



**REQUEST FOR INFORMATION
Generating Alternative Energy
from Philadelphia Waterways
CITY OF PHILADELPHIA**

Issued by:
THE Philadelphia Energy Authority

Responses must be received no later than 5:00 p.m. EST on April 27, 2018.

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I. ABOUT THE PHILADELPHIA ENERGY AUTHORITY

The City of Philadelphia is the largest city in the Commonwealth of Pennsylvania and the fifth-most populous city in the United States with over 1.5 million residents. The City encompasses approximately 134 square miles of land area.

The Philadelphia Energy Authority is an independent municipal authority focused on issues of energy affordability and sustainability for Philadelphia’s government and its citizens. Established in 2010 by City Council and Mayor Nutter, the Philadelphia Energy Authority seeks systemic solutions to our energy challenges, supporting the work of a robust citywide community of energy experts, advocates, and champions.

II. PURPOSE OF REQUEST FOR INFORMATION

The Philadelphia Energy Authority (PEA) in conjunction with the Philadelphia Water Department (PWD) is looking for innovative methods for capturing energy from the waterways of the City of Philadelphia. The goal is to determine which low-impact hydrokinetic generation designs and/or heat pump technologies might be cost effectively used to generate power and/or heating and cooling from waterway sites for direct local use, for integration into the power grid, or in a microgrid application.¹ Candidate waterway sites that would be considered for the RFI include open waterways as well as existing dam spillways and other existing infrastructure.

The primary purpose of this RFI is for manufacturers, research institutions, and other relevant organizations to provide PEA with information regarding their technology solutions and implementation best practices. PEA may use this information to create a future design competition or service contract opportunity for testing or installing specific technologies to generate power and to provide heating and cooling services.

Responses to this RFI are considered non-binding and are used to assist PEA in information gathering for planning purposes. Responses to this RFI will help shape a potential scope of work, but are not required to be considered for future RFPs or contracting work.

III. RESPONSE CALENDAR

Posting of Request for Information (RFI)	October 12, 2017
Deadline for questions, clarification, or requests for additional information	March 16, 2018
Responses to inquiries posted to PEA website	March 30, 2018
Response to RFI Due Date	April 27, 2018

¹ Low-Impact Hydropower is defined by the Low Impact Hydropower Institute. For more information see <http://lowimpacthydro.org/low-impact-criteria/>.

IV. RESPONDER QUESTIONS AND ADDENDA

Questions

All questions concerning this RFI must be submitted via email no later than 5:00 pm, EST on March 16, 2018 and directed to:

Philadelphia Energy Authority at info@philaenergy.org

Responses to such questions and requests shall be at the PEA's sole discretion and nothing in the RFI shall create an obligation on the PEA to respond to the submitting party or at all. On March 30, 2018, PEA will post all responses to the RFI questions, clarifications and request for additional information at:

<http://www.philaenergy.org/public-bids/>.

Addenda

PEA may, in its sole discretion, issue addenda to this RFI containing responses to questions, clarifications of the RFI, revisions to the RFI or any other matters that the City deems appropriate. Addenda will be posted on the PEA's website at:

<http://www.philaenergy.org/public-bids/>.

It is the Respondent's responsibility to monitor the Additional Opportunities site for Addenda and to comply with their terms.

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

If a Respondent finds any inconsistency or ambiguity in the RFI or an addendum to the RFI issued by the PEA, the Respondent is requested to notify the PEA in writing by 5:00 pm EST on March 16, 2018.

V. SUBMISSION REQUIREMENTS

Each Respondent who submits a Response to the RFI shall include the following items at a minimum.

Basic Technology Characteristics

Respondent's submission shall include a description of the technology application containing the following:

- Projected applicability for specific sites and broader applicability for locations in the waterways located within the boundaries of the City of Philadelphia;
- Projected energy generated from each installation (kWh and/or BTU);
- Projected capital costs for each project;
- Projected operation and maintenance cost on an annualized basis;
- Expected useful life of the project equipment, along with equipment warranty terms;
- Potential purchasers for power and heating/cooling output;

- Existing subsidies and other sources of project financing;
- Projected number of jobs created by each installation;
- Projected impact on the flow of the waterway, if any;
- Projected impact on fish and wildlife, if any;
- Projected impact on recreational use of the waterway, if any;
- Any other projected environmental impacts of the technology.

Key Features

- How much energy is harnessed from each installation;
- The scalability of the installation;
- Long term cost effectiveness of the project (Responder should define time scale considered);
- Ability to use the energy generated in a micro grid to allow for local economic development.

Reporting and Key Performance Indicators (KPIs)

Provide metrics for measuring the performance, efficiency, and effectiveness of the installation for its projected service life.

Deployment Experience

Identify if you have experience designing, installing and operating plants using the technology. Include project location, project cost, rated capacity, actual performance, and any other details relevant to your experience deploying this technology.

Specifically, describe your company’s experience and methodologies in building plants or otherwise deploying technologies in waterways similar to those found in the City of Philadelphia. Please specify the basis on which you have determined that the application is similar.

Deployment model

Include a projection of who will or might operate the plant after it is installed; who would be responsible for service work; and who will be responsible for any necessary repairs and/or replacements of parts.

Describe anticipated ongoing service requirements that would impact operation, their expected frequency and duration, and their cost.

Company or Organization Overview

The Respondent shall provide:

- organization name,
- a brief description of the organization and its services,
- an overview of the organization operations, including:

- the number of years the organization has been supporting this solution
- number of full-time employees
- number of graduate and post-graduate research staff, if any
- location of the facility from which this effort will be managed
- contact information, including:
 - name
 - address
 - phone number
 - email address

VI. USE OF RESPONSES

The Responses submitted by Respondents to this RFI may be used by PEA in the process of selecting a provider of a technology to harness the power of the rivers in Philadelphia. All Respondents may submit proposals to any future 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 contracting opportunity.

VII. HOW TO SUBMIT

Respondents must submit their responses electronically to:

Philadelphia Energy Authority at info@philaenergy.org.

Responses are due by 5:00 pm EST on April 27, 2018.

VIII. CONFIDENTIALITY AND PUBLIC DISCLOSURE

Respondents shall treat all information obtained from the PEA that is not generally available to the public as confidential and/or proprietary. 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.

This RFI and the process described are proprietary to the PEA and are for exclusive benefit of the PEA. Upon submission, Responses to this RFI shall become the property of the PEA, 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.

IX. RIGHTS AND OPTIONS RESERVED

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

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 PEA’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 PEA’s 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 PEA deems appropriate, whether or not it was described in the Response to this RFI;
6. at any time determined by PEA, 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 PEA, in its sole discretion, may elect to post on the PEA web page(s) where this RFI is posted.

Respondents with any interest or knowledge of the subject matter are strongly encouraged to submit their responses. PEA looks forward to receiving and reviewing all responses.