

Energy Trust of Oregon Request for Proposals: Industrial O&M Persistence Study

RFP Issued: **July 17, 2018**

Proposals Due: **August 10, 2018**

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Introduction

Energy Trust of Oregon (Energy Trust) is seeking proposals for a contractor to conduct an industrial O&M persistence study. Energy Trust’s Production Efficiency (PE) program provides incentives for operations and maintenance (O&M) measures. Industrial customers can receive incentives for “standalone” O&M measures; O&M measures are also often implemented as part of strategic energy management (SEM) engagements. Tables 1 and 2 below show the number of sites, projects, measures, and savings¹ associated with standalone O&M and SEM over time. Table 3 below shows savings by end use / system, and the share of total savings represented by end use / system for standalone O&M and SEM.

Table 1. Standalone O&M sites, projects, measures, and savings, by installation year

Installation Year	Standalone O&M ²				
	Sites	Projects	Measures	kWh Savings	Therm Savings
2009	4	4	4	5,426,536	-
2010	45	52	52	23,874,843	122
2011	55	57	58	16,515,346	84,845
2012	23	25	32	7,590,209	62,671
2013	29	34	49	8,193,102	9,298
2014	19	23	36	12,084,272	52,688
2015	39	44	65	10,389,449	56,604
2016	39	44	70	9,744,404	133,964
2017	39	43	65	11,961,947	39,967

Table 2. SEM sites, projects, measures, and savings, by installation year

Installation Year	SEM				
	Sites	Projects	Measures	kWh Savings	Therm Savings
2009	0	0	0	-	-
2010	16	16	16	25,507,600	-
2011	15	15	15	20,581,656	163,000
2012	15	17	17	28,696,208	59,800
2013	39	37	39	43,705,391	118,043
2014	37	37	37	35,915,251	38,039
2015	23	22	23	10,258,557	12,376
2016	33	31	33	15,957,119	69,085
2017	24	27	27	15,914,055	8,685

¹ These represent working savings.

² Note that standalone O&M measures may have been installed at sites that participated in SEM (before, after, or during their SEM engagement). It will be important to take this into account when developing the sampling plan, which is described in Task 2.

Table 3. 2009-2017 savings by end use / system for standalone O&M and SEM

End Use / System	O&M		SEM	
	kWh Savings	Therm Savings	kWh Savings	Therm Savings
Boiler	-	106,497 (24%)	-	1,139 (0.2%)
Compressed Air	51,120,401 (48%)	-	-	-
HVAC	10,676,228 (10%)	90,438 (21%)	-	-
Multi-System	11,732,240 (11%)	30,187 (7%)	188,700,000 (98%)	467,889 (99.8%)
Refrigeration	12,887,911 (12%)	-	4,716,053 (2%)	-
All Other³	19,246,621 (18%)	213,037 (48%)	-	-

Measure lifetime has a tremendous impact on the cost-effectiveness of O&M measures. Being off by one year in either direction may have a large impact and could influence program investment decisions. For this reason, Energy Trust is interested in performing focused research into the persistence of O&M measures to obtain a more accurate estimate of measure lifetime.

Currently, Energy Trust uses a measure life of three years for O&M. For first-year SEM, a measure life of three years is used unless a participant enrolls in continuous SEM, in which case a measure life of five years is applied to that first-year engagement. For all continuous SEM engagements, a measure life of five years is used.⁴ In 2017, Energy Trust undertook a study that characterized the types of O&M measures incentivized by commercial and industrial programs. The study also involved a literature review of the lifetime of O&M measures, in an attempt to assess the reasonableness of the current (three-year) measure life. The study can be found on Energy Trust’s website [here](#).

For this industrial O&M persistence study, Energy Trust is interested in performing primary research on the persistence of O&M measures.

Energy Trust Background

Energy Trust is an independent nonprofit organization, selected and overseen by the Oregon Public Utility Commission, to lead Oregon ratepayers in benefiting from saving energy and generating renewable energy. Our services, cash incentives, and solutions have helped participating customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista save over \$1.3 billion on their energy bills. The cumulative impact of our leadership since 2002 has been a contributing factor in our region’s low energy costs and in building a sustainable energy future. More information about Energy Trust’s background, funding sources, strategic and action plans, policies and programs are available on our website at www.energytrust.org/about.

³ The end uses / systems included in “All Other” are aeration, chillers, lighting, motors, material handling, pneumatic conveyance, process fans, primary process, pumping, process heat, secondary process, steam, and wastewater.

⁴ A three-year measure life implies that half of the savings last less than three years, and half of the savings persist longer than three years.

Research Objectives

The goals of this industrial O&M persistence study are to:

- Estimate the long-term persistence of industrial O&M measures, including reasons why O&M measures are no longer in place, and/or no longer saving the amount of energy originally estimated.
- Assess the appropriateness of the three-year measure life that is currently used for O&M measures.
- Assess if measure persistence (including reasons why O&M measures are no longer in place and/or no longer saving the amount of energy originally estimated) differs for standalone O&M measures versus O&M measures implemented at sites that have participated in SEM.
- Provide recommendations for improving the persistence of industrial O&M measures.

Tasks

It is anticipated that the selected evaluator will be required to undertake the following major tasks and the submitted proposal should address these topics:

Task 1. Conduct Study Kick-off

The selected evaluator will meet with Energy Trust and program staff to present and discuss the proposed evaluation methodologies, data collection activities, analysis, report preparation, and other activities, as well as plan for coordination with Energy Trust staff and PDCs.

Deliverables:

- Kick-off meeting

Task 2. Review Program Database and Develop Work and Sampling Plans

The Energy Trust Evaluation Project Manager will provide the selected evaluator with a dataset containing all of the O&M and SEM measures and projects completed by customers since the inception of the program. Based on discussion during the kick-off meeting, a work plan will be developed that will be the basis for all study activities. The work plan will contain:

- Study goals
- Study methodologies
- Sampling plan (see below)
- Schedule of tasks and deliverables

A draft work plan will be presented to the Energy Trust Evaluation Project Manager for review and approval before finalizing, and the selected evaluator will incorporate feedback into all components of the work plan, as needed.

The selected evaluator will develop a sampling plan that is appropriate based on the proposed methodologies and based on data provided by Energy Trust. Energy Trust expects that the selected evaluator will develop the sampling plan such that reliable, accurate, and significant estimates of long-term persistence of O&M measures can be obtained.

The sampling plan will include at a minimum the stratification scheme, number of projects and measures to be selected within each stratum, and expected confidence and precision levels of results.

After the sampling plan has been finalized, the selected evaluator will select the sample based on data provided by the Energy Trust Evaluation Project Manager.

Deliverables:

- Draft and final work plan
- Draft and final list of sampled sites
- Summary of sampling plan and sample selection in study report

Task 3. Review Project Files

Once the work plan has been finalized, and the sample has been selected, the Energy Trust Evaluation Project Manager will gather and provide to the selected evaluator all of the relevant project files.

For standalone O&M, the selected evaluator will review the project files to gain a thorough understanding of the O&M measures that were implemented.

For SEM, the selected evaluator will need to review the project files, including opportunity registers and final reports, to identify what O&M measures were implemented and to categorize these O&M measures - e.g. compressed air, HVAC, etc. Note that because savings for SEM are typically estimated using whole-facility regression models, the selected evaluator will, in most cases, likely not have *ex ante* savings estimates for individual O&M measures implemented during the SEM engagement period.

The selected evaluator will extract relevant information from the project files and compile it into a database, which is described in more detail in Task 6.

Deliverables:

- Review project files

Task 4. Conduct Interviews With SEM and O&M Participants

Using interview guides developed for prior impact evaluations as a starting point, the selected evaluator will develop a draft interview guide. After review and input from the Energy Trust Evaluation Project Manager, contractor will finalize the guide. The selected evaluator will recruit participants and conduct phone interviews with key staff at each participating organization. It is anticipated that PDC staff will work to make the initial contact with select participants as part of the recruitment process; whether or not a participant is contacted by a PDC will depend on the PDC's relationship with the participant. Due to the close, continuous nature of relationships between the program and participants, care must be taken in requesting time and information from customers. Also, the selected evaluator must consider that industrial customers with complex projects often take much longer to arrange site visits (see Task 5) with and fulfill requests.

The phone interviews with participants will focus on any relevant changes made to the facility since the implementation of the O&M measures, such as changes to equipment, personnel, policies and procedures, operating hours and schedules, and production levels. In addition, the interviews will focus on whether or not (and, if applicable, the extent to which) the O&M measures are still in place; if they are not in place, when this occurred, and why.

To help guide this discussion, the selected evaluator will refer to details about the O&M measures recorded in the project files (for standalone O&M) and in the project files, opportunity registers, and final reports (for SEM).

At the end of the interview, if applicable, the selected evaluator will begin coordinating on site visits.

Deliverables:

- Draft and final interview guides
- Summary of findings from interviews in study report

Task 5. Conduct Site Visits

Energy Trust expects that the selected evaluator will utilize site visits for a subset of the sites sampled for the evaluation. Based on the work completed as part of Tasks 3 and 4, the selected evaluator will determine which projects would benefit from a site visit, taking into account project size, the nature of the project and ease of verifying the O&M measures implemented, and information obtained about the status of the O&M measures through interviews with site personnel. The selected evaluator will determine what to verify based on information from the project files, and through interviews with site personnel.

Proposals should specify an estimated number of site visits that the budget can accommodate.

Deliverables:

- Summary of findings from site visits in study report

Task 6. Analysis

The selected evaluator will analyze the data collected in Tasks 3-5 to:

- Estimate the long-term persistence of industrial O&M measures, including reasons why O&M measures are no longer in place, and/or no longer saving the amount of energy originally estimated.
- Assess the appropriateness of the three-year measure life that is currently used for O&M measures.
- Assess if measure persistence (and reasons why O&M measures are no longer in place and/or no longer saving the amount of energy originally estimated) differs for standalone O&M measures versus O&M measures implemented at sites that have participated in SEM.
- Provide recommendations for improving the persistence of industrial O&M measures.

Energy Trust is also interested in understanding reasons why O&M measures are no longer in place.

Deliverables:

- Summary of analysis, findings, and recommendations in study report

Task 7. Reporting

The selected evaluator will provide the Energy Trust Evaluation Project Manager with a draft evaluation report. This draft will be reviewed and commented on by Energy Trust and other parties deemed appropriate by Energy Trust. After a draft has been distributed, the selected evaluator will meet with Energy Trust staff to discuss the draft report and answer questions. Based upon these comments, the selected evaluator will make revisions and deliver to Energy Trust a final version of the report.

Achieving an acceptable final report may take more than one iteration between the selected evaluator and Energy Trust. Where applicable, data, phone conversations, non-confidential sources, publications, and other media used in the report must be referenced and cited. It is anticipated that any respondents or sources can be promised confidentiality in terms of attribution of responses. Findings and conclusions shall be based on the information collected by the selected evaluator and referenced in the report. The use of tables and graphs is recommended for material that does not lend itself well to narrative form, as well as for important findings. All evaluation reports must include, at a minimum, executive summary, methodologies, findings, and recommendations sections.

The selected evaluator will provide Energy Trust with a database containing measure-level data, including any relevant identifiers, a description of the O&M measures implemented, and results.

The selected evaluator will submit monthly status reports presenting (1) a summary of accomplishments during the previous month, (2) current month's activities/plans; (3) variances in schedule and budget, including any necessary explanations; and if applicable, (4) issues or concerns to be addressed with proposed solutions. These reports are due by the 10th of every month and must accompany the invoice, starting with the first month after the final work plan has been delivered. The selected evaluator will be in regular and frequent contact with the Energy Trust Evaluation Project Manager to address issues as needed and provide project updates.

Deliverables:

- In-person meeting with Energy Trust staff to discuss study results
- Final database
- Draft and final evaluation report
- Monthly status reports and invoices

Schedule

It is anticipated that the draft report would be delivered to Energy Trust by **March 15, 2019**. The selected evaluator will receive comments and edits to the draft report from Energy Trust staff and other parties deemed appropriate by Energy Trust, and a final report is expected two weeks after the selected evaluator has received these comments and edits.

The selected evaluator will be required to provide a monthly status report to Energy Trust on the 10th of every month.

Budget

It is anticipated that the budget for the scope as described in this RFP will be in the neighborhood of \$130,000; however, Energy Trust reserves the right to revise budget assumptions at any time. Final budget determination will be documented in the resulting contract between the selected respondent and Energy Trust as described below.

Proposal Requirements

Respondent's proposal must contain:

1. Proposal Information

- 1) A description of the firm's qualifications to conduct this industrial O&M persistence study.
- 2) A project proposal, not to exceed 15 pages, including proposed approach to the specific tasks identified in the "Tasks" section above as well as the firm's proposed approach to the evaluation overall and a management plan.

- 3) Proposed schedule of deliverables. This should include a kickoff meeting scheduled within two weeks of awarding the contract and a provision for a “final” statement of work, if warranted by the kickoff meeting.
- 4) A detailed budget broken out by task and by individual. Key individuals should be identified by name, with billing rates for each. Please use the budget template (below).
- 5) Resumes of key staff and subcontractor team members who will be executing the work scope.

Please note that the 15-page limit for the project proposal referenced in (2) above does not include the firm’s experience, qualifications and references; schedule of deliverables; detailed budget; and the experience of proposed staff.

Budget Template

Staff Name	Hourly Rate	Hours Per Task		Total Hours	Total Cost
		Task 1	Task 2		
Hours Per Task					
Cost Per Task					

2. Conflict of Interest Disclosure

Respondents should disclose any direct or indirect, actual or potential conflicts of interest Respondents may have with Energy Trust in its proposal. A “direct or indirect conflict” is defined as any situation in which an individual or a member of their family or close business or personal acquaintance, is employed by Energy Trust or the OPUC, or may be reasonably construed to have a direct or indirect personal or financial interest in any business affairs of Energy Trust, whether because of a proposed contract or transaction to which Energy Trust may be a party or may be interested or is under consideration, or whether such conflict is purely conceptual, because of similarity of business interests or affairs.

If no conflict is identified by Respondent, the proposal will explicitly provide such a statement in their RFP response. The determination of whether a conflict or interest exists is left to the sole discretion of Energy Trust.

3. Representations and Signatures Page

Respondent’s proposal must contain the signature of a duly authorized officer or agent of the company submitting the proposal. Respondent’s duly authorized officer or agent shall sign **Appendix A** certifying to the representations stated on **Appendix A**.

Proposal Selection Criteria

Proposals will be judged on the following criteria, and any other factors deemed relevant by Energy Trust:

- Project proposal, including proposed approach to specific evaluation tasks and the evaluation overall
- Experience of proposed staff (including key staff from all subcontractors that will be involved in the evaluation) and management plan
- Experience of firm (including all subcontractors that will be involved in the evaluation)
- Proposed budget and schedule of deliverables

Schedule & Administration of Proposal Selection Process

RFP Schedule:

- **July 17, 2018** RFP issued
- **July 26, 2018** **Intent to bid due**
- **July 26, 2018** Questions/request for additional information due
- **July 27, 2018** Response to questions sent no later than
- **August 10, 2018** **Proposals due**

Requests for Additional Information and Proposal Submission

Any questions and/or requests for clarification or additional information regarding this RFP, as well as stating intent to bid on the project, must be submitted via email to the contact named below by **July 26, 2018**. Responses to questions and requests for additional information will be posted on Energy Trust's website no later than **July 27, 2018**. Energy Trust cannot accommodate individual phone, mail, or fax inquiries about the RFP. All questions must be submitted via email.

Stating intent to bid does not obligate a respondent to submit a proposal. Only electronically submitted proposals (in PDF form) will be accepted; faxed or print proposals will not. A signed letter of transmittal (cover letter) is required, but can be scanned and submitted along with the proposal. All proposals must be received by 5pm PST on **August 10, 2018**. Energy Trust will not be obligated to consider information received outside this time interval for the purposes of this RFP. Please submit proposal to:

Erika Kociolek
Evaluation Sr. Project Manager
Energy Trust of Oregon
Phone: 503.445.0578
Email: erika.kociolek@energytrust.org

Revisions to RFP

If it becomes necessary to revise any part of this RFP, an addendum will be issued by Energy Trust and will be posted on the website. Respondents should contact Energy Trust if they find any inconsistencies or ambiguities to the RFP. Clarification given by Energy Trust may become an addendum to the RFP.

Withdrawal and Modification of Proposals

Respondents may withdraw their proposal and submit a revised proposal prior to the response deadline. After the response deadline, Respondent initiated changes will not be accepted. Respondents may withdraw their proposal from consideration at any time.

Proposal Evaluation and Notification for Negotiations

Energy Trust will review the proposals as received and will initiate negotiations with the leading Respondent(s).

RFP GOVERNING PROVISIONS

All submitted proposals are subject to the following additional provisions.

Right to Accept or Reject Proposals, Multiple Awards

Energy Trust reserves the right to make multiple awards, reject any and all proposals and to waive any nonconformity in proposals received, to accept or reject any or all of the items in the proposal, and award the contract in whole or in part as it is deemed in Energy Trust's best interest. Energy Trust may also choose to negotiate any of the details of proposals prior to contracting.

Confidentiality

Respondents shall clearly identify only those portions of their proposals that they do not want revealed to third parties and label such portions as "Confidential Information". Except as required under law or for regulatory purposes Energy Trust will maintain confidentiality of such information. Energy Trust will not accept proposals or other documents that are marked to indicate the entire document is the confidential or proprietary information of the sender or that restricted handling is required. Normal business practices will be observed in handling proposal materials.

Ownership and Return of Proposals

All materials submitted in response to this RFP shall become the property of Energy Trust and shall not be returned to the respondent.

No Verbal Addendums

No verbal agreement or conversation made or had at any time with any officer, agent, or employee of Energy Trust, nor any oral representation by such party shall add to, detract from, affect or modify the terms of the RFP, unless specifically included in a written addendum issued by Energy Trust.

Proposal Costs

Each proposal prepared in response to this RFP will be prepared at the sole cost and expense of the Respondent and with the express understanding that there will be no claims whatsoever for reimbursement from Energy Trust.

Waiver of Claims

Respondent waives any right it may have to bring any claim, whether in damages or equity, against Energy Trust or its officers, directors, employees, or agents, with respect to any matter arising out of any process associated with this RFP.

Energy Trust Rights Reserved

Energy Trust reserves the right, in its sole discretion, to reject any or all proposals in whole or in part, to waive any minor irregularities or informalities in a proposal, and to enter into any agreement deemed to be in their best interests. In addition to any other enumerated reserved rights and/or options as stated in this RFP, Energy Trust may in its sole discretion do any one or more of the following:

- Determine which proposals are eligible for consideration in response to this RFP.
- Disqualify proposals that do not meet the requirements of this RFP, in the sole determination of Energy Trust.
- Negotiate with any Respondent to amend any proposal.
- Select and negotiate and/or enter into agreements with Respondents who, in Energy Trust's sole judgment, are most responsive to the RFP and whose proposals best satisfy the interests of Energy Trust, in its sole discretion, and not necessarily on the basis of price alone or any other single factor.
- Issue additional subsequent solicitations for proposals, including withdrawing this RFP at any time and/or issuing a new RFP that would supersede and replace this one.
- Vary any timetable or schedule, add or change any provisions discussed herein.
- Conduct any briefing session or further RFP process on any terms and conditions.
- Suspend or modify the RFP process at any time.
- Enter into relationships with more than one Respondent.

Resulting Contract

The selected respondent will be required to execute a written contract, including a detailed statement of work, with Energy Trust to perform the evaluation work. No award

will be considered a commitment, and no obligations or legal relations shall exist between Energy Trust and the selected respondent until a final and binding contract has been executed by and between Energy Trust and the contractor. Time is of the essence with regard to this program, and prolonged contract negotiations will not be undertaken. In general, Energy Trust strongly prefers contracts that are consistent with Energy Trust's standard terms and conditions; negotiations for such contracts can generally be completed quickly. In some cases, a few terms and conditions may need to be substituted or waived, in accordance with contract negotiations. Any party involved in these contract discussions can terminate negotiations at any time and for any reason. If it appears that contract negotiations are not proceeding in a timely manner, Energy Trust may opt to terminate the discussions and select another respondent.

APPENDIX A – REPRESENTATIONS AND SIGNATURE PAGE

I, the undersigned declare that;

1. I am an authorized agent of the respondent and have authority to submit this proposal on behalf of the respondent.
2. The information provided in this proposal is true and correct to the best of my knowledge.
3. I have read this Request for Proposals in its entirety and agree unconditionally to all of its conditions and requirements.
4. The respondent has not directly or indirectly induced or solicited any other respondent to submit a false or sham proposal.
5. The respondent has not solicited or induced any other person, firm, or corporation to refrain from proposing.
6. The respondent has not sought by collusion to obtain for itself any advantage over any other respondent or Energy Trust.
7. The respondent's proposal is genuine; not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation; and is not submitted in conformity with an agreement of rules of any group, association, organization, or corporation.
8. I understand and accept that the approval or rejection of respondent's request is within the sole discretion of Energy Trust and that there is no legal commitment until all due diligence has been performed and a properly authorized contract has been duly and properly executed.
9. I authorize the representatives of Energy Trust to investigate the business and personal financial credit history of respondent, its affiliates, and all associated partners, principals and management and authorize the release of all said information.
10. I agree that I will report immediately in writing to Energy Trust any changes to the information contained herein at any time while I am under consideration for funding.

The information contained in this proposal and any part thereof, including its exhibits, schedules, and other documents and instruments delivered or to be delivered to Energy Trust is true, accurate, and complete. This proposal includes all information necessary to ensure that the statements therein do not in whole or in part mislead Energy Trust as to any material fact.

Date: _____

Authorized Signature: _____

Name and Title: _____

(please print)