

December 3, 2014
E² Working Group Meeting Minutes

The E² Working Group met on December 3, 2014. The meeting was held in the 3rd Floor Hearing Room at 3 Empire State Plaza and via conference call. The following organizations participated in the call.

| E² Working Group Members | Ex-Officio Participants |
|--|--------------------------------------|
| DPS | PSEG-LI |
| Con Edison | |
| Corning | |
| National Grid | |
| NFG | |
| Central Hudson | Parties |
| NYSEG | Association for Energy Affordability |
| RGE | |
| NYSERDA | |
| O&R | |

1. Review of October 9, 2015 Minutes

No changes proposed.

2. Subcommittee updates

- **Technical Manual Subcommittee**

Staff provided a status update on the publication of the new Tech Manual. The final draft of the Technical Manual was sent to the E² Working Group for review on November 26, 2014. The group has until December 5, 2014 to voice any objections, otherwise the manual will be deemed final. Once finalized, the document will be filed in DMM and posted to the website. Staff announced the committee will be looking at new measures over the coming months.

- Ancillary Savings Working Group

Debbie Pickett of NYSEG/RG&E presented the Ancillary and Interactive Report. The Ancillary Savings Working Group was tasked with information gathering on if and how program administrators (PAs) were reporting ancillary savings. Six PAs provided information for the report. The subcommittee defined ancillary savings as a measure that is funded by one fuel that results in savings in another fuel, example prescriptive gas measures with the ECMs result in ancillary kWh savings. The subcommittee defined interactive effects as a measure that is funded by one fuel that results in increased fuel usage of another fuel, example prescriptive lighting measures that result in increased Btu usage. Custom programs, like NYSERDA's, use complex modeling and it is difficult to determine the ancillary savings. The subcommittee will be reviewing two NYSERDA custom case studies to acquire granular data on this subject.

Debbie stated the committee would continue to look at ancillary and interactive effects as it relates to possible changes in the Tech Manual.

Staff asked if the subcommittee determined why PAs report these savings differently.

- Debbie responded that it is likely a number of factors including: PAs using different vendors; program development; timing of the reporting style.

National Fuel stated that this issued was discussed in past years but not resolved and the company has always tracked the savings but just started reporting it. Further, National Fuel stated that there has not been clear guidance from Staff on how to handle ancillary savings. They are concerned how reliable the formula is for ECMs in the Tech Manual and how companies address areas where utility, service territories overlap.

NYSEG/RG& E stated they do not recall any direction from the Commission on ancillary savings in Commission Orders.

Staff stated the original scope of the project was to gather information on the reporting of ancillary savings and that this has been accomplished. Staff asked the subcommittee based on what they learned if there was any additional work, they would recommend at this point on the subject.

Peter Sheehan, Staff Committee Chair, stated that the committee is interested in researching the HVAC interactive figures listed in the Tech Manual. NYSEG/RG&E reported that they might be interested in further discussions to better understand the impact on their gas system from actions they may be taking in their electric programs under REV.

- **Small Commercial EM&V**

John Zabliski, Committee Chair, reported they have received detailed information from several impact evaluations. The committee is comparing the information from all the PAs and has found dramatic differences in operating hours between PAs and between actual and estimates used in the Tech Manual. Additionally, differences have been noted with regard to how PAs classify building types and that the Tech Manual differs from the categories used by PAs. The Committee has identified three areas they are focusing on: 1) ; proposed changes to the Tech Manual; 2) additional data needs, if any, and how to approach it, ie. Statewide study, etc; and 3) document the process they utilized which may be useful for EM&V activities or other sub-committees work in the future.

- **Evaluation Assessment and Joint & Statewide Studies**

- The Residential Appliance Metering RFP was released with proposals due on December 3, 2014.
- NYSERDA reported the Residential Baseline Study is near completion. The draft report will be available soon. The committee will have one week to review the draft. NYSERDA will provide a presentation of the study on December 18, 2014 and data will be made available on Open New York.

- Staff reported that 38 EM&V Activity Plan Templates were submitted, with over 100 discrete tasks totaling over \$17 million from the utility PAs. Most of the activities are expected to be completed in 2015 or early 2016. Each company's proposal was different but there were some common themes, such as: customer engagement; distribution system/load forecasting analysis; tech manual support; baseline & potential studies; review of current programs in REV context; NYSERDA transitional issues; and an overall theme of the need for more granular utility-specific data. Staff has been actively reviewing the submissions and meeting with the PAs to gain a better understanding.

Staff understands the interest of the PAs to get started, however due to the different approaches taken and where we are in the planning for the next phase of program offerings, Staff is not ready to provide a blanket approval to proceed. In addition, Staff is reviewing previous Commission Orders related to EM&V to determine the level of flexibility we have with regard to some of the plans proposed.

In the interest of moving this forward, Staff asked the PAs if they would be interested or have any objections to sharing each other's templates for cross sharing information. PAs expressed interest and asked for the budget estimates to be redacted prior to sharing. Staff asked PAs to provide any other concerns related to sharing the materials to Staff by Friday, December 5th.

Staff provided the following examples to illustrate the need to share information across companies:

- Commercial Baseline & Potential Studies - Staff stated that NYSERDA is about to sign a contract for the Statewide Commercial Baseline Study that all PAs have had input on, yet each PA submitted plans for various activities in their own territories that may overlap. Staff believes it would be useful to have a focused discussion on this so that NYSERDA can better understand what the utilities' needs are and the utilities can better understand what information will be available to them and the associated timing.
- Lighting Hours of Use Studies
Staff noted every PA proposed a lighting hours of use study, however it would be premature to proceed with those individual studies until the Small Commercial EM&V group has made their recommendations.

NYSEG/RG&E stated that the studies proposed are expected to provide information for their ETIPs and asked the timing of the approvals.

Con Ed agreed with NYSEG/RG&E and added that the reports will be used for program design after 2016 as well. Con Ed stated that not having the information available could lead to program designs looking much like EEPS programs.

National Grid added that some PAs have a standard contractor procurement process in place that takes time and could delay the implementation. National Grid stated that the earliest approval puts the PAs in the best place to take advantage of the information.

Orange and Rockland stated that some of the process evaluations are reviewing programs that have a vendor or delivery model change in the middle of implementation and the company needs to see the effect of those modifications.

3. Review of November 6, 2014 Notice soliciting Comments

Staff reviewed the Public Service Commission's Notice Soliciting Comments, issued November 6, 2014, in cases 14-M-0094 et al. Staff provided clarification that the NYSERDA Clean Energy Fund (CEF) "2015 Reallocation Supplement" filed on November 17, 2014 only includes information related to the proposed reallocation of funds in 2015. NYSERDA will file a "CEF Informational Supplement" on February 20, 2015. The Commission provided NYSERDA this additional time to file the supplement to further develop its CEF proposal. The February supplement will include information for the time period 2016 and beyond.

NYSEG/RG&E asked Staff how the dates comply with the SAPAs issued.

- Staff responded that the Commission issued several SAPAs for the CEF. The November 6th notice matches or extends the deadlines for comments.

4. CEF and ETIP Discussion

Con Edison stated that the utilities and NYSERDA have met on the original CEF proposal and found it productive. Con Edison questioned Staff as to what the expectations are for the two groups to work together in the future.

- Staff responded that it encourages meetings as information sharing opportunities and Staff intends to meet with all the PAs to facilitate the discussions on the CEF as well. Staff would appreciate if the PAs would begin brainstorming on how to start building or transitioning the 'infrastructure' behind REV to support energy efficiency efforts such as the technical manual and benefit cost testing, etc.

NYSEG/RG&E inquired if the E² Working Group will continue.

- Staff responded that they perceive interest from the PAs for this group or something like this group in the future but will need to determine how to best utilize it. The intention of the ETIP and energy efficiency going forward is for Staff to be more hands off while maintain the integrity of the programs. Staff is open to working collectively to achieve that goal.

Con Edison stated that REV envision the markets to be animated but would like some clarification from Staff. Con Edison stated that there are hundreds of businesses that make up these markets in their territory under the current structure. Con Edison is concerned that market animation has been linked to decreased or no customer incentives being offered. Con Edison believes that their customers may need an incentive to

make a decision for an energy efficiency product. Further, Con Edison has read recent Staff testimony and it raises even more concern.

- Staff responded that how to achieve this needs to be further developed but the impetus is in order to meet the state's overall goals it cannot be done exclusively on the backs of the rate-payers or under the current program models. The market must transition from customer incentives to grow DER and other business models with private capital, and not just with the Green Bank.

NYSERDA added that they are not working toward a purely incentive free market, but more of a “means-to-an-end” incentive. The incentive will no longer be standalone product, but used to overcome a market barrier. The incentive may be targeted towards a technology or strategy to foster interest or education.

Staff added it may be valuable to gather information related to the level of partners currently participating in the portfolio of programs. Staff will provide PAs with a contact to work with on this effort.

NYSERDA stated that it welcomes individual or groups discussions over the next month on the CEF.

5. Comments from Ex-Officio Participants and Parties

No comments.

6. Next meeting date

The January 7, 2015 meeting date must be rescheduled. Due to room availability and scheduling conflicts the next meeting of the E2 Working Group will be held on February 4, 2015.

The next E² Working Group Meeting is scheduled for February 4, 2015 at 10:00am
3rd Floor Hearing Room
Call in number: 866.394.2346
Conference Code: 1614319786

Technical Manual Sub-Committee (TMSC) Report on Ancillary Savings and Interactive Effects 12-03-2014

Mission:

1. Determine the number of program administrators (PA's) reporting Ancillary Savings and Interactive Effects (IE) resulting from current eligible measures in the Electric and Gas programs.
2. Quantify the proportion of ancillary savings/IE as current data reporting allows.
3. Develop a summary of findings as well as potential study points that would require further consideration to inform the E2 working group.

TMSC Categorization of Program & Ancillary Savings Types:

The TMSC categorized two distinct types of programs administered under EEPS: 1) Programs Offering Prescriptive Measures 2) Whole Building and Custom Programs

PAs offering prescriptive programs would typically identify ancillary savings as the positive savings for a fuel type generated by the installation of measure(s) of a different fuel type. In these instances, prescriptive programs can attribute ancillary savings for specific measures installed based on Tech Manual formulas. Prescriptive programs can also have measures that result in interactive effects, which the TMSC has identified as the higher usage of one fuel type due to the installation of an energy efficient measure of the other fuel type.

PAs offering whole building or custom programs typically utilize a building energy simulation model and/or engineering analysis to calculate the energy savings for a combination of measures and may not base savings estimates on the Technical Resource Manual. In the whole building approach, the program takes into account the interactive effects between measures for the building as a whole, which results in the ancillary savings.

Summary of Findings:

The TMSC identified that the reporting of ancillary savings and interactive effects varies among PA's. Some PA's track these savings and some PA's do not track them or do not track them consistently for all programs they offer.

The TMSC identified two primary examples for measures that comprise the majority of ancillary savings for prescriptive programs. These are: 1) electric savings realized from gas programs such as ECM furnace fans for a residential gas program 2) HVAC interaction offsets of gas usage due to energy efficient lighting replacements. These are reflected in the scorecards for PAs that track the savings.

Whole building programs with a wide range of measure types identify the interactive effects and ancillary savings and attribute the savings on a measure by measure basis but the savings and interactive effects will vary by project since these are whole building programs.

By using the EEPS Database, the TMSC found that 6 PA's are reporting ancillary electric savings realized from gas program measures and that 2 PA's are reporting interactive gas effects resulting from electric program measures.

Of the 6 PA's reporting ancillary electric savings from gas programs, a survey of the data content shows that the majority of the residential prescriptive gas program electric savings are due to ECM furnace fans.

- Prescriptive Program Findings: For PAs reporting ancillary electric savings in prescriptive gas programs, an ancillary 11,800 MWh electric savings on program total gas savings of 1,263,753 Dth were achieved.

- Whole Building Programs Findings: For PAs reporting ancillary electric savings in Whole Building gas programs, an ancillary 2,174 MWh electric savings on program total gas savings of 1,009,868 Dth were achieved. An example of these savings are a result of air sealing/insulation measures from whole building residential programs that were funded using gas funds for homes that have central air conditioning. This accounts for the majority of the ancillary electric savings for whole building programs for projects that track these savings. Another example of ancillary electric savings from gas measures are for a new furnace installation with an ECM motor. The program would claim the gas savings but also track the ancillary electric savings resulting from the ECM motor.

Of the 2 PA's reporting interactive gas offsets from electric programs, a survey of the data content shows that PA's reported a total gas offset from electric programs of -158,610 Dth interactive effects on program total electric savings of 1,012,658 MWhs that were achieved. An example, and the majority, of these interactive effects are a result of lighting measures which reduced the kWh usage but increased the heating load thus resulting in a negative Dth savings.

Conclusion & Key Points:

The TMSC determined that, while this high level perspective of ancillary savings can be quantified through current reporting methods, it is important to note that more detailed information could be presented to identify ancillary savings by measure category, if necessary. Prescriptive programs would be more applicable to identify one-to-one ancillary savings whereas whole building and custom programs operate on a project by project basis since it views each project as a custom application.

Below is a summary of key points that were uncovered and preliminarily discussed within the TMSC:

- Discussion of HVAC interactive effects in particular resolved that these negative gas offsets resulting from decreased heat load could be further researched; to determine the source and current accuracy of the HVAC factors in the Tech Manual.
- The source of the ECM furnace fan deemed savings now in the Tech Manual may require review for current accuracy.
- Prescriptive type measures are able to be evaluated across the PA's at a consistent level to identify the ancillary savings values but whole building programs that do not use the Tech Manual to calculate savings will continue to require site specific review to determine the ancillary savings and interactive effects.
- NYSERDA will provide several examples of whole-building projects that have been modeled with building simulation tools to the TMSC to illustrate how interactive effects between electric and gas measures are treated in energy modeling tools.
-

Reporting PAs:

- ConEd
- National
- Fuel
- NYSEG
- O&R
- RG&E
- NYSER
- DA