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Badger Wind, LLC
PU-24-087

Request for Partial Waiver of Light-Mitigating Technology Requirement

July 24, 2025

Public Hearing

Badger Wind Requests a Partial Waiver for 9 of the 92 Turbines

- Badger Wind submitted a Request for a Partial Waiver of Requirement to Install a Light-Mitigating Technology System for nine (9) of the 92 turbines to be construction on the Badger Wind Project.

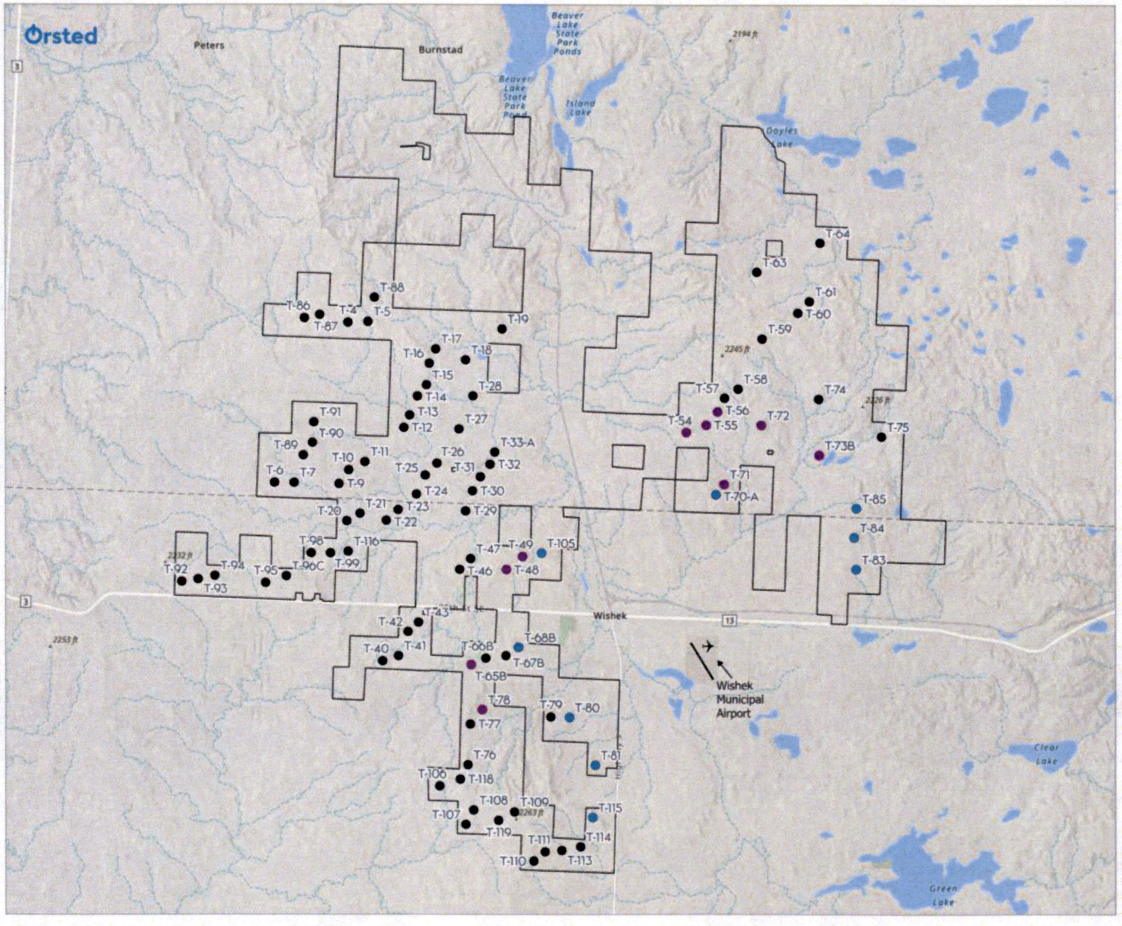
- FAA approved the following lighting plan for the Project:
  - 83 turbines: Aircraft Detection Lighting System (ADLS).
  - 9 turbines: standard lighting (not ADLS).

- Since ADLS is the only light-mitigating technology currently approved by the FAA, a waiver is warranted based on technical infeasibility.

Timeline Overview

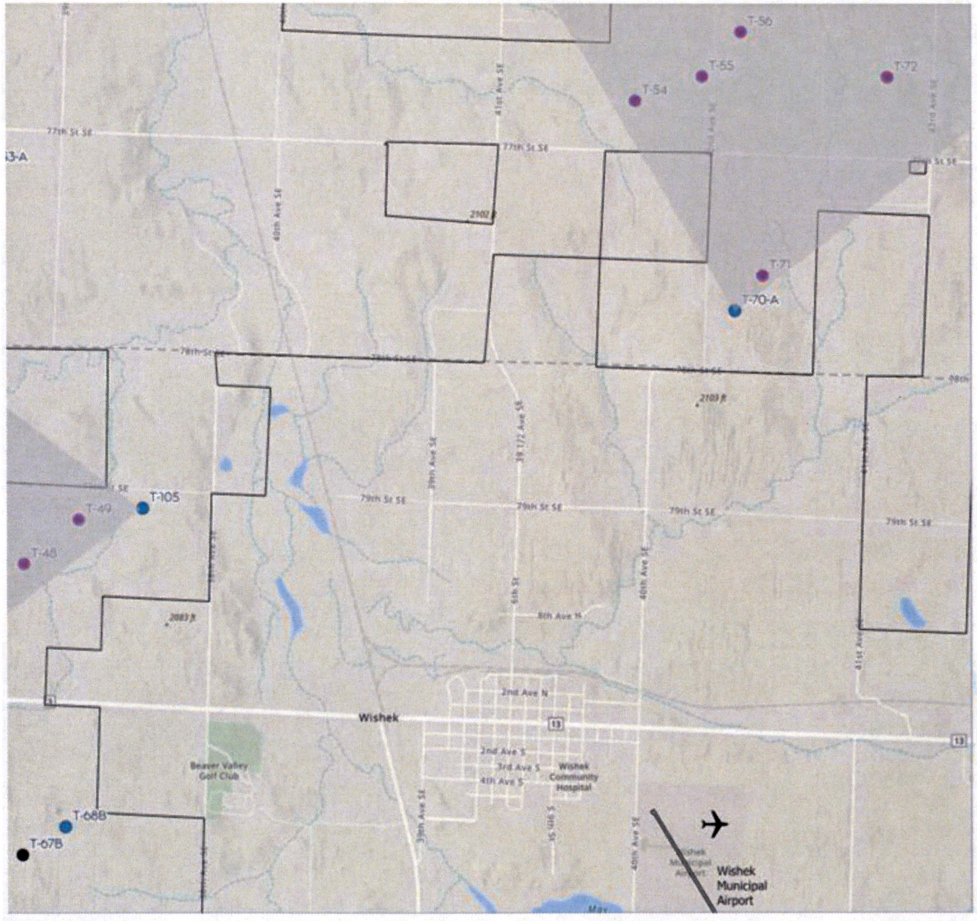
Date	Milestone
September 11, 2024	PSC issued amended Certificate of Site Compatibility to Badger Wind
September 27, 2024	Badger Wind filed Engineering Design Drawings with the PSC depicting final turbine layout
Oct – Nov 2024	ADLS tower siting and radar coverage analysis, including landowner coordination and environmental surveys for tower
December 6, 2024	ADLS tower location finalized
January 9, 2025	Final radar coverage report received from DeTect
January 14, 2025	ADLS tower DNH request and lighting and marking plan (requesting ADLS) request submitted to FAA
February 6, 2025	FAA issued DNH for ADLS tower
February 12, 2025	FAA issued initial marking and lighting plan denying ADLS on 19 turbines
March 19, 2025	Meeting with FAA to discuss ADLS denials and potential justifications for reducing ADLS denials
March 31, 2025	FAA revised marking and lighting plan approving ADLS on 83 of 92 turbines (reducing number of denied turbines to 9)
April 16, 2025	Badger Wind filed Request for Partial Waiver with PSC
December 2025	Anticipated commercial operating date (COD)/ADLS operational date

19 Turbines Were Originally Required to Have Standard Lighting



- FAA originally required standard lighting on 19 turbines (blue and purple). These turbines are between 1.94 and 3.15 nautical miles in distance from the Wishek Municipal Airport runway.
- Further evaluation determined that a number of those turbines are "shielded" by turbines between them and the airport (purple).
- Based on additional coordination, FAA revised its marking and lighting determinations for these turbines:
  - Approved use of ADLS on 10 of these turbines (purple) so long as the "shielding" turbines (blue) have standard lighting.
  - Required standard lighting on 9 turbines closest to Wishek Municipal Airport (blue).

FAA Re-evaluated Initial Lighting Plan based on "Shielding"



- FAA authorized ADLS on turbines "shielded" by the standard-lit turbines.

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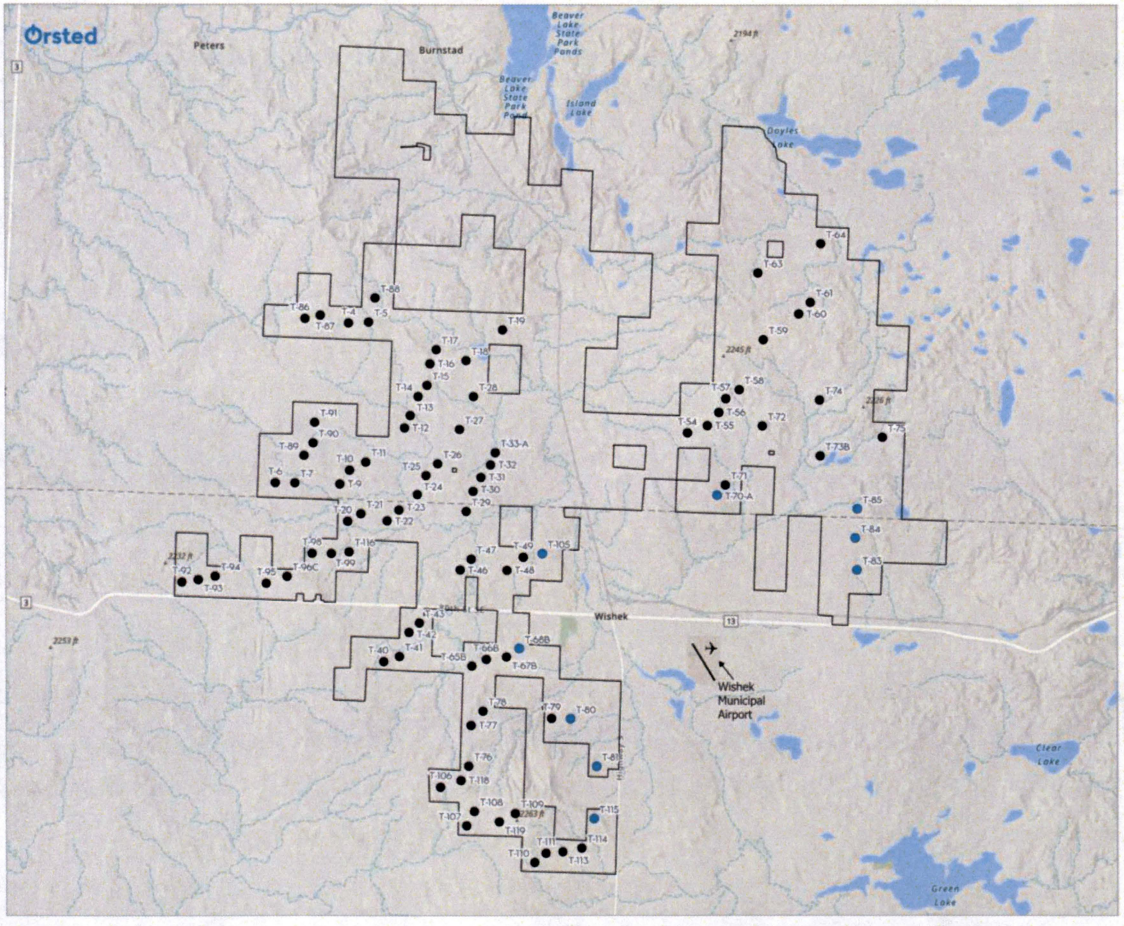
Ultimately, 9 Turbines are Required to Have Standard Lighting



- Ultimately, FAA requires standard lighting on the nine blue turbines.
- These are the turbines for which the partial waiver is requested.

The Impacts of Denying the Partial Waiver Request are Significant

- The current Project design has been optimized to ensure maximum efficiency and output, thereby maximizing economic benefits to landowners and the community. If the Waiver Request were denied:
  - Expect a minimum of 19 turbine locations would be lost due to shielding, and even if all available alternates were used:
    - Up to 82 turbines would be constructed, reducing total capacity by 28 MW; and
    - 12 landowners would lose turbines, with 9 landowners losing all their turbines.
  - In turn:
    - Project value would decrease by approximately $60 million;
    - $12 million less would be paid to local landowners; and
    - $4 million would be lost in property tax revenue for state and local taxing authorities.

Turbines originally denied ADLS by the FAA were between 1.94 and 3.15 nautical miles from the Wishek airport runway

- Badger Wind coordinated closely with the FAA, Wishek Airport, and the North Dakota Aeronautics Commission in siting the Project, which resulted in removing five turbines and shifting two turbines to ensure compatibility with airport operations. ADLS was not an issue that was raised.
- FAA regulations do not specify a distance a wind project should be from an airport in order to utilize an ADLS. Rather, the FAA evaluates lighting and marking plans on a case-by-case basis.

> *"Approval of an ADLS will be on a case-by-case basis and may be modified, adjusted, or denied based on proximity of the obstruction or group of obstructions to airports, low-altitude flight routes, military training areas, or other areas of frequent flight activity. It may be appropriate to keep certain obstructions closest to these known activity areas illuminated continuously during the nighttime hours, while the remainder of the group's obstruction lighting is controlled by the ADLS."* FAA Advisory Circular No. 70/7460-lM, Section 10.2.3

- Based on what we have learned from the FAA's lighting plan determination for the Badger Wind Project, Ørsted commits to not site any future turbine within 3.15 nautical miles of a public-use airport in North Dakota.

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Conclusion

- Based on technical infeasibility, Badger Wind requests that the Commission grant a waiver from the light-mitigating technology requirement for the nine (9) turbines identified in blue near the Wishek Municipal Airport.
- Badger Wind commits to reviewing FAA-approved light-mitigating technology systems and reporting the results to the Commission every three years, to determine if the waiver should continue based on continued technical infeasibility, or if an acceptable light-mitigating technology system could be approved by the FAA and installed on the nine (9) turbines.
- Ørsted commits to not site any future turbine within 3.15 nautical miles of a public-use airport in North Dakota.