

The following items memorialize the understanding between DOER, the Attorney General, the PAs, and EEAC Consultants (hereafter, “the parties”) regarding evaluation policy issues as part of term sheet negotiations for the 2022-2024 plan.

1. Market Effects

- i. To account for the planned substantial investment in heat pump market transformation in the 2022-2024 term, the Plan includes a 22% market effects factor, which is based on an evaluated spillover value from heat pump fuel displacement, for all market rate residential electrification measures in both electric and gas programs. This includes:
 1. Minisplit heat pumps
 2. Central heat pumps
 3. Air to water heat pumps
 4. Ground source heat pumps
- ii. The market effects factor for income-eligible will include a 10% market effects factor, which is based on the evaluated contractor spillover value from evaluation research,
- iii. In addition, the Plan also includes a 22% market effects factor for C&I prescriptive electrification installing small C&I heat pumps, specifically ducted and ductless heat pumps <5.4 tons replacing oil and propane heating and water heating equipment.
- iv. For C&I prescriptive electrification installing large heat pumps (≥ 5.4 tons) as well as C&I custom electrification, including VRF measures, the Plan includes a 10% market effects factor, which is based on the evaluated contractor spillover value from evaluation research.
- v. The market effects factor would only be counted if at least 50% of the agreed-upon annual goals as described in the term sheet are met (the 50% volume thresholds for residential and income-eligible, and 50% threshold for C&I based on MMBtu.) The PAs would claim the market effect savings in each Annual Report, with a “true up” at the end of the term, based upon aggregate performance over the combined three years of the 2022-2024 Plan term. For example, if the PAs do not meet the 50% threshold in one year, but far exceeded it in other years, so that the 50% threshold is met for the term, then no adjustment would be needed in the Term Report. If the PAs meet the threshold in one year, but not the other two, such that they do not meet the 50% threshold for the term, then the PAs would give back the savings for the one year they met the threshold.
- vi. The market effects factor alone (no free ridership) would be counted for the purpose of GHG because market effects from PA efforts in 2022–2024 are expected to result in the adoption of heat pumps outside of the PA programs that contribute to gross GHG goals and would not be accounted for elsewhere. For the purpose of performance incentives, spillover and free ridership would be included as part of the typical net savings calculations.
- vii. The PAs will evaluate market effects this term, and those evaluation findings will be used to claim market effects savings starting in 2025. This rigorous evaluation of market effects that accrue over the long term will include:
 1. Studying barriers to heat pump adoption.
 2. Establishing and documenting a program theory for the PA’s market transformation efforts, including key indicators that would be expected to change as the market transforms.

3. Gathering baseline information for key indicators of market transformation starting in 2022 and measuring them over time to understand the extent of market transformation the PAs are generating.
4. Adapting program strategies to address evaluation findings during the term PAs.

The PAs will include an initial market transformation plan and brief description of their initial program theory in the planned narrative submitted on November 1, 2021.

2. Fuel switching baselines

2A. Baselines for fuel switching in existing buildings (i.e., custom retrofit fuel switching)

For custom retrofit projects, the parties agree that the baseline fuel should be the preexisting fuel.

With regard to the type of equipment assumed to be the baseline for custom retrofit projects, the parties agree that fossil fuel to electric heat pump switching occurring under the C&I Existing Building Retrofit initiative and supplanting all or part of both existing heating and cooling services to the affected loads will use the existing heating and cooling system types in establishing baseline energy use. This applies to both end of life and early retirement measures. Evaluation will assess system baselines for heat pump impacts covered by this agreement, and relevant evaluation findings will be used to inform baseline assumptions for future plans. C&I heat pump baselines not explicitly covered by this agreement will be determined using existing EM&V frameworks and practices and applied to the following program year as with other impact parameters.

Regarding assumptions for the efficiency of baseline equipment, the parties agree that custom fuel switching retrofit projects will use a single existing efficiency baseline *if* PAs confirm that the replaced equipment was operational at the time of replacement and an independent agency (e.g., a TA vendor) provides qualitative statement about the operation/condition of the equipment which supports the claim that the customer would have continued to use this equipment for the foreseeable future. This statement would be based on a site visit and discussion with facilities personnel, visual inspection of equipment, and maintenance logs (if available).

2B. Baselines for fuel switching in C&I new construction

The parties agree to use following guidelines for fuel switching C&I new construction projects¹:

- a) Use a gas baseline for customers with gas service available, and a delivered fuel (propane) baseline for customers who do not have gas service available. In this case, the PAs propose defining gas service as being “available” for a new building if the nearest neighboring building has gas service (or within 100 feet of property line).
- b) Agree that evaluation will not overturn the fuel type of a baseline in the future.
- c) Apply a NTG value to fuel switching savings in the model to account for those customers who would have installed a heat pump on their own, without program influence. These customers exist and must be accounted for in the savings claimed by PAs. Since there isn’t currently an evaluated value for C&I electrification NTG, the parties agree to use a negotiated value for 2022,

¹ This proposal is not intended to waive any PA argument presented to and pending before the Department of Public Utilities in D.P.U. 16-169.

and conduct a study during that year to arrive at a researched NTG value or values for the remainder of the Plan term.

3. BERDO and other Local Energy Initiatives

As cities and towns have increasingly adopted more stringent energy polices, a primary driver of adoption of these policies is access to EE incentives and, more generally, PA program support of these municipalities and customers in these jurisdictions. Municipalities depend on PA incentives to help customers meet the higher efficiency levels they strive for. Stakeholders expect customers subject to the Boston Building Energy Reporting and Disclosure Ordinance (BERDO) and other local energy initiatives would continue to have access to Mass Save technical assistance, vendors, incentives, etc., as a path to complying with these standards.

Given this context, the parties agree that the PAs should be able to serve customers in areas with BERDO and the parties agree to apply this concept to other similar municipal ordinances. The parties also agree to work together to determine how to apply this concept in practice.

Issue 4: Application of C&I new construction industry standard practice (ISP) baselines

The parties agree that new construction whole building projects be evaluated against the baselines that were in effect at the time of project initiation. Project initiation is defined as the earliest of the following milestones that could occur, depending on the project and PA: 1) Memorandum of Understanding date; 2) Engineering Service Agreement date; 3) Signing of any application; 4) Signing of a registration form. Under this policy, all new projects would incorporate the most up-to-date ISP baselines available at the time of project initiation. Those baselines will be considered locked at project initiation from an evaluation perspective. Therefore, realization rates will account for errors in baseline choice or discrepancies/errors in savings assumptions, but they will not retrospectively apply impacts from new ISP baselines to older projects. Instead, the programs will ensure on the front end that all new projects use the most updated baselines available. For projects that were initiated under a retrospective framework (prior to 2022) but close under a prospective framework (2022 and later), the PAs propose using the same prospective evaluation treatment and holding these projects accountable in evaluation to the baselines that were in place at the time of project initiation.