

**PUBLIC (REDACTED)  
VERSION**

PRE-FILED DIRECT TESTIMONY OF  
WHITNEY RUBIN  
ON BEHALF OF CAMDEN SOLAR LLC

NCUC DOCKET NO. EMP-109, SUB 0

**INTRODUCTION**

1  
2 **Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

3 **A.** My name is Whitney Rubin. I am a Development Manager with BayWa r.e.  
4 Solar Projects, LLC (“BayWa Solar”) at 17901 Von Karman Avenue, Suite 1050 in Irvine, CA  
5 92614.

6 **Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL**  
7 **EXPERIENCE.**

8 **A.** I have more than twelve years of experience in land use, urban planning,  
9 government affairs and community outreach. I bring that experience to the solar industry  
10 beginning with work at Center for Resource Solutions, SunPower, followed by First Solar and  
11 now at BayWa r.e. Solar Projects (BayWa Solar). In total I have two and a half years of  
12 experience in solar. I started as a Project Manager with BayWa Solar in January of 2019. My  
13 prior roles include Senior Planning Deputy for a Los Angeles City Councilmember, Project  
14 Manager for a non-profit building schools, and a Project Associate writing documents to follow  
15 the California Environmental Quality Act (CEQA) regulations. I hold a Bachelor of Arts  
16 degree in Geography and Environmental Studies from the University of California, Los  
17 Angeles (UCLA), and two MA degrees from UCLA with a Master of Arts in Latin American  
18 Studies, and a Master of Arts in Urban Planning.

1           **Q.     WHAT IS YOUR RELATIONSHIP TO THE APPLICANT?**

2           **A.**     As discussed in the application, Camden Solar LLC (“Camden Solar”) is a  
3 limited liability company organized for the development and ownership of the Camden Solar  
4 Project (“the Project”) for which a Certificate of Public Convenience and Necessity is being  
5 sought in this Proceeding. Camden Solar was initially formed by Blue Green Energy, LLC, a  
6 Florida limited liability company. Subsequently, Blue Green Energy, LLC, sold Camden Solar  
7 to Solar Access Development Group, LLC (“Solar Access”), a Virginia limited liability  
8 corporation. Solar Access initially developed the Project, which was later fully acquired by my  
9 employer, BayWa Solar. BayWa Solar, as owner and developer, is in charge of engineering,  
10 procurement, construction, power marketing, and O&M. The prior owners are no longer  
11 involved in the Project.

12           **Q.     PLEASE SUMMARIZE YOUR CURRENT EMPLOYMENT  
13 RESPONSIBILITIES.**

14           **A.**     My current role as a Development Manager with BayWa Solar covers the whole  
15 spectrum of solar PV development from land acquisition to support of closing of project sales  
16 with long-term owners. This includes local, state, and federal permitting, title curative work,  
17 and budgeting. Local permitting focuses on obtaining special use permits and fulfilling their  
18 condition to enable issuance of a grading and building permit. State permitting includes state  
19 environmental permits as well as Certificates of Public Convenience and Necessity or Reports  
20 of Proposed Construction, as applicable. Federal permits are usually limited to wetland related  
21 permits issued by the U.S. Army Corps of Engineers.

22           Within BayWa Solar, the Development department coordinates with Engineering,  
23 Construction, Legal, and Project Finance to take a project from idea to marketable asset.

1           **Q.    HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS**  
2 **COMMISSION?**

3           **A.**     I have provided prefiled to testimony to the Commission in support of a CPCN  
4 application for American Beech Solar LLC (Docket No. EMP-108 Sub 0).

5           **Q.    WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6           **A.**     The purpose of my testimony is to provide the Commission with background  
7 information about the Camden Solar Project, its sponsoring developer BayWa Solar, its  
8 development process, as well as project timeline and electricity offtake. The information I am  
9 providing will serve to expand on topics in Camden Solar’s application, including the  
10 regulatory and permitting process for the Project, community engagement related to the  
11 Project, and its current permitting status.

12           **Q.    HAS DEVELOPMENT OF THIS PROJECT PREVIOUSLY BEEN**  
13 **APPROVED BY THE COMMISSION?**

14           **A.**     Yes. As indicated in the Application (and in particular in Exhibit 2), the prior  
15 owners of the Project previously obtained from the Commission a CPCN for the Project under  
16 Commission Rule R8-64 in Docket Number SP-8831, Sub 0. BayWa has purchased the Project  
17 and intends to operate it as a merchant plant, which requires a CPCN issued under Rule R8-  
18 63. The Applicant is requesting that the Commission cancel the Project’s existing CPCN.  
19 However, because the Project previously went through State Clearinghouse review and its site  
20 plan has not changed, the Applicant is requesting that the Commission not require further  
21 review by the Clearinghouse.



1 a third-party lender, likely a commercial bank. About 80% of project cost can be financed  
2 through a loan. During construction, BayWa Solar will raise tax equity, additional cash equity,  
3 and term debt. The loan will be retired when the project goes operational with proceeds from  
4 term debt and tax equity.

5 **Q. WHAT IS THE CONSTRUCTION TIMELINE FOR THE FACILITY?**

6 **A.** Construction for the project is expected to proceed after withdrawal from  
7 Docket SP-8831, Sub 0 and after the Applicant obtains approval for the construction of a  
8 merchant plant. The goal is to start construction August 2020. Commercial operation is  
9 estimated for 2<sup>nd</sup> quarter of 2021.

10 **Q. DESCRIBE BAYWA SOLAR'S EXPERIENCE WITH RAISING**  
11 **PROJECT FINANCING.**

12 **A.** As a subsidiary of BayWa AG, BayWa Solar has the capability on behalf of the  
13 Project to arrange adequate financing, insurance, guarantees, security, and other assurances for  
14 the Project's development, construction, and operation. Although BayWa Solar finances  
15 construction for smaller projects on balance sheet, BayWa Solar has also successfully obtained  
16 third party financing for loans on behalf of its other solar PV projects that is similar to the  
17 third-party financing BayWa anticipates for the Project. BayWa Solar arranges project  
18 financings through a team of professionals in Irvine, California.

19 **SITE AND FACILITY DESCRIPTION**

20 **Q. PLEASE DESCRIBE THE LOCATION OF THE PROJECT, AS WELL**  
21 **AS CURRENT LAND USE AND ANTICIPATED USE.**

22 **A.** The Camden Solar Project is made up of portions of land owned by three (3)  
23 different landowners who in total own 217.94 acres of privately-owned land outside of Camden

1 in Camden County, North Carolina. The Applicant anticipates building on approximately 200  
2 acres, with additional land outside the fence to be used for screening and other project needs.

3 The site is largely rural and agricultural in nature and most of the landowners will  
4 continue to farm and live in proximity to the site. The site will primarily lie behind natural  
5 vegetative buffers. The Project's location will allow it to be shielded from roadway views and  
6 neighboring landowners through the use of generous setbacks, natural buffers and added  
7 vegetative screening.

8 Camden Solar has executed two (2) lease options for the solar array area of the site for  
9 20-year terms with the ability to extend for two (2) consecutive five (5) year periods. One  
10 property has two landowners and the other property has one landowner. These land control  
11 agreements give Camden Solar the right to develop and use the property for solar energy  
12 purposes, including the installation of solar racking, solar panels, inverters, transformers, and  
13 the other elements of the Facility described in the application and my testimony.

14 **REGULATORY APPROVALS AND PERMITS**

15 **Q. DESCRIBE THE PERMITS AND APPROVALS YOU ANTICIPATE**  
16 **WILL BE NECESSARY TO COMMENCE CONSTRUCTION OF THE FACILITY.**

17 **A.** Camden Solar proposes to develop, install, and operate a utility-scale solar  
18 photovoltaic solar energy system in Camden County in a manner consistent with local zoning  
19 ordinance and in accordance with all federal, state, and local regulations.

20 The Project requires a special use permit (SUP) and an electrical/building permit from  
21 Camden County. Camden Solar's local SUP application confirmed that it either met or  
22 exceeded all applicable zoning district requirements, parcel line and equipment setbacks,  
23 height limitations and vegetative buffering as defined by the Camden County Zoning

1 Ordinance. Camden Solar obtained its SUP approval on January 10, 2018 by a unanimous vote  
2 of the Camden County Board of Commissioners. The official documentation of this SUP  
3 approval was issued by Camden County on January 10, 2018 with a one-year extension issued  
4 on December 2, 2019 allowing for a one-year extension until January 8, 2021.  
5 Building/electrical permits will be applied for when the project is ready to be constructed  
6 which is anticipated to be August 2020. The Decommissioning Plan must be submitted to the  
7 County before building permits are obtained.

8 In addition to a CPCN, the Project will require the following state permits and  
9 approvals: (a) a stormwater management permit from the N.C. Department of Environmental  
10 Quality (“NCDEQ”); (b) an erosion and sedimentation control plan permit for construction-  
11 related activities; (c) a Floodplain Development Permit; and (d) N.C. Department of  
12 Transportation driveway permits.

13 Camden Solar will obtain coverage under a general stormwater permit (No.  
14 NCG0100000) for “Construction Activities that are also Subject to the North Carolina  
15 Sedimentation Pollution Control Act of 1973” (“General Permit”). This General Permit  
16 became effective on April 1, 2019 and expires on March 31, 2024. As a condition of the  
17 General Permit, Camden Solar must develop and submit a stormwater pollution and prevention  
18 plan (SWPPP), which it will do prior to construction. SWPPP must include an erosion and  
19 sedimentation control plan. The facility will comply with the General Permit’s requirements.

20 Camden County participates in the National Flood Insurance Program and enforces a  
21 Flood Damage Prevention Ordinance that requires a Floodplain Development Permit for all  
22 development located in the Special Flood Hazard Area (SFHA) within its jurisdiction. The  
23 Applicant will: (1) ensure that Camden County’s Floodplain Administrator reviews and issues

1 permits for each part of the Project within a SFHA, and (2) comply with other regulatory  
2 requirements as applicable.

3 On February 17, 2017, the NC Department of Administration, State Clearinghouse,  
4 issued a letter to Applicant in the existing CPCN docket (Docket No. SP-8831 Sub 0). In this  
5 letter, the agency provided the results of the intergovernmental review of the property,  
6 including its evaluation of potential environmental impacts that might be associated with the  
7 Project. The agency also stated that “no further State Clearinghouse review action on your part  
8 is needed for compliance with the North Carolina Environmental Policy Act.” Comments  
9 provided with the letter were evaluated and taken into consideration for the development of  
10 the property.

11 With respect to federal approvals, the facility received a Preliminary Jurisdictional  
12 Determination (“PJD”) from the U.S. Army Corps of Engineers (“Corps”) on May 31, 2018.  
13 The PJD indicates that the Project properties do not include streams and wetlands on the site  
14 that are jurisdictional waters and/or Waters of the United States, and so no permit will be  
15 required for construction under Section 404 of the federal Clean Water Act.

16 The facility may apply for Market-Based Rate Authorization from the Federal Energy  
17 Regulatory Commission (“FERC”), pursuant to Sections 205 and 206 of the Federal Power  
18 Act, and may seek to self-certify with FERC as an Exempt Wholesale Generator pursuant to  
19 the Public Utility Holding Company Act of 2005.

20 Although the Facility is not located on federally obligated airport land, the Federal  
21 Aviation Administration (“FAA”) may request for Camden Solar to voluntarily submit a glare  
22 study to conform to the FAA’s solar policy. If requested by FAA, Camden Solar will have a  
23 glare study performed and then submit the glare study to the FAA.

1 Camden Solar hired a consultant for the purpose of providing a Natural/Cultural  
2 Resources Constraints Evaluation Letter Report, which was received on April 16, 2019 from  
3 Terracon. This report conveyed an evaluation of regulatory considerations including: (1)  
4 Wilderness Areas and Wildlife Refuges; (2) Threatened/Endangered Species; (3) Cultural,  
5 Historic, and Archeological Resources Review; and, (4) Presence or Absence of Flood Plains.  
6 Terracon concluded that none of these considerations create constraints on the development of  
7 a solar plant at this Facility.

8 **Q. DOES CAMDEN COUNTY HAVE A SOLAR ENERGY ORDINANCE?**

9 **A.** Yes, Camden County established a Solar Energy Systems Ordinance (“SESO”),  
10 adopted December 1, 2014 and amended May 1, 2017.<sup>1</sup> The SESO requires a permit for solar  
11 energy facilities proposed in Camden County based on the size of the facility and the facility’s  
12 zoning district. Depending on the size of the facility, the ordinance requires certain setbacks,  
13 vegetative buffers, height limitations, site plan specifications, and a decommissioning plan for  
14 the removal of equipment and return of the property to its prior condition upon the end of the  
15 facility’s production.

16 As required by the SESO, the Project Site is buffered from view from most roadways  
17 by natural vegetative buffering and continuing farm operations, and significant setbacks and  
18 buffering consideration has been given to neighboring landowners. The decommissioning plan  
19 is attached as Exhibit A to this pre-filed testimony. The decommissioning plan provides that  
20 at the end of the Facility’s useful life, the Site will be stabilized and restored in such a manner  
21 to ensure it is clean, safe, and environmentally stable. Environmentally conscious practices  
22 are developing so that solar photovoltaic (“PV”) panels can be collected and recycled at the

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<sup>1</sup> <https://camdencountync.gov/departments/planning-zoning/proposed-approved-ordinances>

1 end of their useful life rather than deposited in a landfill. The site plan and SUP application  
2 for the Facility were prepared in order to satisfy all applicable requirements as defined in the  
3 Camden County SESO. The SESO also requires a stormwater permit and a Special Use Permit  
4 as previously mentioned in my Testimony and in the Application.

5 **Q. HOW WILL THE PROJECT BE INTERCONNECTED TO THE GRID?**

6 **A.** The Camden Solar Project will interconnect with the distribution grid owned  
7 by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina  
8 (“Dominion”). The Project (Interconnection Request NC 16035) will interconnect via a three-  
9 pole interconnection with a recloser into the PJM distribution system to the Elizabeth City  
10 Substation. The Project’s Point of Interconnection will connect into that new line at the load  
11 side of the utility’s disconnect switch.

12 Camden Solar received an executable Interconnection Service Agreement with  
13 Dominion on May 15, 2015 for NC16035. This Interconnection Service Agreement provides  
14 the terms and conditions under which the Project will interconnect. The estimated Distribution  
15 Upgrade charges for the Project are \$ <sup>CONFIDENTIAL</sup>. The estimated Attachment Facility charges  
16 are \$ <sup>CONFIDENTIAL</sup>, for a total estimated cost of \$ <sup>CONFIDENTIAL</sup>. The Project will be funding the entire  
17 cost of these upgrades and does not expect to receive reimbursement of those costs from PJM,  
18 Dominion, or Dominion’s ratepayers.

19 **Q. DOES THE APPLICANT HAVE PLANS TO INCORPORATE ENERGY  
20 STORAGE AT THE FACILITY?**

21 **A.** At this time the Applicant has no plans to include energy storage at the Facility.

22 **Q. WHAT IS THE PROJECT’S ANTICIPATED ELECTRICITY  
23 PRODUCTION CAPABILITY?**

1           **A.**     The combined nameplate generating capacities at the facility will be 20 MW,  
2 with anticipated gross capacity of approximately 20 MW and an anticipated generation of  
3 51,731 MWh/y of electricity per year. Because solar power is subject to intermittent solar  
4 irradiance, Camden Solar’s maximum dependable capacity is projected to be 0 MW during  
5 some hours of the day.

6           **Q.**     **PLEASE DESCRIBE THE BASIC COMPONENTS OF THE FACILITY.**

7           **A.**     For the Camden Solar Project, 20 MW of photovoltaic solar modules will be  
8 installed on single-axis trackers. These trackers are installed on a north-south axis tilting in an  
9 east-west direction to enable the modules to follow the sun throughout the day. Trackers consist  
10 of galvanized steel and are anchored on H-shaped steel posts that are driven about six feet into  
11 the ground. The trackers do not have a concrete foundation. The total number of modules will  
12 be roughly 72,549 depending on exact wattage of the modules.

13           Nine (9) inverters will transform DC power generated by the solar modules into 20  
14 MW of AC capacity. Nine (9) transformers will step the voltage of generated power up from  
15 1,108V at the inverters to 35kV. Power from these step-up transformers will be collected at  
16 the main power transformer that will again step up the voltage from 35kV to 115kV.

17           The project is located on two (2) adjacent parcels of land. The individual blocks of  
18 trackers with solar modules will be connected through medium-voltage cable runs between the  
19 parcels. These connections will be using either overhead poles or buried cable installed in  
20 culverts or via directional boring.

21           **Q.**     **PLEASE EXPLAIN THE NEED FOR THE FACILITY.**

22           **A.**     Camden Solar is expected to generate about 51,731 MWh/yr, which will be  
23 injected into the existing power grid.

1           The Camden Solar Project will interconnect with the Dominion Energy distribution  
2 grid, affording it potential access to the PJM Interconnection (“PJM”), a Regional  
3 Transmission Organization (“RTO”) in which Dominion participates. PJM coordinates the  
4 movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky,  
5 Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia,  
6 West Virginia, and the District of Columbia.

7           As discussed in Exhibit 3 of the Application, projections for corporate purchase of  
8 energy and renewable energy credits (“RECs”) from solar facilities in the southeast market of  
9 PJM is expected to increase over the next few years. Camden Solar believes that healthy  
10 market conditions will create sustainable offtake for its production.

11           Demand for renewable power is expected to increase in the Southeast over the expected  
12 lifetime of the Project. Dominion Energy has committed to increasing its use of renewable  
13 power to generate 5,000 MW of electricity by 2028. As noted in Exhibit 1 and Schedule 4 to  
14 the Application, the Business Renewables Center, a non-profit initiative that is the leading  
15 industry convener between corporate renewable energy buyers and renewable energy  
16 developers, predicts that the demand for renewable energy in the PJM market, described below,  
17 will increase over the next year as shared in a chart with its members in April 2018. Projections  
18 from PJM indicate that the demand for power, particularly in the Southeast, will increase as  
19 described below.

20           Dominion’s commitment is consistent with state-level policy set by the Virginia  
21 General Assembly, which affirmed the growing importance of renewable energy generation in  
22 passing the Grid Transformation and Security Act of 2018 (the “GTSA”), signed into law by  
23 Governor Ralph Northam on March 9, 2018. The GTSA finds that up to an additional 5,000

1 MW of utility-scale electric generating facilities powered by solar and wind energy is in the  
2 public interest, along with up to an additional 500 MW of non-utility scale solar or wind  
3 generating facilities, including rooftop solar installations.

4 Camden Solar anticipates contracting the sale of energy, capacity, and Renewable  
5 Energy Credits (“RECs”) through PJM. Load growth for the PJM RTO as a whole, and more  
6 specifically for the Dominion Virginia power zone, which serves parts of Eastern North  
7 Carolina and Virginia (as shown as Schedule 8 to the Application), is expected to increase over  
8 the next ten to fifteen years as described below for both winter and summer months.

9 Summer peak load in PJM is expected to grow by 0.3% per year over the next ten years,  
10 and by 0.3% over the next 15 years.<sup>2</sup> For the Dominion Virginia Power zone, summer peak  
11 load growth is expected to grow by 0.9% per year over the next ten years, and 0.8% per year  
12 over the next fifteen years.<sup>3</sup> The anticipated ten-year summer peak load growth in the  
13 Dominion Virginia Power zone represents 1.4% growth over the January 2018 load forecast  
14 report.<sup>4</sup>

15 Winter peak load growth in PJM is projected to average 0.4% per year over the next  
16 10-year period, and 0.4% over the next 15-years.<sup>5</sup> Winter peak load growth for the Dominion  
17 Virginia Power zone is expected to grow by 0.9% per year over the ten years, and 0.9% per  
18 year over the next nine to fifteen years.<sup>6</sup> The anticipated ten-year winter peak load growth in

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<sup>2</sup> PJM Load Forecast Report (Mar. 2019 – RPM Update), available at <https://www.pjm.com/-/media/library/reports-notices/load-forecast/2019-rpm-load-forecast.ashx?la=en>, at 43-44.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at 40.

<sup>5</sup> *Id.* at 47-48.

<sup>6</sup> *Id.*

1 the Dominion Virginia Power zone represents 1.4% growth over the January 2018 load forecast  
2 report.<sup>7</sup>

3 The PJM service area of North Carolina has slightly higher projected load growth than  
4 Virginia. North Carolina is expected to average between 0.9 and 1.1% per year over the next  
5 10 years versus the PJM RTO load growth projections to average between 0.3% and 0.4% over  
6 the next ten years.<sup>8</sup>

7 Generation retirement also demonstrates the need for new sources of electricity in the  
8 region, and in North Carolina in particular. Approximately 209 MW of capacity in North  
9 Carolina was retired in 2017. This represents more than 10 percent of the 2,084 MW that retired  
10 RTO-wide in 2017.<sup>9</sup>

11 **OFFTAKE PLANS**

12 **Q. DESCRIBE THE OFFTAKE PLANS FOR THE PROJECT.**

13 **A.** BayWa Solar has substantial experience with offtake in the PJM market and the  
14 expectations for power purchase from the PJM market in the southeast United States are strong.  
15 BayWa Solar has previously secured and is actively negotiating for over 300 MW of offtake  
16 within the PJM market, and is using this experience to secure offtake for Camden Solar.  
17 Currently, Camden Solar is in active negotiations for power purchase agreements with a group  
18 of investment-grade off-takers for approximately 20 MW and is expecting final power  
19 purchase agreements with these parties in the third quarter of 2020.

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<sup>7</sup> *Id.*

<sup>8</sup> PJM, 2018 North Carolina State Infrastructure Report (January 1, 2018 – December 31, 2018), May 2019, 21, available at <https://www.pjm.com/-/media/library/reports-notice/state-specific-reports/2018/2018-north-carolina-state-data.ashx?la=en>.

<sup>9</sup> *Id.* at 21

1           **Q.     WHAT ARE THE LONG-TERM PLANS FOR OWNERSHIP OF THE**  
2 **PROJECT?**

3           **A.**     After securing power offtake, BayWa Solar plans to market the project to  
4 potential long-term owners who are able to utilize the federal investment tax credit. This is  
5 usually done through a competitive, multi-stage bidding process. This process has not yet  
6 started.

7           While the project assets will be owned by a long-term investor, BayWa Solar will  
8 provide operation and maintenance services to the project.

9           **Q.     PLEASE DESCRIBE THE ANTICIPATED BENEFITS OF THE**  
10 **PROJECT TO THE LOCAL COMMUNITY.**

11          **A.**     The Camden Solar Project will create significant benefits for the local  
12 community, including a substantial increase in tax revenues. The current tax revenue was  
13 \$4,116.16 for year 2019 at the current land designation as agricultural. The project is estimated  
14 to provide over five (5) times that amount in taxes on a yearly basis.

15          The Applicant also anticipates that the proposed Project will require the hiring of  
16 somewhere around 100 local positions during construction as this is consistent with similar  
17 projects of this type and size. Construction materials will need to be purchased, delivered, and  
18 installed during construction as well. In addition, there will be a demand for locally-sourced  
19 contractors during facility operation (landscaping, grounds keepers, maintenance etc.).  
20 Contractors and employees traveling from outside Camden County to assist with the Project  
21 will require the services of local accommodation providers and local restaurants/grocery stores.  
22 Solar also will bring employment opportunity and development for the local Camden County

1 workforce. For a project of this size, the cumulative spending in the area from the development  
2 and construction process is anticipated to be in the millions of dollars.

3 The proposed Project will not meaningfully increase demand for County services. It  
4 will have no adverse impact on schools, law enforcement, or fire and rescue. Construction of  
5 the Project will not necessitate any new or expanded public infrastructure and/or  
6 improvements. Once operational, the Project will not substantially change the character of the  
7 area.

8 Lastly, the Project's site control arrangements allow landowners involved in the Project  
9 to keep their land under family control while ensuring them a long-term and stable income  
10 source through long-term solar lease agreements. Many of our landowners will use this income  
11 to continue agricultural operations on other land in the area.

12 **Q. WHAT ARE THE EXPECTED ENVIRONMENTAL IMPACTS OF THE**  
13 **FACILITY?**

14 **A.** By design and by its nature as a solar PV facility, the Facility will provide clean  
15 renewable power with minimal environmental impacts. The Facility will create no air or water  
16 emissions or other environmental contamination, nor will it create any noise impacts outside  
17 the fence line. Minimal reflectivity or glare will be created, as the panels are designed to  
18 absorb as much sunlight as possible. At the end of the Facility's useful life, materials can be  
19 recycled or sold for scrap, and the land can be returned to agricultural use. The  
20 decommissioning plan for the Project is attached as Exhibit A.

21

1           **Q.   HOW HAVE THE APPLICANTS ENGAGED THE LOCAL**  
2 **COMMUNITY IN RELATION TO THE PROJECT?**

3           **A.**    The previous developer and the Project landowners worked with neighbors  
4 during the SUP process. Since the SUP was approved and issued, Camden Solar has engaged  
5 with the local community. Camden County, as demonstrated through its passing of the Solar  
6 Energy Ordinance and its other actions, encourages the development of new solar facilities.  
7 This Project is the first BayWa Solar project in Camden County, but BayWa Solar is increasing  
8 its presence and activity there as the County representatives are forward thinkers who are open  
9 to renewable energy and business.

10          **Q.   DOES THIS CONCLUDE YOUR TESTIMONY?**

11          **A.**    Yes.

**PUBLIC (REDACTED)  
VERSION**

**EXHIBIT A**

**TO**

**PRE-FILED DIRECT TESTIMONY OF  
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ON BEHALF OF CAMDEN SOLAR LLC**

**NCUC DOCKET NO. EMP-109, SUB 0**

**DECOMMISSIONING PLAN**

## Camden Solar, LLC Decommissioning Plan

### Introduction

Camden County Ordinance No 2017-07-03 Chapter 151 contains decommissioning obligations for solar projects. The Applicant/Owner shall have 12 months to complete decommissioning of the solar facility if no electricity is generated for a continuous period of 12 months (not including delay resulting from force majeure). This facility decommissioning plan outlines the process and major activities required to decommission the facility in compliance with the Camden County Ordinance.

### Decommissioning process and major activities

Camden Solar, LLC shall be responsible for the solar project decommissioning. At the solar facility end of useful life, or as required by Camden County ordinances, Camden Solar, LLC will obtain the necessary permits and secure an appropriately licensed contractor to decommission the facility. Decommissioning will include the major activities below in compliance with Camden County requirements:

- 1.1 Removal of solar panels, buildings, cabling, electrical components, roads, and any other associated facilities down to 36 inches below grade.
- 1.2 Disturbed earth shall be graded and re-seeded, unless the landowner requests in writing that the access roads or other land surface areas not be restored.
- 1.3 Description of any agreement (e.g. lease) with landowner regarding decommissioning and acknowledgement by land owner, land owner may be held ultimately responsible for decommissioning.
- 1.4 List the type of panels and material specifications being utilized at the site. Material specifications will be provided with Construction Plan prior to start of construction
- 1.5 The identification of the party currently responsible for decommissioning.
- 1.6 Prior to issuance of the Building Permit, approved decommissioning plan obligation shall be recorded in the Camden County Registry of Deeds and shall run with the land until decommissioning is completed.

An appropriately licensed contractor will be secured for decommissioning activities. Erosion and sediment control best management practices shall be installed as required by the authority having jurisdiction. The facility shall be de-energized and disconnected from the grid in coordination with the interconnecting utility. System components shall be disassembled and removed in the appropriate procedure to maintain personnel safety as solar panels remain energized when exposed to sun light. Fencing shall be maintained until the end of decommissioning for security and safety. Materials shall be staged on site and removed from the site by the appropriately licensed contractors as necessary. All materials shall be taken to or disposed of by approved recyclers in compliance with all local, state, or federal regulations.

## Recycled and Salvaged materials

The vast majority of system components consists of recyclable materials. Solar panels have a thirty to fifty-year useful life and may be re-used or resold for other projects. Where solar panel manufacturers offer recycling programs, the solar panels shall be disposed removed in coordination with the manufacturers program. Solar panels consist mainly of glass, silicone, and aluminum and may be recycled if dysfunctional or no manufacturer program exists.

Trackers and foundation steel, copper and aluminum conductors, and all other respective recyclable materials will be recycled by an approved recycler.

Inverter stations, combiner boxes, foundation concrete and other miscellaneous materials may not be recycled or may not have disposal programs in place. Any hazardous or non-recyclable materials will be disposed of by appropriately licensed contractors in compliance with local, state, and federal rules and regulations.

## Site restoration

The site shall be restored in compliance with Camden County ordinances and the site lease. Coordination with the land owner may require some site improvements to remain, as outlined in the county ordinances. All other improvements will be removed and the site will be restored and re-seeded in compliance with Camden County ordinances.

## Schedule

The decommissioning process in its entirety is expected to take 6 – 12 months maximum. Approximately 3 – 6 months will be spent planning, securing the necessary permits, identifying recycling facilities and appropriate disposal facilities for non-recyclable materials, and contracting with the appropriately licensed contractors. Activities on site are expected to take 3 – 6 months maximum.