

September 28, 2017

TO: DER and Advisory Committee
FROM: CEE Project Team
RE: **Status report on DSM Potential Study**

This memo is intended to give a brief update, since the last Advisory Committee meeting, on the status of the Minnesota Statewide Energy Efficiency and Carbon Saving Potential Study being conducted by the project team led by the Center for Energy and Environment (CEE).

Activities, Jun - Sept

Project scoping

At the last Advisory Committee meeting, we discussed and got feedback on three areas of work: 1) primary data collection plan; 2) difficult-to-serve/underserved markets; and 3) modeling of delivered fuels opportunities. Since then, we have started work on the primary data collection, and underserved markets according to the plan described at the last Advisory Committee meeting.¹ The DER decided not to spend additional funds to model delivered fuels in the study, although the CEE team will still collect the essential data necessary to conduct analysis of this opportunity at a later time, if needed. Additionally, it was decided that the smaller coop and muni utilities that are now allowed to opt-out of CIP under the recent 2017 legislation will be included in the scope of the study, but we will separately break-out their total potential.

Measure development

The CEE team developed an initial measure list of over 250 measures (after considering over 500 possible measures), as described in our August memo that was send out to Advisory Committee members and is on the project website. On Sept 12th we hosted a webinar to present these measures, and seek feedback. We have received feedback from several parties, and are planning on making appropriate refinements to our measure list. Work has already begun on characterizing these measures for incorporation into the potential model.

Primary data collection

In July, the project team started executing our primary data collection plan, which includes separate surveys for residential buildings, large commercial buildings, and trade allies. We have completed more than 1,400 residential phone surveys and more than 50 residential on-site surveys. We expect to start the commercial and trade ally surveys in October.

Collection of data from utilities

We have started the process of collecting key data needed for the potential study from utilities, including sales data, load projections, energy efficiency market studies, program evaluations, and avoided energy and capacity cost projections. We have executed non-disclosure agreements as needed with utilities for sensitive data.

¹ For details on the primary data collection plan and difficult-to-serve/underserved markets plan, see the respective memos on the DSM potential study website: <https://www.mncee.org/mndemandstudy/home/>.

Incorporation of codes and standards in modeling

The project team has conducted a review of codes and standards expected to take effect during the study period. We will be completing a memo summarizing these codes, and our proposed treatment of them in the potential study. We plan to release this memo for review later in October.

Upcoming Activities

Below is a brief summary of some of the major tasks in the months to come, prior to the next Advisory Committee meeting in February. For details of how these tasks fit in with the overall methodology, see the “Methodology and Model Inputs” memo.²

Continue collection of data from utilities

We are still working on collecting needed data as described above, and will need to have the bulk of this data collection wrapped up by the end of October.

Characterize measures

Now that the measures have been nearly finalized, the team will work to develop the key assumptions for these measures, such as savings estimates, applicability to specific building types and end uses, etc.

Load forecast and sales disaggregation

As described in the methodology memo, we will use existing utility load forecasts where available, and estimate load forecasts where there are gaps. These total sales estimates will then be broken down into total load estimates for specific building type and end-uses.

Estimate avoided energy/capacity costs

The avoided energy and capacity projected avoided costs are major inputs into the calculation of economic potential. Where available, we will collect these projections from utilities. We plan to use a common set of avoided costs for the calculation of statewide potential. We will do sensitivity runs for a high and low values, to represent the range of possible future avoided costs in 2020 and beyond.

Program benchmarking

The project team is analyzing Minnesota energy efficiency program performance, and working with E Source and ACEEE to identify programs around the country for benchmarking program performance, as well as for making best practice recommendations.

Preliminary model runs

By the next Advisory Committee meeting, we plan to have initial model runs to share with the committee, for at least the Technical Potential.

² Also available on the project website: <https://www.mncee.org/mndemandstudy/home/> .

Technical memos and webinars for feedback on key technical parameters

As we collect the data and refine our approach, we will write up our proposed approach in more detail for key aspects of the study, and solicit feedback from Advisory Committee members and other stakeholders. We plan on conducting webinars and/or writing technical memos for feedback on the following topics:

- Treatment of codes and standards
- Treatment of avoided costs
- Projection of sales forecasts