



March 20, 2024

E-Filing

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

RE: Letter in Response to Staff Briefing Papers in the Matter of Xcel Energy's Competitive Resource Acquisition Process for up to 800 MW of Firm Dispatchable Generation, **Docket No. E002/CN-23-212**

Dear Mr. Seuffert,

National Grid Renewables ("NG Renewables") respectfully submits this letter in reply to Department of Commerce's recommendations for further information and in advance of the March 21st hearing. We apologize for the late reply to the Department of Commerce's recommendations and appreciate their thoughtful review of all bids in this competitive acquisition process, along with the well-developed record as outlined in the Staff Briefing Papers. We offer the following additional information for our Plum Creek Wind + Storage and Harmony Solar + Storage projects to our original bid on January 22nd, 2024.

Plum Creek Wind

Department of Commerce recommended the addition of the following information to the Plum Creek, which we have provided in the table below:

1. IRP Order B (5)—Fixed operations and maintenance payment;
2. IRP Order B (6)—Variable operations and maintenance payment;
3. IRP Order B (8)—Tax-related payments and other costs;
4. IRP Order C (1) to (4)—Scheduling provisions, including but not limited to:
 - a. Planned maintenance;
 - b. Expected minimum load;
 - c. Ramp rates; and
 - d. Limitations on operations.
5. IRP Order D—Discussion of the guaranteed performance factors, such as construction costs, unit completion, availability, and efficiency'
6. 800 FD Order, Metric 32—Provide a climate change analysis of the proposal consistent with the Minnesota Environmental Quality Board's environmental assessment worksheet guidance for developing a carbon footprint and incorporating climate adaptation and resilience; and
7. 800 FD Order, Metric 32—Identifying whether the proposal is located in an environmental justice area using census criteria in Minnesota Statute 216B.1691, subd. 1(e). proposal.

Item	Responses
1. IRP Order B (5)—Fixed operations and maintenance payment;	\$1.69/kWh for first 3 years and \$3.6/kWh for rest of contract term - estimate for BESS (contingent on finalizing of long-term service agreement (LTSA) and other guarantees) \$17.3/kW for Wind
2. IRP Order B (6)—Variable operations and maintenance payment;	N/A
3. IRP Order B (8)—Tax-related payments and other costs;	National Grid Renewables can provide this information at a later time. This information is finalized when the project advances further in the development process.
4. IRP Order C (1) to (4)—Scheduling provisions, including but not limited to: <ul style="list-style-type: none"> Planned maintenance; Expected minimum load; Ramp rates; and Limitations on operations. 	<ul style="list-style-type: none"> 7 days per year typically N/A 200 MW/min based on current estimates 7 days per year, typically; 365 cycles/yr and 2 cycles/day
5. IRP Order D—Discussion of the guaranteed performance factors, such as construction costs, unit completion, availability, and efficiency'	According to current estimates, 82.9% round-trip efficiency, availability guarantee - 96% (both would be solidified at a later date post-LTSA signing)
6. 800 FD Order, Metric 32—Provide a climate change analysis of the proposal consistent with the Minnesota Environmental Quality Board's environmental assessment worksheet guidance for developing a carbon footprint and incorporating climate adaptation and resilience;¹¹ and	The EAW worksheet does not apply to Plum Creek Wind+Storage because the project was permitted through the state of Minnesota, which already considers potential environmental impacts. Through the permitting process, National Grid Renewables has engaged with both the MN PUC and the MN DOC Energy Environmental Analysis Unit (EERA), to address potential environmental impacts of the project. We believe we have given diligent consideration of the Minnesota Environmental Quality Board's environmental assessment worksheet, particularly concerning the

	<p>evaluation of the climate change metric. Further, National Grid Renewables' projects will not directly emit any greenhouse gas emissions due to production or storage of electricity. Additional information is presented throughout National Grid Renewables' original submission, detailing the consideration of said guidance into our methodologies and analyses, thus underscoring our commitment to addressing environmental concerns.</p>
<p>7. 800 FD Order, Metric 32—Identifying whether the proposal is located in an environmental justice area using census criteria in Minnesota Statute 216B.1691, subd. 1(e).</p>	<p>Plum Creek Wind + Storage is not located in an environmental justice area, per the census criteria in Minnesota Statute 216B.1691, subd. 1(e).</p>

Harmony Solar

Department of Commerce recommended the addition of the following information to NG Renewables' Harmony proposal, which we have provided in the table below:

1. Minn. R. 7849.0250 A (1)—Discussion of the impact of economies of scale on facility size and timing;
2. Minn. R. 7849.0320 E (1), (2), and (3)—Regarding water use:
 - a. Estimated maximum use including:
 - i. Groundwater pumping rate in gallons/minute
 - ii. Surface water appropriation in cubic feet/second
 - b. Estimated groundwater appropriation in million gallons/year;
 - c. Annual consumption in acre-feet;
3. Minn. R. 7849.0320 H—Potential types/quantities of solid wastes produced in tons/year;
4. IRP Order B (5)—Fixed operations and maintenance payment;
5. IRP Order B (6)—Variable operations and maintenance payment;
6. IRP Order B (8)—Tax-related payments and other costs;
7. IRP Order C (1) to (4)—Scheduling provisions, including but not limited to:
 - a. Planned maintenance;
 - b. Expected minimum load;
 - c. Ramp rates; and
 - d. Limitations on operations.
8. IRP Order D—Discussion of the guaranteed performance factors, such as construction costs, unit completion, availability, and efficiency;
9. 800 FD Order, Metric 32—Provide a climate change analysis of the proposal consistent with the Minnesota Environmental Quality Board's environmental assessment worksheet guidance for developing a carbon footprint and incorporating climate adaptation and resilience;¹⁰ and
10. 800 FD Order, Metric 32—Identifying whether the proposal is located in an environmental justice area using census criteria in Minnesota Statute 216B.1691, subd. 1(e).

Item	Response
1. Minn. R. 7849.0250 A (1)—Discussion of the impact of economies of scale on facility size and timing;	<p>NGR is in discussion with key material suppliers and OEMs for procuring equipment related to these projects. Economies of scale in procurement of building materials enable us to propose a competitive price and ensure the supply chain is geared towards meeting procurement, construction, and operational schedules.</p>
2. Minn. R. 7849.0320 E (1), (2), and (3)—Regarding water use: <ul style="list-style-type: none"> • Estimated maximum use including: <ul style="list-style-type: none"> ○ Groundwater pumping rate in gallons/minute ○ ii. Surface water appropriation in cubic feet/second • Estimated groundwater appropriation in million gallons/year; • Annual consumption in acre-feet; 	<p>Per Minn. Rules 7849.0320 E (1) (2) (3), which applies to alternate cooling systems for fossil-fueled facilities, we do not anticipate using groundwater pumping. While designs are not yet final, Harmony Solar's BESS site will feature access to fire hydrants in case of emergency. However, this water use would only be used in emergency conditions, with no expectation of regular use. We anticipate minimal surface water appropriation and would be pleased to provide the Commission and Company with more granular water use information for our solar and wind projects as needed.</p>
3. Minn. R. 7849.0320 H—Potential types/quantities of solid wastes produced in tons/year;	<p>Per Minn. Rules 7849.0320 H, we do not anticipate Harmony Solar to have significant solid waste production.</p>
4. IRP Order B (5)—Fixed operations and maintenance payment;	<p>\$1.69/kWh for first 3 years and \$3.6/kWh for rest of contract term - estimate for BESS (contingent on finalizing of long-term service agreement (LTSA) and other guarantees) \$6.7/kW for Solar</p>
5. IRP Order B (6)—Variable operations and maintenance payment;	<p>N/A since there are no fuel-related costs.</p>
6. IRP Order B (8)—Tax-related payments and other costs;	<p>National Grid Renewables can provide this information at a later time. Given that this project is still actively in development, we aim to have a final schedule for all operations and</p>

	<p>maintenance activity prior to commercial operation.</p>
<p>7. IRP Order C (1) to (4)—Scheduling provisions, including but not limited to:</p> <ul style="list-style-type: none"> • Planned maintenance; • Expected minimum load; • Ramp rates; and • Limitations on operations. 	<ul style="list-style-type: none"> • 7 days per yr typically. • N/A • 200 MW/min based on current estimates • 365 cycles/yr and 2 cycles/day
<p>8. IRP Order D—Discussion of the guaranteed performance factors, such as construction costs, unit completion, availability, and efficiency;</p>	<p>According to current estimates, 82.9% round-trip efficiency, availability guarantee - 96% (both would be solidified at a later date post-LTSA)</p>
<p>9. 800 FD Order, Metric 32—Provide a climate change analysis of the proposal consistent with the Minnesota Environmental Quality Board’s environmental assessment worksheet guidance for developing a carbon footprint and incorporating climate adaptation and resilience;</p>	<p>The EAW worksheet does not apply to Harmony Solar+Storage because the EAW worksheet is specific to Minnesota projects that are below the state permitting threshold in Minnesota and require permitting at the county level. Further, National Grid Renewables' projects will not directly emit any greenhouse gas emissions due to production or storage of electricity. Still, within the framework of this proposal, diligent consideration has been given to the guidance provided by the Minnesota Environmental Quality Board’s environmental assessment worksheet, particularly concerning the evaluation of the climate change metrics. Building design and materials will aim to mitigate any adverse effects of construction of this facility. Additional information is presented throughout National Grid Renewables' original submission, detailing the consideration of said guidance into our methodologies and analyses, thus underscoring our commitment to addressing environmental concerns.</p>
<p>10. 800 FD Order, Metric 32—Identifying whether the proposal is located in an environmental justice area using census criteria in Minnesota Statute 216B.1691, subd. 1(e).</p>	<p>Harmony Solar + Storage is located in North Dakota, and does not qualify as an environmental justice area per MN Statute 216B.1691. The project is, however, located in a Federal Department of Energy 'Energy Community,' defined as:</p> <p>1) A “brownfield site” (as defined in certain</p>

subparagraphs of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA))

2) A “metropolitan statistical area” or “non-metropolitan statistical area” that has (or had at any time after 2009)

0.17% or greater direct employment or 25% or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil, or natural gas; and has an unemployment rate at or above the national average unemployment rate for the previous year

3) A census tract (or directly adjoining census tract)

in which a coal mine has closed after 1999;
or

in which a coal-fired electric generating unit has been retired after 2009

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document by emailing all persons at the email address provided and indicated on the attached Service List.



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