

September 10, 2018

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Efficiency Maine Trust
Augusta

Re: A Comment Regarding the Utilization of Appropriate Technology to Improve Efficiency in Triennial Plan IV

To Whom It May Concern:

This letter is to encourage Efficiency Maine Trust to bolster its program designs to more effectively address the findings of its evaluations by using appropriate analytic technologies. Specifically, there is opportunity in the Commercial and Industrial Custom Program, the Small Business Program, and the Home Energy Savings Program, to use standardized, off-the-shelf analytic software in place of ad-hoc, time-consuming, engineering analyses and imprecise home-grown web calculators to reduce the cost of analyzing proposed improvement measures and increase customer confidence.

Regarding the C&I Custom Program, the market barriers identified were upfront cost and long payback periods, lack of in-house capacity/expertise, and unfamiliarity with new technology or processes (on the part of contractors as well as customers). Standardizing analyses with software during the scoping and detailed audit phases helps to reduce all of those barriers.

Good, professional software tools provide a stable platform where proven measures *and* the latest ECM technologies can be evaluated for cost-effectiveness on-site, quickly, and transparently. Program operators can make sure the measures they approve and want considered are available for on-site auditors to test in proposed retrofit packages. In contrast to internal spreadsheets or complicated simulation systems, professional audit software uses the latest in interface design and web-based distribution to verify audit quality and ensure everyone is operating on the same analytic engine using the same data. Software also makes it possible to do level 1 screening audits that can then turn into level 2 audits with no data re-entry and with a verifiable history.

For the Small Business Program, the efficiency gained by using industry-standard analysis software is even more impactful. We have seen utility-sponsored small business programs that deploy dozens of market-based contractors with standard audit software on tablets who do *one-hour* assessments and leave the business owner with actionable, cost-effective proposals that go well beyond lighting retrofits. And, the program operator then has the data to do batch analyses where they can identify additional opportunities as incentives shift in the future.

Our recommendation for the C&I Custom and Small Business Programs is to implement an RFI process to obtain detailed information on the costs and benefits of standardizing audit data and analyses using commercially available audit software. There are numerous parallel RFIs available that Efficiency Maine can obtain (we are happy to help facilitate that), which would make the process quick and effective. We're confident this will yield eye-opening insights regarding the efficacy of putting customers, auditors, contractors, and program operators on the same page when it comes to identifying and evaluating efficiency opportunities.

For the Home Energy Savings Program, our experience suggests a slightly different approach. The Efficiency Maine HES Program is one of the best residential programs we know of. You have gotten it right by not mandating energy modeling for all customers. Historically, in many cases, requiring contractors who are often not experienced with software to complete a full model presents an additional barrier that does not lead to more effective improvement packages for the customer or more efficient work for the contractor. In many cases, Efficiency Maine qualified contractors more quickly identify key drivers of energy inefficiency in residences using their observations and experience. However, there *are* many cases where good software employed by a trained user can help overcome some of the barriers you have identified. Specifically, the lack of technical expertise/familiarity with energy efficiency technologies, and “no contractor relationship.”

The best modern residential audit software is business software; it assists with communicating to customers the benefits of various improvement options and in the processes that follow the audit, all the way to a completed job and secured incentive. We’re seeing more and more residential customers and contractors willing to reach deeper for efficiency with PV combined with heat pumps, even storage and electric vehicles. These fuel-switching combinations and other complex scenarios like using smart (or even just programmable) thermostats for effectively utilizing the thermal mass of a building necessitate good analytic tools to determine the energy usage and cost impacts, especially when face with system sizing and scheduling choices. Modern audit software can do these analyses with *very little* effort. And, they let the auditor or contractor present the homeowner with a truly informative report without spending hours dealing with Word templates back in the office.

Modern audit software also integrates with CRM and project management software designed for the home performance industry. For example, our platform Nexus has all the scheduling and task management features you would expect from a CRM, and it also includes a homeowner portal where customers can see the status of their job, review audit reports, and keep in touch with their contractor. Similar systems exist from other vendors.

Our recommendation would be to invest a modest amount in supporting registered contractors in their adoption and use of audit business software through sponsored trainings. I know our community of software vendors would be happy to participate in these trainings.

We would also recommend the HES team work with software vendors to automate rebate and other form filling. This can be done for an investment in the order of a few hundred dollars, and updates can be handled by a simple list-serve. This is done in many other programs around the country, and results in significant saved effort and fewer data entry errors.

I recently had some work done on my home by an Efficiency Maine contractor and was very pleased. The contractor used a software tool (not OptiMiser), and I was impressed with the analysis, but I observed that it took over two weeks to receive the report because the contractor didn’t know how to use the reporting features well enough to have his recommendations mostly pre-saved in the software’s library, and hadn’t used the built-in workscope/pricing features at all (he produced the workscope by hand outside of the software). This was more work for the contractor and more opportunity for me to be anxious or change my mind. The contractor also missed out on the opportunity to give me a DOE Home Energy Score or Appraisal Institute Residential Green and Energy Efficient Addendum, both of which can be automated with no additional data entry via some modern audit software and which can bring additional value to customers.

Thank you for all the great work Efficiency Maine is doing on behalf of our state and the world!

