

Final Recommended License Conditions**PSC Case No. 9483****Citizens UB Solar, LLC**

1. Applicability of Conditions - Except as otherwise provided for in the following provisions, the application ("Application") for the Certificate of Public Convenience and Necessity ("CPCN") is considered to be part of this CPCN for the Citizens UB Solar, LLC ("Citizens UB Solar") Project ("Project"). The Application consists of the original application filed with the Maryland Public Service Commission ("PSC" or "Commission") on June 8, 2018, the amended application filed on April 12, 2019, and direct testimony filed on October 26, 2018. Construction and operation of the Project shall be undertaken in accordance with these conditions, which have been prepared by the Power Plant Research Program ("PPRP") in coordination with the reviewing State agencies. If there are any inconsistencies between the conditions specified below and the Application, the conditions in this CPCN shall take precedence. If CPCN conditions incorporate federal or State laws through paraphrased language, where there is any inconsistency between the paraphrased language and the actual State or federal laws being paraphrased, the applicable federal or State laws shall take precedence.
2. Project Scope - The Project shall be constructed as a fixed-tilt photovoltaic (PV) system within the limit of disturbance and approximate dimensions (surface, in total acreage, and height) as described in the Application, or if applicable, otherwise incorporated in the CPCN. Modifications to the Project's specifications that are not covered by this CPCN should be reviewed by PPRP, but must be approved by the PSC.
3. CPCN Expiration - Construction of the Project shall commence within three (3) years of receiving the CPCN (established by the date of the Final Order), and the Project shall be in operation no later than four (4) years after receipt of the CPCN; otherwise, the CPCN shall expire and no longer constitute authorization to construct and operate the Project.
4. Applicable Laws and Regulations - Construction and operation of the solar facility shall be undertaken in accordance with this CPCN and shall comply with all applicable local, State, and federal laws and regulations, including but not limited to the following:
 - a. Nontidal Wetlands - COMAR 26.23.01 applies to activities conducted in nontidal wetlands and wetland buffers.
 - b. Waterway Construction - COMAR 26.17.04 applies to regulations governing construction activities in nontidal waters and floodplains.

- c. Water Quality and Water Pollution Control – COMAR 26.08.01 through COMAR 26.08.04 apply to discharges to waters of the State and maintenance of surface water quality.
 - d. Erosion, Sediment and Stormwater Control – COMAR 26.17.01 and COMAR 26.17.02 applies to the preparation, submittal, review, approval, and enforcement of erosion, sediment and stormwater control plans, including any dewatering plans and associated water recycling plans.
 - e. Oil Pollution Control – EPA 40 CFR 112 and COMAR 26.10.01.12 apply to the procedures for oil spill control.
 - f. Forest Conservation – Maryland's Forest Conservation Act (FCA), Md. Code, Sections 5-1601 through 5-1613 of the Natural Resources Article.
 - g. Particulate Matter from Materials Handling and Construction - COMAR 26.11.06.03D, applies to airborne particulate matter such that a person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.
 - h. Nuisance Air Pollution - COMAR 26.11.06.08 provides that an installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, a nuisance or air pollution.
 - i. Odors - COMAR 26.11.06.09 provides that a person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.
 - j. Noise - The Project shall comply with the Maryland noise regulations in COMAR 26.02.03 and the Carroll County noise regulations in Carroll County, MD Code of Ordinances Title IX Chapter 93.
5. Site Control - In accordance with COMAR 20.79.03.01, prior to construction, Citizens UB Solar shall provide the PSC and PPRP a copy of the purchase agreement, land lease, or similar agreement with the owners of the properties on which the Project site is located. Citizens UB Solar shall also identify any applicable term of the purchase agreement, land lease, or similar agreement and provide assurances to PPRP and the PSC that such term of the purchase agreement, land lease, or similar agreement meets or exceeds any applicable Power Purchase Agreement (“PPA”) term and includes any time necessary for complete decommissioning closure and removal of the Project facilities.

6. Project As-Built Details – Within 60 days of commencing operations, Citizens UB Solar shall provide to the PSC, PPRP, and Carroll County, the following as-built details: engineering and construction plans for the Project, including the total acreage of the Project site; the PV panel and module type, dimensions, and locations; and consistent counts of the number of PV modules, and support posts for the PV modules, as well as a consistent depth of post/pile burial and height of the PV panels above grade. Where the as-built details are identical to those submitted with the CPCN application, Citizens UB Solar shall provide a statement to this effect and not resubmit the information.
7. Access - Representatives of the PSC, PPRP, Carroll County, and the Town of Union Bridge shall be afforded access to the Project site at any reasonable time, with appropriate notification, to conduct inspections and evaluations necessary to confirm compliance with the CPCN requirements. Citizens UB Solar shall provide assistance as reasonably necessary to conduct inspections and evaluations effectively and safely, which may include, but need not be limited to, the following:
 - a. Inspecting construction authorized under this CPCN;
 - b. Accessing or copying any records that Citizens UB Solar is required to keep pursuant to this CPCN or applicable regulations;
 - c. Obtaining any photographic documentation and evidence; and
 - d. Determining compliance with the conditions and regulations specified in the CPCN.
8. Construction Dewatering – Citizens UB Solar shall inform the PSC and PPRP if it determines that an appropriations permit is required for construction dewatering under COMAR 26.17.06.03A (subject to the parameters listed in 26.17.06.03B(3)). The Applicant shall provide the PSC and PPRP with copies of all documentation necessary to obtain a Permit to Appropriate and Use Waters of the State. Any such groundwater withdrawal appropriation request by the Applicant or a successor shall require an amendment to the CPCN pursuant to COMAR 20.79.03.02.B(3).
9. Spill Control – Citizens UB Solar shall follow guidelines established by the United States Environmental Protection Agency’s Spill Prevention, Control and Countermeasure and Facility Response Plan programs to prevent and control spills. In particular, the streams and wetlands of the project parcels, the offsite streams and wetlands into which these flow, and all adjacent properties shall be protected from spills or leaks of transformer fluids or other biologically detrimental substances by appropriate containment structures.
10. Sediment Control - Citizens UB Solar shall implement soil erosion and sediment control best management practices (BMPs) provided in the Maryland Department of the Environment (MDE) document, *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*, and as otherwise may be

approved or required by Carroll County. All portions of the Project site disturbed during construction shall be stabilized as soon as practicable after the cessation of construction activities within that portion of the site, followed by seed application, in accordance with the above-cited document.

11. Forest Conservation – Citizens UB Solar shall comply with Carroll County’s Forest Conservation Ordinance (Carroll County Code of Ordinances, Chapter XV, §150.20 through §150.41) implementing the Maryland FCA. Prior to the start of construction, Citizens UB Solar shall prepare and submit to Carroll County for approval and to PPRP for review a Forest Conservation Plan that is consistent with all Carroll County Forest Conservation requirements.
12. Soil Compaction Management – During construction and operation, soil inside the Project Limits of Construction should be effectively managed for compaction according to the guidance provided in the NRCS Soil Quality – Agronomy Technical Note No. 17 “Soil Compaction: Detection, Prevention and Alleviation.” For areas that will receive flow as part of a Non-Rooftop Disconnection Credit, ripping (to a minimum depth of 12”) and compost amendment shall be performed where compaction has occurred (e.g. graded areas, staging areas, or heavily trafficked areas) to assure planting success and the proper post-construction runoff characteristics.
13. Vegetation Management Plan – Citizens UB Solar shall plant and establish the grounds of the Project beneath and between the solar panels with native, warm season grasses and/or low-growing pollinator-friendly plant species. Further, Citizens UB Solar shall, prior to commencement of Project construction, develop and submit to PPRP for review a grounds management plan that incorporates an Integrated Vegetation Management (IVM) approach and specifically includes the following:
 - a. Description of grasses and other plant species to be maintained at the site, with preference given to native (or naturalized) species;
 - b. Schedule for mowing that avoids or minimizes mowing activities during the nesting season of most ground-nesting birds (i.e., May through August);
 - c. Restriction of grass mowing height at all times to not less than 10 inches except in areas where this would present a fire hazard or impede required access to equipment;
 - d. Protocol for managing invasive plant species, consistent with county regulations; and
 - e. Description of the herbicides and pesticides to be used at the Project site, details for avoiding or minimizing their use, and specific conditions under which these substances will be used. Herbicides and pesticides shall be EPA-registered at the time of application and shall only be applied in

accordance with label recommendations, applicable law, and landowner requirements.

14. Pollinator Habitat – Citizens UB Solar shall use native flowering plants to establish and maintain long-term pollinator habitats where possible throughout the solar facility. Citizens UB Solar shall develop a Pollinator Habitat Plan that sets forth details of the pollinator habitat and includes the following:
 - a. Maps of designated pollinator habitat areas on the Project site;
 - b. Lists and descriptions of all intended target native plant species for the pollinator areas;
 - c. Methods for planting the pollinator areas;
 - d. All management methods for the pollinator areas, including elimination of non-native invasive species, mowing, herbicides, and other pertinent criteria;
 - e. Projected success goals for the pollinator habitats, including expected percent survival statistics of all planted species during a period of five years after installation, and contingency planting for areas of nonestablishment; and
 - f. Citizens UB Solar shall submit the Pollinator Habitat Plan to PPRP and Carroll County for review at least 30 days before completion of Project construction, and shall indicate whether Citizens UB Solar will participate in Maryland Department of Natural Resources' Pollinator-Friendly Designation Program for Solar Facilities.
15. Rare, Threatened, and Endangered Species – Citizens UB Solar shall notify and consult with the Maryland Department of Natural Resources, Wildlife and Heritage Service to determine appropriate actions if any rare, threatened, or endangered species are encountered during planning, construction, operation, or maintenance of this facility.
16. Grading and Stormwater Management – Citizens UB Solar shall provide PPRP and the PSC Engineering Staff with copies of all plans that Citizens UB Solar submits to Carroll County in connection with the Project for grading the site, and all permits received for such grading, within fifteen (15) calendar days of submitting such plans or receiving such permits. Grading and associated stormwater controls shall be designed to minimize hydrological changes to off-site streams and wetlands and to maintain the existing flow regime to these streams and wetlands. In no case shall such plans include removal of topsoil from the site.
17. Land Use - Citizens UB Solar shall certify to the PSC and to PPRP that it has designed the facility in substantial conformity to Carroll County Site Plan requirements as codified in § 158.153 of the Carroll County Code, titled Solar Energy Conversion Facilities. Citizens UB Solar shall also certify that it has

received Site Plan approval and all required local permits and authorizations prior to the commencement of construction.

18. Construction Traffic - Citizens UB Solar shall require all construction traffic to enter and exit the Project site from the proposed access driveways off Green Valley Road (MD 75). If circumstances or conditions require construction traffic to temporarily access the Project site from an alternative access driveway, Citizens UB Solar shall file an amendment request with the PSC and PPRP describing the reason(s) for and duration of the amendment, and shall receive approval from the PSC and PPRP prior to using an alternate access driveway.
19. Road Permits - Citizens UB Solar shall comply with all permit requirements and restrictions for use, crossing and occupancy of State, Carroll County and Town of Union Bridge Roads and obtain appropriate approvals, as necessary.
20. Road Damage - Prior to construction, Citizens UB Solar shall document road, shoulder, and right-of-way (ROW) conditions on roads with direct access to the Project site, and monitor road conditions weekly during the construction period, or when notified of damage or debris caused by construction vehicles. If Citizens UB Solar causes damage during its work to any roadway under the authority of the Maryland Department of Transportation State Highway Administration (MDOT SHA), they shall contact MDOT SHA District 7 Maintenance to report any damage to a MDOT SHA roadway. Citizens UB Solar shall correct all identified road conditions that deviate from its initial reconnaissance within 48 hours of being detected or reported. Repairs to roads, shoulders, and ROWs shall conform to MDOT SHA specifications or Carroll County Design Manual for Roads and Storm Drains, whichever is applicable.
21. Setbacks - Citizens UB Solar shall certify to the PSC and PPRP that setbacks shall conform to setback requirements as annotated in §158.153(D)(3) of the Carroll County Code where applicable. Citizens UB Solar shall certify to the PSC and PPRP that all proposed setbacks in the Site Plan have been reviewed and approved by Carroll County.
22. Landscape Buffer - Citizens UB Solar shall design a landscape buffer within the setback and outside the perimeter fence that will effectively screen, to a minimum 6 feet above ground level at planting and 30 feet at maturity, views of the solar facility. The buffer must mitigate views, to the extent practicable, from all adjacent public roads, residential properties, and cultural landmarks, and be consistent with buffer recommendations of the Maryland Historical Trust (MHT). Landscape screening requirements may be waived by the Town of Union Bridge and/or Carroll County where Citizens UB Solar can demonstrate that conditions on adjacent land are present, such as forest, woodland, wetlands, open fields, or cropland, such that the landscaped buffer serves no purpose. The landscape buffer plan must be submitted to the PSC, PPRP, MHT, the Town of Union Bridge, and Carroll County for review and approval prior to the start of construction.

23. Landscaping Maintenance Agreement – Prior to the issuance of a grading permit, Citizens UB Solar shall negotiate and execute a landscape maintenance and surety agreement that ensures the landscape buffer is protected, monitored and maintained over the life of the Project.
24. Landscaping Surety Agreement – Citizens UB Solar shall submit to the PSC and to PPRP a copy of an executed maintenance agreement for the landscape plan with a surety or other financial assurance to cover replacement of plantings or associated irrigation systems planting in conformance with §157.20(K) and §157.21 of the Carroll County Code.
25. Outdoor Lighting – Citizens UB Solar shall develop a plan that will mitigate intrusive night lighting and avoid undue glare onto adjoining properties. Citizens UB Solar shall certify to PPRP and the PSC that it has received approval of the outdoor lighting distribution plan from Carroll County during Site Plan review.
26. Glare Mitigation – Prior to installation of the solar panels, Citizens UB Solar shall take the following actions to provide an opaque buffer that mitigates glare impacts upon surrounding public roads and properties. The Applicant may add an opaque addition to the Project’s perimeter fencing (such as slats or fabric) to initially comply with this requirement. However, if not sufficient to mitigate glare, the Applicant shall construct a temporary, opaque buffer that may include any combination of additional fencing, landscaping and berms that completely screens Green Valley Road from the sun’s reflections off solar arrays from the time the panels are mounted on supports. The temporary buffer shall be installed within the setback where permanent landscaping has been proposed or required, as described in Recommended Condition 22, and must be maintained until the permanent landscape buffer provides an opaque visual barrier. The temporary buffer shall be in conformance with all applicable State and local laws and regulations.
27. Visual Impact Complaint Resolution - If the Town of Union Bridge, Carroll County, PPRP or any other party to the case provides information to the Applicant indicating that reflective glare or visibility of structures within the perimeter fence is impacting a nearby road(s) or resident(s), the Applicant shall coordinate with the Town of Union Bridge, Carroll County, and PPRP to determine a reasonable solution to mitigate negative impacts.
28. Documentation of Historic Resources
 - a. Citizens UB Solar shall supplement the Determination of Eligibility (DOE) form submitted by Circa~ for the Kilfadda Farm (CARR-948) with documentation of interior spaces within the farm house and associated agricultural buildings. This documentation shall be completed by a qualified architectural historian, preservationist, or historian and accompanied by supporting materials as described in *General Guidelines for Compliance-Generated Determinations of Eligibility and Standards and*

Guidelines for Architectural and Historical Investigations in Maryland.

- b. The photographs contained in this supplemental documentation shall conform to the standards described on pages 36-7 of the *Standards and Guidelines for Architectural and Historical Investigations in Maryland* (Standards and Guidelines) and the standards described in the Maryland Historical Trust's "Guidelines for Digital Images."
 - c. Citizens UB Solar or its qualified consultant shall submit the completed supplemental documentation package to MHT at least six (6) months prior to beginning construction of the Project.
29. Archaeological Discoveries - In the event that relics from unforeseen archeological sites are revealed and identified during construction, Citizens UB Solar, in consultation with and as approved by the MHT, shall develop and implement a plan for avoidance and protection, data recovery, or destruction without recovery of such relics or sites.
 30. Heart of the Civil War Heritage Area (HCWHA) - In order to address HCWHA concerns of adverse impacts to identified areas, Citizens UB Solar shall consider the mitigation strategies suggested by the HCWHA:
 - a. Enhanced and additional landscape buffering - shall be in accordance with Condition 22 Landscape Buffer.
 - b. Entry into the Historic District - Citizens UB Solar shall coordinate with HCWHA and MHT regarding signage content and location if deemed warranted.
 - c. Kilfadda (CARR 948) - the cost of nominating the Kilfadda house to the National Register may be undertaken in place of Condition 28 Documentation of Historic Resources. However, Citizens UB Solar shall consult with MHT prior to submitting the nomination.
 - d. Toll House (CARR 1546) - Citizens UB Solar shall consider implementing "mitigation by avoidance" by avoiding any disturbance to the Union Bridge Toll House site located east of South Main Street if the applicant determines use of other areas of the property is appropriate.
 - e. Troop movements - Citizens UB Solar shall coordinate with HCWHA to allow for future archaeological investigation of the Kilfadda property.
 31. Scenic Byways Coordination - Citizens UB Solar shall certify to the PSC and to PPRP that it has consulted with the MDOT SHA Scenic Byways Coordinator to ensure the project's site layout, landscaping, and lighting maintains and enhances the byway's visual quality.
 32. Cycling Safety - Citizens UB Solar shall instruct its suppliers and contractors to be aware of on-road bicycle route designations near the Project and Maryland traffic laws regarding bicycles on the road, and include the condition in all contracts with suppliers or contractors.
 33. MDOT SHA Bicycle and Pedestrian Coordination - Citizens UB Solar shall certify to the PSC and to PPRP that it has consulted with the MDOT SHA Bicycle and

Pedestrian Coordinator to ensure activity during construction minimizes conflict with bicyclists.

34. Fire Safety – Citizens UB Solar shall design, install and maintain the Project to meet all applicable minimum standards set forth in the National Fire Protection Association (NFPA) 70: National Electrical Code and all applicable minimum standards appropriate for ground-mounted solar facilities set forth in NFPA 1: Fire Code.
35. Emergency Preparedness - Citizens UB Solar shall contact the Union Bridge Fire Company and the Carroll County Department of Public Safety to develop appropriate protocols for addressing on-site emergencies.
36. Solar Decommissioning
 - a. At least 30 days prior to the start of construction, Citizens UB Solar shall submit a decommissioning plan to the PSC and PPRP for review. The decommissioning plan shall describe the responsible party(ies), timeframes, and estimated costs for decommissioning, dismantling, and legal disposal of all components, including cables, wiring, and foundations below and above ground. The plan shall address site conditions after decommissioning, including stabilization, grading and seeding all disturbed areas and evenly distributing topsoil if stockpiled onsite. The plan shall maximize the extent of component recycling and reuse, where practicable, and ensure all materials are handled in accordance with applicable federal, State, county, and local requirements. Citizens UB Solar shall not begin construction until Citizens UB Solar has addressed all written comments from the PSC and PPRP, the PSC has approved the plan, and all specified financial guaranties are in place. The approved plan, and any updated plans, shall be filed in the PSC docket for Case No. 9483.
 - b. Citizens UB Solar shall implement a financial mechanism to ensure that decommissioning costs are not borne by the State and/or the County at the end of the useful life of the Project or in the event of abandonment of the Project. The Project will be considered to be abandoned if there is no electric generation for a period of twelve (12) consecutive months. The financial instrument may be in the form of a surety bond, a letter of credit issued by a financial institution, or other alternative arrangement and must be in place prior to the commencement of construction of the Project. The financial mechanism is subject to the evaluation and approval of the PSC as to the credit-worthiness and financial capabilities of the counter-party(ies).
 - c. Citizens UB Solar shall develop an estimate of decommissioning costs by a third-party consultant to determine the amount of the decommissioning surety bond letter of credit, or other alternative arrangement. The cost estimate shall address provisions for the safe removal and proper disposal

of all components of the Project, including any components containing hazardous or toxic materials.

- d. Over the life of the Project, Citizens UB Solar shall update the decommissioning cost estimate and corresponding approved financial instrument every five (5) years after the issuance of the CPCN to adjust for inflation and any other necessary changes. The salvage value of the panels may only be included in a five (5) year update as an offset to decommissioning costs if Citizens UB Solar can provide evidence that a recycling market exists for such panels and the value is commercially supported. Citizens UB Solar shall provide the revised cost estimate to the PSC for approval, file the revised cost estimate in the PSC docket for Case No. 9483, and execute an adjustment to the financial guarantee mechanism.
 - e. Except in the event of a pending request for repowering filed with the Commission, Citizens UB Solar shall begin implementation of the approved decommissioning plan within 12 months after the Project ceases to generate electricity for sale. Prior to starting implementation, Citizens UB Solar shall notify the PSC and PPRP of its intent to decommission.
37. Project Transfer - All provisions and requirements of this CPCN shall apply to any and all subsequent owners and/or operators of the Project. In the event of any pending change in control or ownership, the current owner/operator shall notify the succeeding owner/operator of the existence of the requirements of this CPCN by letter and shall send a copy of this letter to the PSC and PPRP. Information provided to the PSC and PPRP shall also be filed in the PSC docket for Case No. 9483.
 38. Current Point of Contact - The Applicant or its legal successor shall specify a representative for Project matters, including compliance with the CPCN conditions ("Representative"). The Applicant or its legal successor shall file in the PSC docket for Case No. 9483 the representative's contact information, including the representative's name, title, email address, and physical address. Any change in the representative or to the representative's contact information shall be filed in the PSC docket within 30 days.
 39. Compliance - Issues of non-compliance with CPCN conditions raised by the Town of Union Bridge, Carroll County, PPRP, or any other party to the case shall be addressed by the Project's Representative. Within 45 days of receiving notice, the Project's Representative shall submit, and file in the PSC docket for Case No. 9483, a summary of the non-compliance issue and a statement of how the Project has addressed or is addressing the matter.
 40. Submissions to PPRP - Informational copies of the required communications, reports or studies referenced in the preceding license conditions shall be sent to PPRP by e-mail (and by mail if requested) at:

Director
Power Plant Assessment Division
Department of Natural Resources
Tawes State Office Bldg., B-3
580 Taylor Avenue
Annapolis, Maryland 21401
e-mail: pprp.dnr@maryland.gov