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November 4, 2020

VIA ELECTRONIC FILING

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place E, Suite 350
St. Paul, Minnesota 55101

Re: ***In the Matter of Walleye Wind, LLC for a Certificate of Need for the Walleye Wind Project and Associated Facilities in Rock County,*** **MPUC Docket No. IP7026/CN-20-269**

Walleye Wind, LLC – Certificate of Need –Application Amendment

Dear Mr. Seuffert:

Walleye Wind, LLC (Walleye Wind, Applicant) hereby submits this Certificate of Need (CON) Application amendment (Application Amendment). Walleye Wind initially filed a CON Application (Initial Application) on July 9, 2020. In this Application Amendment, Walleye Wind proposes to modify the Project's proposed wind turbine technology and layout to change alternative and primary turbine designations, modify operational power capacity at several turbines; as well as remove several turbine locations and make turbine shifts to address landowner participation and concerns. These changes are described in detail below and reflected in the following documents included with this Application Amendment:[1]

(1) A clean version of the CON Application text incorporating the changes described below;
(2) **Attachment A**: A map comparing the Initial Application wind turbine array and this Application Amendment wind turbine array; and

[1] Interested stakeholders will have the opportunity to comment on this Application Amendment at the yet to be scheduled Informational/Scoping Meeting and during the subsequent comments periods that will be scheduled.

(3) **Attachment B**: Revised Appendix C, Project Maps reflecting changes described below.

Walleye Wind has designed and developed the current site in accordance with Minnesota standards in order to provide 100% Production Tax Credit capability when delivering the project for the Minnesota Municipal Power Agency (MMPA) in December of 2021. To meet this deadline, Walleye Wind respectfully requests Commission review and approval of the Amended Application no later than August 2021.

Description of Changes

The Initial Application included 51 prospective turbine locations; five of those locations were removed from this Application Amendment. The five locations that were removed included two primary turbines and three alternate turbines. The wind turbine array in this Application Amendment is numbered in a way that spatially matches the Initial Application, including the terms "primary" and "alternate". The removal of two primary turbines lowers the count for turbines designated as primary to 38 turbines. Walleye Wind, however, is proposing to construct 40 of the 46 prospective locations presented in this Application Amendment.

The October 2020 array includes changes to the June 2020 array, and due to these changes, those "primary" and "alternate" terms no longer indicate which turbine locations are truly expected to be built. For this reason, **Table 1**[2] indicates the turbine technologies included in the latest array, the total count of a given turbine technology, how many of those turbines were considered "primary" in the June 2020 array, and how many are expected to be built as of October 2020. More specifically, this Application Amendment proposes to make the following changes to wind turbines:

- Two primary and three alternate turbine locations removed
- Five primary turbines changed to alternate
- Seven alternate turbines activated to primary
- Fourteen turbines shifted locations
- Four turbines changed from General Electric (GE) 2.82 MW to safe harbor model GE 2.32 MW turbines
- Three turbines changed from a safe harbor GE 2.32 to model GE 2.82
- Noise Reduced Operations (NRO) technology was added to six model GE 2.82 turbines
- Three turbines model GE 2.82 changed hub heights

[2] Aside from Table 1, the table numbering in this amendment corresponds to the table numbering in Initial Application.

With these changes in turbine technology, the Project's total power capacity will decrease slightly from 110.8 MW to 109.2 MW.[3]

A map comparing the Initial Application wind turbine array and this Application Amendment wind turbine array is provided in **Attachment A**. Access roads, collection routes, and crane walks were adjusted to accommodate the revised turbine array, which can be seen in **Figure 1**, below. Maps have been updated to reflect the Application Amendment modifications and are herein provided in **Attachment B**. Sections of the Initial Application or appendices that did not change are not summarized herein as the Initial Application

[3] Select GE 2.82-127 LNTE wind turbines (turbines 5, 6, 27, 32, 33, and Alt 8) are proposed to run under a noise reduction operation (NRO). In the event that the NRO model turbines are not required, the Project capacity would increase to approximately 109.7 MWs.

Table 1: Summary of Walleye Wind Certificate of Need Application Wind Turbine Changes

Turbine Number		Turbine Model		
Initial Application Primary and Alternate Designation	**Application Amendment Primary and Alternate Designation**	**Initial Application**	**Application Amendment**	**Changes Between Initial Application and Application Amendment**
1	2	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine moved approximately 615 feet west
2	Alt3	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine changed to alternate and moved approximately 599 feet northwest
3	6	GE2.82 127RD 114HH	GE2.32 116RD 80mHH	Turbine model change from GE 2.82 to GE 2.32
4	Alt7	GE2.32 116RD 80mHH	GE2.32 116RD 80mHH	Turbine change to alternate and moved approximately 20 feet south
5	4	GE2.32 116RD 80mHH	GE2.82 127RD 89HH NRO	Turbine model change from GE 2.32 to GE 2.82 and added NRO technology
6	5	GE2.82 127RD 114HH	GE2.82 127RD 114HH NRO	Turbine model added NRO technology
7	-	GE2.82 127RD 114HH	-	Location removed
8	7	GE2.82 127RD 114HH	GE2.32 116RD 80mHH	Turbine model change from GE 2.82 to GE 2.32 and moved approximately 746 feet southwest
9	8	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
10	9	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-

Turbine Number		Turbine Model		
Initial Application Primary and Alternate Designation	Application Amendment Primary and Alternate Designation	Initial Application	Application Amendment	Changes Between Initial Application and Application Amendment
11	14	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
12	18	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
13	12	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
14	10	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
15	11	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
16	13	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
17	15	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
18	16	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
19	17	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
20	19	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
21	-	GE2.82 127RD 114HH	-	Location removed
22	21	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine moved approximately 36 feet northwest
23	Alt2	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine changed to alternate
24	23	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-

Turbine Number		Turbine Model		
Initial Application Primary and Alternate Designation	Application Amendment Primary and Alternate Designation	Initial Application	Application Amendment	Changes Between Initial Application and Application Amendment
25	24	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
26	25	GE2.82 127RD 114HH	GE2.32 116RD 80mHH	Turbine model change from GE 2.82 to GE 2.32
27	Alt8	GE2.82 127RD 114HH	GE2.82 127RD 114HH NRO	Turbine changed to alternate, added NRO technology, and moved approximately 557 feet northwest
28	26	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
29	27	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
30	28	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine moved approximately 115 feet south
31	29	GE2.82 127RD 114HH	GE2.82 127RD 89HH	Turbine model change to lower hub height-
32	31	GE2.32 116RD 80mHH	GE2.82 127RD 89HH NRO	Turbine model change from GE 2.32 to 2.82 and added NRO technology
33	30	GE2.32 116RD 80mHH	GE2.82 127RD 114HH NRO	Turbine model change from GE 2.32 to GE 2.82, added NRO technology, and moved approximately 15 feet east
34	35	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine moved approximately 866 feet northeast

Turbine Number		Turbine Model		
Initial Application Primary and Alternate Designation	Application Amendment Primary and Alternate Designation	Initial Application	Application Amendment	Changes Between Initial Application and Application Amendment
35	36	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
36	37	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
37	38	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
38	Alt6	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine changed to alternate
39	39	GE2.82 127RD 114HH	GE2.82 127RD 114HH	-
40	40	GE2.82 127RD 114HH	GE2.82 127RD 89HH	Turbine model change to lower hub height
Alt1	-	GE2.82 127RD 114HH	-	Location removed
Alt2	-	GE2.82 127RD 114HH	-	Location removed
Alt3	-	GE2.82 127RD 114HH	-	Location removed
Alt4	22	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine activated from alternative to primary and moved approximately 654 feet southwest
Alt5	Alt1	GE2.82 127RD 114HH	GE2.82 127RD 114HH	Turbine moved approximately 308 feet northeast
Alt6	20	GE2.82 127RD 114HH NRO	GE2.32 116RD 80HH	Turbine activated from alternative to primary and model change from GE 2.82 to GE 2.32

Turbine Number		Turbine Model		
Initial Application Primary and Alternate Designation	**Application Amendment Primary and Alternate Designation**	**Initial Application**	**Application Amendment**	**Changes Between Initial Application and Application Amendment**
Alt7	1	GE2.82 127RD 89HH	GE2.82 127RD 89HH	Turbine activated from alternative to primary and moved approximately 35 feet northeast
Alt8	32	GE2.82 127RD 89HH	GE2.82 127RD 89HH NRO	Turbine activated from alternative to primary and NRO technology added
Alt9	3	GE2.82 127RD 89HH	GE2.82 127RD 89HH	Turbine activated from alternate to primary and moved approximately 236 feet northwest
Alt10	33	GE2.82 127RD 89HH NRO	GE2.82 127RD 114HH	Turbine activated from alternative to primary, model changed to increased hub height, and moved approximately 371 feet southeast
Alt11	34	GE2.82 127RD 89HH NRO	GE2.82 127RD 89HH	Turbine activated from alternative to primary

Section 1.1 – The Walleye Wind Project

As previously described, the Project's total capacity is now 109.2 MW and will be generated using a combination of three potential General Electric (GE) models including: the 2.82 MW, 114-meter hub height turbine; the 2.82 MW, 89-meter hub height turbine; and the safe harbor 2.32 MW, 80-meter hub height turbine. The Initial Application states that the preliminary turbine layout included 11 turbines. The current preliminary turbine layout now includes 6 alternative wind turbines.

Section 5.0 – Certificate of Need Criteria
Section 5.2 – Description of Turbines and Towers
5.2.1 Size, Type, and Timing

As previously mentioned, the Initial Application indicated that the Project is approximately 110.9 MW. However, the capacity of the Project has decreased slightly from 110.8 MW to 109.2 MW since submission of the Initial Application.

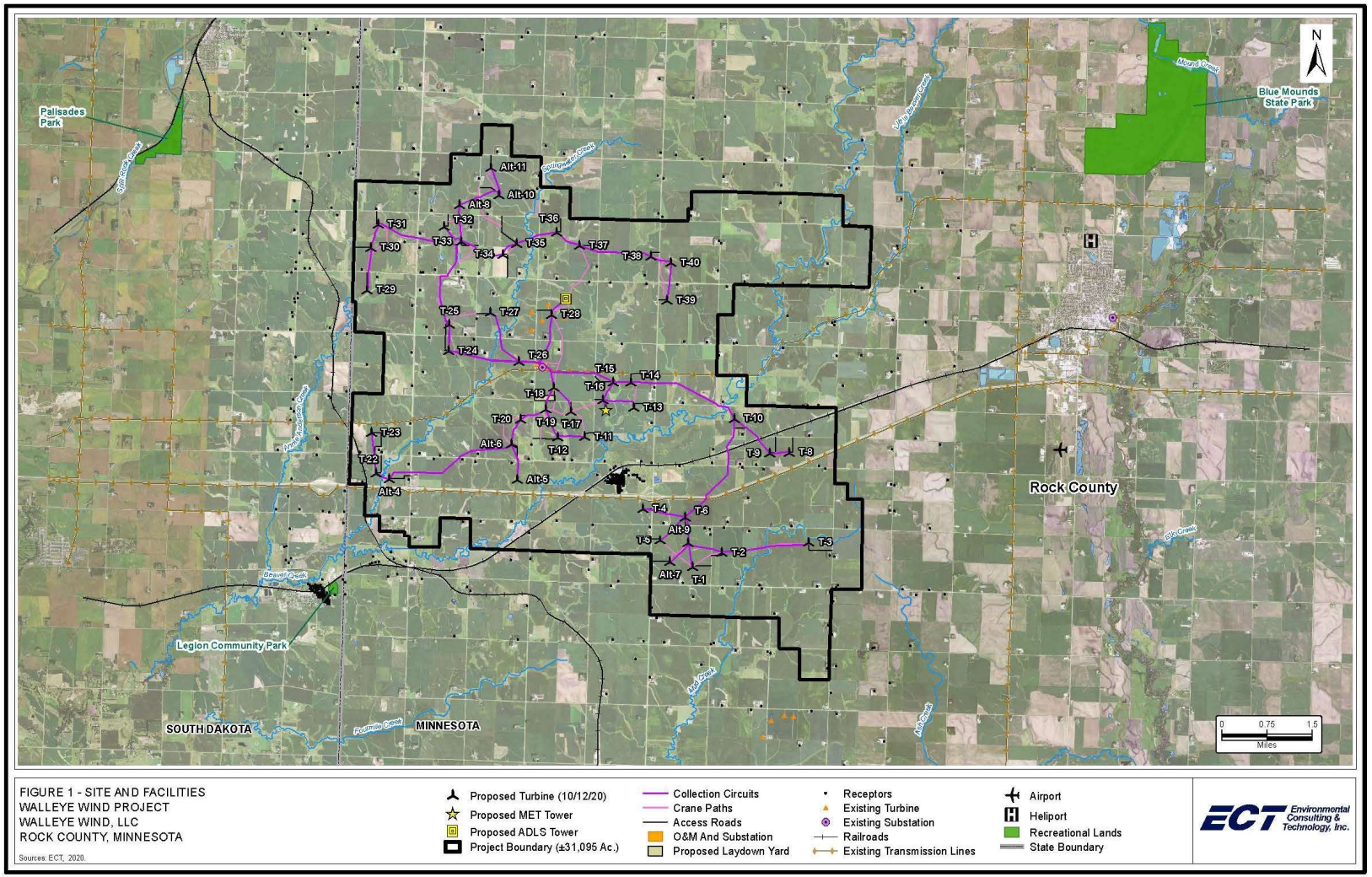
5.2.4 Reliability

The Initial Application estimated an annual expected net capacity factor of approximately 41.6% to 48.8% with a projected average annual output of approximately 449,860 MWh. Due the changes in turbine technology, the new net capacity factor for the Project is approximately 40.1% to 50.9% is expected annually and the projected average annual output is approximately 431,947 MWh.

Section 6.0 – Description of LEGF and Alternatives (Minn. R. 7849.0250)
Section 6.1 – Proposed Project (Minn. R. 7849.0250(A))

The Initial Application stated that four turbine models would be used for the Project, including: 2.82 MW, 114-meter hub height turbine; the 2.82 MW, 89-meter hub height turbine; and the safe harbor 2.32 MW, 80-meter hub height turbine; or the safe harbor 2.5 MW, 90-meter hub height turbine. The current project layout removed the option of using the safe harbor 2.5 MW turbines. A map showing the updated Project is provided below in **Figure 1**.

Figure 1. Project Layout



Section 6.1.1 – Nominal Generating Capacity and Effect of Economies of Scale (Minn. R. 7849.0250(A)(1))

The total nominal generating capacity of the Project was initially approximately 110.8 MW. Due to changes in project design, the generating capacity is now 109.2 MW.

Section 6.1.2 – Annual Capacity Factor (Minn. R. 7849.0250(A)(2))

As previously described, the projected annual net capacity factor for the Project is now approximately 40.1% to 50.9% with a projected average annual output of approximately 431,947 MWh.

Section 6.2 – Availability of Alternatives (Minn. R. 7849.0250(B))

Section 6.2.2 – Upgrades to Existing Resources (Minn. R. 7849.0250(B)(2))

The Initial Application stated that there was no potential upgrade to an existing facility suitable to produce approximately 110.8 MW of wind energy as Walleye Wind has no existing facilities in Minnesota. The capacity of the Project has been updated to 109.2 MW and it remains true that no upgrade to an existing facility be suitable to produce 109.2 MW of wind energy.

Section 6.2.3 – New Transmission (Minn. R. 7849.0250(B)(3))

The Initial Application stated that, Walleye Wind has no plans to own or operate transmission voltage level lines for the interconnection of the Project and that according to MMPA, there were no transmission alternatives that would provide approximately 110.8 MW of wind energy, as only a wind generating plant can produce the approximately 110.8 MW of renewable energy contracted for in the PPA. The capacity of the project has been updated to 109.2 MW and it remains true that no transmission alternatives would be suitable to provide 109.2 MW of wind energy.

Section 11.0 – Environmental Information for Proposed Project and Alternatives (Minn. R. 7849.0310)

Section 11.1 Wind Facility

Section 11.1.1 Impacts to Visual Resources

In the Initial Application, 94 existing turbines were located within 10-miles of a proposed Project turbine location. Based on revisions to the Site layout, the number of existing turbines within 10-miles of a proposed Project turbine is 67. Also in the Initial Application, Walleye Wind proposed four turbine models including the GE 2.5 MW or the GE 2.32 MW and two models of the GE 2.82 MW. The Project now proposes three turbine models and removes the GE 2.5 MW an option.

Changes in visual impacts are expected to be negligible. **Table 5** has been updated to reflect current Project technology.

Table 5. Rotor Diameter and Number of Turbines

Turbine Model	Rotor Diameter (meters/feet)	Rotor Tip Height (meters/feet)	Ground Clearance (meters/feet)	Number of Primary Turbines	Number of Alternate Turbines
GE 2.32 MW	138.3/453.7	116.5/382	21.8/71.7	4	1
GE 2.82 MW	178.1/584.3	127.2/417	51/167.3	27	3
GE 2.82 MW	152.1/499	127.2/417	25/82	2	3
GE 2.82 MW-Noise Reduced Operation (NRO)[4]	178.1/584.3	127.2/417	51/167.3	3-	
GE 2.82 MW-NRO	152.1/499	127.2/417	25/82	2	1

Section 11.1.1 Shadow Flicker Impacts

The Initial Application indicated that the predicted, expected annual shadow flicker duration ranged between 0 hours, 0 minutes and 42 hours, 22 minutes per year, which occurred at non-participating receptor 331.

The maximum predicted expected annual shadow flicker duration for this Application Amendment is now 45 hours and 49 minutes (participating receptor 331). The maximum modeled expected annual flicker at a non-participating receptor (receptor 84) is 38 hours, 36 minutes, and the maximum modeled expected annual flicker at a targeted receptor (#94) is 42 hours, 34 minutes.

In the Initial Application, 206 receptors were predicted to experience no annual shadow flicker, 167 locations were predicted to experience less than 10 hours per year of shadow flicker, 60 locations were expected to have between 10 and 30 hours of shadow flicker per year, and 10 locations were expected to have over 30 hours of shadow flicker per year, including five non-participating receptors. The revised model for the Application Amendment indicated 227 receptors are predicted to experience no annual shadow flicker, 152 locations are predicted to experience less than 10 hours per year of shadow flicker, 53 locations are expected to have between 10 and

[4] The NRO mode reduces the sound power level by lowering the rotor speed, which therefore lowers the blade tip speed, and can also modify the blade pitch. Utilizing these two techniques, where needed, specific turbines will meet the required noise levels.

30 hours of shadow flicker per year, and eleven locations are expected to have over 30 hours of shadow flicker per year, four of which are non-participating receptors.

Section 11.1.3 Impacts to Land Use

The Initial Application stated that the permanent loss of acres of agricultural lands totaled approximately 42.8 acres of agricultural land. Additionally, nearly all (97%) of the Project permanent development was planned in land currently under crop cultivation. Due the changes in the Project layout, this now totals 47.4 acres. The adjusted amount is still not expected to result in the loss of agricultural-related jobs or net loss of income.

Section 12.0 – Facility Information for Proposed Project and Alternatives Involving Construction of a Large Electric Generating Facility (LEFG) (Minn. R. 7849.0320)

Section 12.8 – Noise (Minn. R. 7849.0320(I))

In the Initial Application, since ambient sound levels in the Project area vary, modeled Project-Only sound levels were combined with modeled Existing Non-Project wind turbines sound levels and a range of non-wind turbine ambient sound levels in order to evaluate the Minnesota limit of 50 dBA. The highest Project-Only L_{50} sound level ranged from 14 to 47 dBA and the maximum modeled sound level was 47 dBA at 11 receptors (5 participating, 4 targeted, and 2 non-participating receptors). For this Application Amendment, the highest Project-Only L_{50} sound level to be 47 dBA at receptors #94, 147, 83, 332, N9, 163, 316, 148, and 87. This includes 6 participating receptors, 3 targeted receptors.

Thank you for your attention to this Application Amendment.

Respectfully submitted,

Stinson LLP

/s/ Brian M. Meloy

Brian M. Meloy

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Walleye Wind, LLC for a Certificate of Need for the Walleye Wind Project and Associated Facilities in Rock County, Minnesota	)))))	**Docket No. IP-7026/CN-20-269** ***CERTIFICATE OF SERVICE***

The undersigned hereby certifies that a true and correct copy of the **WALLEY WIND LLC'S CERTIFICATE OF NEED APPLICATION AMENDMENT** has been served today by e-mail and/or U.S. Mail to the following:

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Dated this 4th day of November, 2020.

/s/Nena L. Kuhnly
Nena L. Kuhnly