Union Bridge Solar Project

Developed By:
Citizens Enterprises Corporation
A non-profit energy company founded in 1979 by Joseph P. Kennedy II.

**Mission:** To make life’s basic necessities more affordable for those in need.

**Programs:** Various charitable energy assistance programs. Charitable programs include:

- **Heating Oil Assistance:** Delivered 100 gallons of free heating oil to low-income households and 65 tribes in 23 states ($500M over past 10 years), in partnership with CITGO Petroleum.

- **Natural Gas Assistance:** Provides financial assistance for unpaid bills to low-income households in MA (partnership with Distrigas), and KY (partnership with Columbia Gas).

- **Shelter Winter Assistance:** Provides financial assistance for unpaid bills to low-income households in MA (partnership with Distrigas), and KY (partnership with Columbia Gas).

- **Solar Homes Program:** Installs no-cost residential rooftop solar systems on homes of low-income families in the Imperial Valley, California.
About the Applicant – Completed Projects

• Completed Projects
  • Citizens currently owns and operates close to 100 MW of distributed solar projects in the US.
  • All projects have been financed by Citizens as the sole project sponsor, a tax equity partner, and a debt partner. Citizens anticipates using some of its existing partners on this project to facilitate the financial closing.
  • Citizens has also completed multiple wind and transmission projects.

• Development Projects
  • Citizens solar development pipeline is approximately 150 MW with development assets in MD, MA, NY, NJ, NC, and CA.
Project Overview

• Project Size
  • 9.9 Megawatts (MW)
  • 49.76 acres of panels within the fence

• Location
  • Parcels are located both within the Town of Union Bridge and Carroll County
  • Main St. across from Lehigh Valley Cement
  • Along W Locust St and S Whyte Street
Project Overview

• Zoning
  • Town of Union Bridge Parcels include Conservation (C), Industrial Restricted (IR), and R-6000.
  • Carroll County parcels include Conservation (C), Industrial Restricted (IR), and Industrial General (IG).
  • Conservation areas will not be used for the project.
  • Utility Scale Solar Projects in the IR and IG zoning designations within the County are a permitted use.
  • Utility Scale Solar Projects in the IR zoning designation within the Town are a permitted use upon approval by the zoning board.
  • Utility Scale Solar Projects in the R-6000 zoning designation within the Town would require either zoning and master plan changes or special exception.
Project Zoning Map / Preliminary Site Layout
Project Overview

• Schedule
  • Engineering and Permitting: October, 2018 through February, 2019
  • Construction: Spring 2019
  • Operation: Summer/Fall 2019

• PJM Studies
  • PJM Queue Position AB1-096
  • Interconnection Service Agreement complete and currently in suspension
Benefits to the Town / County

• Tax Benefits
  • Annual personal property tax benefits to the Town and County.

• Local Job Opportunities
  • Citizens will hire a general contractor that will recruit local labor for construction jobs. Depending on schedule and timing, we anticipate this number to be approximately 50 jobs during peak periods.
  • Long term job opportunities will be associated with landscape management and electrical maintenance (provided by our 3rd party operations and maintenance provider).
Benefits to the Town / County

• Site for WWTP Expansion
  • The Applicant is offering a 5 acre footprint for the Town’s WWTP expansion

• Site for SWM Upgrade

• Opportunity for Church of the Brethren to piggy-back on the proposed solar project.
Environmental Characteristics

• Project avoids wetland impacts.
• Project is not within the Critical Area.
• Project design will not be impacted by FEMA area designations.
• Project design does not require tree clearing.
• Project will comply with FCA, SWM, S&EC, and site plan requirements.
• Project will include landscape buffering in addition to existing wooded buffers.
Approvals

- State of Maryland CPCN License from the PSC
- Local site plan
- Environmental permits – SWM, S&EC, FCA, wetlands
- Construction permits – building permit, grading permit, electrical permit
Miscellaneous Project Elements

• Glare Analysis
  • ForgeSolar PV Planning and Glare Analysis completed
  • MAA and FAA reviews

• Landscape Buffers and Pollinators
  • Evergreens, shrubs, grasses, and pollinators
  • Buffers will be 25 feet wide and will screen from roads, businesses, and residential dwellings
  • Buffers will be incorporated into the existing viewsheds

• Noise Compliance
  • Inverters located internal to the project
  • Will meet Town/County noise codes at the fence line
Example Solar Projects

Location: Millen, GA  
Size: 28.0 MW  
Technology: Single Axis Tracker

Location: Amesbury, MA  
Size: 6.0 MW  
Technology: Ballast on landfill
Example Solar Projects

Location: Falmouth, MA  
Size: 4.0 MW  
Technology: Ballast on muni landfill

Location: Buena Vista, GA  
Size: 2.0 MW  
Technology: Post-driven
Example Solar Projects

Location: Norton, MA  
Size: 2.0 MW  
Technology: Ballast on muni landfill

Location: Tyngsborough, MA  
Size: 3.5 MW  
Technology: Ballast on EPA Superfund
Example Solar Projects

Location: Agawam, MA
Size: 2.6 MW
Technology: Ballast on landfill

Location: Macon County, GA
Size: 1.0 MW
Technology: Post-driven
Example Solar Projects

Location: Vienna, GA
Size: 1.0 MW
Technology: Post-driven

Location: Agawam, MA
Size: 1.8 MW
Technology: Post-driven