

## RFP EM-010-2020 Questions and Answers

- 1. Would Efficiency Maine consider approaches that do not collect in-field measurements at all sites to address “HP coefficient of performance as a function of outdoor air temperature” and “HP average heat rate (but/h) as a function of outdoor air temperature”? Collecting this data in the real world (as opposed to lab settings) is prohibitively expensive and intrusive, in our experience.**

The Efficiency Maine heat pump model relies on temperature dependent performance (COP and capacity) to estimate savings. It is desired to be able to adjust manufacturer reported performance to reflect in field performance achieved in Maine businesses. Methods that achieve that end will be considered.

- 2. Are the listed quotas specified for metering sites (only), customer surveys (only), or both?**

Sampling quotas are intended for metered sites.

- 3. A. Is there any budget guidance that can be made available to contractors considering writing a proposal? If so, what is the expected budget range?**

**B. The RFP does not provide a budget. Is there a budget amount that has been approved for the study, or can Efficiency Maine provide guidance on the anticipated budget range?**

There is no budget range being provided. Budgets should be commensurate with the effort required to meet the requirements set forth in the RFP. Efficiency Maine values efficiency and cost effectiveness.

- 4. Are there any interim analysis or reporting deliverables needed during the course of the contract? If so, what? If so, by when?**

There are no pre-defined interim reporting deliverables required. Per the RFP: Memos on interim findings in advance of the findings report can be very helpful in sharing early observations and obtaining feedback on writing style and content detail. These memos should be structured to parallel the construction of the final report. The Work Plan should include a list of the interim memos to be generated.

- 5. Please define more clearly what is meant by the term “portfolio” in the RFP in the section 3.2.1 Impact Evaluation.**

Portfolio refers to the entire set of measures offered by Efficiency Maine across all programs.

- 6. Regarding the following statements in the RFP on page 13, Section 3.2.1. Impact Evaluation:**  
**B. Relative precision shall be  $\pm 10\%$  or better at 80% confidence interval at the portfolio level for savings estimates (energy and peak demand).**

**C. Sampling by facility type shall have quota targets.**

**The sum of the quotas in C suggest a much higher level of precision for the portfolio is obtainable. However, most of the sub-areas required quotas will not be sufficient to reach the  $\pm 10\%$  at 80% confidence level. Does B or C have precedence in determining sample size?**

The requirement to meet  $\pm 10\%$  or better at 80% confidence interval at the portfolio level is a general requirement across all programs. Every evaluation must be designed to fulfill that requirement. Generally, that means the evaluation sampling should be designed to meet 80/10 or better at the program level. It is a requirement imposed on all evaluations and has precedence over any other sampling requirements unless expressly waived.

7. A. Regarding table on page 8, Measure Quantity by Measure Type and Facility Type, for all facility types, could you provide a breakdown of how many buildings/facilities are represented in each zone category (2 zone, 3 zone, etc.), as well as the grand total?
- B. Regarding the table on page 8 of the RFP listing the measure quantity by measure type and facility type, is the total measure quantity the number of unique customers?
- C. The table on p. 8 of the RFP shows the number of heat pumps (by number of measures) installed by facility type. Can the Trust identify or estimate how many unique multifamily and lodging properties installed heat pumps through the program?

“Measure Quantity by measure type and facility type July 2017 – December 2019” table provided in the RFP is the count of measures installed. The following table is a count of projects. It is not a count of unique facilities/customers. Projects that include more than one type of heat pump are represented in each applicable column. Projects that were completed at the same building at different times are counted as separate projects. Projects were installed at 887 unique addresses between 7/1/2017 and 12/31/2019.

<b>Project count by facility types and measures</b>	<b>DHP Lost Opp. 2 Zones</b>	<b>DHP Lost Opp. 3 Zones</b>	<b>DHP Lost Opp. 4 Zones</b>	<b>DHP Lost Opp. Single Zone</b>	<b>Ductless Heat Pump Multi-Family</b>	<b>Total</b>
Agriculture	3	0	0	12	0	15
Assembly	1	1	0	1	0	3
Bar/Lounge	1	0	0	3	0	4
College	2	1	4	1	0	8
Convenience Store	4	2	0	6	0	12
Elementary/Secondary Schools	10	7	3	10	0	30
Family Entertainment Centers	0	0	0	2	0	2
Fire/Police/Public Safety	3	0	0	4	0	7
Fitness Center	3	0	0	10	0	13
Garage/Repair	5	5	0	20	0	30
Grocery Store	0	1	0	7	0	8
Health	11	9	8	17	0	45
Health Care - Assisted/Nursing	1	0	0	1	0	2
Health Care - Outpatient	4	0	0	1	0	5
Hospital	2	0	0	8	0	10
Lodging	10	6	10	28	5	59
Manufacturing	6	3	4	25	0	38
Manufacturing (1 Shift)	1	0	1	1	0	3
Manufacturing (2 shifts)	0	0	0	1	0	1
Manufacturing (3 shifts)	1	0	0	1	0	2
Multi-family Building 11+ Units	0	0	2	2	20	24
Multi-family Building 5+ Units	0	0	0	1	8	9
Multi-family Building 5-10 Units	0	0	1	2	15	18
Municipal/Government	8	2	4	15	0	29
Office	40	34	23	128	0	225
Other	49	24	18	159	2	252
Religious	6	4	2	17	0	29
Restaurant	19	6	2	22	0	49
Restaurant - Casual Dining	5	0	0	0	0	5
Restaurant - Fast Food	0	0	0	1	0	1
Retail	14	11	2	55	0	82
Warehouse	2	2	0	8	0	12
<b>Total</b>	<b>211</b>	<b>118</b>	<b>84</b>	<b>569</b>	<b>50</b>	<b>1032</b>

**8. Are new construction projects run through the C&I Prescriptive program, or are all projects existing buildings/retrofit?**

New construction buildings are eligible for heat pumps through the C&I Prescriptive program.

**9. Will contact information (name and phone number) be available for the contractors/installers?**

Yes, contact information is available for all trade allies that participate in Efficiency Maine programs.

**10. Are incentives allowed for the contractor/installer interviews?**

There are no rules that would prohibit incentives for participation in an evaluation.

**11. Does advanced metering infrastructure (AMI) / electric interval data typically exist for customer sites at the facility types described in the sampling requirements (Multi-family, lodging, office, retail, restaurant, other)?**

Yes. The two largest electric utilities, Central Maine Power and Emera Maine, have AMI equipment installed for commercial customers.

**12. Are customers who participated in the Commercial and Industrial Prescriptive (CIP) Program required to allow verification site visits including the installation of monitoring equipment?**

Program participants are required to accept the program terms and conditions which includes the following clause:

**4. POST-INSTALLATION VERIFICATION**

The Eligible Customer agrees to allow access to the equipment and measures for purposes of inspection and verification. Efficiency Maine is not obligated to pay any pre-approved incentives until it has performed a satisfactory post-installation verification, or it has explicitly waived this requirement. If Efficiency Maine determines that equipment or measures were not installed or performed in a manner consistent with the approved application, it may withhold payment of the incentive amount and require changes before making payment. Efficiency Maine reserves the right to recover all incentive amounts paid if Qualifying EEMs and related equipment for which such incentives were awarded cannot be located or were not installed in a manner consistent with the Program or these Terms and Conditions and, in such case, the Eligible Customer shall be obligated to reimburse Efficiency Maine for all such amounts upon demand.

**13. For multi-family heat pump installations, can you please provide a breakdown of equipment by type (i.e. number of zones per unit)? In other words, can we get the MF heat pump count broken up into the same categories as shown to the right of the MF column in the data provided?**

The specific equipment installed is recorded for each project. For multi-family installations, the number of zones is not recorded separately. An analysis of the specific equipment installed on each project would be required.

**14. The table on RFP p. 10 show "Gas Account No" and "Electric Service Account No" as optional. Approximately what percent of HP projects have the optional electric and gas account numbers?**

That percentage is unknown at this time. Those fields are currently not included in any reports. Note that these fields are optional because contractors and not the end customers complete the project application.

**15. Does Efficiency Maine collect and maintain a record of installation invoices from contractors installing equipment in this program?**

Invoices are uploaded to the project record in effRT. They are generally in pdf.

**16. Does the Trust require licensed electricians for installing and/or removal of any power metering equipment?**

Contractors are expected to perform all work in accordance with Maine laws and regulations. Generally, any work that involves opening the breaker box requires a licensed electrician.

**17. Can the Trust provide an estimate of the fraction of the C&I prescriptive program budget spent on the heat pump measure for the years to be evaluated?**

From 7/1/2017 to 12/31/2019, the Trust issued \$1,463,000 in incentive payments for HP projects.