11.3.2.9. Greenhouse gases, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases like hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Include emissions associated with other project inputs besides the boiler fuel itself.

5.11.3.3. Estimated maximum expected annual emission rates from project sources for the pollutants listed in Section 5.14.3.2.

5.11.3.4. Projected emissions in tons-per-year (tpy), by source and for the entire plant, for the pollutants listed in Section 5.14.3.2.

5.11.3.5. How the proposed project would affect air quality in relation to NAAQS and PSD increments.

5.11.3.5.1. Provide background ambient levels for criteria pollutants in micrograms per cubic meter at 1, 3, 8, & 24-hour intervals. Also provide annual totals, if available.

5.11.3.5.2. Provide modeling results comparing expected project emissions with the NAAQS (include the expected impact distance and direction).

5.11.3.5.3. Provide all PSD increment modeling results, including those for known pollutants that did not hit the significance threshold.

5.11.3.6. Provide expected annual emissions in tons per year (tpy) of CO_2, N_2O, CH_4, and hydrofluorocarbons by source and for the entire plant in two tables:

5.11.3.6.1. Assuming maximum capacity operation for 8760 hours per year.

5.11.3.6.2. Assuming an anticipated capacity factor that allows for outages and the electric market variations.

5.11.3.7. Provide tables listing annual organic and inorganic hazardous air pollutant (HAP) emission estimates, with an estimated tpy emitted for each HAP and a total estimated tpy for all HAP emissions.

5.11.4. Describe sources and projected amounts of dust ("fugitive dust") and how it would be controlled.

5.11.4.1. Discuss dust sources and control measures to be used during and after construction.

5.11.4.2. Discuss fugitive dust emissions from fuel storage piles and fuel handling and conveyance, and measures to be taken to control them.

5.12. Solid Waste Handling and Disposal

5.12.1. Identify any solid waste that would be produced as a result of electricity production (*e.g.* coal or biomass ash and sorbent by-products, scrubber sludge).

5.12.2. Describe the composition and quantity of the wastes over the expected life of the plant and how each would be handled.

5.12.3. List the DNR solid waste and landfill permits required for the project and the status of permit applications.

5.12.4. Identify the location(s) on the project site where solid waste (bed ash, fly ash and flue gas desulfurization by products, etc.) would be stored, transported, and loaded for removal.

5.12.5. Discuss the potential for beneficial use or reuse of ash and other combustion byproducts.

5.12.6. Locate and describe the potential ash landfills that could be utilized for combustion wastes. Describe how much ash would need to be transported and

how many trucks that transport would require. Map the most probable truck routes to the landfill(s).

6. Community Impacts

6.1. Community Resource Maps and Imagery (see Section 1.8)

6.1.1. Provide maps showing sites in relation to nearest residences and other buildings, indicating distances to both the site boundary and the plant footprint.

6.1.2. Provide additional maps, if necessary showing proximity to schools, daycare centers, hospitals, and nursing homes up to one-half mile from the site.

6.2. Current Land Ownership

6.2.1. Identify plans for temporary or permanent acquisition of lands or rights-of-way from landowners.

6.2.2. State whether or not the applicant has an option to purchase for each site or connecting facility route under review.

6.3. Local Zoning

6.3.1. Provide copies of any zoning ordinances affecting each project site and the area within one-half mile of the site boundary (provide only the pages introducing and identifying the document and directly citing the ordinance language).

6.3.2. Describe (1) the existing zoning and (2) the expected zoning changes needed for the project.

6.3.3. List the total number of acres in each existing zoning classification on each site, and list the number of acres impacted by the project in each existing zoning classification.

6.3.4. Describe zoning changes to be requested of local government for the proposed project at each site. Report the name of the entity responsible for zoning changes, the process required to make a zoning change, and the outcome or expected outcome for those changes.

6.4. Land Use Plans

6.4.1. Provide relevant portions of any land-use plans adopted by local governments within one-half mile of the project boundary for each site. Include not only general land-use plans, but also other relevant planning documents such as county recreation plans, farmland preservation plans, highway development plans, and sewer service area plans.

6.4.2. Describe how the project blends into or conflicts with any of the land-use plans and how any conflicts might be resolved.

6.5. Agriculture

6.5.1. Describe any farming activities at the site(s), current or in the immediate past.

6.5.2. Identify any agricultural practices that may be affected by the project construction or operation including but not limited to irrigation systems, windbreaks, aerial seeding or spraying, organic farms, and drainage systems (tiles, ditches, laterals).

6.5.3. Identify the number and size of parcels enrolled in farmland preservation programs and permanent agricultural or conservation easements that may be affected by the project.

6.5.4. Provide specific details for mitigating or minimizing construction impacts in and around agricultural lands.

6.5.5. Identify any parcels of land in the project area that may impact a Drainage District, and identify the Drainage District if applicable. The following applies when any part of a project impacts a Drainage District.

7.5.5.1 The County Drainage Board will need to be notified before undertaking any action, including any change in land use that will alter the flow of water into or from a district drain, increase the amount of soil erosion, or the movement of sediment solids to a district drain or affect the operation of the drainage district, or the costs incurred by the Drainage District. This applies to parcels of land that receive water from, or discharge water to a Drainage District, regardless of whether the land is included in the Drainage District.

6.5.6. Indicate whether the project would require an Agricultural Impact Statement (AIS) from DATCP.

6.5.7. If the project would affect any properties used for agricultural purposes, submit one of the following, either:

6.5.7.1. A completed Agricultural Impact Notice (see DATCP website and search "Agricultural Impact Notice" for appropriate form or contact DATCP).

6.5.7.2. A release letter from DATCP stating that an AIS will not be written for this proposed project.

6.5.8. Discuss induced voltage issues as they relate to the project areas and connecting facility routes. Provide for each power line route:

6.5.8.1. The number of confined animal dairy operations[23] within one-half mile of any proposed electric transmission or distribution centerline on or off the project site alternatives.

6.5.8.2. The number of agricultural buildings located within 300 feet of the proposed centerline.

6.5.8.3. A discussion of induced voltage issues as they relate to the project and its related power line routes.

6.6. Conservation Easements and Programs

6.6.1. Within one-half mile of each site alternative and along each connecting facility route, identify properties with conservation easement agreements.

6.6.2. For each conservation easement that would be crossed by a route, identify and discuss:

6.6.2.1. The holder of the easement and the type of easement.

6.6.2.2. The conditions of the easement.

6.6.2.3. What approvals are necessary to construct on the property.

[23] Any farming operation that has animals confined in building(s). Not limited to a specific number of animals or the DNR's definition of Concentrated Animal Feeding Operations (CAFO).

6.6.2.4. The potential impacts to the landowner, including costs, penalties etc. if there is construction on the property.

6.6.2.5. Whether the proposed project is consistent with the stated goals of the easement.

6.6.3. Identify properties within proposed project sites or connecting facility ROWs that are enrolled in the Managed Forest Law (MFL) or Forest Crop Law (FCL) programs, and discuss how they might be affected.

6.7. Communication with Potentially Affected Public

6.7.1. List all attempts made to communicate with and provide information to the public.

6.7.2. Provide a description of public information meetings and who was invited.

6.7.3. Submit copies of the public outreach mailings and handouts.

6.7.4. Provide electronic copies of written public comments (*e.g.*, letters, emails, forms, etc.) submitted prior to filing the application with the PSC.

6.8. Demographics

6.8.1. Provide a description of the area within one-half mile of each site in terms of population, racial or ethnic composition, and income levels.

6.8.2. Provide the same information (required in item 6.8.1) for the township, county, or Standard Metropolitan Statistical Area as a whole.

6.9. Local Government Impacts

6.9.1. For each site, list all services to be provided (e.g. water, fire, EMS, police, security measures, and traffic control) by the city, town, and/or county during (1) construction and (2) when the plant is in operation. Specifically, address community and facility readiness for incidents such as fires, boiler implosions/explosions, coal dust explosions and critical piping failures.

6.9.2. Identify all local government infrastructure and facility improvements required (*e.g.* sewer, water lines, railroad, police, and fire) for each site.

6.9.3. Describe the effects of the proposed project on city, village, town and/or county budgets for these items.

6.9.4. Estimate the revenue to any city, village, township, or county resulting from the project in terms of taxes, shared revenue, or payment in lieu of taxes.

6.9.5. Describe any other benefits to the local community at each site (e.g., employment, reduced production costs, goodwill gestures).

6.9.6. List any existing facilities that would be retired as a consequence of the proposed facilities at either site, and discuss any job impacts that could result from the retirement(s).

6.9.6.1. Describe how natural gas pipelines in the project area would be impacted during construction and operation of the project, whether the project would have any risk of damaging pipelines, any special safety measures that would be utilized to construct near or under pipelines, and any changes that may be required for local first responders to address emergencies involving the pipelines due to the project.

6.9.6.2. State how the applicant plans to work with the natural gas pipeline facility owners to mitigate potential stray currents on the pipelines.

6.9.6.3. Describe safety measures that would be taken to meet the pipeline operator's policies around their natural gas pipelines.

6.9.6.4. Describe plans to work with the pipeline operators to develop a plan to construct and maintain facilities in a manner that does not interfere with the pipeline operators' ability to access their pipelines and rights-of-way.

6.9.7. ***High Voltage Transmission Line Fee Distributions***

If a high-voltage electric transmission line is expected to be one of the connecting facilities for this project, provide the following.

6.9.7.1. An estimate of all high-voltage impact fees that must be paid to the Department of Administration by the applicants as required under Wis. Stat. §196.491(3g).

6.9.7.2. Identify which components of the total project cost were used as the base cost and how the fees were calculated.

6.9.7.3. Provide estimates of one-time and annual environmental fee payments that would be made to each affected city, village, town, and county.

6.10. Workforce

6.10.1. Provide information on the workforce size and skills required for the plant construction and operation.

6.10.2. Estimate how much of the expected workforce would come from local sources.

6.11. Traffic, Roads, Railroads

6.11.1. Describe types of vehicles that will visit and be used on site during construction. Include vehicles used by workers arriving to and departing from the construction sites as well as construction and supply vehicles.

6.11.2. Describe how construction traffic will enter and leave each site.

6.11.3. Give an estimate of traffic frequency and volume during construction. Include access traffic by workers, equipment and supply deliveries, and any earthmoving equipment.

6.11.4. Estimate the potential impacts of construction traffic on the local transportation system at each site. In particular, provide information on:

6.11.4.1. Probable routes for delivery of heavy and oversized plant equipment loads.

6.11.4.2. Potential for road damage and any compensation for damage.

6.11.4.3. Anticipation of any traffic congestion caused by the project.

6.11.4.4. Any changes in rail line usage and any interference with existing rail traffic.

6.11.4.5. How heavy loads or large loads would be handled.

6.11.5. Describe changes in the types and frequency of traffic expected on roads and railroads due to plant operation at each site. Describe expected traffic routes, including but not limited to those for transport of ash to landfills.

6.11.6. Describe any permanent changes required to existing roads, railroads, traffic signals, etc., as a result of this project at each site.

6.12. Noise

6.12.1. For each site, provide existing and projected noise measurements as described in the PSC Noise Measurement Protocol and pre-construction consultations.

6.12.2. Provide copies of any applicable local noise ordinances at each site.

6.12.3. Provide potential noise impacts of the following types of activities or equipment if applicable:

- 6.12.3.1. Fuel delivery train couplings when coal cars are being staged and moved for emptying.
- 6.12.3.2. Fuel unloading either through bottom dump or rotary car dumper.
- 6.12.3.3. Noise generated from different rail car types.
- 6.12.3.4. Unloading, dumping, and loading of fuel delivery trucks and ash/waste removal trucks.
- 6.12.3.5. Steam blows for plant start-up.
- 6.12.3.6. Cooling tower operation.
- 6.12.3.7. Air separation units or other generation unit components whose noise might dominate the plant site.

6.13. Odors

Identify any odors that may be perceptible outside the plant boundary during both construction and operation.

6.14. Fogging and Icing

6.14.1. Provide an analysis of the potential for icing, fogging, and salt deposition due to operation of the proposed facility for each site, including specific location and duration. Take into account each plume mitigation alternative being considered in the project application.

6.14.2. Submit fogging probability maps, icing probability maps, $CaCO_3$ deposition probability maps, and plume length maps for each plume mitigation alternative being considered.

6.14.3. Discuss and provide diagrams of any potential mitigation measures contemplated for decreasing fogging or deposition.

6.15. Residential and Urban Communities

6.15.1. Identify the distances from nearby residences to the proposed facilities' footprint and site boundary for each site.

6.15.2. Discuss anticipated impacts of the proposed plant at each site to residential/urban neighborhoods and communities such as noise, dust, duration of construction, time-of-day of construction, road congestion, impacts to driveways, etc.

6.15.3. Discuss how anticipated impacts would be mitigated.

6.15.4. Discuss the property value concerns that have been communicated to the applicant for each site.

6.15.5. Discuss potential impacts to more regional communities that could result from river-related activities, air pollution, or other far-reaching effects of plant operation.

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

6.15.7. Locate and describe hospitals, schools, daycare facilities, and retirement homes within one half mile of each proposed site, or describe and locate the closest of each if one does not exist within a half mile.

6.16. Visual Impacts

6.16.1. ***Plant profiles and appearances***

6.16.1.1. Provide the physical area and height dimensions for the plant components at each site. Submit diagrams and drawings to illustrate the power plant footprint and the heights of the plant components (*e.g.* boiler building, exhaust stack)

6.16.1.2. Submit photo simulations of the project at each site for public-valued view sheds as discussed in pre-application meetings.

6.16.1.3. Identify scenic roads within the project area(s) and discuss the potential impact of the project.

6.16.2. ***Lighting***

6.16.2.1. Describe each site lighting plan during project construction. Compare and contrast the intensity of the proposed lighting with the existing light regime in each site's neighborhood.

6.16.2.2. Describe each site lighting plan for plant operation. Compare and contrast the intensity of the proposed lighting with the existing light regime in each site's neighborhood.

6.16.2.3. Describe the potential impacts of each site's lighting on adjacent land uses.

6.16.2.4. Provide copies of any applicable local ordinances that relate to the proposed lighting plans.

6.17. Parks and Recreation Areas

6.17.1. Identify any parks and recreation areas or trails that may be impacted by the proposed project at each site, and the owner/manager of each recreation resource.

6.17.1.1. Provide any communications with these owners/managers.

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

6.18. Airports

6.18.1. Identify the location of all private and public airports/airstrips near each site and connecting facility.

6.18.2. Describe the airports/airstrips, their runways (length, orientation), and type of use.

6.18.3. Describe any potential for impact to aircraft safety and intrusion into navigable airspace (runway approaches).

6.18.4. Identify potential construction limitations and permit issues.

6.18.5. Provide documentation of consultation with the WisDOT Bureau of Aeronautics and the FAA.

6.19. Communication Towers

6.19.1. Discuss any potential interference to the function of communication towers within the project area by the proposed project.

6.19.2. Provide GIS location information for communications facilities evaluated in section 6.19.1. Include in the GIS information the communications technologies used for each facility.

7. 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.

7.1. 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).

7.1.1. 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.

7.1.2. 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.

7.1.3. 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).

7.1.4. Provide the following information:

7.1.4.1. 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.).

7.1.4.2. 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.

7.1.4.3. 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.).

7.1.4.4. 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.)

7.1.5. 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.

7.1.6. For waterways that will be open-cut trenched, provide the following:

7.1.6.1. State if any waterways are wider than 35 feet (measured from OHWM to OHWM).

7.1.6.2. 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.

7.1.6.3. The size of the trench (length, width, and depth) for each waterway crossing.

7.1.6.4. Details on the proposed in-water work zone isolation/stream flow bypass system (i.e. dam and pump, dam and flume, etc.).

7.1.6.5. Duration and timing of the in-stream work, including the installation and removal of the isolation/bypass system and the trenching activity.

7.1.6.6. 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.).

7.1.6.7. How the waterway bed and banks will be restored to pre-existing conditions.

7.1.7. For waterways that will be directionally bored, provide the following:

7.1.7.1 The location and size of any temporary staging and equipment storage.

7.1.7.2 The location and size of bore pits and their distance from waterways.

7.1.7.3 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).

7.1.8. For waterways that will have a TCSB installed across them, provide the following:

7.1.8.1. Description of the TCSB proposed, including dimensions, materials, and approaches. Verify the TCSB will completely span the waterway.

7.1.8.2. State if any waterways are wider than 35 feet (measured from OHWM to OHWM), and/or if any in-stream supports will be used.

7.1.8.3. 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.

7.1.8.4. Duration of the placement of the TCSB.

7.1.8.5. Sediment controls that will be installed during the installation, use, and removal of the TCSB's.

7.1.8.6. How the TCSB's will be inspected during use and how they will be anchored to prevent them from being transported downstream.

7.1.8.7. 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.

7.1.8.8. How the waterway bed and banks will be restored when the TCSB is removed.

7.1.9. 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).

7.1.10. 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.

7.2. 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).

7.2.1. 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.

7.2.2. 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.

7.2.3. Wetland functional values:

7.2.3.1. 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.

7.2.3.2. Discuss how the project may impact existing functional values of wetlands.

7.2.3.3. Provide Wisconsin Rapid Assessment Methodology (WRAM) forms, or other assessment methodology documentation, if completed.

7.2.4. Identify any wetlands in the project area that are considered sensitive and/or high-quality wetlands, including, but not limited to:

7.2.4.1. Any wetlands in or adjacent to an area of special natural resource interest (ASNRI) (NR 103.04, Wis. Adm. Code).

7.2.4.2. 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.

7.2.4.3. Any wetlands with high functional values based on factors such as abundance of native species and/or rare species, wildlife habitat, hydrology functions, etc.

7.2.5. Provide the following:

7.2.5.1. 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

7.2.5.2. 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.

7.2.5.3. How many wetlands will have permanent fill placed within them. Provide the total amount of permanent wetland fill, in square feet.

7.2.5.4. 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.

7.2.5.5. 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.).

7.2.5.6. 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.).

7.2.6. 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.

7.2.7. For wetlands that will be open-cut trenched, provide the following:

7.2.7.1. 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.

7.2.7.2. 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.

7.2.7.3. Duration and timing of the work in wetlands.

7.2.7.4. How the wetlands will be restored to pre-existing conditions.

7.2.8. For wetlands that will be directionally bored, provide the following:

7.2.8.1. How bored wetlands and associated bore pits will be accessed.

7.2.8.2. The location and size of any temporary staging and equipment storage.

7.2.8.3. The location and size of bore pits and the distance from wetlands.

7.2.8.4. 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).

7.2.9. For wetlands that will be plowed, resulting in a discharge of fill (soil mixing and/or soil rutting), provide the following:

7.2.9.1. Provide details on the total disturbance area in wetland, including how total wetland disturbance was calculated.

7.2.9.2. Duration and timing of the work in wetlands.

7.2.9.3. 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.

7.2.10. 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:

7.2.10.1. Provide details on the total disturbance area in wetland, including how total wetland disturbance was calculated.

7.2.10.2. Duration and timing of the work in wetlands.

7.2.10.3. How the wetlands will be restored to pre-existing conditions.

7.2.10.4. 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.

7.2.11. For wetland vegetation that will be cleared or cut for construction, provide the following:

7.2.11.1. 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.).

7.2.11.2. The timing and duration of vegetation removal

7.2.11.3. Describe the type of equipment that will be used, and if the vegetation removal will result in soil disturbance, including rutting and soil mixing.

7.2.11.4. The type of wetland and type of vegetation to be cleared.

7.2.11.5. 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.

7.2.11.6. 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.

7.2.11.6.1. If debris is not proposed to be removed from all wetlands during clearing, explain why disposal in non-wetland areas is not feasible.

7.2.11.6.2. 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.

7.2.11.6.3. 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.

7.2.12. 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.

7.2.13. 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.

7.2.14. 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.

7.3. 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.

7.3.1. 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.

7.3.2 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).

8. 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.

8.1. 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.

8.2. 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.

8.3. 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.

8.3.1. 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.

8.3.2. 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.

8.3.3. If any recommended follow-up actions are not planned to be incorporated into project construction or operation, state the reasons why.

8.3.4. Provide communications with DNR and U.S. Fish and Wildlife Service, as applicable.

9. 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.

9.1. 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.

DL: 01502379