

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Stony Brook Solar Project		
Street Address: 327 Moody Street		
Municipality: Ludlow	Watershed: Chicopee River	
Universal Transverse Mercator Coordinates: Zone 18T Easting: 705908.08; Northing: 4674440.8	Latitude: 42.195025313299205 Longitude: -72.50616527748429	
Estimated commencement date: 10/1/2021	Estimated completion date: 5/31/2023	
Project Type: Photovoltaic Solar Generation	Status of project design: 5% complete	
Proponent: Massachusetts Municipal Wholesale Electric Company (MMWEC)		
Street Address: 327 Moody Street		
Municipality: Ludlow	State: MA	Zip Code: 01056
Name of Contact Person: Jason Viadero		
Firm/Agency: MMWEC	Street Address: 327 Moody Street	
Municipality: Ludlow	State: MA	Zip Code: 01056
Phone: 413-386-4761, 413-308-1315	Fax: N/A	E-mail: jviadero@mmwec.org

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐ Yes ☒ No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting: Not applicable

a Single EIR? (see 301 CMR 11.06(8))

a Special Review Procedure? (see 301 CMR 11.09)

a Waiver of mandatory EIR? (see 301 CMR 11.11)

a Phase I Waiver? (see 301 CMR 11.11)

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
310 CMR 11.03 1(b)(1) Direct alteration of more than 25 acres of land not associated with a forest management plan

Which State Agency Permits will the project require?
The Project is proposed by MMWEC, which may be an Agency as defined by MEPA.

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:
Not applicable

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Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	285		
New acres of land altered		39.53	
Acres of impervious area		0.05	
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0	595,672	
Number of housing units	0	0	0
Maximum height (feet)	7		
TRANSPORTATION			
Vehicle trips per day	0	<1	<1
Parking spaces	0	0	0
WASTEWATER			
Water Use (Gallons per day)	0	0	0
Water withdrawal (GPD)	0	0	0
Wastewater generation/treatment (GPD)	0	0	0
Length of water mains (miles)	0	0	0
Length of sewer mains (miles)	0	0	0
Has this project been filed with MEPA before? ☐ Yes (EEA # _____) ☒ No			
Has any project on this site been filed with MEPA before? ☒ Yes (EEA # <u>2475, 2760, 13889, 3931, 3700, 3001, 11022</u>) ☐ No			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

The Massachusetts Municipal Wholesale Electric Company (MMWEC) Stony Brook Solar Project (the Project) will be situated on approximately 39.5 acres (Project Site) located within the existing 285 acre MMWEC Ludlow Campus (the "Property") which is home to MMWEC's administrative offices and the Stony Brook Energy Center, a 354MW Intermediate Unit and a 172MW Peaking Unit owned and operated by MMWEC. The project site shall be the area directly disturbed for the construction of the proposed solar facility. We are not including any additional areas of the property outside of the

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project site area that will be disturbed. No oil tanks or underground piping exist on the project site. The overhead line running from the array to SBEC will go across underground fuel, water and gas lines. However, we no utility poles will be set into the ground in areas adjacent to these underground lines.

The Project Site consists of successional forests throughout most of the Site. The dominant vegetation in the uplands consists of northern red oak (*Quercus rubra*), northern white oak (*Quercus alba*), sugar maple (*Acer saccharum*), white pine (*Pinus strobus*), red pine (*Pinus resinosa*), quaking aspen (*Populus tremuloides*), and big-tooth aspen (*Populus grandidentata*) in the tree layer; multiflora rose (*Rosa multiflora*), autumn olive (*Elaeagnus umbellata*), and glossy false buckthorn (*Frangula alnus*) in the shrub layer; Virginia strawberry (*Fragaria virginiana*), sheep fescue (*Festuca ovina*), red fescue (*Festuca rubra*), little false bluestem (*Schizachyrium scoparium*), wrinkle-leaf goldenrod (*Solidago rugosa*), New York fern (*Parathelypteris noveboracensis*), evergreen wood fern (*Dryopteris intermedia*), and whiplash dewberry (*Rubus flagellaris*) in the herb layer; and Asian bittersweet (*Celastrus orbiculatus*) in the woody vine layer.

The terrain of the Site is gently sloping to the north, south, east, and west due to a ridge running north to south in the center of the Site. The soils observed throughout upland portions of the Site were generally classified as silt loam, sandy loam, silty clay loam, sandy clay loam, or gravelly clay loam.

The Property is zoned "Industrial C" under the Ludlow Zoning Ordinance, and electric and solar generation is an allowed use in that zone. The Property already includes a 4-acre 345-kilovolt (kV) substation including poles wires and transformers which serves the exiting Stony Brook Energy Center and delivers power to the Ludlow substation 5.5 miles to the east along Route 21. The Property is bounded by commercial business development to the south; the Hampden County House of Corrections to the north; Advanced Drainage Systems and Westover Air Reserve Base to the west; and additional MMWEC and Westover Municipal Development Corporation property to the east.

The majority of the Property is currently open space with various portions of the Property devoted to facilities of the Stony Brook Energy Center and the MMWEC Administration Office Building. Included on the Property are various buildings and structures of varying sizes which are remnants of when the Property was part of Westover Air Force Base. Since the completion of construction of the Stony Brook Energy Center and the Administrative Office Building in the early 1980s no major above ground structures have been added to the Property. The Project will be the first alteration of land on the Property since that time.

Describe the proposed project and its programmatic and physical elements:

The proposed Project is a nominal 6.9MW-AC ground-mounted solar photovoltaic generating facility with accompanying facilities such as inverters, transformers, the sole purpose of which is to provide renewable energy to MMWEC member cities and towns having municipal electric light departments who have determined to participate in the Project. The energy generated will assist in meeting the goals of net zero by 2050. In addition, in the near term this Project will complement existing MMWEC assets on site and better utilize energy facilities by providing generation throughout the day and throughout the year, unlike certain existing assets which tend to only operate during times of high system demand or system constraints.

The Project will consist of approximately 24,076 solar modules attached to a ground mounted racking system, installed on driven posts within the constraints of the array. The Project will utilize ancillary facilities such as centralized inverters, collector boxes and step up transformers to convert the DC electricity to AC and transform the electricity to 4,160volts for connection to the Stony Brook Energy Center existing transmission facilities. With the exception of the precast cement slabs utilized for

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supporting inverters and transformers as well as slabs for collector boxes, no impermeable surfaces shall be created on the Site. Access and egress will be through existing roadways or crushed stone access drive.

As part of the Project a nominal area of 39.5 acres within the perimeter of the limit of disturbance shall be cleared of existing growth which is scrub and mixed hardwoods and softwoods. Following clearing and construction of the Project the disturbed site shall be reseeded with native grasses and mowed periodically to discourage the growth of species that might otherwise shade or interfere with solar generation.

The Project has been carefully designed to avoid impacts to wetlands and waterbodies.

During construction, area along the east side of Alabama Street will be utilized for project staging. This area is currently paved or mowed grass. Following construction, any areas of disturbed grass shall be restored to prior conditions

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

The purpose of the Project is to respond to an acknowledged need for non-carbon emitting generation by MMWEC member cities and towns having their own utility systems. As the Commonwealth transitions towards Net Zero by 2050, additional non-carbon generation will be needed. While the power supply of many MMWEC members is more than 50% carbon neutral and other members continue to build carbon free generation within their service territories, some MMWEC member utilities with limited available open space are unable to construct generation within their service territories to provide carbon free energy to their customers. This Project seeks to enable increased carbon free energy for these members while leveraging the benefits of construction on a site with available infrastructure for power generation.

In selecting the location of the proposed Project, MMWEC determined that due to the proposed size of the Project (in excess of 5MW), larger tracts of land and co-location with an existing electric power facility and substation would be required. Due to general system sizing and the increased penetration of distributed solar in the Commonwealth in the past 5 years, most distribution level circuits would be incapable of handling the proposed 6.9MW of solar generation, without extensive overhaul and upgrades taking increased time and dollars to achieve. As such, any construction not co-located with an existing electric facility or higher voltage substations would require additional construction activities such as re-conducting circuits or constructing dedicated circuits that would drive up costs to member cities and towns and increase disturbance to the environment.

Technologies Considered

In seeking to provide MMWEC members with non-carbon emitting energy generation, MMWEC considered alternate technologies meeting MA Class I RPS standards including wind, biomass, hydro and anaerobic digestion. Based on that consideration, MMWEC determined that due to the specific atmospheric needs for the development of wind and hydro, as well as location specific needs and permitting requirements for biomass and anaerobic digestion, solar represented the technology set