



## 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](mailto:critchfield.james@epa.gov).

### Contact Information

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### Project Summary

**Project name:** Monarch I

**Developer name:** Monarch Wind Power LLC

**Renewable energy type:** Wind

**Project city/state:** Monmouth, Illinois

**Project geographic coordinates (To find, use: [www.latlong.net/](http://www.latlong.net/)):**

Latitude 40 degrees 49'56 Longitude -90 degrees 39'39

**Total planned megawatt (MW DC) size:** 18.4MW

**Are there phases? If so, how many and in what size tranches?** No phases.

**What is the expected annual output of the completed project (MWh)?** 66 million kwh

**Expected date of construction commencement:** 2016

**Expected date of commercial operation:** Dec 2016

**What is the largest development hurdle and how is it anticipated to be overcome? Long term power purchase agreement with a creditworthy counterparty**

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

Monarch has consulted on various 20MW studies and has collaborated with developers of much larger projects.

### **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.**

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

Identical 40-year leases with contiguous landowners

**Have land leases been filed with the county?**

Yes. Warren County itself owns half of the leased land.

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

A full NEPA review was completed in 2010 and EPA issued a FONSI on the project. The project also has received a take permit for the Indiana bat from the USFWS in 2010 (the mitigation protocol has become the model for all subsequent take permits)

**Is this project sited on a current or formerly contaminated land, landfill or mine site?<sup>1</sup> If so, has the site addressed the related environmental issues?**

No such issues. Land is 100% arable farm land currently producing corn.

### **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 is to a 69kV distribution line owned by Ameren CIPS and is located on the site. Ameren has completed interconnection studies and has offered an interconnection contract.

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

Already complete.

**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?**

Ameren study concluded that the project actually improved delivery of local power in part because wind conditions coincide with seasonal operation of nearby grain elevators that are interconnected to the same distribution line.

### **Operation & Financing**

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

Proven technology including GE's new 2.3MW turbines.

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

Short-term, we will use a GE maintenance contract with local staff for daily monitoring. Longer term, local staff will monitor.

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<sup>1</sup> 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.

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

Onsite tower was installed in 2009. Two wind studies have been completed using 4 years of wind data (GE also has estimated the output from our wind data).

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

Monarch prefers to retain whole or partial ownership but will entertain sale and other proposals from reputable investors. Project finance is available from GE Energy but there appear to be plenty of less expensive options.

**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: \_\_\_\_\_

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

Corporate, University or community off-taker located within MISO that wants a 20-25 year contract, preferably one that is structured as a difference contract so as to avoid transmission charges (Ameren study indicates that all of the power actually will be used locally, i.e. within Warren County even at peak wind periods).

**What marketing opportunities exist at the project?**

Both marketing and research opportunities are available including naming of the project. Monmouth College faculty already have participated in wind studies, avian studies and will be engaged in monitoring for the bat take permit. We envision other research opportunities in collaboration with GE including drone blade inspections. Monarch's wind study contributed to GE's development of taller turbines as well as the new 2.3MW turbine with longer blades.