# STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of the Applications of Benton Solar, LLC for a Site Permit for the 100 MW Solar Energy Generating System, a Site Permit for the 100 MW Battery Energy Storage System and a Route Permit for the 115-kV High-Voltage Transmission Line Associated with the Benton Solar Project in Benton County, Minnesota Docket No. IP7115/GS-23-423 Docket No. IP7115/ESS-24-283 Docket No. IP7115/TL-23-425 OAH Docket No. 25-2500-40508

#### DIRECT TESTIMONY OF

Adam Gracia

On Behalf of

BENTON SOLAR, LLC

June 30, 2025

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#### **Schedules**

Schedule 1 – Resume of Adam Gracia

#### I. INTRODUCTION AND QUALIFICATIONS

- 2 Q. Please state your name and business address:
- 3 A. My name is Adam Gracia. My business address is 700 Universe Blvd., Juno Beach, FL
- 4 33408.

- 5 Q. By whom are you employed and in what capacity?
- 6 A. I am employed by NextEra Energy Resources, LLC ("NEER") in the capacity of Project
- 7 Director.
- 8 Q. For whom are you testifying?
- 9 A. I am testifying on behalf of the Applicant, Benton Solar, LLC ("Benton Solar"), which is a wholly-owned indirect subsidiary of NEER.
- 11 Q. What is your role with respect to the Benton Solar Project?<sup>1</sup>
- 12 A. I have overseen the development of the project since October, 2023. My role includes the development of the Joint Site Permit Application and Route Permit Application.
- 14 Q. What is the purpose of your testimony in this proceeding?
- I am testifying in support of Benton Solar's Joint Site Permit Application and Route Permit
  Application (together, the "Applications"), which seek the required authorizations and
  permits from the Minnesota Public Utilities Commission to construct, own, and operate the
  Solar Facility, BESS, and Transmission Line. Specifically, I (1) introduce the overall
  Project and its components; (2) describe the benefits associated with the Project; (3) detail
  Benton Solar's stakeholder outre¶ ach efforts; and (4) summarize Benton Solar's response
  to public comments. I also introduce the witnesses who are providing testimony on behalf

<sup>&</sup>lt;sup>1</sup> My testimony refers to the up to 100-megawatt ("MW") capacity solar energy conversion facility as the "Solar Facility," the up to 100-MW battery energy storage system as the "BESS," and the approximately 0.5 mile, 115-kilovolt high-voltage transmission line as the "Transmission Line." My testimony uses the term "Project" to refer to all three components collectively (i.e., the Solar Facility, the BESS, and the Transmission Line).

1 of Benton Solar.

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#### Q. What conclusions do you reach in your testimony?

A. For the reasons provided in my testimony, I conclude that the Commission should approve
the Applications and issue the requested permits because the Project will: (i) advance
renewable energy production and usage in the state of Minnesota in support of state carbon
reduction goals; (ii) safely and reliably deliver the renewable output from the Solar Facility
and the BESS to the electrical grid in compliance with applicable regulations and permit
conditions; and (iii) provide substantial and quantifiable benefits to the communities in
which the Project is situated.

#### 10 Q. Please summarize your qualifications and experience.

I have 8 years of experience in project management, including development, budgeting, financial forecasting, and local permitting and compliance. I have been working in my current role at NEER since 2023, and my responsibilities include financial feasibility analysis, cost and schedule management, and coordination of functional project teams and customer relationships.

I received a Bachelor of Arts in Engineering Sciences from Harvard University, and a Master's in Engineering Management from Duke University. Prior to joining NEER, I served in the United States Navy as a Nuclear Submarine Officer for 6 years, 9 months.

#### Q. Which sections of the Applications are you sponsoring?

A. I am sponsoring Benton Solar's Applications in their entirety with the understanding that
the other Benton Solar witnesses, who are subject matter experts, address in detail specified
sections of the Applications.

#### Q. What schedules are attached to your testimony?

1 A. Attached to my testimony are the following schedules: 2 Schedule 1 – Resume of Adam Gracia 3 Q. Was this testimony drafted by you or under your supervision? 4 A. Yes. 5 II. **BENTON SOLAR WITNESSES** 6 Q. Who are the other Benton Solar witnesses presenting direct testimony in support of 7 the Project? 8 A. In addition to my testimony, Benton Solar is providing the testimony of three subject matter 9 experts, as summarized below: 10 Cody MacDonald: Mr. MacDonald is a NEER Senior Environmental Specialist and has 11 over eight years of experience in environmental permitting. His testimony covers the 12 environmental studies and analysis associated with the Project. 13 Ashley Nunez: Ms. Nunez is a NEER Principal Engineer and has 8 years of experience as 14 a fire protection engineer in the power generation industry and 7 years of service as a 15 volunteer firefighter. Her testimony provides an overview of the BESS equipment and 16 location, details the design and safety components of the BESS, and responds to public 17 comments related to the BESS. 18 Anthony Bass: Mr. Bass is a NEER Senior Project Manager and has 2 years of experience 19 in managing the execution of construction activities, including new solar facilities and new 20 transmission lines. His testimony details the technical specifications of the Project, the 21 construction, procurement, and operation of the Project, and responds to public comments 22 about the construction, operation, and decommissioning of the Project.

OVERVIEW OF PROJECT AND APPLICATIONS

III.

#### a. Overview of the Solar Facility and the BESS

Q. Can you please provide an overview of the Solar Facility and the BESS that are the
 subject of the Site Permit Applications?

- 4 A. Yes. The Project includes the 100 MW Solar Facility and 100 MW, 4hr BESS in Benton County, Minnesota. The Solar Facility and BESS portions of the Project are located in 5 Minden Township, on approximately 905 acres of private land, and will interconnect to the 6 7 Great River Energy ("GRE") Benton County 115-kV substation via the 0.5-mile overhead 8 115-kV Transmission Line proposed in the Route Permit Application. Benton Solar 9 executed a Generator Interconnection Agreement with the Midcontinent Independent 10 System Operator ("MISO") in December 2022, after securing full site control for the solar 11 array. Development efforts have continued since 2022, including environmental and engineering studies, agency coordination, and community outreach. The Project is 12 13 expected to achieve commercial operation in December 2027.
- Q. What are the structures that will be constructed for the Solar Facility, the BESS,and the associated facilities?
- 16 A. The Solar Facility will be primarily comprised of photovoltaic ("PV") panels fastened to
  17 an efficient tracking system. The tracking system will change the angle of the panels
  18 throughout the day to maximize Project efficiency. Each tracking system will contain
  19 multiple PV panels, which will be connected to each other in series to create a string.
  20 Multiple strings will be connected to a single Power Conversion Unit ("PCU") via direct
  21 current ("DC") electrical wiring. The PCU converts the low-voltage DC generated by the
  22 panels to medium voltage alternating current ("AC") at 34.5 kV. Energy from the Solar

Facility and the BESS will be distributed through a series of underground cables to deliver power to the Project's collector substation.

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The BESS will store excess power generated by the Solar Facility or absorbed from the grid, and will consist of individual battery cells assembled in series or parallel in sealed battery modules. The modules are installed in self-supporting racks inside a self-contained energy storage system cabinet.

The collector substation will step up the energy generated by the PV array and stored by the BESS from 34.5 kV to 115 kV via a single generator step up unit.

Section 3.1 of the Joint Site Permit Application describes the above facilities in more detail.

#### How did Benton Solar determine where to site the Solar Facility and the BESS?

The Project location was determined based on four distinct factors. First, Benton Solar used desktop analysis to identify a strong solar resource in the area, which has been verified by the placement of one temporary Meteorological Evaluation Tower within the Project boundary. Second, Benton Solar conducted environmental and engineering studies to assess the area for geotechnical risk, threatened or endangered species, culturally sensitive areas, and environmental contamination. Third, Benton Solar considered proximity to a point of interconnection with available capacity. The existing GRE Benton County Substation was identified as having available capacity and low interconnection costs through the MISO interconnection study process. Finally, Benton Solar considered the willingness of landowners to participate in the Project by approaching landowners to secure voluntary leases and easements to support the Project's development.

#### Q. Does Benton Solar hold the land rights necessary for the Solar Facility and the BESS?

A. Yes, Benton Solar holds the land rights for the entire Solar Facility and BESS via voluntary
 solar and collection easements.

#### Overview of the Transmission Line

Q. Can you please provide a summary of the Transmission Line that is the subject of
 the Route Permit Application?

- A. Benton Solar proposes to construct an approximately 0.5 mile, overhead, 115-kV transmission line to connect the Solar Facility and the BESS to the point of interconnection at the GRE substation. The Transmission Line will be constructed entirely on private property.
- 10 Q. What are the Project facilities that will be constructed for the Transmission Line?
- 11 A. Benton Solar's Joint Site Permit Application describes the collector substation that will be 12 constructed in order to convert the 34.5-kV power from the Solar Facility and BESS to 115-kV power. From the collector substation, 115-kV AC single-circuit steel transmission 13 14 structures will be erected to deliver the power from the collector substation to the point of interconnection. These structures will vary in height above ground level from 45-95 feet, 15 16 and the average span length will be between 300 and 500 feet. More information regarding 17 the Transmission Line structures can be found in the Route Permit Application Section 2.5 18 and the testimony of Mr. Bass.
- 19 Q. What is the status of the acquisition of land rights for the Transmission Line?
- A. The Project has secured a purchase option to construct the collector substation and a portion of the Transmission Line. For the rest of the Transmission Line, the Project requires one easement from GRE, which Benton Solar expects to execute by July 31, 2025.

- 1 Q. Has Benton Solar made any refinements to the route proposed in the Route Permit
- 2 **Application?**
- 3 A. Benton Solar has not modified the proposed route. Adjustments to the technical
- 4 specifications of the transmission structures are detailed in Benton Solar witness Anthony
- 5 Bass's testimony.

#### 6 IV. BENEFITS OF THE PROJECT

- 7 Q. What are the principal benefits associated with the Project?
- 8 A. The Project will deliver a suite of economic, reliability, and environmental benefits to the
- 9 state, local community, and Project participants, including the following:
- 1. Local communities will benefit from the production tax payments annually paid by Benton
- Solar to Benton County and Minden Township. Benton County is expected to receive
- approximately \$200,000 per year over the life of the Project, which totals \$6 million over
- the anticipated life of the Project. Separately, Minden Township will receive approximately
- \$50,000 annually over the life of the Project, which amounts to \$1.5 million over the
- 15 assumed project life.
- 16 2. During the 14-month construction period for the Project, the Solar Facility and the BESS
- will create between 150–300 temporary construction jobs, while the Transmission Line
- will create approximately 5–10 temporary construction jobs. After construction, the Project
- will employ 2–3 full-time employees who will live and work in the community. Overall,
- 20 the Project will serve as an economic stimulus to local businesses while providing an
- 21 efficient, reliable, and safe energy resource to the region. The Project is in the process of
- hiring a prime contractor for the Project and expects that contractor to engage local

subcontractors and local union halls to support as many of the temporary construction jobs 1 2 as possible. Staffing will vary depending on workforce availability and qualifications.

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- 3. Participating landowners will receive annual compensation for the use of their land over the life of the Project, which is also expected to have a beneficial ripple effect in the local 5 economy.
- 6 4. Minnesotans will benefit from Benton Solar's purchasing of local construction materials.
  - 5. The BESS will have a positive impact on electric reliability because it can reduce voltage and frequency fluctuations experienced by the Solar Facility and electric grid, as well as extend the hours that the electricity generated by the Solar Facility can be utilized by the grid—i.e., by storing excess solar energy generated during the day and discharging that energy at night when needed.
- 12 6. The Project also advances the state of Minnesota's legislative directive to bring the state to 13 a 100% renewable energy supply by 2040, which is designed to provide Minnesotans with 14 the environmental and health benefits of reduced carbon emissions. If Minnesota is to meet 15 its ambitious renewable objectives, projects like the one proposed by Benton Solar will be 16 instrumental in attaining such a high level of in-state renewable generation. Additional 17 environmental benefits are described in detail in the testimony of Benton Solar witness Mr. 18 MacDonald.
- 19 Q. Has Benton Solar made any commitments regarding the use of union or local labor 20 to construct the Project?
- 21 A. Yes, Benton Solar has committed to select and hire an Engineering, Procurement, and 22 Construction contractor ("EPC") that will utilize skilled union tradesmen and tradeswomen 23 to construct the Project. Benton Solar will require the Project EPC to negotiate and enter

5	0.	Will the Project provide any tax benefits to the surrounding communities?
4		<u>20252-215314-01</u> ).
3		to Benton Solar, LLC's Response to Scoping Comments in this docket (eDockets ID no.
2		of the Project. That commitment is memorialized in correspondence filed as Attachment 1
1		into a site-specific Project labor agreement with the appropriate Unions for the construction

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The Project will pay a Solar Energy Production Tax in lieu of property tax, in accordance with the Minnesota Department of Revenue. The solar energy production tax is paid to the county treasurer at the time and manner provided for the payment of personal property taxes.

The Department of Revenue requires utility scale solar projects to pay \$1.20 per megawatt-hour produced. Benton Solar estimated the annual production tax to be \$250,000, where 80% will go to Benton County, and 20% will go to Minden Township. Benton Solar used the Project nameplate capacity and the expected net capacity factor to determine the number of megawatt-hours produced each year for this tax calculation.

### Q. How will the Project preserve land for agricultural use and mitigate potential impacts?

The Project has developed an Agricultural Impact Mitigation Plan ("AIMP"), which identifies Best Management Practices to avoid, minimize, and mitigate potential adverse impacts to the land. Additionally, the Project will implement a Vegetation Management Plan ("VMP") to guide Site preparation, vegetation establishment and management, and erosion control throughout the life of the project. Benton Solar has partnered with the Bee and Butterfly Habitat Fund through the Solar Synergy program to develop a regionally

appropriate seed mix for the Project. More information on the AIMP and VMP can be 1 2 found in Section 2.4 and Appendices C and D of the Joint Site Permit Application. 3 V. **PUBLIC & AGENCY OUTREACH** 4 Q. Can you please summarize the public outreach effort undertaken by Benton Solar in 5 support of the Project? 6 A. Yes. Since 2022, Benton Solar has continuously kept the County and local stakeholders 7 updated and engaged with the Project throughout its development. This outreach has 8 included frequent updates to the Benton County Board, outreach to federal, state, and local 9 agencies, coordination with Benton County Emergency Management and local fire 10 departments, landowner dinners and updates for participating landowners, and an open 11 house for the broader community to engage with the Project. 12 Q. What outreach did Benton Solar engage in prior to the submission of its Applications? 13 Benton Solar engaged in outreach with the Benton County Commission, Benton County A. 14 Planning and Zoning Department, Benton County Emergency Management, Minden Township, the Foley Area Chamber of Commerce, the Benton Economic Partnership, City 15 16 of St. Cloud Planning and Zoning, and both participating and non-participating landowners 17 at the Project's open house in August 2024. The detailed outreach log is provided in Table 18 5-1 of the Joint Site Permit Application and Appendix A of that Application provides more 19 detail on the Project's agency coordination. 20 Q. Did Benton Solar coordinate with tribes and tribal governments within the area of

Yes. Benton Solar conducted outreach to 47 Native American Tribes for the Project,

including (1) sending an initial outreach letter sent to each Tribe's Tribal Historic

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the Project?

Preservation Officer or similar representative on October 22, 2022, which provided 1 2 information on the Project and surrounding area; and (2) sending a second outreach letter 3 to provide a Project update to the 11 Minnesota Tribal Nations and to those Tribes outside 4 Minnesota that requested continued involvement in the Project. As indicated in Section 5 5 of the Joint Site Permit Application and Section 8 of the Route Permit Application, 6 coordination with tribes is ongoing to ensure acceptable avoidance of cultural resources. 7 Further detail of coordination with the Tribes is provided in the testimony of Benton Solar 8 witness Mr. MacDonald. 9 Q. What outreach efforts has Benton Solar engaged in since filing its Applications? 10 Since filing the Applications, Benton Solar has reached out to the Minnesota Department A. 11 of Transportation and the Minnesota Department of Natural Resources following their 12 comments on the docket. Benton Solar has continued to update Benton County, Minden 13 Township, and other local organizations to address concerns raised during the public scoping meeting. Benton Solar has also developed a preliminary visual screening plan 14 and will present it to the Benton County Planning Commission later this summer. 15 16 VI. **RESPONSE TO PUBLIC COMMENTS** 17 Q. You previously noted that landowners and members of the local community have filed comments regarding Benton Solar's Applications. What topics did the comments 18 19 address? 20 A. The public comments fell into the following categories: (1) the location of the project, (2) 21 the visual landscape, (3) sound levels, (4) property values, (5) human health and safety, (6) effects on natural resources and wildlife, (7) the construction, operation and 22

decommissioning of the Project, (8) the safety features of the BESS, (9) outreach, (10) the

1		Project's customer, and (11) effects on cultural resources. Benton Solar responded to these
2		public comments in its February 12, 2025 response to scoping comments. Benton Solar
3		welcomes the opportunity to further respond to community questions or concerns during
4		the upcoming public hearings.
5	Q.	Is Benton Solar further responding to the public comments in its direct testimony?
6	A.	Yes. My testimony provides responses to public comments about the Project's customer,
7		outreach, and impact on property values. The other Benton Solar witnesses respond as
8		relevant to their scope of expertise:
9		• Mr. MacDonald's testimony responds to questions about the visual landscape,
10		sound levels, human health and safety, effects on natural resources and wildlife,
11		and effects on cultural resources.
12		• Ms. Nunez's testimony provides responses to public comments on the safety
13		features of the BESS.
14		• Mr. Tony Bass's testimony provides responses to public comments about the
15		construction, operation and decommissioning of the Project.
16	Q.	What is your response to the questions raised about the whether the Project has a
17		customer?
18	A.	At the time of the filing of the Applications, Benton Solar was working toward securing an
19		agreement related to the sale of power generated by the Project. Since that time, the Project
20		entered negotiations and is finalizing a power purchase agreement with a load serving
21		entity in Minnesota for the Solar Facility. The Project is currently negotiating an additional
22		power purchase agreement for the BESS.

1 Q. What is your response to public comments asserting an alleged lack of outreach to

homeowners and the broader community?

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A. As outlined in my testimony and in Section 5 of the Joint Site Permit Application and Section 8 of the Route Permit Application, Benton Solar has been providing Project updates to the Benton County Board consistently for the past 3 years, beginning in 2022. Benton Solar also held an open house on August 14, 2024—prior to submitting the Joint Site Permit and Route Permit Applications—to inform the broader community of the Project scope, timeline, and permitting process. Additionally, Benton Solar has been a member of local chambers of commerce and economic partnerships since 2022, and has provided Project updates to each organization. Benton Solar has also sponsored various community events and organizations, including the Foley Party in the Park, the St. Cloud Rotary, Big Brothers and Big Sisters of Central Minnesota's Back to School Campaign, and the Benton County Sheriff's Department. Benton Solar is also continuing to work with Benton County to develop a visual screening plan that exceeds the County's ordinance requirements to minimize the visual impact of the Project for non-participating landowners.

Q. What is your response to public comments about the potential effect the Project will have on property values?

Benton Solar does not anticipate any decreases in property values attributable to the Project. The full market impact analysis commissioned by Benton Solar and existing literature regarding the lack of a negative effect on property values from solar and BESS facilities are included in Section 4.2.6.1.2 and Appendix H of the Joint Permit Application.

1 VII. CONCLUSION

- 2 Q. Does this conclude your testimony?
- 3 A. Yes.

#### Schedule 1 - Resume

#### Adam Gracia

561.797.5048 | adam.gracia@nexteraenergy.com

Mr. Gracia has 8 years of experience in energy project management, including development, budgeting, financial forecasting, and local permitting and compliance. His responsibilities include financial feasibility analysis, cost and schedule management and coordination of functional project teams and customer relationships. He has over 2 years of experience in the utility industry including roles of increasing responsibility in community development, engineering and construction, and project development, and 7 years of experience as a United States Naval Submarine Officer.

#### **EXPERIENCE**

#### NextEra Energy Resources | Juno Beach, FL

**Project Director** 

June 2025 - Present

Apr 2023 – June 2025

Senior Project Manager

Develop and maintain relationships with the surrounding community stakeholders for wind, solar, and battery storage projects in the state of Minnesota. Manages all aspects of the day-to-day transaction process to ensure timely completion as well as a cost effective and competitive result. Leads and coordinates key functions such as financial feasibility analysis, engineering / design, project legal review, permitting activities, and / or financial negotiations. Coordinates due diligence activities with other internal groups to ensure proper analysis and structuring of assigned projects. Acts as liaison between internal and external specialists regarding procurement, contracting, permitting and interconnection. Constructs contractual arrangements for project development. Negotiates agreements with consultants and subcontractors. Ensures compliance with applicable technical and regulatory requirements. Fosters external relationships with customers, 3<sup>rd</sup> parties and /or members of the community.

#### U.S. Navy, Submarine Learning Center | Santa Rita, Guam

Nuclear Engineering and Tactics Instructor, Training Program Manager

Jan 2021 - Feb 2023

Managed all technical and tactical training for forward deployed nuclear-powered submarines in the Pacific Fleet. Instructed nuclear submarine officers in reactor chemistry, fluid and instrument integration, and casualty prevention. Responsibilities included creating, coordinating, and executing advanced engineering training and tactical certifications for 13 submarine crews for complex missions vital to national security. Coordinated training exercises with various military and civilian stakeholders, to include the office of Naval Reactors and foreign militaries.

#### U.S. Navy, USS Georgia (SSGN 729) | Kings Bay, GA

Nuclear Submarine Officer

Apr 2018 - Dec 2020

#### Schedule 1 - Resume

Certified Nuclear Engineer Officer by the Department of Energy and the Department of Naval Reactors. Managed the ship's quality assurance program, engineering department training, and reactor control division. Supervised the production, verified adequacy, and approved technical maintenance documentation of critical ship's system maintenance in accordance with the Navy's Submarine Safety program. Responsible for certifying the ship to perform Naval Special Warfare Operations and complete missions vital to national security. Mentored, trained, and qualified over 20 officer and enlisted supervisors to safely operate the nuclear propulsion system on board. Selected to be the Senior Supervisor in the engine room for all complex engineering evolutions, overseeing over \$50 million in reactor plant repairs and testing. Managed a division of 8 sailors responsible for the maintenance and safe operations of an S8G nuclear reactor and its associated electrical systems and instrumentation. These roles required engineering project management, in depth technical knowledge of the nuclear reactor propulsion system, and risk management.

## U.S. Navy, Naval Nuclear Power School and Prototype Training | Charleston, SC

Nuclear Submarine Officer Candidate

Sep 2016 - Mar 2018

Completed advanced courses in mathematics, physics, and nuclear engineering, and qualified as Engineering Officer of the watch on an S5W prototype reactor.

#### **EDUCATION**

**Duke University | Durham, North Carolina** 

Master of Engineering Management

Dec 2022

Harvard University | Cambridge, Massachusetts

Engineering Sciences with a focus in Bioengineering

May 2016