

*Via First Class Mail and E-Mail  
August 31, 2012*

Mark D. Marini, Secretary  
Department of Public Utilities  
One South Station, Fifth Floor  
Boston, MA 02110

**RE: D.P.U. 08-50: ROBUST BILL IMPACT MODELING FOR ENERGY EFFICIENCY PROGRAMS**

Dear Secretary Marini,

On behalf of Northeast Energy Efficiency Partnerships (NEEP), ENE (Environment Northeast), Mass Energy Consumers Alliance, Conservation Law Foundation (CLF) and Conservation Services Group (CSG), we appreciate the opportunity to provide the following comments on the Department of Public Utilities' (the "Department" or "D.P.U.") approach to analyzing the bill impacts of energy efficiency program funding. In particular, we urge the Department to retain a bill impacts model that measures both the cost and benefit impacts of efficiency funding on customer bills.

We are concerned that the Department is contemplating a proposed change in how energy efficiency program administrators will be required to conduct bill impact analysis, as announced by Department staff at the meeting of the Bill Impact Working Group (the "Working Group") on August 16, 2012. It is our view that such an analysis would provide an incomplete picture of how energy efficiency program funding affects customer bills. Reverting to the so-called "traditional" bill impact analysis would only show the short-term cost of energy efficiency and not the long-term benefits. The proposed change in methodologies would also fail to consider the simple fact that a saved unit of energy costs less over time than does a unit of new energy supply.

While Department staff members have indicated their belief that the program portfolio benefit-cost analysis and the Avoided Energy Supply Component ("AESC") report<sup>1</sup> will be sufficient in documenting positive impacts on ratepayers, we stress that these alone do not provide a full accounting of the benefits of energy efficiency. Not only does energy efficiency provide proven savings and other benefits for program participants, it also delivers system-wide energy-savings and economic benefits for all customers.

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<sup>1</sup> The AESC report projects marginal energy costs that will be avoided due to reductions in energy use that come as a result of efficiency programs across New England. <http://www.ma-eeac.org/docs/PAcites/AESC%202011%20Final%20-amended%208-11-11%20-Synapse.pdf>

## Background

Under the Green Communities Act, the Department is charged with ensuring that “electric and natural gas resources needs shall first be met through all available energy efficiency and demand reduction resources that are cost-effective or less expensive than supply.”<sup>2</sup> Under this mandate, the Department may approve efficiency funding after considering, among other things, “the effect of rate increase on residential and commercial customers” proposed by Program Administrators (“PAs”).<sup>3</sup>

To meet these statutory requirements, the Department required the PAs to “present a comprehensive estimate of how energy efficiency programs are likely to impact customers’ rates and average bills, and describe why the estimated impacts are appropriate in light of the expected benefits of the energy efficiency programs.”<sup>4</sup>

In our understanding, “traditional” bill impact analysis used prior to D.P.U. Order 08-50 and in non-efficiency rate cases:

- Calculates only the costs of spending, yet labels this calculation “bill impacts;”
- Ignores the direct energy and demand savings seen by efficiency program participants; and
- Ignores the price impacts, transmission and distribution (T&D) upgrade deferrals, and other avoided costs that accrue to all ratepayers.

Following enactment of the Green Communities Act, the D.P.U. was explicit in its determination that the “traditional” Rate Impact Measure Test would be insufficient in evaluating energy efficiency programs, stating:

in reviewing energy efficiency program implementation the Department will consider the effects of increased distribution charges and average bill impacts, as we typically do with respect to any proposal for a change in a rate, tariff or charge jurisdictional to the Department. However, the Department finds that the Rate Impact Measure test is too limited and an inappropriate tool for the Department’s review. Rather, we will require Program Administrators to provide for the Department’s review a more comprehensive analysis of rate and average bill impacts than the Rate Impact Measure test allows.<sup>5</sup>

As a result, the Department, in concert with the Working Group, developed a robust bill-impacts model that captured a broad spectrum of bill impact cost and benefit information for both program

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<sup>2</sup> G.L. c.25, § 21 (a)

<sup>3</sup> G.L. c. 25, § 19 (a)

<sup>4</sup> D.P.U. 08-50-A, Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines Consistent with An Act Relative to Green Communities (March 16, 2009), pg 57. <http://www.ma-eeac.org/docs/DPU-filing/08-50-A%20Order.pdf>

<sup>5</sup> D.P.U. 08-50-A, pg 18

participants and non-participants.<sup>6</sup> This model sought to take data that had previously been siloed — “traditional” bill impacts analysis for cost, other studies such as the Total Resource Cost (TRC) test<sup>7</sup> and AESC for benefits — and improve upon it to develop a fuller understanding of the actual cost to ratepayers. The Department has consistently tried to have the working group account for the long-term effects of efficiency in rates and bills.<sup>8</sup>

Indeed, some of the work done in Massachusetts has been held as a model of best practices for the region and the nation, showing that heightened investments in energy efficiency at an appropriate level and pace can benefit all customer classes.<sup>9</sup> The State Energy Efficiency (SEE) Action network convened by the U.S. Department of Energy produced a guidance document that echoes the Department’s expanded approach to bill impact analysis, stating “[w]e recommend a completely different approach to addressing rate impacts from energy efficiency programs.”<sup>10</sup> The document continues:

In analyzing rate and bill impacts of energy efficiency programs, it is important to account for the long-term savings as well as the short-term costs. It is also important to account for all the ways in which rates may be affected, including reduced generation costs and reduced wholesale electricity prices. The Ratepayer Impact Measure (RIM) test is an insufficient indicator of rate impacts, as it is overly narrow and does not present rate and bill impact information in a way that is useful to regulatory commissions.<sup>11</sup>

At the most recent meeting of the Bill Impact Working Group, Department staff presented a brief history of bill impact analysis describing the “traditional” analysis required when utility companies seek rate increases for any reason. From this presentation, it appears that the Department is seriously considering a return to a more “traditional” bill impact requirement when analyzing the impacts of efficiency funding proposals.

#### The Department Should Retain the Current Approach to Bill Impact Analysis and Should Not Revert Back to a “Traditional” Analysis Model

Rejecting all of the work of the Department, the Working Group, and the PAs in approaches developed under Order 08-50 in favor of the “traditional” model that is solely concerned with cost would misrepresent the actual bill impacts of energy efficiency. What is most important when assessing the

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<sup>6</sup> “Bill Impacts of Energy Efficiency Programs,” Presentation of D.P.U. Commissioner Tim Woolf to NARUC, February 2010. <http://www.narucmeetings.org/Presentations/Woolf-efficiency-bill-impacts.pdf>

<sup>7</sup> The TRC, or Total Resource Cost test, is focused on the cost-effectiveness of efficiency programs but does not examine wider impacts on energy users as a whole.

<sup>8</sup> D.P.U. order 08-50-B, pg 17

<sup>9</sup> 2009 AESC report, [http://www.nationalgridus.com/non\\_html/eer/ne/2009\\_NE\\_AESC\\_Report.pdf](http://www.nationalgridus.com/non_html/eer/ne/2009_NE_AESC_Report.pdf), pg. 20.

<sup>10</sup> “Analyzing and Managing Bill Impacts of Energy Efficiency Programs: Principles and Recommendations,” State & Local Energy Efficiency Action Network, July 2011. [http://www1.eere.energy.gov/seeaction/pdfs/ratepayer\\_efficiency\\_billimpacts.pdf](http://www1.eere.energy.gov/seeaction/pdfs/ratepayer_efficiency_billimpacts.pdf) pg. iii

<sup>11</sup> Id.

likely impacts on utility customers is to look at the factors that could cause bills to go up or down as a result of the proposed rate. Cost is only one side of the ledger.

As the D.P.U. wrote in its 08-50 A order:

While energy efficiency programs will typically increase customers' distribution rates, average bills should be lower than they would be without energy efficiency programs. In evaluating rate and average bill impacts, Program Administrator should fully investigate the tradeoff between increased rates and reduced bills. This is particularly important because, while energy efficiency programs result in rate increases to the distribution rate, they result in savings on the entire bill. Thus, the Department expects rate and average bill impact analyses to include estimates of both absolute and percentage impacts on total customer bills, for each rate class, for the period that includes the average life of the energy efficiency measure.<sup>12</sup>

Reverting back to a "traditional" analysis risks creating a one-sided approach that does not fully measure the ways efficiency can help control costs for all customers, including the Demand Reduction Induced Price Effect, or "DRIPE," which the Department describes in regards to price suppression on wholesale and capacity markets:

These lower wholesale prices will reduce the commodity costs for electricity, which will result in lower bills for all electricity customers. In addition, by reducing electricity demand, energy efficiency programs can help lower the costs of complying with the Massachusetts Renewable Portfolio Standard and RGGI.<sup>13</sup>

We support the Department's objectives of minimizing and disclosing bill impacts, but assert that, because energy efficiency is a both a capacity and energy resource, it allows the Commonwealth to meet an increasing percentage of load at far less than the cost of new generation resources. As such, rate adjustments through energy efficiency surcharges are different in kind from other proposed rate changes, and should be treated accordingly under Departmental review.

Moreover, reverting back to a traditional bill impacts model is unlikely to deliver any administrative efficiencies for the Department or other stakeholders. Employing a traditional bill impacts model ignores the change in bills due to efficiency-related cost-savings. As a result, any relevant bill savings information not captured in the initial analysis will necessarily come through the discovery process

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<sup>12</sup> D.P.U. 08-50-A, pg 58

<sup>13</sup> D.P.U. 08-50-A, pg 59

within a D.P.U. proceeding. Drawn out discovery processes could be avoided by preserving the current bill impacts analytical model.

If the Department no longer requires the PAs' model to compare a scenario with and without efficiency, Massachusetts risks forfeiting the opportunity to calculate and report a very tangible number – the dollar amount of a change in a monthly bill from energy efficiency.

As advocates of energy efficiency and organizations that are all deeply invested in the long-term success of these programs in Massachusetts, we urge the Department to preserve the bill impact analysis model and the procedures developed under 08-50 A & B through the multi-stakeholder Bill Impact Working Group.

While there is perhaps room for improvement in the analytical framework the Department used to evaluate the bill impacts in the 2010-2012 efficiency plans, that approach — as well as the revised one introduced by the program administrators at the June 25 Working Group meeting — are both superior to the “traditional,” costs-only model currently being considered.

In our view, a sound bill impacts approach:

- Accounts for both cost of and savings from energy efficiency program implementation;
- Considers the benefits and costs for all customer classes, and compares potential impacts on program participants and non-participants;
- Recognizes that spending on efficiency is very different from other charges that use the traditional bill impacts analysis (Lost Base Revenue, Gas Adjustment Factor, etc.); and
- Can calculate a very tangible number – the dollar amount of a change in a monthly bill from energy efficiency.

The number of customers who are program participants is another key piece of the energy efficiency bill impact analysis. According to modeling done by the Bill Impacts Working Group, participants will see additional bill decreases from reduced usage from the more efficient products, while non-participants are more likely to see just the rate impact on their bills, with even non-participants benefiting over time. The ratio of participants to non-participants is an important piece of information, as it provides an indication of the amount of customers likely to experience bill increases or decreases.

The analysis model in use under the first three-year plans and the revisions to the model presented by the PAs in June served well to capture not only the costs but also the benefits to customers in a heightened efficiency investment scenario. These models also demonstrate the wholesale electric market price suppression effects that can be seen across the grid.

It is worth noting that due to increasing, sustained and measured savings of energy efficiency programs in Massachusetts and in neighboring states, ISO-New England recently deferred hundreds of millions of

dollars in transmission projects that are no longer needed, at least in part because of transmission planning forecasts that appropriately contemplate lower peak loads due to increased energy efficiency.

Massachusetts has long been held as a leader in energy efficiency programs and policies, having been recognized for the first time as number one in the nation in ACEEE's 2011 State Energy Efficiency Scorecard.<sup>14</sup> The policy objectives laid out in the Green Communities Act of 2008 are a large factor in the state's continuing success at capturing cost-effective efficiency opportunities, helping customers save money and increase comfort while contributing towards a host of broader economic and environmental objectives.

To sustain and build upon this success, it is vital that the Commonwealth's regulatory framework be sound and forward-looking, to ensure the ongoing progress in valuing and harnessing the multiple benefits of energy efficiency programs. While the Department's electric and gas division staff positioned this change as something that would have minimal effects on the Commonwealth's ability to pursue aggressive savings goals, we caution that eliminating a robust rate impact analysis could undermine the long-term viability of the state's current energy efficiency trajectory, without delivering any administrative efficiencies.

We therefore urge the Department to preserve a balanced approach to analyzing bill impacts of efficiency programs. The Department should build upon the bill impact analysis called for in orders 08-50 A and B and should direct the PAs and other members of the Working Group to continue work on a model that accounts for the full impact of energy efficiency programs to ratepayers, and reject a reversion to a more "traditional" approach. Our organizations are committed to supporting and participating in the development of solutions that serve the best interests of the Commonwealth's electric and gas customers while supporting its broader public policy objectives. We believe that a well-conceived energy efficiency bill impact analysis model can and should do both.

We appreciate the opportunity to submit these comments and look forward to continuing to work with the Department and all stakeholders in this important matter.

Sincerely,



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(more)

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<sup>14</sup> <http://aceee.org/sector/state-policy/scorecard>

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