



EEB Residential Committee Meeting
Wednesday, August 9, 2023 | 9:00 – 11:30 AM

[Meeting Materials](#)
[Meeting Recording](#)

Minutes

1. **Welcome – Melissa Kops**

a. Roll Call of Committee Members

Board Members: Melissa Kops, Kathy Fay, Karraine Moody, Shubhada Kambli, Ben McMillan, Donald Mauritz, Larry Rush, Ron Arujo

Board Consultants: Richard Faesy, Bahareh van Boekhold, Leigh Michael, Stacy Sherwood, James Williamson

2. **Approve May Residential Committee Meeting Minutes**

Ms. Melissa Kops motioned to approve the [June Meeting Minutes](#). Ms. Shubhada Kambli seconded the motion and the motion passed 4-0.

3. **Public Comments**

None.

4. **DEEP Updates**

Ms. Becca Trietch (DEEP) and Giulia Bambara (DEEP) provided [updates on the Residential Energy Preparation Service program and on DEEP's federal funding progress](#).

a. Residential Energy Preparation Service (REPS)

Ms. Giulia Bambara provided updates on the REPS program, describing the current levels of participation (24 completed units) and projects in the pipeline (54 units in progress). Information was provided on updates to the “Milestones and Timeline” instrument development. The timeline is currently developed to represent a maximum project time (currently ~6 months total) and may be updated to present average timelines in the future. There was a description on the process that is taken if mold is discovered during the weatherization implementation process. DEEP has a retained contractor, ICAST, to provide quality control services on the program and may assume this role in future.

Ms. Melissa Kops asked for future REPS reporting to include the budget summary and for DEEP to provide additional information on status of 54 in-progress projects.

Ms. Giulia Bambara confirmed that the 54 in-progress figure counts work that is actively being done; updated monthly pipeline data was not yet available at the time of the presentation. Ms. Becca Trietch discussed providing quarterly budget updates for future presentations.

Ms. Vivian (Last-Name TBD) asked for clarification on the quantity of in-progress projects originating from HES-IE and WAP programs. Ms. Giulia Bambara provided a reminder that ICAST hasn't yet provided an updated pipeline report, so granular data was not currently available, but would be shared upon receipt.

b. Federal Funding Progress

Ms. Becca Trietch provided updates on multiple federal funding efforts that DEEP is developing.

i. IRA Guidance from DOE

Information was provided on [IRA guidance released by DOE](#). DEEP is currently evaluating the hiring of consultant to assist with application development. Applications are understood to be “considered on a rolling basis”. DEEP intends to seek public input during the application development stage.

ii. HES-IE & WAP Coordination Efforts

An update was provided on HES-IE & WAP efforts, including a description of current deliverable statuses, energy efficiency work force credentials, and cost share payment structures. Summary tables were provided in appendix of the linked slide deck. There was discussion on the in-process RFP development aimed at developing an energy incentive tool. The next step on the RFP will be requesting public comments.

iii. “Green Storm” Planning

Upcoming green storm planning topics will include energy incentive tool public input, strategizing on tax credit use, and centralization of income verification/qualification approaches.

iv. State-Based Home Energy Efficiency Contractor Training Grants Program

Details were discussed on the newly released energy [contractor training grant that was posted by DOE](#). DEEP is still determining best steps for program design and funding uses. The following questions were posed to assist in development:

- 1) What gaps have we documented in CT’s EE and electrification workforce?
- 2) What ways would you like to see the funding used?

Ms. Becca Trietch can be contacted at Becca.Trietch@ct.gov

5. Draft Weatherization Definition – DEEP

Ms. Shubhada Kambli provided an update on the status of DEEP’s weatherization definition. The definition continues to be refined based off of public comments and with input from leadership/stakeholders. A draft is expected to be released within the next few months.

6. Company Updates

Ms. Diane Del Rosso (Eversource) and Ms. Amy Mclean Salls (Avangrid) provided [updates to Q2 residential programs](#) and on the [status of HES & HES-IE Health and Safety Barrier Report](#).

a. Q2 Residential Programs

A combined residential summary was presented indicating spending and savings levels through Q2 2023. There was a discussion on the impact that heat pump projects have on net program savings, as they indicate “negative savings” when used to replace fossil fuel sources. For Eversource, overall program spending is slightly ahead of Q2 targets – a reminder was provided for vendors to manage to their allotted purchase orders. There are ongoing discussions underway to evaluate options for managing the ES-electric budget spend. Other ES-gas and Avangrid programs have budgets that are generally in line with Q2 targets.

Ms. Melissa Kops asked if there was any opportunity to move budget among different programs. Ms. Dianne Del Rosso clarified that the opportunity does not currently exist.

Mr. Richard Faesy (Energy Futures Group) questioned if the lag in savings was anticipated to be corrected and accounted for this year. Ms. Dianne Del Rosso clarified that there is a mismatch in data because heat pump projects are creating the perception of “negative savings” due to the program’s kwh-accounting structure. There are ongoing efforts to modify goal metrics to track by MMBTU. On the gas side, some of the lag in savings can be attributed to updates in realization rates.

Mr. Glenn Reed (Energy Futures Group) questioned if realization rates would only be applied prospectively. Ms. Dianne Del Rosso clarified that the evaluation and planning group has made some interim adjustments to the current program year. The general consensus was that current challenges may be further amplified when updated realization rates are applied in full. There was further discussion about accelerating the metric transition from kwh to MMBTU. Ms. Kathy Fay suggested that the updated metrics should also align with ongoing greenhouse gas directives.

For Retail products, ES is generally in line with Q2 targets. UI did not have Q2 data available to present.

For Residential New Construction, ES-electric is performing in line with the Q2 target. ES-gas is overspent due to an influx of multifamily projects. Avangrid’s values follow a similar trend.

For HVAC and Water Heating Equipment, ES-electric has expended the full budget due to robust heat pump activity. Savings continue to show a negative value due to the previously discussed fuel switching effects. Gas project volume is less than originally forecasted due to a 2023 change limiting projects to those replacing non-condensing equipment. Avangrid budgets and savings were described as following similar trends to ES.

Mr. Richard Feasy questioned if it was possible to shift underspent gas budget to overspent electric budget. Ms. Diane Del Rosso explained that the referenced budget shift is currently being evaluated.

Mr. Glenn Reed asked for clarification in percent savings shown between annual and lifetime values. The Companies committed to investigating the referenced annual and lifetime savings values further to determine if the tracking system was reporting correctly.

The Companies presented granular data on the number of units sold through Upstream HVAC and Water Heating programs. Ms. Kathy Fay questioned if there was a possibility of adding a penetration figure to provide context to data (% of total customers utilizing the program in a defined geographical area). The Companies did not have the penetration figure information available at the time of presentation.

Ms. Melissa Kops asked for additional information on UI’s low heat pump project values relative to Q2 goals. Ms. Amy Mclean Salls proposed that rebate processing issues influenced the currently reported quantities. Ms. Kathy Fay sought additional clarification on low heat pump

water heater values relative to Q2 goals. Amy Mclean Salls explained that EFI was not processing natural gas rebates up until July and the result is reflective in tracking data. Mr. Richard Faesy questioned the extent that program performance could be attributed to EFI's processing lag.

Ms. Kathy Fay asked about the level that this issue has been communicated to vendors. Ms. Amy Mclean Salls clarified the communication and training efforts by the Companies and that rebate processing has been adjusted to allow for processing online, by email, and by paper application.

For Upstream HVAC and Water Heating Equipment, program data was discussed for boiler circulator pumps and natural gas water heaters. ES-electric is slightly behind Q2 target on circulator pumps and significantly behind on natural gas water heaters. Avangrid's data showed similar trends. Additional data was presented for natural gas boilers and furnaces. For ES, boiler projects are generally in line with the Q2 target, furnaces are slightly behind the Q2 target. Avangrid data shows significant lag due to the EFI processing issue. SCG program performance is expected to be corrected by next quarter; CNG is not expected to meet this goal.

For the Heat Pump program (midstream), data was presented on ducted and ductless air source heat pumps. ES data shows that ducted heat pumps have performed well above the anticipated goal – enough to offset lag in ductless installations. Avangrid shows similar trends in heat pump installs. There was discussion on the extent that differences in rebate values were impacting customer decisions to install ducted vs ductless.

Mr. Richard Faesy questioned if the policy change to “discontinue central cooling system incentives” (while restricting the incentive to heat pump projects) was driving consumer demand. The Companies committed to gathering the requested information on heat pump projects from their internal teams.

Ms. Melissa Kops suggested that the customer's ducted vs ductless decision is likely driven by their existing distribution system (is there existing ductwork in the home, etc.) and questioned if the programs incentives should promote ductless systems to encourage a greater installation rate. Ms. Kathy Fay advised that future targets be selected more carefully based on trends seen in 2023 data.

Additional Information was presented on heat pumps installed in the energy optimization program for air source heat pumps, ground source heat pumps, and multifamily mini-split heat pumps for units replacing electric resistance or oil/propane. For ES, trends show ductless heat pumps are more common in electric resistance replacement and ducted units are more common when replacing oil/propane systems. Additionally, ground source heat pumps are more common in oil/propane replacement scenarios. UI data was limited to ductless systems and GSHP installations.

Ms. Melissa Kops asked why UI presentation data was missing ducted systems. Ms. Amy Mclean Salls and Mr. Larry Rush (Avangrid) clarified that since the UI ducted heat pump incentive process is through a rebate form, the units are not counted in the midstream table.

Ms. Kathy Fay asked for further clarification of rebate source (upstream, midstream,

downstream) to be noted on future graphs.

Data was presented for heat pumps replacing natural gas heating units. For ES, a majority of projects were multifamily mini-split heat pump projects. UI did not have projects to report due to tracking system issues and committed to report this value for the Q3 update.

For the Home Energy Solutions programs, ES-electric programs are slightly ahead of budget projections with savings tracking spending. ES-gas programs are generally in line with Q2 targets. It is speculated that the mismatch between lifetime and annual savings is due to “more insulation projects being installed than originally projected”. In general, UI programs show a trend of budgets slightly over Q2 targets and savings lagging expected levels.

For the Multifamily Initiative programs, ES-electric is behind goal with annual savings trending and lifetime savings roughly achieving its mid-year goal. ES-gas is significantly behind budget and savings goals. As a result, ES is utilizing multi-family funds for some single-family programs. UI and CNG budgets are generally on track with target. SCG budget is overspent. Savings are generally in line with Q2 expectations. CNG has not closed any projects to claim savings for 2023.

Mr. Richard Faesy asked for multifamily data to be broken out separately - indicating actual magnitude of goals, shown for comparison. Ms. Amy Mclean Salls clarified that there are 188 units in CNG territory pending payment in Q3, which will lead to fulfillment of annual and lifetime savings goals.

Mr. Richard Faesy asked if the spend for a project was reported before savings were booked and if this should happen simultaneously. Ms. Amy Mclean Salls and Mr. Larry Rush explained that projects were accrued at time of dollar commitment and that savings are claimed when a project is verified as completed. Mr. Richard Faesy asked if Eversource uses the same accounting practice. Mr. Larry Rush explained that Eversource uses different accounting practices. Ms. Diane Del Rosso stated that Eversource records spend and savings when the project is paid. Ms. Melissa Kops asked if there was a way for the Companies to align accounting methods. Ms. Kathy Fay reiterated concern with the issue of misaligned savings and budget. The group agreed to resolve differences in budget and savings accounting standards during future meeting discussion.

For HES IE programs, ES-electric is ahead of target on budget and savings. ES-gas is aligned with targets. UI values are skewed as a result of issues with the tracking system and results are expected to align closer with targets for Q3 presentations.

For the Multifamily Initiative (income eligible), ES-electric is underperforming on budget with savings ahead of budget spend. ES-gas budget spend is generally in line with Q2 target with savings exceeding Q2 target. UI-electric budget is significantly below goal, however savings generally meet/exceed target. There is a large UI all-electric new construction project in the pipeline that will balance the budget underspend. CNG and SCG both show budgets underspent with savings goals being generally met. There is an ongoing coordination effort to align utility residential new construction efforts with CHFA financing channels. There was discussion on potential changes to future multifamily programs due to DEEPs Weatherization Assistance Program Cost share efforts.

For Residential Behavior programs, UI has not paid any projects to date or claimed savings. Their spend is generally in line with the Q2 target. Eversource does not have behavior programs to report. Ms. Melissa Kops asked if the measure included programmable thermostats. Ms. Amy Mclean Salls confirmed that thermostats are included in this program.

Electric and Natural Gas metrics were presented for categories including: HES and residential new construction projects across a variety of savings metrics and measure parameters. For single family MMBTU savings goals in ducted and non-ducted homes, both ES and UI are projected to fall short of annual savings goals at current trajectory. For “% of single-family homes that receive insulation upgrades”, both ES and UI are trending to achieve the annual goal. For the HES gas metric in non-barrier homes, ES-gas is behind on goal, CNG and SCG have surpassed goal. For the RNC retention metric, ES is projecting to achieve annual goals; UI does not have results available to share.

Ms. Melissa Kops asked for clarification on the reason that single family MMBTU goals are projected to fall short of annual goals. Ms. Diane Del Rosso explained that goals were set based of historical program performance. Recent evaluations of air sealing savings indicate over-claiming of savings in prior years. With the adjusted savings claims methodology, goals become more difficult to achieve. There was a discussion on the proposed strategy to decouple air sealing incentive payment from associated CFM reduction.

Ms. Melissa Kops questioned if the MMBTU goals posted were annual goals. Mr. Richard Faesy explained that goals are presented as average savings per home, not cumulative.

Electric and natural gas metrics were also presented for HES-IE projects. For single family MMBTU savings goals in ducted and not ducted homes, both ES and UI are projected to fall short of annual savings goals at the current trajectory. For % of single-family homes that receive insulation upgrades, both ES and UI have savings lagging behind targets. For the HES gas metric in non-barrier homes, all gas utilities are behind on goals. For the equity metric, ES is close to achieve the annual goal; UI is on track to meet equity goal by year end.

b. HES & HES-IE Health and Safety Barriers Report

Ms. Diane Del Rosso provided reference to a presentation for the [2022 update on health and safety barrier guidance](#).

7. 2024 Plan Updates - Companies

a. HES-IE Heat Pump Cap

Ms. Amanda Stevens (Eversource) provided an [overview of new HES-IE Heat Pump Incentive Caps](#) currently under development. Two potential caps are being evaluated: \$6,000/ton and \$25,000/unit (SF) or \$15,000/unit (2-4 unit MF). Heat pump project data was presented on a “\$/ton” vs “total installed cost” scatter plot. There was additional discussion on “considerations and process” associated with the proposed cap structure. Proposed incentive caps include heat pump incentive and any associated comprehensive incentive. Customer contributions are not applied to the cap. Initial structure is based off of vendor feedback received during the 7/25 call. Process is slated for implementation near the end of August.

Mr. Glenn Reed asked if there are separate incentives available for panel upgrades.

Ms. Amanda Stevens clarified that panel upgrade incentive is anticipated in the IRA funding and would not be applied to the referenced heat pump cost cap.

8. Performance Management Incentive (PMI) Metrics

a. Secondary Metrics – Technical Consultants

Mr. Richard Faesy commented on the ongoing [development of updated secondary metrics](#) – indicating that metrics should be viewed as a work-in-progress that will continue to evolve.

b. Equity Metric – DEI Consultants

Bahareh van Boekhold (Illume) provided an [update on the development of equity PMI metrics](#). Topics included a review of the proposed metric (X% above EJC participation baseline), an overview of programs to be included in the 2024 metric (HES and HES-IE for SF and MF), a discussion on the recommended non-participant study, and a review of goals driving the EEB’s equity vision. As of 8/9, Illume will move into Task 3 of the 2023 workplan with a focus on “defining underserved populations”.

Ms. Amy Mclean Salls asked for additional details on the focus areas of the non-participant study. Ms. Bahareh van Boekhold explained that goals of the study include defining “who is not participating” and “why they are not participating”. Mr. Richard Faesy added that an approach is being evaluated to gather data from existing studies that have already been completed. There are efforts to avoid paying for study costs out of program implementation budgets.

Ms. Kathy Fay noted that the evaluation committee may present additional information on equity study costs in the upcoming EEB meeting. It was recommended that the program administrators act to correct known equity issues before additional studies are completed. **An additional recommendation was provided to organize an educational opportunity for the EEB and Companies—with the intention of developing an understanding of the history of equity indifferences affecting the programs. Ms. Kathy Fay reiterated concern that results of past equity studies are not readily searchable.**

9. Future Agenda Topics – Technical Consultants

Mr. Richard Faesy provided an [update on future agenda topics](#) to be discussed at upcoming meetings. Topics included a deeper dive in multifamily programs with case studies, behavior programs, the 2024 Plan update, DEEP updates for IRA plans and the weatherization definition, and other ongoing program-specific areas.

10. Public Comments

Tim Fabuien (CMC Energy) expressed concern with the transition of the Aero seal offering to a rebate program. It was speculated that the associated change in incentive will generally make the service unavailable to middle class to moderate families due to lack of disposal income. There was a follow-up comment on concerns with the lack of focus to duct distribution systems when ducted heat pump systems are being installed.

Ms. Melissa Kops asked for additional information on the new duct sealing incentive structure. Ms. Diane Del Rosso clarified that the advanced duct system rebate is still under development. It was explained that advanced duct sealing savings attributed to updated realization rates will provide

restrictions on the rebate that can be offered. The structure being considered would require customers to have HES services first before qualifying for advanced duct sealing rebates. Mr. John Karyczak (Avangrid) stated the importance of maintaining cost effectiveness of the HES programs and suggested that the intention is to keep advanced duct sealing measure in the program, however, it will need to evolve to be developed under a different set of implementation strategies.

11. Adjourn

Melissa Kops motioned to adjourn the meeting at 11:36 am, it was seconded by Kath Fay. The motion passed 4-0.