

# Project Matching: Facilitating New Renewable Energy Projects Project Proposal Submittal Form

The EPA Green Power Partnership's (GPP's) <u>Project Matching Initiative</u> works to connect stakeholders with new, not-yet-built renewable energy projects that may align with their energy, environmental, and financial objectives. The initiative's goal is to spur the development of new renewable generation by facilitating the signing of long-term green power contracts between end-users and project developers, thereby providing a guaranteed stream of revenue that developers can use to secure project financing.

The GPP will host a project matching webinar on Wednesday, May 25, 2016, from 1:00 – 2:30 pm (EST), entitled "Project Matching: Shovel-ready Renewable Energy Projects." Project developers are invited to submit project proposals to GPP for possible inclusion in the webinar. This form includes all anticipated criteria that EPA will use to select featured projects for the webinar. All projects submitted for review that meet minimum requirements for data completeness and basic eligibility will be posted on the GPP website. A renewable energy project's inclusion in this initiative does not constitute endorsement or recommendation by EPA.

**Project proposals are due by April 29, 2016** and must be submitted electronically to James Critchfield, critchfield.james@epa.gov.

# Project Summary Project name: Rose Hill Solar Developer name: OneEnergy Renewables Developer contact name | phone | email: Russ Wright | 206-922-7940 | russ@oneenergyrenewables.com Renewable energy type: Solar PV Project city/state: Maryland, Delmarva Peninsula Project geographic coordinates (To find, use: www.latlong.net/): Latitude\_\_\_\_\_\_ Longitude\_\_\_\_\_\_ Confidential.

Grid system operator (ISO, RTO) that the project will interconnect to: PJM

Total planned megawatt (MW DC) size: 26 MWdc

Are there phases? If so, how many and in what size traunches? N/A

What is the expected annual output of the completed project (MWh)?

44,932 MWh

**Expected date of construction commencement:** 

2/1/2017

**Expected date of commercial operation:** 

11/30/2017

What is the largest development hurdle and how is it anticipated to be overcome?

This project has a clearly-defined path to interconnection and permitting. The primary remaining development hurdle is to source a long-term offtake contracts for the power and SRECs so the project can move into the financing and construction phase.

# Can you provide examples of similar projects you have developed?

Wye Mills Solar: OneEnergy developed the 13.6 MW (DC) Wye Mills solar PV project which will serve the Johns Hopkins Medicine's East Baltimore Campus and is expected to be complete and operational during Q2 2016. The solar installation will feature more than 40,000 solar panels across a 97-acre plot of land in Wye Mills, in Queen Anne's County, Maryland. The Wye Mills project is located in Queen Anne's County, Maryland and is expected to offset about 18 percent of the total energy Johns Hopkins facilities utilize. The solar power system will deliver the energy generated from this project to Johns Hopkins for less than their current electricity rate, and provide a long term hedge against the rising costs of purchasing power. The project is being built and will be maintained by SolarCity, and will be financed and managed by Direct Energy Business.

**Sunfish Solar:** Sunfish Solar is a 7.3 MW (DC) solar PV project in Queen Anne's County, Maryland. Sited on a 40-acre parcel of land, the project is expected to produce nearly 12,000 MWh during its first year via the use of roughly 24,000 solar panels. The project is financed by a nationally recognized leader in solar financing and has an executed power purchase agreement with with the General Services Administration, the U.S. government's supply agency. Construction is expected to begin in Q2 2016 and will be operational during Q4 2016.

Cambridge Solar: Cambridge Solar is a 4.3-MW (DC) solar PV project operating in the heart of Maryland's Eastern Shore and is designed to produce enough energy to meet 40% of the National Aquarium's annual electricity needs. OneEnergy tailored development of both the project and the transaction to meet the Aquarium's unique financial and energy profile, working closely with the National Aquarium's energy provider and the project's owner/financier, Constellation, to integrate the project into the Aquarium's existing power supply. The National Aquarium will receive 100% of the energy produced by the project for 25 years and all solar renewable energy credits (SRECs) generated in years 16-25. The project owner will retain the SRECs generated by the project in years one to 15 of the agreement.

**Steel Bridge Solar:** Steel Bridge Solar is a 3.0 MW (DC) solar PV project located in Polk County, Oregon. The site is located in the Portland General Electric (PGE) service territory. The region is generally considered an unlikely location for a large solar installation, and an underutilized 12-acre site is a

rarity—both make this project particularly successful. The project is the largest solar PV project in PGE's service territory and is expected to produce nearly 4,000 MWh of energy in its first year of operation. Electricity generated by this project will serve a 19-year power purchase agreement with PGE and the project is financed and owned/operated by NRG. As part of developing this project, OneEnergy successfully obtained multiple competitive incentives totaling more than \$3 million to increase the project's strong economic metrics.

**Interlake Solar:** Interlake Solar is a 2.9 MW (DC) solar photovoltaic project located in Ontario County, New York and is one of the largest higher education solar projects in New York State. Sited on 40 acres, the project is expected to generate roughly 10 percent of college's energy demand. OneEnergy secured an estimated 25 percent of the project's funding through a highly competitive grant with NY-SUN with NYSERDA. The project will be financed through an executed 25-year power purchase agreement with Greenwood Energy, and is being co-developed and managed by Borrego Solar Systems.

**Ewauna I&II:** Ewauna Solar is multi-phased 4 MW (DC) solar photovoltaic project located in Klamath County, Oregon. Construction for Phase I (1 MW) is complete and the project is online. Construction of Phase II (3 MW) is expected to begin Q2 2016. Sited on roughly 36-acres of previously-disturbed industrial zoned land, solar represents a low-impact development appropriate for the site and the area. The project is expected to generate approximately 7,300 MWh of clean electricity annually. As part of developing this project, OneEnergy has successfully obtained multiple competitive incentives to increase the project's strong economic metrics. Electricity generated from this project will serve a power purchase agreement with PacifiCorp and is owned and operated by SolarCity.

# **Site Readiness**

Has the project received all necessary federal, state, and local permits to proceed with construction and operation? If not, please outline the key permits required to proceed with project construction/operation and describe the steps you have taken in order to evaluate and address permitting risk for this project.

The project is in the process of completing all steps required to obtain necessary permits and approvals, including: Certificate of Public Convenience and Necessity (CPCN) from the Public Utilities Commission; storm water permit for construction under the General National Pollutant Discharge Elimination System (NPDES) from the Maryland Department of the Environment (MDE); and local building and grading permits from Queen Anne's County.

OneEnergy has successfully moved four large-scale solar projects through the State Certificate of Public Convenience and Necessity (CPCN) process, and has another three projects almost complete. The CPCN Permit is issued through the Public Service Commission and coordinated with Maryland's Department of Natural Resources (DNR). OneEnergy has completed an on-site review of the property with the heads of DNR through the Power Plant Research Program (PPRP). Formal application for the CPCN is anticipated May 2016 and approval is expected within nine months.

With one 4.3MW project operational and 20MW of projects under construction in Maryland, OneEnergy is well positioned to move this project forward quickly in order to achieve an in-service date of November 2017. In addition to moving the project through the CPCN process, a Notice of Intent will also be filed with MDE (considered an application for coverage under NPDES) in conjunction with preparation of a final site plan and construction drawings for the County Planning Commission. Building and grading permits will be applied for after the site plan approval from the County.

Have you secured long-term site control? If so, please describe the nature of the agreement (lease, ownership, etc.)?

The developer and the landowners signed a 26-year lease option agreement in May, 2014 with a 5-year development option on this 150-acre site. The site lease also features two 5-year extension options at the end of the 26-year lease term.

Have land leases been filed with the county?

Yes.

Does the project require either an Environmental Impact Statement or Environmental Assessment? If so, what is the status?

No.

# Interconnection

What is the status of interconnection, and have system impact and facility studies been completed? (Distribution or transmission level projects are both eligible)

Feasibility Study completed 2/4/2015.

System Impact Study completed 3/9/2015.

Facilities Study. Submitted and under review. Expected May 2016.

Interconnection Agreement expected Q3 2016.

When do you expect the interconnection study process will be complete?

May 2016.

Does the transmission owner (TO) or independent system operator (ISO) have a process to study the project's impact on the local or regional grid and the subsequent cost to interconnect?

Yes. See above.

### **Operation & Financing**

What is the long- and short-term plan for operating and maintaining the project?

OneEnergy works with a number of larger project owners/operators that will finance, construct, own and operate the project once a long-term offtake agreement is arranged.

Briefly describe why this site is a good candidate for renewable energy development and the process you used to reach this conclusion (e.g., meteorological tower data collection).

The Rose Hill project is well-sited to deliver strong economic returns to potential offtake partners for the following reasons:

 The Delmarva Peninsula features among the highest solar irradiation and locational marginal prices in PJM.

- Maryland solar RPS provides important revenue stream to project, enabling it to offer
  economically compelling PPA rates to potential offtake customers. Note: This will require a
  partial REC swap in the early years of the contract. OneEnergy is well positioned to advise
  customers on appropriate claims in REC-swap scenarios and to provide high quality replacement
  RECs during the years in which RECs are swapped.
- Low cost interconnection due to close proximity of necessary grid infrastructure.

In what ways can organizations participate in the project? (Check all that Apply)

Provide a short summary of how you view project finance and structure/ownership taking shape for this project:

OneEnergy works with a number of larger project owners / operators that will finance, construct, own and operate the project once a long-term offtake agreement is arranged.

## <u>Partners</u>

☐ X Power purchase agreement for bundled power and RECs
☐ X Financial hedge or contract for differences
☐ X Long term REC offtake
☐ X REC arbitrage / REC swap (e.g., Partner would not own the RECs associated with the project)

Is the project's ability to secure financing or enter the development phase contingent on finding a partner as detailed in previous question?

Yes, a long-term offtake partner will be required for this project to secure financing and proceed to construction/operation.

What are some of the characteristics of your ideal power purchaser, investor, or other partner?

• Substantial electricity load in PJM (>80,000 MWh)

☐ X Financial investment / ownership stake

☐ Other, please specify: \_\_\_\_\_

- Investment-grade credit
- Desire to hedge on-peak electricity costs while catalyzing the development of a new, large-scale renewable energy project.

What marketing opportunities exist at the project for the partnering entity? Examples might include, naming rights, press support, ribbon cutting ceremonies etc.

- Signage at the project site
- Naming rights
- Ribbon cutting, First Site Tour and other educational and stakeholder event(s)
- Press and media support
- Live project data feeds broadcast in customer facilities and/or via digital platforms
- Numerous other digital and print marketing opportunities