STATEMENT OF PROJECT OBJECTIVES

City of Ann Arbor
Ann Arbor Wind Generator for Water Treatment Plant

A. PROJECT OBJECTIVES

In 2006, the City of Ann Arbor's City Council set a Green Energy Challenge, which was updated in 2011. The updated energy goals call for the City to use 30 percent renewable energy in its municipal operations by 2015 and 5 percent community-wide by 2015, and also to reduce community-wide greenhouse gas emissions to 8 percent below 2000 levels by 2015. This wind generator project will assist the City of Ann Arbor in meeting its Green Energy Challenge goals by generating local renewable energy.

The project is also intended to raise awareness of the viability of renewable energy in Southeast Michigan. The City will develop an education program for grades K through 12 as well as for the community as a whole.

B. PROJECT SCOPE

This project aims to further the mission of the EERE Wind & Hydropower Technologies Program to "increase the development and deployment of reliable, affordable, and environmentally responsible wind technologies in order to realize the benefits of domestic renewable energy production." The project scope includes wind generator selection and purchase, micro-siting, site design, and construction of one or more wind generators, as well as easements, conduit, cabling, transformers, and other equipment necessary for interconnecting the generator(s). In addition, the project includes public outreach and education to raise awareness about wind energy.

C. TASKS TO BE PERFORMED

Phase 1: Siting Analysis

Task 1.0- Selection of Project Developer

Issue a request for proposals (RFP) for a project developer, to be responsible for micro-siting, turbine selection, site design, engineering, and construction.

Subtask 1.1: Write and issue RFP.

Subtask 1.2: Review RFP, select developer, and sign Letter of Intent as prerequisite to a power purchase agreement (PPA) at completion of Task 2.0.

Task 2.0- Site Analysis and Environmental Impact Study

With selected project developer and consulting engineer, conduct siting analyses and environmental impact study.

Subtask 2.1: Conduct fatal flaw analysis of primary site that addresses setbacks, wind regime, public acceptance, permitting and zoning requirements, Federal Aviation Administration (FAA) permitting, access to interconnection, wildlife and natural features impacts. Analysis will be of a paper or "desk top" approach and will not involve any soil disturbance or other physical impacts on site.

Subtask 2.2: If issues are identified at the primary site, conduct fatal flaw analyses of additional sites.

Subtask 2.3: Conduct detailed micro-siting analysis, including site-level wind analysis to determine ideal siting of turbine.

Subtask 2.4: At completion of fatal flaw analysis, once site is selected and has met all preconditions for obtaining required permits for construction, conduct environmental impact study per Federal Government requirements.

Subtask 2.5: Prior to commencing Subtask 2.4, if it is determined that preferred site is not on City-owned property, develop a lease agreement with property owner to use site for duration of PPA.

Task 3.0- Outreach and Education

Develop a community outreach and educational program in coordination with the project developer. Hold community outreach and informational sessions to discuss the project and its impact on neighboring properties, as well as broader issues related to wind generation in the city.

Subtask 3.1: Work with project developer to design and implement educational programs.

Subtask 3.2: Coordinate with project developer and conduct community outreach sessions to discuss the project and its impact on neighboring properties.

Phase 2: Wind Generator Procurement and Installation

Task 4.0- Wind Generator Selection and Procurement

Working with project developer, identify wind generator requirements, and contract for delivery of wind generator.

Subtask 4.1: Develop and sign power purchase agreement with selected wind generator provider.

Subtask 4.2: Identify required wind generator characteristics, based on site constraints and wind regime.

Subtask 4.3: Select generator(s), develop design and permitting documents, and contract for delivery to site.

Task 5.0- Wind Generator Installation

Manage and complete construction of wind generator system.

Subtask 5.1: Install wind generator(s) system.

Subtask 5.2: Manage contract through the successful installation of the wind generator(s).

Task 6.0- Project Reporting

Reports and other deliverables will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein. Any additional deliverables will be provided as needed.