Project Matching: Facilitating New Renewable Energy Projects

Project Proposal Submittal Form

The EPA Green Power Partnership’s (GPP’s) Project Matching Initiative 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, in collaboration with EPA’s RE-Powering America’s Land Initiative, will host a project matching webinar on Wednesday, June 24, 2015. 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 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 June 5, 2015 and must be submitted electronically to James Critchfield, critchfield.james@epa.gov.

Contact Information

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Project Summary

Project name:
Arizona District-Wide School Solar Project

Developer name:
Natural Power and Energy (NPE)

Renewable energy type:
Grid-Tie Photovoltaic (Solar)

Project city/state:
Arizona

Project geographic coordinates (To find, use: www.latlong.net/):
Latitude__   Longitude__

Total planned megawatt (MW DC) size:
11.563 MW DC

Are there phases? If so, how many and in what size tranches?
The project will be split into three distinct phases for the purposes of conducting civil transactional surveys, community outreach, final electrical and structural engineering, and ultimately construction.

Formal design and engineering, as well utility Interconnection Applications and Studies has already been initiated for the project as further detailed in the below development hurdle question/answer.

What is the expected annual output of the completed project (MWh)?
20,727.5 MWh

Expected date of construction commencement:
Phased construction expected to commence in Q4 2015, with final completion of all sites expected by the end of Q3 2016.

Expected date of commercial operation:
All sites expected to be in commercial operation by end Q3 2016.

What is the largest development hurdle and how is it anticipated to be overcome?
Development hurdles to ensure the project has been grandfathered should utility-proposed changes to the state’s net metering standard be implemented by the Arizona Corporation Commission, have already been overcome. Other development hurdles include interconnection studies for six planned large meter interconnections. We will work through this issue with the utility.

Can you provide examples of similar projects you have developed?
NPE developed the recent Tucson Unified School District (TUSD) project (11.15 MW across 43 sites). TUSD is a current EPA Green Power Partner with all sites in commercial operation. TUSD’s project is similar to the school solar project under development and described herein.

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.

Interconnection Applications for each metered location have been submitted to the utility. However, permit packages have not yet been developed for submittal to the local Authorities Having Jurisdiction, of which there are several as the project spans multiple jurisdictions. Permit packages have not yet been developed because the design review and community outreach processes are still ongoing for the next several weeks. NPE perceives minimal risk in the interface with the AHJs and has past experience in working with the majority of these AHJs.
Have you secured long-term site control? If so, please describe the nature of the agreement (lease, ownership, etc.)?

The project is being financed through a Power Purchase Agreement (PPA), which includes an easement and access to the solar facilities for the system owner for the term of the agreement.

Have land leases been filed with the county?

No.

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

No.

Is this project sited on a current or formerly contaminated land, landfill or mine site?\(^1\) If so, has the site addressed the related environmental issues?

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)

Interconnection Applications for all meters have been submitted to the utility. Six large systems will require Interconnection Studies by the utility, but all other meters qualify for fast-track processing.

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

It is expected that the utility’s Interconnection Studies will be complete by the end of Q3 2015 at the latest.

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. This will be reflected in the utility’s Interconnection Studies required for six large meters.

**Operation & Financing**

Is any element of the project – technology or systems – experimental or pilot-phase or proven technology?

All proven technology to be utilized. Systems to be installed on parking shade structures, non-parking shade structures (such as adjacent to playing fields) and rooftops – depending on site.

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

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\(^1\) Examples of such properties could include brownfields, municipal solid waste landfills, abandoned mine lands, and Superfund sites, among others subject to state or federal authorities or cleanup programs.
Standard maintenance plan for PPA agreements.

For wind projects, has a meteorological tower been installed? If yes, when was the tower installed and how much data has been collected?

Not applicable.

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

We have already selected a long-term owner for the project.

**Partners**

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

- Power purchase agreement for bundled power and RECs
- Financial hedge or contract for differences
- Long term REC offtake
- Financial investment / ownership stake
- Other, please specify: _Organizations (such as school districts, municipalities, airports, tribes) that have community-scale projects in consideration and can benefit from NPE’s significant experience and capabilities in providing solar services for multi-site projects in a range of 1 to 30 MW._

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

Ideal characteristics of a long term REC offtaker for the project include the following:

- Private and Public entities committed to long term (10-20 years) REC purchase to support long-term sustainability goals.
- Private and Public entities focused on long term (10-20 years) REC purchase with documented financial stability.
- Private and Public entities interested in supporting schools implementing renewable energy projects that may provide additional resources for student curriculum enhancement.

What marketing opportunities exist at the project?

Significant marketing opportunities exist for the project:

- The project will receive considerable media interest in Arizona as a result of multiple public outreach work streams and planned stakeholder engagement campaigns.
- The pairing of an established entity for long term REC purchase / offtake with a school district, independent of any utility incentive, will be a first in Arizona and thus possess built-in project promotion features and marketing opportunities.
Example NPE developed solar integrated shade structures (Tucson Unified School District) similar to what will be designed and constructed for this client: