

# Request for Proposals: RFP #51521 Maximizing Minisplit Performance



## 1 Background

NEEA's Ductless Heat Pump (DHP) Program has supported the market development of DHPs since 2010. The Program has succeeded in large measure in removing many, but not all, of the market barriers to this technology. During this time it has become clear that DHPs do not always result in effective displacement of existing heating system energy use. The challenge is that DHP systems are often installed in parallel operation with older less efficient systems, resulting in reduced reliance of the DHP system.

The outcome of these reduced savings is that utility programs often achieve lower savings than anticipated from DHP measures. This impacts payback to the customer and generates cost effectiveness challenges for the utility. While there has been considerable investigation of DHPs, to-date there is not comprehensive meta-analysis and generation of DHP program "enhancement measures" that, if taken, could decrease customer payback and improve utility program cost-effectiveness.

This request for proposal seeks to solicit a primary author to synergize the work that has been completed to-date and develop a set of "enhancement measures" for DHP systems installed in the Pacific Northwest. These measures include not only technical controls or hardware based solutions, but also program implementation measures, training, and customer education. An estimate of cost and savings is needed for each enhancement measure. The selected contractor will be the primary author and investigator for these efforts. NEEA will coordinate several conference calls with the contractor, PNNL, and a pool of utility program staff that have expertise and interest in this topic, to provide guidance and feedback for the contractor for this work.

### 1.1 Bidder Info

- Proposals will be due March 2, 2020 by COB PST – 3 page limit.
- Bidders with field and lab experience with DHPs are encouraged to apply.
- NEEA will not be responding to questions prior to the proposal due date.
- Finalists will be contacted by March 5, 2020 with final selection determined by March 15<sup>th</sup>
- The anticipated start date for this work in April 1, 2020.

## 2 Objectives

NEEA seeks a set of "enhancement measures" for DHP installations that will maximize their performance when followed. The selected contractor will prepare a meta study of previous studies and conduct market research on currently available technologies. The

selected contractor will need considerable understanding of DHPs measures and residential heating systems.

Key desired outcomes are:

- A reference document, summarizing what is already known about DHP interaction with existing heating systems and best practices for maximizing minisplit performance in homes.
- A list and description of current available products and solutions (enhancement measures) that improve performance of DHPs as displacement heating solutions.
- The savings, cost and program implementation strategies of these enhancement measures in as much detail as possible.

### 3 Scope of Work

Activities for this work include but may not be limited to the following:

1. **Kick-off Meeting & Workplan Development.** The selected contractor will create a workplan and timeline for the project.
2. **Meta Study** – review existing research
3. **Market Survey** – compile current market ready solutions with capabilities, costs, and market barriers
4. **Measure Analysis** - Development of measures
5. **Prepare report.** The selected contractor will prepare a draft report and a final report after NEEA review.

#### 3.1 Timeline

This work is anticipated to start April 1, 2020 and be completed by August 31, 2020.

### 4 Proposal Submission

Bidder shall submit (1) electronic copy of the proposal by the end of business day listed in the RFP schedule below.

#### 4.1 RFP Schedule

January 22, 2020	RFP Posted
March 2, 2020	Proposal Due Date
March 7-10	Conference calls with finalists
March 15, 2020	Contract Award Date

#### 4.2 RFP Point of Contact

All correspondence, included but not limited to, questions and submissions shall be directed to:

Christopher Dymond, Senior Product Manager  
E-mail: [cdymond@neea.org](mailto:cdymond@neea.org)

### 4.3 Proposal Format

Proposals should be no longer than 3 pages and include the following:

1. **Proposed Approach** – Include an overview of the approach and methodologies to executing the work. Include evidence of understanding of DHP measures, residential heating systems, and controls.
2. **Cost** – Proposals should be bid on a time & materials basis. Provide a cost breakdown by task. Include the estimated total cost for the project. A rate sheet can be included in the proposal appendix.
3. **Timeline** – Include a timeline that demonstrates how the project will be implemented including suggested deliverables and milestones.
4. **Team** – Who will be doing this work with breakdown by primary tasks. Detailed descriptions of staff experience and capabilities can be included in the proposal appendix.
5. **Example Projects** – Provide links to or include case studies or other projects that demonstrate your capabilities related to this project. These may be included in the proposal appendix.

### 4.4 Scoring

In scoring the proposals, the emphasis will be on familiarity with the topic of enhancing DHP performance and the likelihood that the contractor staff have the experience and talent to develop a credible reference document summarizing multiple enhancement measures for multiple types of housing applications.

NEEA is under no obligation to select any proposal that results from this solicitation, nor is there any obligation or intent implied to reimburse any party for the cost of preparing a proposal in response to this RFP. NEEA encourages bidders to submit proposals that include innovative methods or tasks in addition to or different from those listed in the RFP.

## 5 Minimum Insurance Coverage

Firms interested in working with NEEA should be aware of the following insurance requirements for all NEEA vendors.

Vendors must maintain adequate and reasonable insurance covering their performance under any offered contract, including, but not limited to Commercial General Liability of at least \$1,000,000/occurrence, Business Automobile Liability insurance, and any workers' compensation and unemployment insurance required by law. Professional Liability insurance may also be required. NEEA may request a copy of such insurance policies prior to awarding work.

See sample terms and conditions for additional information about minimum insurance requirements: <https://neea.org/img/documents/sample-neea-contract-terms-and-conditions.pdf>.