

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Request for Comments on Draft Order Adopting
Application Filing Requirements for Wind Energy
Projects Requiring CPCN or CA

Docket No. 5-AFR-300

**COMMENT ON APPLICATION FILING REQUIREMENTS DRAFT
AND DRAFT COMMISSION ORDER**

JEWELL JINKINS INTERVENORS

Jewell Jinkins Intervenors is a group of landowners, residents, and farmers who have an interest in Commission proceedings and have intervened in the Badger Hollow dockets (PSC Dockets 9697-CE-100, 9697-CE-101, and 5-BS-228) and the Cardinal-Hickory Creek transmission docket, as well as Petitioning the Commission for rules to aid in siting of solar projects and separately commenting on solar Application Filing Requirements in docket 5-AFR-700. As with that solar AFR docket, this wind AFR docket could be a good step by establishing filing requirements specifically for wind, taking commenters' proposals and critique into account

We thank the Commission for the opportunity to comment on these wind AFR Draft Proposals and Commission Order.

Rulemaking, the Commission, and the Wind Siting Council

Jewell Jinkins Intervenors (hereinafter "JJI") notes that on this docket's service list, there are four and a half pages of names and addresses, and other than Citizens Utility Board, which has advocated in the public interest and challenged utility projects in the past, there are no individuals or organizations advocating and representing public interests and raising the concerns of landowners or groups, and no individuals or landowner groups who have intervened in wind dockets. Notice recipients Clean Wisconsin and RENEW Wisconsin do intervene, but their interventions support renewable projects, avoiding the legitimate issues raised in siting and permitting by others. JJI did not receive direct notice of this docket, learned of it by accident, and have spread word as best we can. The Commission should make best efforts to assure its notice lists are more inclusive.

As above, several years ago, JJI petitioned the Commission for a rulemaking, which was

denied¹. For the wind AFR, as well as additional wind siting issues, a formal rulemaking process should be initiated by the Commission, in conjunction with review by the Wind Siting Council, as there are wind regulatory issues not only regarding Application Requirements but very problematic siting and CPCN review issues that have surfaced as projects have been permitted. Those very health and policy issues are a primary focus of the Wind Siting Council and the Commission's mandate.

Through the process of CPCN review, the Commission and the public have learned much about permitting large utility scale wind projects, potential impacts, and demonstrated impacts of large wind projects. In some other states, as utility scale wind projects advance, health, environmental, economic, technological, and land use impacts have driven policy changes. In some other states, newly documented impacts have yet to be recognized. This AFR docket begins to address important issues which should be formally promulgated into rules. Rules would have stronger impact, and a formal rulemaking proceeding would necessarily involve increased public input in an iterative process and due consideration.

In 2009, Wisconsin's legislature established, in Act 40, the Wind Siting Council, which has a specific mandate:

(b) The commission shall, with the advice of the wind siting council, promulgate rules that specify the restrictions a political subdivision may impose on the installation or use of a wind energy system consistent with the conditions specified in s. [66.0401 \(1m\) \(a\) to \(c\)](#).² The subject matter of these rules shall include setback requirements that provide reasonable protection from any health effects, including health effects from noise and shadow flicker, associated with wind energy systems. The subject matter of these rules shall also include decommissioning and may include visual appearance, lighting, electrical connections to the power grid, setback distances, maximum audible sound levels, shadow flicker, proper means of measuring noise, interference with radio, telephone, or television signals, or other matters. A political subdivision may not place a restriction on the installation or use of a wind energy system that is more restrictive than these rules.

(c) In addition to the rules under par. [\(b\)](#), the commission shall, with the advice of the wind siting council, promulgate rules that do all of the following:

1. Specify the information and documentation to be provided in an application for approval to demonstrate that a proposed wind energy system complies with rules promulgated under par. [\(b\)](#).

¹ See PSC Docket 1-AC-254.

² [66.0401 \(1m\)](#) AUTHORITY TO RESTRICT SYSTEMS LIMITED. No political subdivision may place any restriction, either directly or in effect, on the installation or use of a wind energy system that is more restrictive than the rules promulgated by the commission under s. [196.378 \(4g\) \(b\)](#). No political subdivision may place any restriction, either directly or in effect, on the installation or use of a solar energy system, as defined in s. [13.48 \(2\) \(h\) 1. g.](#), or a wind energy system, unless the restriction satisfies one of the following conditions:

- (a) Serves to preserve or protect the public health or safety.
- (b) Does not significantly increase the cost of the system or significantly decrease its efficiency.
- (c) Allows for an alternative system of comparable cost and efficiency.

2. Specify the information and documentation to be included in a political subdivision's record of decision under s. [66.0401 \(4\) \(b\)](#).
3. Specify the procedure a political subdivision shall follow in reviewing an application for approval under s. [66.0401 \(4\)](#).
4. Specify the requirements and procedures for a political subdivision to enforce the restrictions allowed under par. [\(b\)](#).

...

(e) The wind siting council shall survey the peer-reviewed scientific research regarding the health impacts of wind energy systems and study state and national regulatory developments regarding the siting of wind energy systems. No later than October 1, 2014, and every 5 years thereafter, the wind siting council shall submit a report to the chief clerk of each house of the legislature, for distribution to the appropriate standing committees under s. [13.172 \(3\)](#), describing the research and regulatory developments and including any recommendations of the council for legislation that is based on the research and regulatory developments.

Wis. Stat. §196.348(4g)b, c, and e³. See PSC Dockets 1-AC-231, 5-GF-228 (now active), and recently opened 5-WF-2022⁴. This Comment will be filed in the active dockets.

Despite this clear mandate of a survey of peer-reviewed research and health impacts and regulatory developments regarding siting nationally, and the statutory requirement of a report every five years the Wind Siting Council has not met for years and its most recent report was its first, in 2014⁵. Since 2014, many more wind projects have been sited, many unforeseen changes have taken place in renewable energy, in wind the several-fold increases in size of wind turbines and generation capacity, and the surge of very large solar projects, which affects the economics and choices for renewable generation. These factors, and more, must be analyzed by the Wind Siting Council to credibly consider changes for wind siting.

The 2019 report is missing in action. In this hiatus, there have been significant peer-reviewed research and health impacts studies completed and released. Further, there have been ground-breaking regulatory developments in Wisconsin and neighboring Minnesota that should not be ignored.⁶ The Shirley Wind report was dismissed by the Wind Siting Council claiming it was not “scientific peer-reviewed research,” and this characterization is

³ See also PSC’s Wind Siting Council’s page:
<https://psc.wi.gov/Pages/ServiceType/Energy/Renewables/WindSitingCouncil.aspx>

⁴

| PSC Ref * | Description | Document Type | Docket or Utility | Received Date | Filed By |
|-----------|---|------------------------|-------------------|------------------------|-----------------------------|
| 441240 |  Wind Siting Council Mailing List (63 KB) | Mailing / Service List | 5-WF-2022 | 06/23/2022 04:05:00 PM | PSC Records Management Unit |
| 441221 |  Order Appointing Wind Siting Council Members Signed and Served on 06/23/2022 (166 KB) | Order | 5-WF-2022 | 06/23/2022 03:35:00 PM | Amy Simonsen |
| 440598 |  06/09/2022 Minutes for Commission Open Meeting (143 KB) | Minutes | 5-WF-2022 | 06/16/2022 11:25:00 AM | Cru Stublely |
| 439998 |  WSC Appointments Memo 2022 (160 KB) | Memorandum | 5-WF-2022 | 06/09/2022 04:35:00 PM | Amy Simonsen |
| 439759 |  06/09/2022 Agenda for Commission Open Meeting (172 KB) | Correspondence | 5-WF-2022 | 06/07/2022 11:35:00 AM | Cru Stublely |

⁵ Wind Turbine Siting-Health Review and Wind Siting Policy Update Pursuant to Wis. Stat. § 196.378(4g)(e).
<https://psc.wi.gov/SiteAssets/windSitingReport2014.pdf>

⁶ See below in “11. Noise” for specifics on Shirley Wind in Wisconsin, and Wisconsin’s Alliant Energy’s settlements in their Bent Tree wind project in Minnesota.

erroneous. The Shirley Wind noise report and Alliant's Bent Tree settlements were ordered by these states' Commissions, and are Wisconsin and Minnesota Commission driven **REGULATORY** developments. The Wind Siting Council failed to address these regulatory actions by mischaracterizing the actions.

The 2014 Wind Siting Council Minority Report, Appendix F, of the Wind Siting Council, drafted by Dr. James Amstadt, Carl Kuehne, Tom Meyer, and Glen Schwalbach. P.E., and signed onto by Mary Brandt and Tim Roehl, raised many of these issues, and deserves attention.

This wind AFR and the Wind Siting Council are inextricably linked – no changes should be made prior to review and comment by the Wind Siting Council and Commission consideration of the Wind Siting Council's next report.

Updates in the wind AFR should be implemented quickly, and retroactively for those projects now in the wind CPCN process. However, much information that is needed is not provided in this draft, and the draft requires additional review by the Wind Siting Council, the public, and the Commission. This indeed is a conundrum of timing, but it is one created and/or enabled by the Commission.

Jewell Jenkins Intervenors request that this AFR effort and review by the Wind Siting Council be implemented as soon as possible, and then also shifted into formal rulemaking for incorporation into PSC Code.

Comments regarding Introduction

The Introduction addresses what must be included in the application in general, how to file, and it's important to note that these are requirements, and there are few specific limitations, this is a floor, and not a ceiling.

Another procedural issue, one of interpretation that has a material impact, is that of exemptions allowed for Independent Power Producer ("IPP") applications, a practice that limits issues considered in these CPCN proceedings. In the cover letter, the Commission addresses "IPP" projects seeking approval as an "Independent Power Producer" and yet despite the application as an "IPP," many are planned to be sold to a utility immediately after approval should not be exempted from application filing requirements – to the extent that there is an agreement for the sale already in place at the time of the application and/or prior to Commission approval.

Where an IPP is applying, but the project is under contract to be sold instantly on approval of the IPP CPCN, where the Commission knows or should know that there is no intention of operating as an IPP, the project should be regarded as a utility project and should have to provide all the information a utility is required to provide. IPPs are circumventing review using the "site/acquire" model. This has been raised as a troubling issue by intervenors and by Commission staff – the Commission must immediately cease the exemption of IPPs destined for immediate sale to utilities.

Regarding the DNR Joint Application Needs, p. ii, the Draft plan to DNR should also be available publicly, because water, drainage, and erosion concerns are primary to landowners in a project area. Based on water issues in solar dockets, the Shirley wind docket landowner buyouts before construction, and failure of many projects to take water concerns seriously, it is important for landowners in a project to know of plans, and be able to contribute information – landowners are “on the ground” and know more about water in their area than anyone. Their expertise should be utilized together with the DNR.

Regarding the “Engineering Plan,” p. ii, the Engineering Plan description of facilities should include the turbine manufacturer specifications, maintenance, and safety plans. Notice of the Engineering Plan must be widely provided, by direct mail, newspaper, and radio PSAs. Requirement of this should be incorporated into the AFR. P. 5 refers to “property owners,” but notice should also be sent to “resident” where property owner address and property address are different. Renters such as Brianna and Henry Frear have been left out and not provided notice due to this “property owner” focus. The mailing list should also include interested parties who have contacted the applicants.

Regarding wetlands, p. iii, all projects must be evaluated through a field evaluation.

Regarding WisDOT Permits and Reviews, p. iv, the applications to the FAA must be included to enable identification of height and locations.

Utility proposed and “IPP” proposed projects, p. iv, should both require an Agricultural Impact Statement. Ownership does not determine impacts! Due to the large amount of acreage of a utility scale wind project, and with siting common on Farmland Preservation land, an Agricultural Impact Statement must be required. Surveys must be sent out to all landowners, renters, farmers within (? 2 miles? 5 miles? 10 miles?) of the project area, with mailing list and affidavit of mailing filed on ERF, and responses filed on ERF. This survey process has been problematic in the past, with large landowners, and likely smaller landowners as well, excluded from the process. The survey should also be posted online for people who did not receive a survey to complete it, and for ease of response. The project applicant should also post notice of this survey with a link for local farmers’ participation.

Mailing lists, p. v., must be filed and publicly accessible.

Application size, p. vi, offers limitations of filing ordinances and land use plans. Because these land use plans are a factor for consideration by the Commission, the relevant pages of the plans, and the relevant ordinances, should be included in their entirety.

Unofficial minutes of meetings, records of telephone conversations, and billings from PSC and DNR should be included via a link so that these documents are accessible to the public.

CEII documents, p. vi, must be legitimately characterized as CEII, and care must be taken not to label documents as CEII to prevent public review.

Documents filed on ERF, p. vii, such as Microsoft Excel tables, Word, modeling, should be

filed with an active link so that the documents may be accessed by the public.

Completeness, p. vii, the Commission must take into account public comments before declaring an application complete. Completeness review is the “enforcement” of AFRs, and the Commission must take AFRs seriously. For example, the brownfield requirement for generation siting has not been taken seriously, instead derided. Project developers thus far do not give adequate consideration to siting on brownfields by ignoring the definition of brownfields, only consider brownfields on the very limited EPA list, and do not consider siting on brownfield if one brownfield cannot contain the entire project. Abandoned, idle, and underused sites, brownfields under Wisconsin law, are not considered. The Commission’s approach has been to dismiss the notion of siting on brownfields out of hand.

The AFRs should be binding, and applicants not providing a complete application should be required to request an exemption or variance, which should only be granted for good cause. The information is necessary to process an application, and considerable delay occurs when information is not forthcoming and must be unearthed through Data Requests.

Back to brownfields... In siting wind, shuttered coal and nuclear plant properties should receive priority as sites, because infrastructure, particularly transmission, in a brownfield site is readily available. When closing coal plants and nuclear plants, the Commission should require siting of wind as a condition to approval of plant closure, and as a requirement in any decommissioning plan. The converse applies as well, in siting wind and solar, the Commission should look first at brownfield and fossil generation sites. Applicants must be encouraged to group array sites together to include in the 25%, and for the project overall.

Aerial imagery is an essential component for review. The Introduction, p. viii, fn. 6, states that “[a]erial imagery is no longer required to be submitted.” This is poor practice, as it’s difficult to evaluate impacts without this “full picture.”

A link to GIS data should be provided for public access. Introduction, p. viii, fn. 7. Public copies of CPCN and CA Applications should be provided electronically via a Notice of Filing to those requesting notice of applications, with a link to the ERF docket. “No requirements” is not reasonable in this electronic age – again, these filing requirements are a floor and not a ceiling.

Another general comment is that the Commission should establish a filing requirement of a formal complaint process, rather than leave it for the developers/owners to improvise, as invited in the AFR. The Complaint process should include a contact person, steps to take, mitigation that applicants commit to performing, and steps available for complainants if applicant response does not alleviate the problem. There should be regular reporting to the Commission of all complaints, with details of steps taken, resolution, and that complainants have option to proceed to the Commission if problems are not resolved, with a designated Commission contact person for each project. Each CPCN and CA Order should require a very specific Complaint process with Commission oversight, a copy of the project’s Order be provided to those within and directly adjacent to the project area, and to parties in the CPCN docket.

Substantive Comments on “Draft” Wind Energy Projects Application Filing Requirements

These substantive comments are not all inclusive – if an area is missed, it’s likely due to time limitations.

The Draft “Wind Energy Projects Application Filing Requirements” addresses what must be included in the application in general, how to file, and it’s important to note that these are requirements, and there are few specific limitations – this is a floor, and not a ceiling.

Drawing the distinction between CPCN and CA projects, and sizing projects at just below the PSC threshold of 100MW bumps into the Commission’s own advice on p. 2 of the Draft Application Filing Requirements:

Do not break a single project into two or more smaller projects in order to avoid the regulatory review process under Wis. Stat. § 196.491(3) or to avoid the regulatory review process under Wis. Stat. §196.49 (Wis. Admin. Code § PSC 112).

Splitting projects up into projects sized smaller to fall under county jurisdiction has been occurring, with no recognition, action, or consequences from the Commission. The Commission could consider allowing projects that are split into smaller sizes, if genuine distributed generation, siting generation near load, where no new transmission would be required. The Commission should be proactive in exempting small projects from PSC CPCN review. Projects evading regulatory review should be prohibited from going forward.

Project Area and Turbine Site Alternatives

Alternative Project Areas

Alternative Project Areas must include brownfields. Wis. Stat. §196.491(3)(d)8.

Alternative Turbine Sites

Alternative turbine sites must Wis. Stat. §196.491(3)(d)8.

1. General Project Location...

1.1.6 Provide a general map...and specific detailed maps in electronic format that can be expanded in detail.

1.2 Ownership

As stated in the Draft AFR, “Identify the corporate entity or entities that would own and/or operate the plant.” If there is an agreement to sell to a utility, treat the project as a utility project, and not an IPP.

1.2 Project Need/Purpose

Need and Purpose – multiple disclosures are needed this section. The project should disclose whether or not there is a direct link to reduction of greenhouse gas, i.e., is this project contractually replacing fossil fuel facility; is this project to be built on fossil fuel brownfield site; to address whether construction of the project will reduce greenhouse gas generation, or whether it is planned to just increase generation on the market.

1.3.4.8 Efficiency⁷

1.3.6 ~~IPPs Only~~ ALL APPLICANTS - Energy Agreements⁸

1.4 Alternatives

1.4.4 Efficiency. If project will require transmission service, provide estimated line loss, cost of any reactive power, and transmission service costs.

1.5 Turbine Site Selection

1.5.2 ... consideration and how such risks would be mitigated. Discuss threshold for notice of force majeure.

1.5.3.2 Identify any sites where setback waivers are needed or have been executed⁹. Provide copy of waiver agreements.

1.5.3.3 Identify any sites where non-participating “good neighbor” agreements have been executed¹⁰. Provide copy of waiver agreements.

1.5.3.4 Provide copies of lease agreements¹¹ and status of easement agreements, narrative and shown on map...

⁷ Wind projects are inherently inefficient when compared to most other generation. In the efficiency section, the projects must provide energy loss information such as losses in conversion from DC to AC, losses inherent in the collector system, and energy losses in transmission over grid and cost of transmissions service (all projects should include information on losses). These losses are costs. Losses could be reduced by balancing loss cost with gains of distributed generation near load, with no transmission construction and no transmission service cost. These losses, transmission capital cost if any, and transmission service costs, if any, need to be internalized into the cost of energy that the project provides.

⁸ Just because it's a utility does not mean that the utility is not selling project-generated energy on the market. Agreements and/or intent to sell energy on the market, rather than serve that utility's load, must be disclosed.

⁹ JJI supports setbacks of at least 1.5 miles due to traveling of sound which does not respect property boundaries. The Wind Siting Council needs to address known state regulatory developments that per se acknowledge that various setbacks utilized in projects are not sufficient to prevent violations of state noise standards, nor are they sufficient to prevent annoyance, about which causation has been demonstrated. Health impact information is developing through scientific peer-reviewed studies, which must be reviewed by the Wind Siting Council.

¹⁰ “Good neighbor” agreements can be problematic, as they require the signatory to give up rights, waive rights, hold project owner harmless, and in most cases have no idea of the possible impacts and do not know what it is they may be waiving.

¹¹ Lease agreements should be scrutinized by the Commission to determine whether lease has clause to transfer decommissioning to landowner if project owner fails to decommission or abandons project. This type of arrangement is against the public interest, and is assuredly against the landowners' interest! Any project with such a clause in the lease should not be approved. The Commission should also be on alert for other terms indicative of an adhesion contract.

1.5.4 Identify whether setbacks are consistent with local zoning or if there are variations from local zoning setbacks. Identify jurisdiction and distance at issue for each turbine that is proposed but not consistent. If setbacks do not comply with local zoning setbacks, provide locations not in compliance (general narrative, and GIS and map) and explain plan to achieve compliance.

1.6 & 1.7 Utilities and IPPs - Cost

1.6.6 and 1.7.3 (Decommissioning information must not be limited to “utilities only.” Any and all projects, even a legitimate IPP project ,will require decommissioning. To exempt IPPs is a failure of logic. Both utilities and IPPs must provide decommissioning plans that include financial assurance and a commitment to recycle. Project must take full responsibility for decommissioning and must not have lease option of transferring decommissioning responsibility to landowner – financial assurance must be sufficient to preclude abdication of decommissioning responsibility. Decommissioning plans are available online, and these plans should be a part of the CPCN process for review and comment by the Commission, parties, and the public. At the PSC, some projects have properly provided decommissioning plans during the permitting process – it can and should be done. Applicants must also disclose whether land lease contract contain a clause transferring decommissioning to landowners who then are to collect from _____? The entity would be unknown if owner bankrupt and MIA. This is a particular concern with IPPs, a specific reason why IPPs should provide decommissioning information and financial assurance. The PUC should also prohibit any project contract with a decommissioning default to landowners if owner does not decommission – the Commission should reject CPCN with these adhesion leases.)

1.6.6.3 and 1.6.6.4 : (language of 1.7.3.3 and 1.7.3.4 should apply equally to utilities, Particularly because utilities have taken over “IPP” projects, inheriting leases, and utilities also use these terms in leases. All developers do, and it’s unreasonable transfer to landowners, and unreasonable to include this language in leases.)

1.7 IPPs Only IPPs and Utilities if Potential to Market Energy

(apply 1.7 to utilities)

2.2 Turbine Type and Turbine Characteristics

2.2.4 Technical Characteristics of Turbines

2.2.4.10 Provide manufacturer manuals with specifications, and include safety manual. (important because these manuals include statement of safe distance from turbines, i.e., likely ice throw distance, fire protocol, etc.)

2.3 Construction Equipment and Delivery Vehicles

2.3.5.2 ~~Probable~~ Routes for delivery of heavy and oversized equipment and materials, and identification if U.S., State, County, or Town roads.

2.3.5.3 Potential for road, ditch, and/or drainage damage...

2.3.5.7 Provide all agreements with counties and townships regarding roads and

infrastructure and construction traffic, including identification of haul routes, upgrades, expansion, reinforcements needed, and costs of upgrades and repairs.

2.3.6.1 List and map of roads most likely to be affected by... and road agreements with jurisdictions having responsibility for roads.

2.3.6.3 Best practices for management of construction traffic and access interruptions.

2.4 Other Project Facilities

2.4.1.6 Provide information of impact of 30-50 year long term foundations, including concrete leachate, compaction, and how removal of foundation and restoration will be accomplished.

2.4.5.5 Provide copy of spill and containment plan.

2.4.6.6. Identify transmission and distribution owners and describe all communications and agreements with ~~the~~ each transmission or distribution owner.

2.4.6.7 For transmission interconnections... and provide copies of ~~the latest~~ each draft ~~of~~ and the final MISO report...

2.4.7.5 Overhead Collector Circuits

2.4.7.5.1 If using overhead collector circuits, explain why collector circuits cannot be undergrounded.

2.4.7.5.2 Size of pole to be used. (et seq)

2.4.8 Lighting

2.4.8.2 “Dark Skies” downward lighting should be required for temporary and permanent lighting.

2.5.6 Describe... discharge. stormwater holding ponds should be identified in or adjacent to substation area. Stormwater treatment should be addressed, including contaminants expected in substation stormwater runoff.

2.6 Operations and Maintenance Building

2.6.1 Describe the purpose and use of the proposed O&M Building and identify local land use plan provisions for O&M buildings.

2.6.5.2.1 For physical and cyber security requirements, provide citation and link to source of requirements, i.e., NERC Critical Infrastructure¹².

2.6.5.3 “Dark Skies” downward lighting should be required for temporary and permanent lighting.

2.6.5 Describe how the building property would be lit and how the downward light

¹² Shots were fired into a California substation a few years ago, and the applicant should address this type of threat. Cybersecurity is also frequently raised as a concern. The legitimacy of concerns should be reviewed.

Dark skies lighting plan...

2.7 Battery Storage

2.7.5 Discuss any safety and/or security requirements

2.7.9 Provide public map of natural gas pipelines in the area using the National Pipeline Mapping System (NPMS) Public Viewer: <https://pvnpm.phmsa.dot.gov/PublicViewer/>

2.7.10 describe potential of battery storage to lessen or eliminate need for transmission.

3. Construction Sequence and Workforce

3.1.1 ... potential seasonal, financial, or regulatory constraints. Include a timeline showing , subsidy, and tax and tax credit events and deadlines, construction activities...

3.2 Workforce

3.2.3 Discuss security and public health concerns associated with large workforce influx, including man camps, sex trafficking, etc., and what applicant will do to monitor and protect the public, and address increased needs for local law enforcement and emergency response.

3.2.4 Identify what positions and percentage of workforce will be union labor and/or prevailing wage jobs.

4. Project Maps, GIS...

Basic (background) features ... boundaries. When ERF filed, maps shall be labeled providing identification to enable use.

4.1.1 General Project Area Map

- Identify haul routes covered under road agreement.

4.1.4 ... Include adjacent landowners as defined above.

4.1.6.2 Land ownership maps

- Show categories of land ownership – i.e., leased, probable, in negotiation, and definite refusal.

4.1.7.1 ...should show existing zoning out to ~~0.5~~ two (2) miles beyond the boundaries of the project area.

4.1.7.3 Maps of public and private drainage and ditch systems, including drain tile. Drain tile should be located and mapped and included in the application.

4.1.8 (“line of site” should probably be “sight.”)

4.1.9. Noise Modeling Maps

4.1.9.1 Noise modeling maps showing turbine locations, receptors, and noise modeling in 5 dBA increments extending out to the 30 dBA contour modeled using ground absorption coefficient of 0.0.

4.1.9 .2 Noise modeling maps showing turbine locations, receptors, and noise modeling in 5 dBA increments extending out to the 30 dBC (including infrasound) contour modeled using ground absorption coefficient of 0.0.

4.1.9.3 Noise modeling maps showing turbine locations, receptors, and noise modeling in 5 dBA increments extending out to the 30 dBA contour modeled using ground absorption coefficient of 0.5.

4.1.9.4 Noise modeling maps showing turbine locations, receptors, and noise modeling in 5 dBA increments extending out to the 30 dBC (including infrasound) contour modeled using ground absorption coefficient of 0.5.

4.1.10 Shadow Flicker Modeling Maps

4.1.10.1 Shadow Flicker maps showing modeling results in map form showing the potential for shadow flicker using modeling for entire project site layout. Include contours for 100, 50, 30, and ~~25~~ 20 hours annually.¹³

4.2.1.7 All known/mapped drainage system features (e.g. field drains and ditches, main district drain, drain laterals) within the project area boundary (line). Areas to be used for access, construction, and installation of turbines, collector system, substation and associated facilities must be inspected for drainage system components, particularly drain tile, to identify, locate, and map for avoidance.

4.5 Photo Simulations

Photo simulations... completed. Photos should not only show accurate representations of project appearance from public areas such as parks, community gathering places, roads, but also from perspective of resident, looking out toward project.

5. Natural and Community Resources, Description, and Potential Impacts

5.1 – 5.13 –(Information in footnotes below should also be included in Sections 5.1-5.13)

5.2.2 Describe expected changes to site topography due to grading activities, and describe how grading activities will impact decommissioning and return to original state.

5.6 Local Zoning and Safety

5.6.1 Provide copies of any zoning ordinances, including oversize/overweight and/or other road agreements...

5.6.7 Identify emergency response services, training, and equipment necessary for local emergency response and cost of same.

5.14 Cumulative Impacts

5.14.1 Identify all wind and solar projects, existing, applied for, and announced, within a ten (10) mile range of the proposed project. For each of the categories in Section 5 above, identify and analyze cumulative impacts.

5.14.1.1 Site Geology¹⁴

5.14.1.2 Topography¹⁵

¹³ Show shadow flicker modeling for 30 and 20 hours because those are the hours in PSC 128.15, NOT 25.

¹⁴ Include groundwater mapping and infiltration rate measurements. Include map to show all public and private wells within site plan and within 2 miles of project.

¹⁵ Include topographical changes in visual aesthetics and whether grading activities will impact decommissioning and return to original state.

- 5.14.1.3 Land Cover¹⁶
- 5.14.1.4 Wildlife¹⁷
- 5.14.1.5 Public Lands and Recreation¹⁸
- 5.14.1.6 Local Zoning and Safety¹⁹
- 5.14.1.7 Land Use Plans²⁰
- 5.14.1.8 Archaeological and Historic Resources²¹
- 5.14.1.9 ER Review...
- 5.14.1.10 Invasive Species²²
- 5.14.1.11 Contaminated Sites and brownfields²³ (Wis. Stat. §196.491(3)(d)8).
- 5.14.1.12 Floodplain
- 5.14.1.13 Vegetation Management and Site Restoration²⁴

6. Waterway/Wetland Permitting Activities

6.3 Mapping Wetland and Waterway Locations, Impacts, and Crossings²⁵

7. Agricultural Impacts

7.1 Current Agricultural Activities

7.1.6 Identify any farmland affected by the project that is part of an Agricultural Enterprise Area or that is Farmland Preservation land.

7.1.7 ... Describe the economic value of these programs for land in project area, and identify and itemize cost of loss in this section and in “cost” section of application. Describe the process for returning...

¹⁶ Land cover maps should include local roads with roads and road easements identified.

¹⁷ criteria for determination of wildlife pre-construction studies should be stated. Final report/s and/or analyses should be reported, added to application, and ERF. Post-construction wildlife monitoring and response protocol should include posting results on ERF, an thresholds for putting in front of Commission.

¹⁸ Public lands and Recreation resources listed should also be identified on map with adequate scale to clearly define boundaries.

¹⁹ In area with agricultural zoning, applicant should go through zoning process for change to industrial zoning.

²⁰ If the proposed project inconsistent with local land use plans, applicant should have to apply for exemption, variance, or local land use plan change. Inconsistent projects should not be permitted.

²¹ Where archaeological and/or historic resources are near or within the project siting area, applicant should contact entity overseeing that historical/archaeological site, particularly tribal entities, to assure project is respectful distance from site and that it does not interfere with use and preservation of the site. Consider the Jeffers Wind Project in Minnesota, sited near sacred native areas; also consider Lava Ridge Wind, proposed for site in Idaho near the Minidoka National Historical Site, and how siting is handled.

²² Describe efforts to prevent invasives. Will sufficient vegetation management be utilized, i.e., sufficient seeding, to prevent invasive species of plants from taking hold?

²³ Should include exhaustive list of available brownfield sites, including not just EPA Brownfield sites, but also statutorily required abandoned sites, idle sites, underutilized commercial and industrial, i.e., FoxConn, coal plant properties, nuclear plant properties, idle and/or abandoned frac sand mines, etc., use of which would not only fulfill the brownfield use requirement, but which would also further advance distributed generation.

²⁴ Vegetation Management Plan should be public to greatest extent possible (see e.g. Grant Co. Solar, where all but cost made public).

²⁵ This is absolutely necessary information, and should include agricultural drainage systems, ditches, drain tile, culverts, etc.. This information is crucial because water does not observe project boundaries, and non-participants can be severely affected by errant water, both above ground and below, a lesson learned, one hopes, through the Badger Hollow solar water issues.

7.2 Stray Voltage

7.2.1 Identify the location of confined animal dairy and hog operations within one-half mile of any proposed transmission, ~~or~~ distribution, collector system or other project facilities.

7.2.4 Describe ~~Discuss~~ any plans to conduct stray voltage testing pre- and post-construction and ERF filing of results.

8. Airports and Landing Strips

8.4.3 Verify whether emergency Air Ambulance Service will land within project area, specifying distances from turbines where service would be provided and areas where service would not be provided.

8.5 FAA

8.5.1 Provide copies of all FAA Obstruction Evaluation requests and determinations.

9. EMF

9.1.2 Show a separate profile for any overhead collector circuits and tie-line and other transmission lines in project area.

9.1.5 Identify on map all residences within 300 feet of collector and transmission lines.

10. Line-of-sight and Broadcast Communications

10.1.1 Provide a line of ~~site~~ sight analysis...

11. Noise

11.1.3 Provide turbine manufacturer's turbine model specifications, including noise information, description of noise attenuating methods and materials, if any, used in...

11.2.1. Describe how noise complaints will be handled, including complaints based on dBA and dBC (including infrasound), posting all noise complaints on ERF and confirmation of compliance with noise standards, and provide documentation of handling of any and all complaints in other projects in Wisconsin or other states. Describe how noise complaints from participants will be handled. Owner to be assessed any costs of non-compliance.²⁶

11.2.2 Discuss the range of any mitigation measures that would be used in addition to operational curtailment of one or more wind turbines to address noise complaints during the

²⁶ AFRs regarding noise must be reviewed by the Wind Siting Council, and both the Wind Siting Council and the Commission must take into account "the peer-reviewed scientific research regarding the health impacts of wind energy systems and study state and national regulatory developments regarding the siting of wind energy systems." Wis. Stat. §196.348(4g)e. See e.g., a report and summary of developments by Dr. Johnson, attachment A: A Madison County, Iowa Cardiologist's Investigation and Response to Industrial Wind Turbines in the Rural Residential Countryside Regarding Concerns of Adverse Health Effects and Exploration of the Relevant Accompanying Larger Issues.

operation of the project, and steps to be taken if mitigation does not resolve problem.²⁷

11.2.3 Discuss how owner will handle post-construction noise monitoring, including but not limited to reporting of both dBA and dBC monitoring (see Noise Protocol IV(A)(3)(c), , IV(B)(3)(c), filing on ERF together with a comparison with pre-construction modeling and shall address any discrepancy between pre-construction modeling using ground attenuation factor of 0.0 and the post-construction noise monitoring results.

11.2.4. Discuss how owner will handle post-construction noise modeling that demonstrates non-compliance with the noise standards, including, but not limited to owner initiated operational curtailment at the non-compliant locations during daytime or nighttime, depending on non-compliance, and that shall address mitigation measures with non-participant. If post-construction noise monitoring demonstrates non-compliance with the noise standard at the locations chosen, homes of ALL non-participant shall be subject to noise monitoring to determine the extent of non-compliance.

12. Shadow Flicker

12.1.1 Provide ~~an analysis~~ modeling results in chart and map form showing the potential for shadow flicker using modeling for entire project site in the area of a typical wind turbine site. Include contours for 100, 50, ~~30,~~ and 20 annually.²⁸

12.1.2 Describe how owner will estimate shadow flicker for each non-participant post-construction for compliance 20 hour threshold for offer of mitigation and for 30 hour/year limit.

12.2.1 Describe mitigation available to reduce shadow flicker and estimated costs.

12.3.1 In the event of an inquiry or complaint by a resident in or near the project area, what mitigation will be offered for various increments of hours of shadow flicker. ~~Describe what modeling or other analysis would be used to evaluate the possibility of shadow flicker at the residence.~~

12.3.2 If the likelihood were high that the resident would experience shadow flicker, describe what measures would be used to reduce the impacts on the resident. Describe

²⁷²⁷ The Commission and Wind Siting Council must, in reviewing regulatory developments, take note of landowner buyouts due to noise complaints and demonstrations of standard exceedences. Mitigation efforts range from curtailment to landowner buyouts such as those in the Shirley Wind project (A Cooperative Measurement Survey and Analysis of Low Frequency and Infrasound at the Shirley Wind Farm in Brown County, Wisconsin, PSD REF #178263). A Wisconsin utility, Alliant, bought out two landowners in its Bent Tree wind project after exceedences were demonstrated by the MN Public Utilities Commission's ordered noise study and replication: [Bent Tree Noise report confirms permit violations!](#) Bent Tree Phase I Noise Monitoring report: https://legalelectric.org/f/2017/10/BentTree_NoiseMonitoring_20179-135856-01.pdf and replicated in Phase II: https://legalelectric.org/f/2017/10/BentTree_NoiseMonitoring_20179-135856-01.pdf after which the MN Public Utilities Commission approved the settlements with the two landowner families: [Bent Tree Order filed by PUC](#) - <https://legalelectric.org/weblog/17112/>

²⁸ Show shadow flicker modeling for 30 and 20 hours because those are the hours in PSC 128.15, NOT 25.

owner's plan if mitigation offered does not satisfy the resident's complaint.

13.1.2 Provide a copy of all agreements with local communities (e.g. JD, road agreement).

13.2.1 Identify any local government infrastructure and facility improvements required (e.g. sewer, water lines, road upgrade and corner fill, railroad, police, fire), including cost estimates and agreements covering any apportionment and/or assessment.

13.2.4 Describe any other costs and/or benefits to the community...

14. Landowners Affected and Public Outreach

14.1.1 Property owners and residents... surrounding land use, etc., Describe plan and efforts to notify property owners and residents at the earliest opportunity prior to filing of application.

14.1.2 Public property, such as schools, parks, cemeteries, hospitals, or other government land and buildings within two miles ~~one mile~~ of the project area boundary.

14.2.3 Identify all local media that have been informed about the project. The list of local media should include at least one print and one broadcast. Include copies of Public Service Announcements sent to media outlets with dates sent and broadcast/printed.

15. Erosion Control and Storm Water Management Plan

In addition to Erosion Control and Storm Water Management under DNR permits, the applicant should also be required to include a water complaint process and mitigation plan exclusive of DNR permits. This Complaint process should include a contact person, steps to take with water issues, and mitigation that applicants commit to performing, and steps for landowners and the Commission to take if applicant does not respond or if response does not alleviate the problem.

COMMISSION DRAFT ORDER

The Commission's presumption of a wind Application Filing Requirements Order is premature. As above, the Wind Siting Council has not reviewed and provided advice to the Commission, a statutory requirement. No wind AFR Order should be issued until review by the Wind Siting Council – that is one of the WSC's mandates, and a directive to the Commission.

What are Jewell Jinkins Intervenors' requests based on these comments?

- Jewell Jinkins Intervenors requests the Commission provide ten (10) days' notice of and opportunity for Reply comments.
- Jewell Jinkins Intervenors requests the Commission invite oral argument on the Draft Application Filing Requirements.
- Jewell Jinkins Intervenors requests that the Commission incorporate review of the Draft Application Filing Requirements by the Wind Siting Council.

- Jewell Jinkins Intervenors requests that the Commission review with the Wind Siting Council and on, and not until, advice of the WSC, adopt rules for siting by county and town political subdivisions and restrictions on siting; adoption of PSC Code 128 for use by these political subdivisions; and as mandated by Act 40:
 1. Specify the information and documentation to be provided in an application for approval to demonstrate that a proposed wind energy system complies with rules promulgated under par. [\(b\)](#).
 2. Specify the information and documentation to be included in a political subdivision's record of decision under s. [66.0401 \(4\) \(b\)](#).
 3. Specify the procedure a political subdivision shall follow in reviewing an application for approval under s. [66.0401 \(4\)](#).
 4. Specify the requirements and procedures for a political subdivision to enforce the restrictions allowed under par. [\(b\)](#).
- Such other regulatory requirements needed in an application to provide the information for a record to support a CPCN or CA decision.

Thank you for the opportunity to comment on these important issues.

PLEASE ADD MY NAME AND CONTACT INFORMATION TO THE MAILING LIST FOR THIS DOCKET AND

Dated: August 23, 2022



Carol A. Overland MN Lic. 254617
Attorney for Jewell Jinkins Intervenors
Legalelectric
1110 West Avenue
Red Wing, MN 55066
(612) 227-8638
overland@legalelectric.org