

PHILADELPHIA ENERGY AUTHORITY

REQUEST FOR INFORMATION for

Renewable Energy Development for The City of Philadelphia

November 2016

Issued by:

Philadelphia Energy Authority

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RENEWABLE ENERGY DEVELOPMENT REQUEST FOR INFORMATION (RFI)

I. Purpose of Request for Information

The Philadelphia Energy Authority (“PEA”) in partnership with the City of Philadelphia (“City”) invites interested parties to respond to this Request for Information (“RFI”) with information regarding project structures that would make renewable energy development projects feasible for the City. The PEA and City (collectively referred to as “COP”) are also requesting information regarding projects developed with similarly sized governments or institutions.

Many renewable energy project arrangements currently exist in the marketplace. The COP is looking for information on renewable energy project options applicable to the City or a Pennsylvania Authority to inform the development of a potential Request for Proposals.

II. City of Philadelphia

The Office of Sustainability is responsible for implementing Greenworks Philadelphia, the City’s comprehensive sustainability plan. The Office of Sustainability works with City departments and partners around the city to improve quality of life in all Philadelphia neighborhoods, reduce the City’s carbon emissions, and prepare Philadelphia for a hotter, wetter future. The Office of Sustainability recently released an update to its sustainability plan, Greenworks Philadelphia, and is now developing an Energy Master Plan for City government operations. Energy efficiency and renewable energy will continue to play an important role in the Office of Sustainability’s work.

City Energy Office. The City of Philadelphia’s Energy Office, housed within the Office of Sustainability, manages City government energy operations. The mission of the Energy Office is to:

- Strategically procure cost effective, reliable, safe, clean energy and conventional energy systems for city government.
- Promote energy conservation and efficiency within City facilities by providing education, technical expertise and analysis of energy used.
- Develop and implement projects and programs that promote the efficient use of energy and reduce the City’s environmental impact.

III. The Philadelphia Energy Authority

PEA is an independent municipal authority focused on issues of energy affordability and sustainability for Philadelphia’s government and its citizens. Established in 2010 through the leadership of now-Council President Darrell Clarke and then-Mayor Michael Nutter, the PEA seeks systemic solutions to our energy challenges, supporting the work of a robust community of energy experts, advocates, and champions citywide. PEA holds long-term energy contracts on behalf of the City of Philadelphia and works closely with the Office of Sustainability and Energy Office to achieve our shared goals.

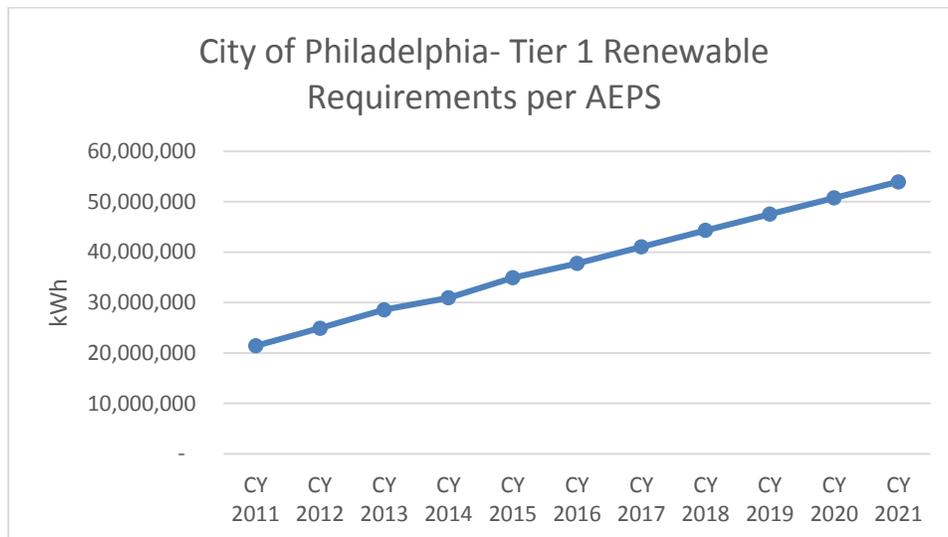
In February 2016, PEA and Council President Clarke launched the Philadelphia Energy Campaign, a 10-year initiative to leverage \$1 billion in investment in energy efficiency and clean energy projects across four key sectors: City buildings, the School District of Philadelphia, low-income residential housing and small businesses. Our goal is to create 10,000 jobs, reach 25,000 households and support 2,500 small businesses. The Energy

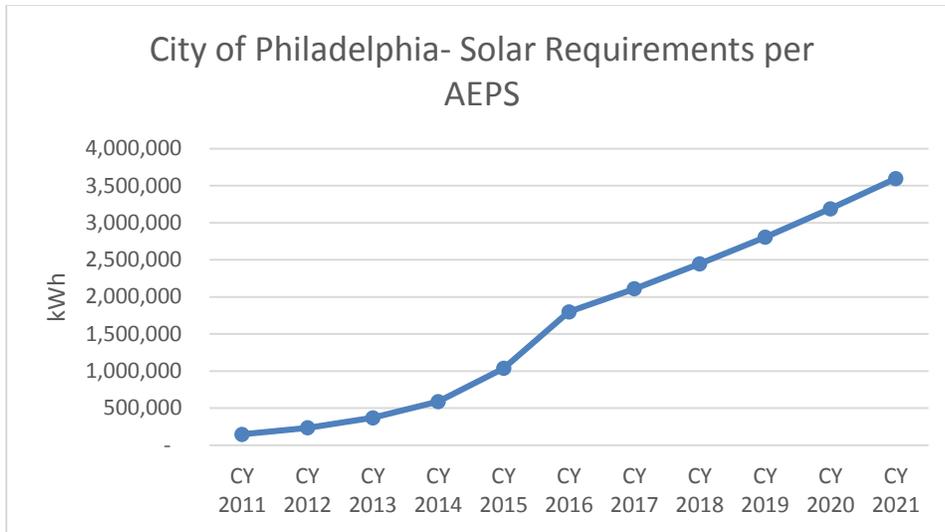
Campaign is neighborhood-driven, and strives to strengthen communities, cut energy bills, reduce Philadelphia’s carbon footprint and build our local economy equitably.

IV. Background

The COP is committed to supporting wise investments today that will yield significant energy and cost savings and carbon footprint reductions in future years. To date, the City has installed two significant renewable energy projects: a 260 KW solar array at Philadelphia Water’s Southeast Water Pollution Control Plant, and a 5.6 MW biogas co-generation facility at Philadelphia Water’s Northeast Water Pollution Control Plant. The City values the role that renewable energy can play in climate adaptation, energy reliability, long-term strategic energy procurement, reducing Peak Load Contribution, fulfilling its renewable energy credit (“REC”) requirements, stimulating the local economy and creating jobs. Implementing another renewable energy project would add value to those areas.

City Energy Profile. During the period July 2014 to June 2015 the City consumed approximately 710,000 MWh. The City’s Peak Load Contribution (“PLC”) is about 112 MW. The City purchases its electricity through a dedicated PJM subaccount managed by a Licensed Service Entity. The City makes forward purchases of 5-20 MW blocks of energy and basis to provide a high level of cost certainty for City budgets. All remaining supply costs and other charges associated with electricity such as capacity, transmission, and ancillary charges are fully passed through to the City on a monthly basis. The City has obligations to purchase renewable energy for compliance with Pennsylvania’s Alternative Energy Portfolio Standard (“AEPS”), which it satisfies through monthly purchases. In addition to compliance RECs, the City has in the past made voluntary REC purchases and is interested in either purchasing voluntary RECs or retiring voluntary RECs through a potential project. The following charts outline the City’s Tier 1 and Solar REC requirements per Pennsylvania’s Alternative Energy Portfolio Standard (“AEPS”). Note that 1 REC is equivalent to 1 MWh.





V. Potential Project Structures and Facilities

This RFI does not limit the responder to only these types of projects, but provides examples of the types of projects the COP is seeking to understand further.

Solar Power on City Facilities

Types of projects that the COP is interested in include a power purchase agreement (“PPA”) for one or more solar generation systems installed on City property, and on-site installations owned and operated by the City. These projects could include installations on several City-owned facilities which can be net-metered and/or virtually net-metered as allowed under Pennsylvania law. In Pennsylvania, nonresidential customers can net-meter systems up to 3 megawatts (MW) in capacity; and systems greater than 3 MW but no more than 5 MW can be net-metered if the systems are available to the grid during emergencies, or where a microgrid is in place in order to maintain critical infrastructure. COP is interested in net metering opportunities and all variety of PECO tariff options could be considered. There are many City-owned facilities throughout Philadelphia that are in close proximity to one another and could capitalize on net metering. In terms of size, the COP is interested in scalable solutions, mainly commercial-scale projects. In order to help plan for this potential opportunity the City is requesting interested parties submit responses detailing how a solar project could be feasible for the City.

Solar projects could be implemented at facilities operated by several different City departments. Facilities that could be feasible for solar projects include: Baxter Water Treatment Plant (9001 State Rd, Philadelphia, PA), Fleet Vehicle Repair Shop 134 (100 E Hunting Park Ave, Philadelphia, PA) and City-owned parking lots. The COP is open to discussing all City facilities and a comprehensive list of sites, including their square footage, can be found on Open Data Philly’s website under the master facilities database (<https://www.opendataphilly.org/dataset/city-facilities-master-facilities-database>). Please note that the City does not own School District of Philadelphia buildings, or the Convention Center, nor does it pay for utilities at those locations. For the purposes of this RFI, the COP is not interested in the development of solar projects on the City-owned vacant lots. Respondents should also consider loan funding available through the state's Solar Energy Program (SEP) which was recently re-opened. See the following link for

more information: <http://www.bizjournals.com/philadelphia/news/2016/11/16/small-business-solar-energy-loan-incentives.html>.

Renewable Power Purchase Agreement for Off-site projects

Another type of project that the COP is interested in is a PPA or Virtual PPA for commercial-scale renewable electricity generated at one or more offsite locations and provided to the City at a contracted unit cost for an extended period of time. The City's purchasing strategy for electricity and requirements for RECs could be leveraged for this type of project.

Restrictions and limitations specific to local government organizations should be considered when recommending project options. The COP prefers projects to be reasonably cost-effective, but is potentially interested in a project that could add budget certainty to the City's electricity costs and furthers the City's broader sustainability goals. The COP is interested in contracting for up to 20 years. Information on how projects can maximize co-benefits including reducing carbon pollution, creating local and clean energy jobs, creating opportunities for minority and women owned business enterprises, or increasing resiliency are encouraged.

Alternative Technology

The COP is also interested in information regarding renewable energy technologies that generate power, reduce energy load on the existing utility grids, reduce greenhouse gas emissions and improve the environmental quality of the area, but may not be widely adopted. Technologies should be UL-certified (or equivalent) and commercially viable and available. Renewable technology solutions or energy storage solutions should have the potential to be beneficial across a variety of City building types or properties.

VI. Submission Requirements

Each Respondent who submits a Response to the RFI shall include the following items in the order listed.

1. **Company Profile:** Respondent must provide a profile of its company's operations including:
 - a. Name, business address, telephone number, website address, incorporation location(s), and list of Pennsylvania and/or Philadelphia business licenses currently held.
 - b. The number of years the company has been in the business of developing, designing and/or installing renewable energy generation systems.
 - c. A primary contact for the Respondent, including name, job title, address, telephone and fax numbers, and email address.
 - d. A description of Respondent's business background and any other information about Respondent's business organization that Respondent deems pertinent to the RFI.
2. **Experience and Case studies:** Respondent should provide a description of the Respondent's experience implementing relevant large-scale renewable energy projects. Project case studies and examples for local governments or institutions are of particular interest. Where possible, project descriptions should include the type of project, location of the generation, fee and payment structure, simple

payback timeline, photographs of the project, web links to project information, and any other relevant project details.

3. General feedback: In general, the COP would like to explore four primary issues, and requests that Respondents provide a brief narrative on each of the following:
 - a. Suggestions for the technologies that the City should be considering.
 - b. Suggestions about the ownership models.
 - c. Suggestions about the type of issues that need to be considered in locating potential sites.
 - d. Suggestions for specific project targets (as detailed below in section VI-

4. Feasible renewable energy project structures for the City: Respondent should provide information and ideas on project options that would make a large-scale renewable energy project feasible for the City, in particular focusing on projects as described in Section V “Potential Project Structures and Facilities” of this RFI. Responses should include:
 - a. Detailed descriptions about how the project would be structured.
 - b. Approximate size (in terms of kW or kWh) that would make a project cost-effective, including optimal size combinations of multiple solar arrays on different facilities (if recommended and applicable).
 - c. Roof requirements if an on-site renewable energy project is recommended.
 - d. A list of preferential sites or information on locations of potential off-take projects (if applicable).
 - e. Potential limitations or restrictions that could impact a project such as interconnection limitations.
 - f. The indicative unit costs for electricity with and without Alternative Energy Portfolio Standard Credits (if applicable).
 - g. Information on the type and form of contract.
 - h. Potential options for decommissioning and other considerations at the end of the contract term (if applicable).
 - i. Options and methods for including Philadelphia’s local workforce and/or disadvantaged business enterprises in the project development, construction or operation and maintenance.

VII. Use of Responses

The Responses submitted by Respondents to this RFI may be used by the City in the process of preparing a notice of a future contracting opportunity in order to award an organization with a contract to implement a renewable energy project for the City. All Respondents may submit proposals to the notice of contracting opportunity once it has been posted to the City of Philadelphia websites. A Response to this RFI is not a requirement to submit a proposal for the potential contracting opportunity.

VIII. Submission Deadline and How to Submit

An electronic copy of the complete Response must be submitted no later than January 5th, 2017 (“Submission Deadline”).

Respondents must submit their responses electronically as a single document to energy@phila.gov and eschapira@philaenergy.org, and must be no larger than 10MB to ensure delivery. **Responses are due by 5 pm, Philadelphia, PA, local time on January 5th, 2017.**

IX. Response Calendar

Posting of RFI	November 23, 2016
Deadline for questions, requests for clarification, or requests for additional information	December 14, 2016
Posting of responses to Respondent questions	December 21, 2016
Response Due Date	January 5, 2017

X. RFI Contact Information

All questions concerning this RFI must be submitted via email no later than 5 pm, Philadelphia, PA, local time on December 14, 2016, prior to the response due date and directed to: energy@phila.gov.

Responses to such questions and requests shall be at the COP's sole discretion. Any responses provided to Respondents will be posted on the PEA's website at <http://www.philaenergy.org/energynews/> by December 21, 2016.

The COP may, in its sole discretion, issue addenda to this RFI containing responses to questions and requests for information, notice of changes in the voluntary meeting, clarifications of the RFI, revisions to the RFI or any other matters that the COP deems appropriate. Addenda will be posted on the PEA's website at <http://www.philaenergy.org/energynews/>. It is the Respondent's responsibility to monitor the website for Addenda and to comply with their terms.

Oral responses by any City employee or agent of the City are not binding and shall not in any way be considered as a commitment by the City.

If a Respondent finds any inconsistency or ambiguity in the RFI or an addendum to the RFI issued by the City, the Respondent is requested to notify the City in writing by 5 pm, Philadelphia, PA, local time on December 14, 2016.

XI. Confidentiality and Public Disclosure

Respondents shall treat all information obtained from the City which is not generally available to the public as confidential and/or proprietary to the City. Respondents shall exercise all reasonable precautions to prevent any information derived from such sources from being disclosed to any other person. No other party, including any Respondent, is intended to be granted any rights hereunder. Respondents agree to indemnify and hold harmless the City, its officials and employees, from and against all liability, demands, claims, suits, losses, damages, causes of action, fines and judgments (including attorney's

fees) resulting from any use or disclosure of such confidential and/or proprietary information by any Respondent or any person acquiring such information, directly or indirectly, from the any Respondent.

XII. Rights and Options Reserved

In addition to the rights reserved elsewhere in this RFI, the City reserves and may, in its sole discretion, exercise any or more of the following rights and options with respect to this RFI if the City determines that doing so is in the best interest of the City:

1. to decline to consider any response to this RFI (“Response”); to cancel the RFI at any time; to elect to proceed or not to proceed with discussions or presentations regarding its subject matter with any Respondent and with firms that do not respond to the RFI; or to reissue the RFI or to issue a new RFI (with the same, similar or different terms):
2. to waive, for any Response, any defect, deficiency or failure to comply with the RFI if, in the City’s sole judgment, such defect is not material to the Response:
3. to extend the Submission Date/Time and/or to supplement, amend, substitute or otherwise modify the RFI at any time prior to the Submission Date/Time, by posting notice thereof on the City web page(s) where the RFI is posted:
4. to require, permit or reject amendments (including, without limitation, submitting information omitted), modifications, clarifying information, and/or corrections to Responses by some or all Respondents at any time before or after the Submission Date/Time;
5. to require, request or permit, in discussion with any Respondent, any information relating to the subject matter of this RFI that the City deems appropriate, whether or not it was described in the Response to this RFI;
6. at any time determined by the City, to discontinue discussions with any Respondent or all Respondents regarding the subject matter of this RFI, and/or initiate discussions with any other Respondent or with vendors that did not respond to the RFI;
7. to do any of the foregoing without notice to Respondents or others, except such notice as the City, in its sole discretion, may elect to post on the City web page(s) where this RFI is posted.

This RFI and the process described are proprietary to the City and are for exclusive benefit of the City. Upon submission, Responses to this RFI shall become the property of the City, which shall have unrestricted use thereof. Responses may be subject to public disclosure under the Pennsylvania Right-to-Know Law. However, a “record that constitutes or reveals a trade secret or confidential proprietary information” is exempt from access by a requester under that law. Ultimate determination of the application of that exemption cannot be assured, but Respondents are advised to mark clearly any portion(s) of any submittal believed to qualify for that exemption. By submitting its Response, the Respondent agrees to the terms.