Comments of Natalie Hildt, Manager of Public Policy Outreach
Northeast Energy Efficiency Partnerships (NEEP)
To the Energy Conservation Management Board (ECMB)
Regarding the 2011 Energy Efficiency Plans
July 15, 2010

Chairman Gaudiosi and members of the Board:

NEEP is pleased to present input on the 2011Conservation and Load Management (CL&M) plans as being developed through the Connecticut Energy Efficiency Fund (CEEF).[1]

As you know, NEEP is a regional nonprofit that promotes the efficient use of energy in homes, buildings and industry in the Northeast. We advance cutting-edge products and practices through coordinated, whole-building efficiency programs and policies. Saving energy creates a stronger economy, a cleaner environment and a more reliable and affordable energy system.

Introduction

Connecticut has a history of providing leading-edge energy saving programs for its electric and gas customers. The state's policymakers, business leaders, utility companies, consumer and environmental advocates have long realized that efficiency is the cheapest, cleanest, smartest way to meet the state's growing energy demand. It helps stabilize the electric grid and controls power costs for all. And because efficiency curbs emissions and is an economic engine, it is even more valuable as a policy tool to propel the state out of recession and help meet the twin policy goals of clean air and greenhouse gas reduction.

Yet Connecticut has been challenged in moving forward under the mandate of Public Act 07-242, the directive that requires utilities to procure all cost-effective energy efficiency before turning to fossil fuel generation. This is due in part because of short-sighted funding raids as administrations seek to bridge budget gaps, but also because the Department of Public Utility Control (DPUC) has taken what is, in NEEP's opinion, an overly skeptical position on the potential of wide-scale efficiency to drive down energy costs for all.

We understand that some at the DPUC have expressed concern that the All Cost-Effective Achievable scenario would increase costs for non-participants while decreasing costs for program participants. While this may be true in the short-run in small increments and to varying degree depending on rate class, NEEP would again urge the Department to look to neighboring states on the issue of bill impacts. With significantly increased investments in efficiency, overall energy costs would likely decline with substantial, permanent reductions in the load curve.

[1] These comments are offered by NEEP staff and do not necessarily represent the view of NEEP's Board of Directors, sponsors or underwriters.

Where analysis has been done on impact scenarios from increased surcharges to build efficiency funds in other states – specifically, the Rate Impact Working Group in Massachusetts convened under the Green Communities Act – the conclusion has been that any rate impacts would be nominal compared to the significant savings realized through the capture of all cost-effective energy efficiency. The so-called Demand Reduction Induced Price Effect, or "DRIPE" has the potential to drive energy costs down for participants and non-participants alike. NEEP continues to monitor this working group and experiences of other states.

In any event, it now appears that these vital programs may soon be short-changed by more than $28 million a year, with ratepayer money being siphoned off for years to come. This administrative move would no doubt have devastating effects on the integrity of the programs, on the commercial and residential customers who will not be able to rely on them, and on the broader economic, environmental and electric system objectives of the state.

Integrated Program and Policy Strategies are Essential

Under the looming reality of efficiency programs with a third less funding beginning in 2012, the state and program administrators will need to get even more creative to wring increased kWh and therm savings out of every ratepayer dollar invested in efficiency.

NEEP again stresses the importance of leveraging the utility-run programs with complementary state energy policies. In addition to offering traditional audit and incentive programs, we believe that it is entirely appropriate for ratepayer dollars to be used to advance building energy codes, to research and see adopted new appliance efficiency standards, to educate customers about behaviors and maintenance that will save them energy, and engage in upstream market transformation initiatives.

Codes and standards can and should work hand-in-hand with ratepayer programs to "lock in" those savings and continue the upward cycle of development of energy efficient technologies and practices. The state's utility companies are uniquely qualified and positioned to deliver services such as building energy code training on measurement and compliance to building professionals, and should be allowed attribution of the savings they help deliver.

Utilities should also be involved in advancing appliance efficiency standards. We applaud the DPUC's draft ruling that the utilities should become involved in such projects. As you may know, California's utilities have long taken an active role in developing and advancing codes and standards, and state and utility officials in Massachusetts are currently determining how such a model will work there.

Building energy rating and disclosure can create a market-driven path to lowering consumer energy costs, signaling to potential buyers or renters, realtors, and banks the true value of efficient mechanical and lighting systems and building envelope. As the experts in building energy solutions for residential and commercial customers, it makes sense that utilities should be involved in developing such a program for the state.

Financing options, including Property Assessed Clean Energy (PACE) programs funded through municipal bonds or other means, as well as low-interest financing options, can provide critical leverage to incentive-based programs. But they cannot stand alone, and must be carefully crafted to protect all involved from undue risk.

Strengthening building codes and appliance standards, building energy rating and disclosure, operation and maintenance training, consumer education, market transformation efforts and new financing options are some of the tools that can help make typical incentive programs go further to help Connecticut save energy.

Program Strategies Overview

Funding concerns not with-standing, Connecticut and the region are entering a new era in energy efficiency. Much of the low hanging fruit has been claimed. Standard incandescent lamps are soon to become heavily impacted by the Energy Independence and Security Act of 2007 (EISA) federal minimum efficiency standard, and compact fluorescents will thus become the baseline technology, driving savvy states and program administrators to recognize them as a stepping stone on the increasingly short path to solid state lighting.

State policymakers have indicated an interest in going deeper with savings, but deeper is not cheaper. The ECMB and the DPUC will have to keep their eyes on total portfolio savings and the mandate to go after *all* cost-effective efficiency, not just the opportunities with the most favorable Total Resource Cost (TRC) test ratio. Indeed this mandate, by definition, calls for benefit-cost ratios approaching 1.0 and thus allows increased costs per unit of energy saved.

In addition to thinking differently about the regulatory framework through elements such as cost-effectiveness screening, NEEP submits that evolving the programs to address market changes and new focus points will facilitate deeper savings and prepare for the next generation of technologies to deliver future energy savings. These suggestions include:

Upstream Market Focus

Manufacturers and retailers will respond to market demands, and it is the job of the programs to help shape and advance that demand. Efficiency programs should begin moving away from traditional customer rebate options and focus much more on upstream entities and market transformation. Efficiency dollars invested in public awareness campaigns, marketing premium efficiency technology and training for salespeople, trade and building professionals (i.e., sustainable, market-oriented infrastructure development) is money wisely spent, and will continue to build demand for the types of products and practices that will transform buildings and their energy consumption.

Whole Building Focus, Including O&M

It is NEEP's perspective that sustainable, comprehensive programs demand broader market engagement rather than primary reliance on large contractors. This means bringing more trade allies into the fold, whether they are mechanical, electrical or weatherization specialists. More of these technicians will need to be educated and integrated into a whole building framework. While Connecticut has been a leader in this area, we do not believe that Connecticut's whole buildings programs are either market-oriented or comprehensive enough. There is still too much reliance upon direct installation by service providers who are under contract to the utilities, and limitations to the scope of services they are licensed and/or bound by contract to provide.

We would urge the ECMB and the utilities to consider how well the programs relate to each other. For example, does the C&I Operation and Maintenance program clearly and demonstrably feed the Energy Opportunities program? If not, it should. With the economy down and given the tremendous untapped efficiency potential in existing buildings, it is important that programs focus there. O&M training as well as retrofits can be excellent and cost-effective ways of deriving savings.

Target Consumer Electronics

We urge the state to support and utilize TopTen USA, a web-based initiative to help residential and commercial users research and purchase the most energy efficient products in the U.S. marketplace. TopTen USA can serve as a platform for both upstream and consumer incentives targeting those products. The site will be launched in the coming months as a beta site, and is expected to be fully operational by 2011.

Residential Solid State Lighting

In 2012, the ubiquitous "A lamp" incandescent bulb will begin to be phased out of the market place. Quality assurance testing and ENERGY STAR® specifications for lighting are undergoing significant changes. New U.S. Department of Energy (DOE) testing processes are now in place and others are being developed, as are new protocols and requirements for approved testing facilities. At the same time, the U.S. Environmental Protection Agency (EPA) is, through a recent memorandum of understanding with DOE, consolidating control over labeling for all ENERGY STAR products and services and has initiated a comprehensive overhaul of how ENERGY STAR treats all forms of lighting. We encourage Connecticut's program administrators to heavily engage in the EPA's process of redesigning ENERGY STAR specifications for lighting and other products.

Residential HVAC and Water Heating

NEEP gives high marks to the state's program administrators for their work in bringing ductless mini split heat pumps to the market. In conjunction with the working group process facilitated by NEEP, Connecticut has become a model for the region in bringing this cutting-edge HVAC technology to the mainstream of its efficiency programs. Next up for programs should be heat pump water heaters. NEEP has demonstrated national leadership in the development of this technology and market, and stands ready to aid in a similar process to bring this high-efficiency technology to Connecticut's marketplace.

Multifamily Housing Programs

Connecticut has emerged as a leader in delivering all fuels energy efficiency to existing multifamily buildings. We encourage the state to continue down the path of serving multifamily units with whole building energy solutions. These programs are critical in terms of delivering savings to residential rental and condominium dwellers, many of whom would otherwise be limited in their options to control energy costs.

Commercial and Industrial Lighting

The state continues to be a leader in the development of NEEP's Qualified Solid State Lighting Products List process, a highly-regarded national system to verify performance of commercial lighting products not addressed by ENERGY STAR. Now Connecticut can begin moving commercial solid state lighting more into the mainstream of the programs. Beyond solid state lighting, 2011 will be the critical year for lighting in general, with a fundamental shift in how commercial lighting design is undertaken and how savings are calculated. This will happen via the U.S. Department of Energy's Commercial Lighting Solutions program, which is launching for the commercial office and retail sectors this year and will continue to expand next year. Embedded in that initiative is a switch from how savings are calculated - from use of lighting power density and stipulated or "bin" hours of use, to modeling annual kWh performance net of day-lighting and controls as the basis of savings.

We encourage Connecticut to be a leader in shifting to that new model by supporting development and deployment of market-actor training through the NEEP DesignLights Consortium's regional training and deployment effort now under development and co-branded with DOE's Commercial Lighting Solution. This work is making the region *the* national pioneer in shifting to this new model. Similarly, we encourage Connecticut to develop the evaluation, measurement and verification practices required to support this shift.

Conclusion

In the coming years, the state and program administrators will be asked to do more with less. This is why new, creative and holistic thinking is essential. The same stand-by programs will not continue to deliver the same levels of savings. New technologies will need to be explored and integrated into whole-building programs. Efficiency starts with smart operation and maintenance, weatherization programs and customer education.

Programs also need to work hand-in-hand with other public policies like building energy codes, appliance efficiency standards, and building energy performance labeling and disclosure. This will help maximize savings, minimize cost and harness market forces to the benefit of the entire state and the region. Similarly, programs have an opportunity to deeply coordinate with other new players in energy efficiency related to the American Recovery and Reinvestment Act (ARRA) and the growing emergence of community energy efficiency efforts.

The state should also support innovative ways for the program administrators to help customers realize savings. This may be through access to low-interest financing, upstream market work, or meter data-driven informed choices to help customers operate their buildings more effectively. The utilities and their partners have shown effective leadership in delivering efficiency programs to residential and commercial ratepayers, and should be afforded full support to wring savings out of these dollars through alternative methods that have been tried and tested in neighboring states such as Vermont and Massachusetts.

Thank you for the opportunity to comment on this important plan. NEEP stands ready to provide advice and support to the state as you pursue clean, efficient energy solutions for Connecticut's long-term future.