



WPPSEF

WEST PENN POWER
SUSTAINABLE
ENERGY FUND

**Sustainable Energy Financing
Request for Proposals (2018-01)**

**Proposal Submission Deadline
February 27, 2018 (4:00 PM, EST)**

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BACKGROUND

The West Penn Power Sustainable Energy Fund (WPPSEF) is a 501(c) 3 nonprofit organization whose mission is to:

- ✓ Promote the use of renewable and clean energy technologies that can benefit West Penn Power (WPP) ratepayer;
- ✓ Promote energy conservation and energy efficiency technologies that can benefit WPP ratepayer;
- ✓ Promote the education, economic development, and environmental betterment of renewable and clean energy technologies and energy conservation and efficiency technologies that can benefit WPP ratepayer.

Applicants applying for WPPSEF financing must demonstrate that the proposed effort can benefit the WPP ratepayer. Figure 1 illustrates the West Penn Power service region.



Figure 1. WPP Service Region (shaded in green).

FOCUS AREAS

This WPPSEF funding opportunity is focused on:

- ✓ Institutional-scale solar PV farms in the West Penn Power service region,
- ✓ Deployment of clean heat and power technologies,
- ✓ Foster smart energy use by deploying innovative energy efficiency technologies,
- ✓ Clean energy manufacturing in Pennsylvania,
- ✓ Regional-scale sustainable energy programs, and
- ✓ Electric vehicle charging stations at showcase high performance buildings.

A more detailed description of these focus areas is provided below.

SOLAR PV FARMS IN WEST PENN POWER SERVICE REGION

The WPPSEF seeks to co-fund the deployment of institutional-scale solar PV farms (1-3 MW) within the WPP service region. Project examples include, but are not limited to:

- ✓ Solar PV farms at schools and universities which seek to install solar for on-site power and educational programming; and
- ✓ Solar PV farms that assist local communities to redevelop abandoned/ blighted land into a site where sustainable energy technologies, such as solar PV, can be deployed.

CLEAN HEAT AND POWER TECHNOLOGIES

The WPPSEF seeks to co-fund the deployment of clean heat and power projects throughout the WPP service region. Project examples include, but are not limited to:

- ✓ The deployment of clean heat and power technologies which are integrated into the construction and operation of high performance buildings;
- ✓ Biogas projects that capture and utilize methane for on-site heat and power applications;
- ✓ Demonstration of micro-hydropower systems; and
- ✓ Renewable heat projects that utilize sustainably harvested Pennsylvania biomass in the commercial and institutional-scale sectors.

SMART ENERGY USE

The WPPSEF seeks to support innovative energy efficiency projects. Examples include, but are not limited to:

- ✓ High performance construction projects that utilize advanced building concepts and materials with a specific focus on energy use such as the Living Building Challenge (LBC), Passive House, and Leadership in Energy & Environmental Design (LEED);
- ✓ Support projects at healthcare facilities that reduce energy usage and improve air quality in the local communities in which they serve;
- ✓ Energy projects that implement energy efficiency measures which have been identified as priority areas in comprehensive, industrial-/ institutional-scale energy audits;
- ✓ Energy projects that seek to reduce energy use by deploying waste heat recovery technologies; and
- ✓ Support sustainable energy projects that will improve water treatment plants energy use in the WPP service region.

CLEAN ENERGY MANUFACTURING IN PENNSYLVANIA

The WPPSEF seeks to support the expansion of manufacturing of clean energy equipment and components for the wind, solar, biomass, geothermal heating and cooling, energy efficiency, and high performance building industries in Pennsylvania.

Examples include, but are not limited to:

- ✓ Expand or improve existing manufacturing production or processes by expanding plant size, and/or purchasing new equipment; and
- ✓ Support new manufacturing facilities construction and equipment purchase.

REGIONAL PROGRAMS

WPPSEF seeks to broaden the understanding of sustainable energy at the regional level within the WPP service region. Collaborative programs that bring together a diverse

team of individuals, organizations, and agencies will enable sustainable energy to be showcased at the regional, multi-county level. Examples include, but are not limited to:

- ✓ Partnership programs that focus on deploying sustainable energy education and assistance that clearly demonstrate a positive impact on economic development at a regional-scale;
- ✓ Establishment of sustainable energy programming in Pennsylvania's Department of Conservation and Natural Resources (DCNR) Conservation Landscapes within the WPP service region, and
- ✓ Programs that reduce energy use, while having a positive economic development/ environmental benefit, across multi-counties.

ELECTRIC VEHICLE CHARGING STATIONS

The WPPSEF seeks to co-fund the installation of public-accessible electric car charging stations at a limited number of certified, high performance buildings. The charging stations must be located in the WPP service region.

LEVELS OF FUNDING

Financing Requests. WPPSEF financing terms are flexible and developed to meet the project needs while assessing project risk. While a particular project ceiling or floor has not been set by the WPPSEF, most project financing requests are expected to be in the \$50,000 to \$400,000 range. WPPSEF interest rates and fees mirror the market and are typically similar to commercial banks.

Grant Requests. WPPSEF grant making is limited to non-profit entities. WPPSEF grant making is very competitive and applicants must clearly demonstrate the project will benefit the WPP ratepayer. The WPPSEF anticipates its grant making efforts to be capped at \$25,000 per award. Exceptions to this cap may be made for those projects that the WPPSEF deems as having high impact in the WPP service region.

SUBMITTING A FUNDING REQUEST

The WPPSEF is anticipating providing support to numerous projects through this RFP process. The WPPSEF reserves the right to request additional information after proposals have been received to complete its due diligence process. If funded, the applicants should be prepared to complete all proposed work within 18-months of receiving their WPPSEF agreement.

APPLICATION DEADLINE AND SUBMISSION

The deadline for receipt of proposals is **4:00 PM (EST) on February 27, 2018.** Proposals submitted after the deadline will be returned to the applicant. A signed original and twelve (12) copies and an electronic copy (save as pdf on thumb drive) should be submitted to the WPPSEF Director at the following address:

Mr. Joel Morrison
The Pennsylvania State University
Director, WPPSEF
C-211 CUL
University Park, PA 16802-2323

PROPOSAL FORMAT AND CONTENT

Applicants are required to submit their proposal on standard 8 1/2" x 11" letter size paper with 1" margins. An original copy of the proposal is to be bound by paper clip. Additional copies of the proposal are to be stapled and three hole punched. Font size type must be 10 pt. or greater and line spacing should be single space or greater.

ADDITIONAL INFORMATION

Additional questions should be forwarded to the WPPSEF Director. Questions should be submitted via e-mail to wppsef@ems.psu.edu or contact Mr. Joel Morrison at (814) 441-1100.

APPENDIX A

Appendix A contains the information needed from all applicants seeking funding for this round of WPPSEF funding. The WPPSEF reserves the right to return, without review, proposals that do not submit the required information in Appendix A.

ATTACHMENT A – PROPOSAL CHECKLIST

Company Name _____

Project Title _____

Applicants should use this checklist to make sure their proposal is complete. The proposal is to be compiled and submitted in the following order:

ATTACHMENTS

- _____ ATTACHMENT A: PROPOSAL CHECKLIST
- _____ ATTACHMENT B: PROPOSAL OVERVIEW & SIGNATURE
- _____ ATTACHMENT C: PROJECT FINANCING – USES & SOURCES

PROJECT PROPOSAL

- _____ Executive Summary (one page maximum)
- _____ Benefit to WPP Ratepayer (one page maximum)
- _____ Statement of Work (ten page maximum)
- _____ Project Milestone (one page maximum)
- _____ Project Performance Metrics (three page maximum)
- _____ Project Finance (three page maximum)
- _____ Biographical Sketches (one page per person maximum)
- _____ Letters of Support (optional, two letters maximum)
- _____ Required number of copies (1 original + 12 copies)

ATTACHMENT B – PROPOSAL OVERVIEW AND SIGNATURE

Date of Submission _____

Company Name _____

Title of Proposal _____

- Program Area
- Solar Farms in West Penn Power Service Region
 - Clean Heat & Power Technologies
 - Smart Energy Use
 - Clean Energy Manufacturing
 - Regional Programming
 - Electric Vehicle Charging Stations

Project Budget Summary

Applicant Funding (Cash) \$ _____

Applicant Funding (In-Kind) \$ _____

Other Project Partner Funding \$ _____

Requested WPPSEF Funding \$ _____

Total Project Funding \$ _____

Primary Project Contact

Name: _____

Phone (Office): _____

Phone (Mobile): _____

Email: _____

Address: _____

Approved by:

Authorized Representative

ATTACHMENT C: Project Finance – Sources and Uses

Finance Category	Applicant		Project Partners (List Names)			WPPSEF Request		Category Total
	In-Kind	Cash				Grant	Loan	
<i>Salary</i>								
<i>Major Equipment (greater than \$25K)</i>								
<i>Equipment/Supplies (less than \$25K)</i>								
<i>Construction</i>								
<i>Subcontracts</i>								
<i>Legal</i>								
<i>Other (please list)</i>								
Finance Total (by Source)								
Total Project Cost								
% Cost by Source								

PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY
ATTACHMENT C: Project Finance - Sources and Uses

Finance Category	Applicant		Project Partners (List Names)			WPPSEF Request		Category Total
	In-Kind	Cash	DCED-CFA (Grant)	DCED-CFA (Loan)	Bank XYZ (Loan)	Grant	Loan	
<i>Salary</i>								
J. Smith	\$2,500	\$0	\$2,500	\$0	\$0	\$0	\$0	\$5,000
B. Good	\$2,500	\$0	\$2,500	\$0	\$0	\$0	\$0	\$5,000
Major Equipment (greater than \$25K)								
Biomass Boiler	\$0	\$25,000	\$25,000	\$25,000	\$0	\$15,000	\$60,000	\$150,000
Biomass Feed Silo	\$0	\$5,000	\$0	\$0	\$0	\$2,500	\$17,500	\$25,000
Biomass Delivery Truck	\$0	\$30,000	\$0	\$0	\$0	\$0	\$7,500	\$37,500
Equipment/ Supplies (less than \$25K)								
Welding/ Fabrication	\$2,500	\$2,500	\$0	\$0	\$0	\$0	\$0	\$5,000
Plant Controls/ Valves	\$0	\$5,000	\$0	\$17,500	\$0	\$0	\$0	\$22,500
Construction								
Site Permits	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$500
Site Excavation	\$0	\$35,000	\$0	\$15,000	\$0	\$0	\$0	\$50,000
Plant Building	\$0	\$25,000	\$0	\$100,000	\$100,000	\$0	\$0	\$225,000
Subcontracts								
Consulting - Engineering	\$0	\$5,000	\$5,000	\$0	\$0	\$0	\$10,000	\$20,000
Consulting - Environmental	\$0	\$5,000	\$0	\$0	\$0	\$1,000	\$0	\$6,000
Legal								
XYZ Legal	\$0	\$1,250	\$0	\$0	\$0	\$0	\$0	\$1,250
Other (please list)								
Electric Service Upgrade	\$0	\$7,500	\$0	\$7,500	\$0	\$0	\$0	\$15,000
Road/ Parking Lot Paving	\$2,500	\$5,000	\$0	\$0	\$0	\$0	\$0	\$7,500
Equipment Rental - Skid-Steer Loader	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000
Post Construction - Site Landscaping	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500
Educational Biomass Kiosk	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$1,000
Finance Total (by Source)	\$12,500	\$156,750	\$35,000	\$165,000	\$100,000	\$19,500	\$95,000	\$583,750
Total Project Cost	\$583,750							
% Cost by Source	2.1%	26.9%	6.0%	28.3%	17.1%	3.3%	16.3%	100.0%

PROJECT PROPOSAL GUIDELINES

Applicants are required to submit a project proposal that contains the following sections:

Executive Summary One (1) page maximum

The Executive Summary is to summarize the technical and financial aspects of the proposed project, the project timeframe, and project participants.

Benefit to WPP Ratepayer One (1) page maximum

Applicants need to identify the location of the proposed project, identify if the project is in the WPP service region, and summarize how the project will benefit the WPP ratepayer.

Statement of Work Ten (10) page maximum

The Statement of Work is the main body of the proposal. It should describe the proposed project in detail, the participants in the project, and how the project will be completed and managed.

Project Milestone One (1) page maximum

The Project Milestone establishes the time schedule for accomplishing the work. The plan should include the key milestones of the project in bar chart format and should cover the complete period of performance.

Project Performance Metrics Three (3) page maximum

The Project Performance Metrics is to be used to quantify the energy, environmental, and economic aspects of the project. A description of the energy generated/ saved (kwh, gallons of fuel, etc.), jobs created or retained (temporary and permanent, etc.), water saved (gal/ day), environmental betterment (reduction of CO₂, CH₄), environmental attributes generated (renewable energy certificates, nutrient trading credits), and economic development potential is to be discussed. Applicants need to document how the project performance metrics were determined.

Project Finance Three (3) page maximum

Project Finance is to be used to document how the project is to be financed. The applicant is required to discuss project costs, the various funding streams used to complete the project, and financial projections and associated assumptions. This is an extended discussion of the data in Attachment C.

NOTE: The WPPSEF reserves the right to ask that the applicant to provide their business plan, company and personal financial statements, and any agreements (e.g. power purchase agreements, fuel supply agreements, etc.) that are deemed necessary for considering project funding. Applicants should have such information readily available in the event these data are requested by WPPSEF.

Biographical Sketches One (1) page per person maximum

The Principal Investigator of the proposed project is required to submit a one (1) page vita. Each vita should include educational background, professional experience, honors and professional activities. Additional vitae can be submitted for key personnel.

Letters of Support Two (2) letters maximum

Letters of support from outside sources are encouraged, but not mandatory.