

September 5, 2023

VIA E-MAIL AND HAND DELIVERY

Mr. Steven Kahl
Executive Secretary
North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480

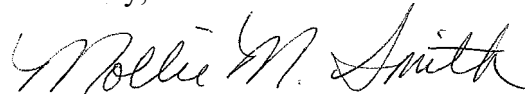
**Re: Otter Tail Power Company
Amend – Ashtabula III Wind Energy Facility Upgrade Project
Siting Application – Barnes County
Case No. PU-23-256**

Dear Mr. Kahl:

In connection with the above-referenced matter, Otter Tail Power Company encloses for filing an electronic copy of its presentation for the September 6, 2023 informal hearing. We will bring hard copies of the presentation to the informal hearing.

If you have any questions, please let me know.

Sincerely,



MOLLIE M. SMITH

MMS/80063840
Enclosure

cc: Lisa McFarland (w/ enclosure, via e-mail)
Bryce Haugen (w/ enclosure, via e-mail)



INFORMAL HEARING CASE NO. PU-23-256

Ashtabula III Wind Energy Facility Upgrade

September 6, 2023



SUMMARY OF REQUEST



Filing Request of the Commission:

- Certification of the Ashtabula I Wind Equipment Upgrade, supported by:
 - Environmental and regulatory compliance memorandum, with:
 - Appendix A - Acoustic Assessment Results and Sound Waivers
 - Appendix B - Shadow Flicker Assessment Results
 - Appendix C - FAA Filings
 - Appendix D - Microwave Beam Path Study
 - Appendix E - Cultural Resource Report and Unanticipated Discoveries Plan
 - Appendix F - IPaC Resource List; and
 - Appendix G - Setback Waiver.

EQUIPMENT UPGRADES DESCRIBED

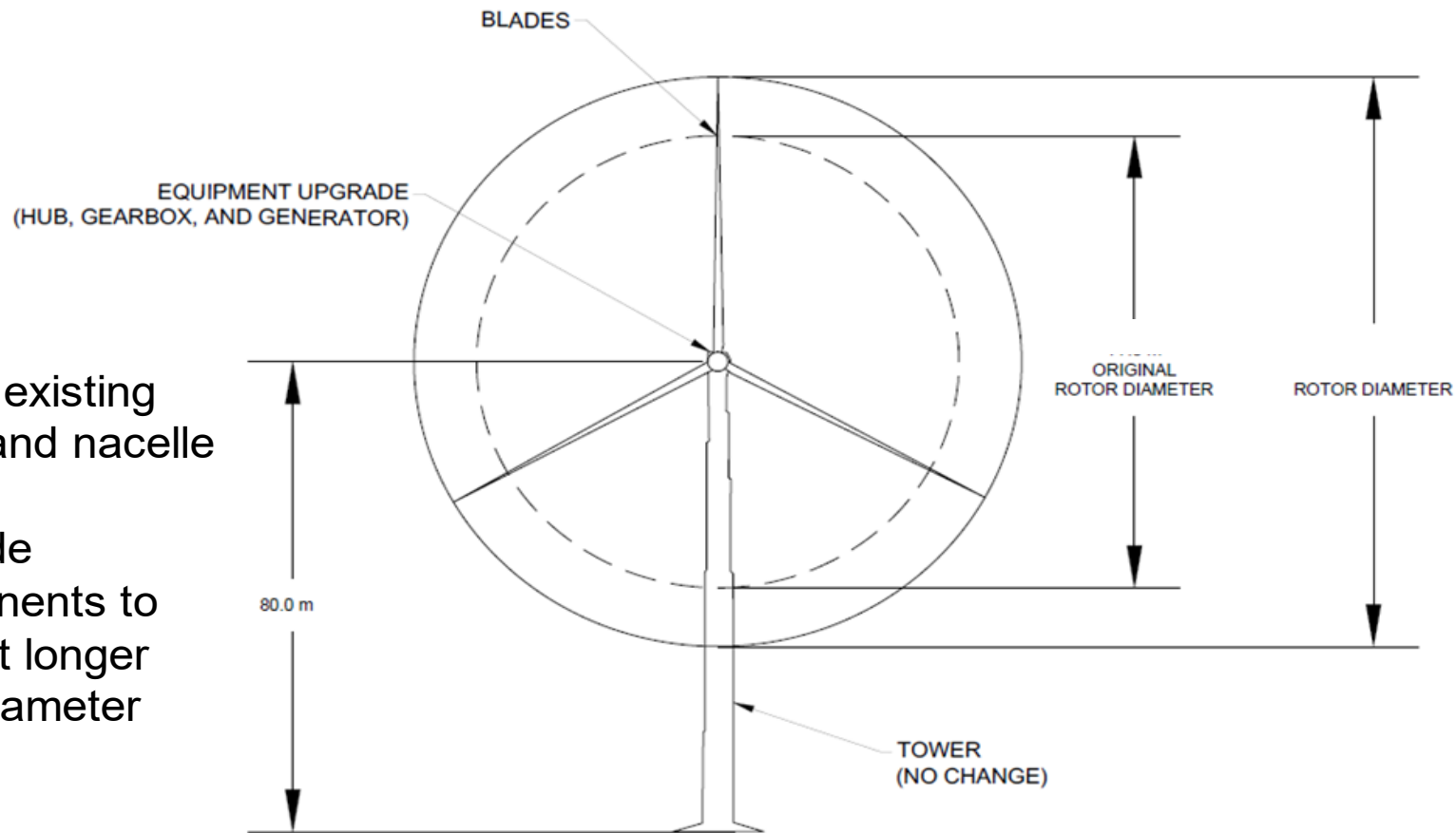
- Wind turbines are improved through use of existing towers and nacelles by replacing or refurbishing components to support longer blades to maximize energy generation at the existing facility.
- Ashtabula III project:
 - Component replacement target Q3 2025
 - Existing towers and foundations remain
 - No changes to underground collection, substation
 - New hub and rotors to support longer blades
 - 82.5 meter rotor diameter increases up to 91 meter rotor diameter
 - Component, electrical, and software upgrades within nacelle



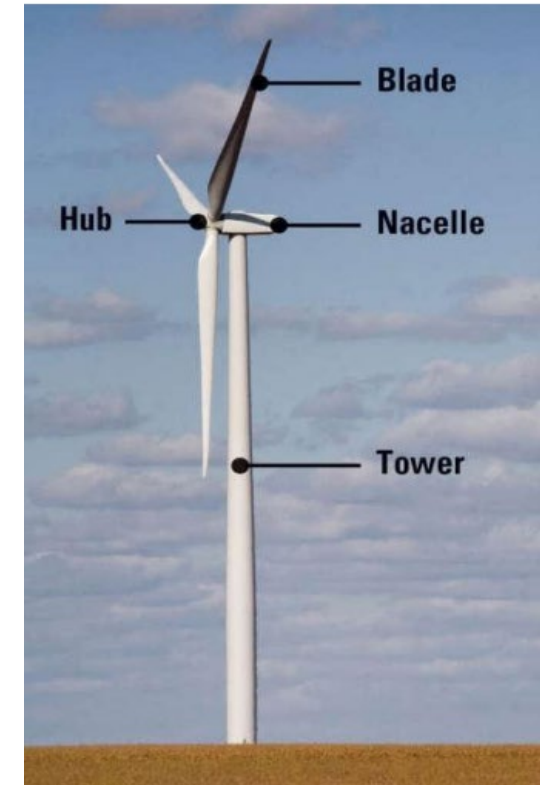
FIGURE 2

PROPOSED TURBINE UPGRADE

- ~20% more energy generated annually

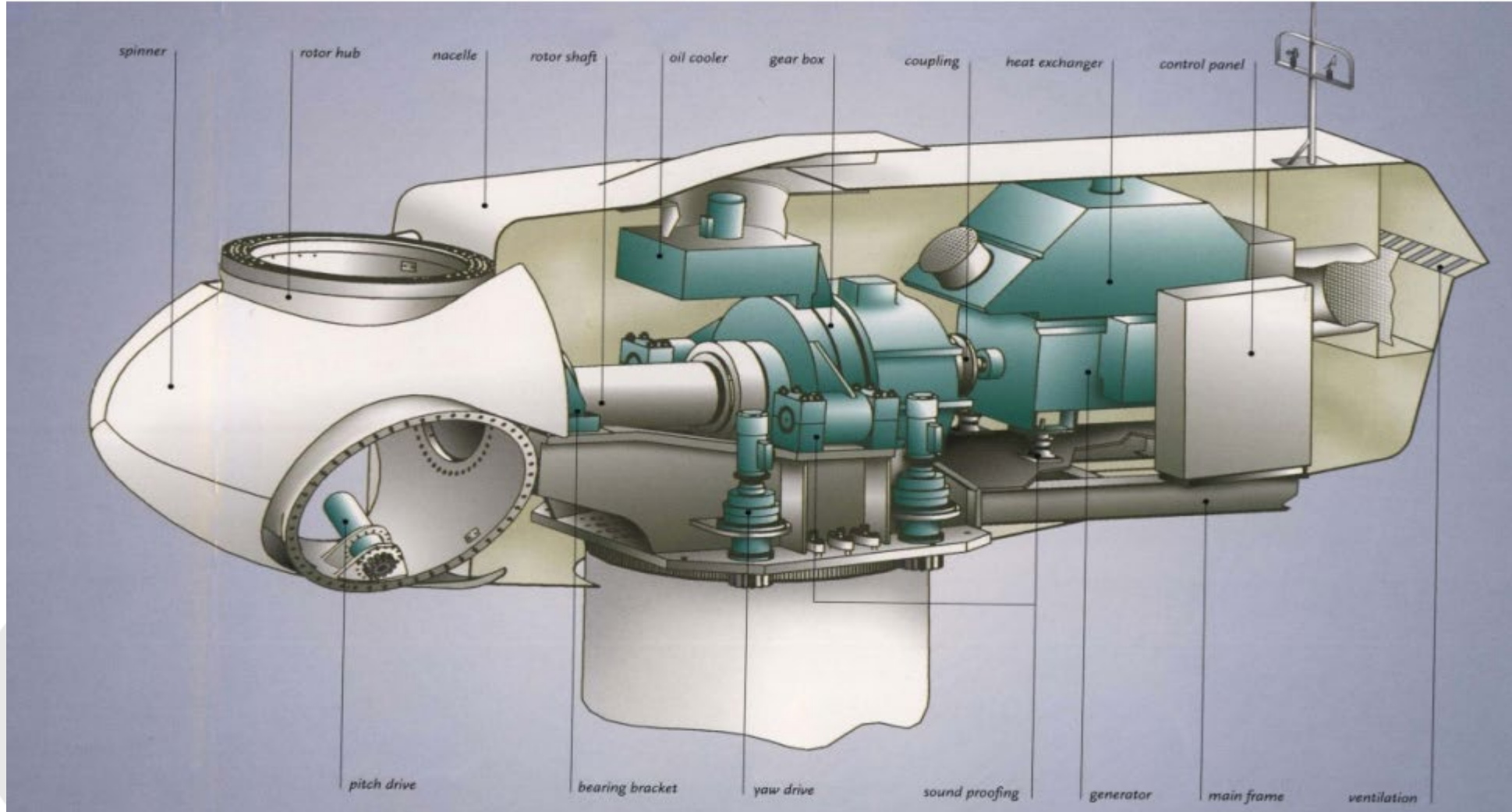


- Use of existing tower and nacelle
- Upgrade components to support longer rotor diameter



COMPONENT REPLACEMENT ILLUSTRATION

- Hub, blade bearings and pitch cylinders will be replaced to accommodate the larger rotor
- Replacement of existing gearbox
- Refurbishment of generator
- Obsolete blades will be recycled



Improved performance of resources is always under evaluation:

- Sourcing of blades expected to be from North Dakota.
- Additional state taxes paid by facility.
- The upgrades increase energy produced and reduces costs in the long term.

COMPLIANCE WITH COMMISSION REQUIREMENTS

Ashtabula III wind equipment upgrade:

- Certification is in Compliance with NDCC Section 49-22-03(3)(a):
 - Wholly within designated Project site
 - Improves the existing energy generation technology
 - Complies with the Commission's current exclusion area and avoidance area requirements, including:
 - Turbine setback requirements
 - Three property line setback variances requested impacting four turbines
 - County roadway setback variances for three turbines
 - Sound requirement
 - Cultural and wetland avoidance – within previously surveyed/disturbed areas
 - One receptor (residence) modeled to have over 30 hours per year of shadow flicker – will use shadow flicker mitigating technology to reduce shadow flicker to 30 hours per year
 - Complies with Commission's prior Orders

SUMMARY OF REQUESTS

Request of the Commission:

- Certification of the Ashtabula III Wind Equipment Upgrade including non-participating property line setback variances for four turbines and county roadway setback variances for three turbines.

