



[via e-mail](#) - December 14, 2012

Comments of Northeast Energy Efficiency Partnerships (NEEP) On Connecticut's Draft Comprehensive Energy Strategy

Debra Morrell, Administrative Coordinator
Department of Energy and Environmental Protection
Bureau of Energy and Technology Policy
Ten Franklin Square
New Britain, CT 06051

Dear Ms. Morrell,

On behalf of Northeast Energy Efficiency Partnerships (NEEP)¹, thank you for the opportunity to provide comments relative to the Draft Comprehensive Energy Strategy (CES) for the State of Connecticut, as developed by the Department of Energy and Environmental Protection (DEEP). These comments follow the oral testimony we delivered at the Nov. 27, 2012 technical hearing on the energy efficiency chapter of the draft Strategy.

In summary, NEEP commends Governor Dannel Malloy, DEEP Commissioner Dan Esty, and the entire DEEP staff for their leadership in setting energy efficiency as a first-order energy resource for the state. The CES brings together many different elements of energy policy into a comprehensive strategic plan for meeting the state's energy, economic and environmental goals. While the Strategy addresses all energy-related elements, ranging from electricity supply and renewable energy, to transportation and natural gas imports, we are very pleased to see that the cornerstone of the Strategy is energy efficiency.

Aside from our general support, we'd like to offer a few comments on ways to make this forward-looking document even stronger. In particular, we:

- Echo the Strategy's emphasis on capturing all cost-effective energy efficiency, and for promoting a conservation adjustment mechanism (CAM) to help fund the more comprehensive energy efficiency programs needed to realize much deeper energy savings;
- Support expanded thermal efficiency programs by establishing a stable and sufficient oil heat funding mechanism;
- Agree that private financing needs to be increased to maximize savings opportunities, but caution that such financing should *complement*, not *replace* ratepayer-funded efficiency programs; and
- Encourage the state and utilities to heed the lessons from Hurricane Sandy and develop and/or expand upon policies and procedures that will expedite the deployment of efficiency solutions after any natural

¹ These comments are offered by NEEP staff and do not necessarily represent the view of the NEEP Board of Directors, sponsors or partners.



disaster, so that long-term opportunities for savings are not lost in the rush to rebuild and replace failed equipment.

In our oral comments, NEEP also raised several specific building efficiency policies that we respectfully suggest should be even more of a focal point of the Strategy, and asked DEEP staff to reconsider how these policies can best be advanced, either through legislation or administrative directives. These recommendations include:

- Support for DEEP's acknowledgement that the state needs to adopt the latest updated model energy code by July 1, 2013, as well as its recognition of the importance of "measures that will better ensure that building inspectors understand and enforce the energy portion of the building code." In relation to this acknowledgement by DEEP, let me reiterate NEEP's offer of support to help the state devise a better system for **assessing building energy code training and compliance**. This offer was discussed in some detail with Deputy Commissioner Katie Dykes in a meeting we participated in with Connecticut Light and Power, United Illuminating and a number of our fellow energy efficiency advocacy allies on August 22 in New Britain. Attached to these comments please find a copy of a memo (marked as Attachment A) we later forwarded to Deputy Commissioner Dykes outlining our strategy for enhancing the assessment of code compliance in the state. While the utilities have offered to fund such an effort through their Conservation and Load Management program budget for this year, that funding can no longer be made available after the end of this month. Thus, if DEEP wishes for this code assessment plan to be realized, the utilities will need to know immediately whether they are approved for the expenditure of those funds to implement this strategy.
- Noting the omission of any recommendation related to a **stretch building energy code** as a fundamental improvement to 16a-38k regulations, NEEP has offered to work with DEEP and the Department of Construction Services/State Building Inspector to bring forth for adoption an appendix to the energy code that can function as a single-option to provide guidance for deeper energy savings for municipal, commercial and residential construction and renovation projects. In addition, NEEP has a model code to offer for these purposes that is easily adaptable to the needs of Connecticut. Although DEEP's consultants have noted that new construction has slowed in the state, an advanced energy code can still deliver significant cost effective savings when buildings are renovated by making cost-effective changes to existing buildings code requirements.
- We strongly suggest that DEEP's recommendations on **building energy rating/labeling and disclosure** go much further than was outlined in the CES. We support the proposed residential energy labeling program currently being piloted by United Illuminating, and see that as a logical means for working with the U.S. Department of Energy to enhance its Home Energy Score tool. We also fully expect and strongly urge DEEP to signal that this pilot will in the very near future serve as the basis for a mandatory home energy rating and disclosure program in the state.

However, we are disappointed to find that the Strategy makes no suggestion regarding commercial building rating and disclosure, other than suggesting that the General Assembly consider legislation to require owners to provide energy cost data to tenants. Given that many jurisdictions in recent months have adopted or are moving to adopt commercial building energy benchmarking policies – Washington, D.C., Philadelphia, New York City and Boston, among them – the time is right to address that part of the building stock. NEEP recommends a statewide commercial benchmarking program as a start, with



the eventual adoption of a commercial asset rating program as a complement once models currently being tested become available. As NEEP is working closely with the Massachusetts Department of Energy Resources on a pilot to test innovative and cost-effective ways to provide an asset rating for commercial buildings, we would be more than happy to work with DEEP to develop a strategy for implementing a rating and disclosure system for Connecticut.

- While the Strategy does reference a case study on ‘**Leading by Example**’ in public buildings, we would recommend that the Strategy go further in addressing energy consumption in state and municipal facilities. First, we would suggest that DEEP continue to offer and promote the Northeast Collaborative for High Performance Schools (NE-CHPS) protocol for new school construction. NE-CHPS has shown to be the most effective model available for reducing energy use in K-12 new school construction. Beyond new school construction, NEEP has made available a best practices guide to operations and maintenance in both schools and other public buildings, and would be more than happy to work with DEEP in getting this guidance into the hands of those municipal and state facilities managers who can most benefit from it. Lastly, we would urge DEEP to require that all public building facilities managers be certified in resource-efficient operations and maintenance practices. As such training is readily available through the state’s utility companies, this would be a logical step to ensure that public dollars are being stretched as far as possible by infusing energy efficiency into standard O&M practices.
- Lastly, we urge DEEP – as one of only *two* states in the country with administrative authority to set its own **appliance efficiency standards** – to use its authority and not only investigate opportunities for setting new state-based standards, but weighing in more forcefully with the U.S. DOE to ensure strong new federal standards to benefit Connecticut ratepayers.

As the public policy director for a regional efficiency organization that tracks efficiency policies in 11 states and the District of Columbia, let me reiterate how impressed we are with Connecticut’s collective support and leadership to harness the numerous benefits of energy efficiency. We thank Gov. Malloy, Secretary Esty, Deputy Secretary Dykes, and other leaders and partners in the utility, non-profit and energy services sector for their efforts to deliver efficiency to residents and businesses, and for helping to shape this important Strategy. NEEP continues to hold Connecticut’s programs and policy efforts as models of best practices to other states.

Thank you for considering NEEP’s input during this important period of planning for Connecticut’s energy future. Again, we are very encouraged by all of the commitments shown by DEEP, and look forward to continued collaboration as the elements of the Comprehensive Energy Strategy move to implementation.

Sincerely,

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Director of Public Policy
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Connecticut:

Enhancing Energy Code Compliance Assessments

TO: Katie Scharf Dykes, Deputy Commissioner for Energy, DEEP

FROM: Connecticut Code Compliance Coalition

RE: Proposal for enhancing energy code compliance assessments

DATE: Oct. 10, 2012

Following our meeting of August 23, 2012, a coalition of groups¹ concerned about the shortfalls in the determination of Connecticut's building energy code compliance rates - and what it means for related attempts to develop and deliver code training in the state - agreed to provide the Department of Energy and Environmental Protection (DEEP) with a proposal for enhancing the current building energy code assessment efforts in the state.

This memo describes the coalition's proposal and its recommendations for how to move forward in the immediate term future to determine gaps in energy code compliance in a manner that will allow the state's utility companies and others to develop building energy code training that is targeted toward those elements of building construction and/or renovation that most often miss required code elements.

INTRODUCTION

As has been previously discussed with Commissioner Daniel Esty and Deputy Commissioner Katie Scharf Dykes, and as outlined in a memo delivered to DEEP in March 2012, our coalition holds that a comprehensive state-level strategy to advance energy efficiency must address minimum standards of building energy performance, and, in particular, building energy codes. Our recommendations at the time included the following five priority items:

Priority #1	Determine CT's energy code compliance rate.
Priority #2	Achieve FULL compliance with the 2009 model energy code by December 2017.
Priority #3	Develop and publish CT's Strategic Compliance Plan.
Priority #4	Develop a funding mechanism for ongoing code work, support and implementation.
Priority #5	Adopt the 2012 International Energy Conservation Code (2012 IECC) by July 1, 2013.

As the state assured the U.S. Department of Energy (DOE) that it would achieve at least a [90 percent compliance rate](#)² by December 2017 in return for its funding made available through the American Recovery and Reinvestment Act (ARRA), **Priority 1, determining Connecticut's current energy code compliance rate, is of immediate concern.** Not only would such determination allow the state to establish a baseline from which to measure its progress toward achieving the ARRA-mandated compliance goal, but it would make best use of ratepayer dollars in targeting code training to address those gaps in design and construction that lead to failure in meeting code.

¹ This coalition consists of Northeast Energy Efficiency Partnerships (NEEP); the Connecticut Energy Efficiency Fund/Connecticut Light&Power and United Illuminating; Connecticut Fund for the Environment; Environment Northeast; Sierra Club; and Norwalk Community College.

² <http://www.energycodes.gov/events/energycodes/presentations/ECodes09/monday/compliance.pdf>

With this in mind, our coalition proposes the following:

DRAWING A CONNECTICUT COMPLIANCE ROADMAP

SCOPE: Determine conditions affecting energy code compliance (new construction/renovations; residential/commercial) across the building construction development process to:

- 1) Establish a baseline of energy code compliance, and
- 2) Determine and engage complementary support efforts and resources that will assist Connecticut in achieving all minimum 2009 energy code requirements in its construction projects, thereby meeting DOE compliance goals.

GOAL: All new building construction and renovation requiring a permit shall be designed, reviewed, constructed and inspected as meeting all minimum requirements of the adopted energy conservation codes and standards. The state will be able to demonstrate an effective compliance rate with the 2009 IECC of 90 percent or better to DOE before 2017, consistent with the established federal goal.

PROCESS: A survey of local officials will be undertaken to better understand how department structure, duties, processes, obligations, limitations, training and funding affect the information and data gathered. All recommendations should be informed by continuing review and field verifications of gaps in identified knowledge; understanding of required construction techniques, procedures, testing, expected results, reports and filings; plus developments in new technology, materials and systems entering the market. As this effort would involve the expenditure of ratepayer dollars, we recommend and ask DEEP to approve of this project being run through the Connecticut Energy Efficiency Fund program framework, as administered by United Illuminating and Connecticut Light and Power, with stakeholder input from this coalition, ECS and the Department.

Gap Analysis: An analysis of deficiencies in energy efficient building construction knowledge and information that creates discrepancies in the design, construction and/or operational adequacy in buildings and their plumbing, mechanical or electrical systems, should be undertaken. This can best be accomplished through information/data gathered first-hand - the least costly point being at the building permit and inspection process.

A separation of the state into at least two or, preferably, three territories/regions will allow for division of workloads and opportunity for smaller efforts/commitment to conduct visits and gather data consistent with the DOE's instructions on choices of sampling locations and building types.

Contacts, information gathering, and submittals to the DOE national database ("Score + Store" - already in place) will require experienced code officials as field personnel to interview local officials, cooperatively undertake plan reviews and field visits, and administratively gather, review and submit plan and field data to DOE. Such individuals must be able to establish peer rapport with individual officials, explain reasons and procedures, conduct analytical plan reviews and field inspections, and handle information and data.

(As an added benefit, the peer reviewers will also be able to impart a considerable amount of advice and knowledge as part of their review process, as well.)

The best source for these candidates will be current or former members of the Connecticut Building Officials Association (CBOA), with the necessary experience, local knowledge, qualifications, and the available time to commit to the nature of such reviews. It is anticipated that candidates will most likely be retired or part-time officials. Use of such individuals can avoid a major problem encountered in other jurisdictions (e.g., New York), where the professional agency engaged to conduct such surveys was an unknown party and could not establish a professional rapport with local officials, who were understandably very suspicious about why the state was "looking over their shoulder." The Connecticut candidates would be trained in their specific job duties by the project facilitator before being sent out to independently acquire information and data.

Data Collection and Submittal: Subsequent site visits would be less intensive, but would be combined with an initial "gap analysis," in order to give an accurate picture of what existing local conditions are, and where changes to training and regulations will improve the process and the outcomes.

A secondary (but vital) component of this process would be a general, anonymous survey of current local conditions and functional considerations affecting the local officials' abilities to conduct their own reviews and inspections of energy-related code compliance. This could reveal important changes in current statutes and regulations that could improve the quality of local conditions and other obligations affecting their jobs, thereby streamlining current tasks/obligations and allowing an official to spend more productive time performing his or her essential duties. A corollary benefit would be improved compliance for all codes.

Coalition Process and Commitment: In order to make the process most efficient, members of the coalition must commit to sharing information readily and openly, pooling ideas in order to streamline the roadmap and allow for structured interaction. Regular telephone communications can be scheduled to keep efforts focused, resolve issues and have information shared among all. Committees can also use established email connections to share ideas and make recommendations/decisions, as needed. They should set their own schedules consistent with the timing for the intermediate and ultimate goals of the entire coalition. A contract or contracts for services should be considered to comply with state and federal funding rules and restrictions. The coalition may wish to explore other funding sources interested in this work; NEEP has already begun this process through some of its connections, and will continue to do so.

GEOGRAPHIC TARGET AREAS: Examination of on-line materials from Census data and other sites reveal that Fairfield, New Haven and Hartford counties each represent about 25 percent of the state. Litchfield, Middlesex, New London, Tolland and Windham counties together have less than 25 percent of the total population. This distribution would suggest that subdividing the state into three approximately equal territories/regions - Fairfield/Litchfield; New Haven/Middlesex/New London; Hartford/Tolland/Windham - would yield territories that encompass all urban and suburban/rural categories, have major population centers from which to draw commercial examples, and involve different utility service territories within each.

Further, the distributions of building activity, existing dwellings and population are relatively balanced between them, even though physical land areas are not. Fairfield/Litchfield has 49 jurisdictions; New Haven/Middlesex/New London has 63; and Hartford/Tolland/Windham has 57.

Since each territory/region has four city centers/urban areas of varying sizes, there is also a fair representation for sampling of larger commercial data.

Data collection of 44 minimum representative samples in each of four categories across the state, including both new construction and renovations to existing buildings, residential and commercial uses, would be satisfied with 15 samplings from each territory in each separate category. It is suggested that the coalition consider obtaining data to include in the sampling quantity from as many towns as practical, in order to get a more accurate picture of actual conditions across the state. This could potentially represent almost 100 percent of state jurisdictions if balanced against the four types of data to be collected. Institute for Sustainable Energy (ISE) has suggested that it could function as a data collection and transmission point both to centralize this administration task and keep most funding available for field operations.

FUNDING: Representatives of Connecticut Light and Power and United Illuminating, functioning as the Connecticut Energy Efficiency Fund (CEEF), have indicated their willingness to aid in funding the initial stages of the code compliance assessment project. Utilizing funds from the CEEF new construction program budget, it is their estimation that approximately \$100,000 can be made available for the code compliance effort.

As this funding would be comprised of ratepayer dollars, it is also the recommendation of the coalition that this effort be run through the CEEF new construction program, as administered by CL&F and UI, and subject to all standard program oversight, review and reporting as occurs with other CEEF programs.

CONCLUSION

This proposal represents the initial phase of what the coalition envisions will be a “phased” approach to both measuring and improving energy code compliance in Connecticut. While CEEF has indicated the ability to utilize existing program funding for this first step in enhancing compliance assessment, this would not represent the broader goal of developing a true and complete baseline compliance assessment. Rather, this would utilize research to date to address identified gaps in code compliance in a way that allows for training to be targeted, and, thus, more effective. The coalition is committed to researching additional options for attaining the larger code compliance assessment goals, as well as means for funding such work. We look forward to continuing a dialogue with DEEP and other interested stakeholders toward that end.

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