



21 Oak Street
Suite 202
Hartford, CT 06106
(860) 246-7121
www.env-ne.org

Rockport, ME
Portland, ME
Boston, MA
Providence, RI
Hartford, CT
Charlottesville, VA

**COMMENTS OF ENVIRONMENT NORTHEAST
TO THE CONNECTICUT ENERGY ADVISORY
BOARD ON THE INTEGRATED RESOURCE PLAN
FOR CONNECTICUT SUBMITTED BY THE
CONNECTICUT LIGHT AND POWER COMPANY
AND THE UNITED ILLUMINATING COMPANY**

January 25, 2010

Environment Northeast (ENE) is a non-profit research and advocacy organization that focuses on energy, air quality and climate change solutions for New England and Eastern Canada. ENE appreciates the opportunity to provide comments to the Connecticut Energy Advisory Board (CEAB) on the recently submitted *Integrated Resource Plan for Connecticut* (IRP) prepared by United Illuminating (UI), Connecticut Light & Power (CL&P) and The Brattle Group.

1. Summary

ENE believes that the IRP provides an excellent summary of the many factors affecting the supply, demand and cost of electricity to Connecticut consumers over the next ten years. The primary recommendations for action in the IRP appropriately focus on the areas where near-term procurement of resources is required to meet the statutory requirements by expanding demand-side management (DSM) programs and implementing a regional renewable energy development policy. However, the IRP's specific recommendation to adopt the Target DSM Expansion strategy (Target) is not consistent with the statutory requirements and would provide electric customers and the State with much lower levels of economic and environmental benefits than would the All Cost-Effective strategy. The following are ENE's summary comments on the IRP.

- Public Act No. 07-242 requires UI and CL&P to develop a resource procurement plan which includes, as the first priority, meeting the state's energy requirements by procuring "all available energy efficiency and demand-side resources that are cost-effective, reliable and feasible". PA 07-242 at Sec. 51(c). The Act requires substantial changes in the way the utilities value and acquire energy resources, by mandating the purchase of all cost-effective efficiency and instituting an important set of preferences, beginning with efficiency, in the procurement process.
- The IRP as endorsed by CEAB and ultimately by the DPUC should specifically support a requirement that the utilities increase funding for efficiency programs as described in the "All Cost-Effective" strategy with funding increases necessary to capture the additional efficiency resources over the ten-year period of the IRP.
- Adoption of the All Cost-Effective strategy, when compared to the Reference case and the Target strategy, will provide many benefits to the State:

- It is the lowest cost path for consumers and the state and is projected to reduce customer costs by \$ 423 million annually by 2020.
- The energy savings will significantly help the state meet its environmental goals - the annual level of additional emissions savings in the All Cost-Effective strategy in 2020 are estimated at
 - 552 tons of SO₂, a primary contributor to acid rain
 - 144 tons of NO_x, a primary contributor to ozone, haze, and respiratory health problems
 - 663,079 tons of CO₂, the primary greenhouse gas
- The energy savings will also provide substantial economic benefits by increasing the State's Gross State Product by an estimated \$ 500 million and creating 3640 jobs for each year of investment, thereby making Connecticut more competitive. In effect, the energy bill savings are available to be spent in other parts of the economy and are substituted for fuel purchases that drain money from the state's economy.
- The All Cost-Effective Strategy would meet the statutory requirements to minimize customer costs and maximize consumer benefits consistent with environmental goals and standards and to acquire all cost-effective DSM resources.
- The CEAB should support the All Cost-Effective strategy and recommend that the DPUC require that this strategy be funded.

2. Background

Public Act No. 07-242 is a broad mandate that adopts key provisions and requirements designed to advance energy efficiency and clean energy resources, remove disincentives to utility investment in energy efficiency, create a more transparent and consumer friendly energy planning process and implement leading edge efficiency standards for appliances and equipment. The energy planning and purchasing proposals and other reforms, supported by a wide range of stakeholders from utilities to environmental groups, were included in this new legislation.

The Energy Resource Planning and Procurement Process:

- Requires development of electric utility planning for procuring needed resources including supply, transmission and energy efficiency and other demand-side resources. The Act specifically requires assessment of "how best to eliminate or stabilize growth in electric demand" and incorporate "the impact of current and projected environmental standards, including those related to greenhouse gas emissions and the Clean Air Act goals, and how different resources could help achieve those standards and goals" PA 07-242 at Sec. 51 (b).
- Declares that energy and capacity needs shall first be met through procuring all available energy efficiency and demand-side resources that are cost-effective, reliable and feasible, i.e. are less expensive than purchasing the equivalent amount of energy from electric generation.

- Creates a broadened stakeholder board with consumer, environmental, business and state agency representatives, assisted by expert consultants (CEAB)

In 2008, the CEAB supported the adoption of the DSM Focus case which was a DSM expansion plan similar to the All Cost-Effective strategy. 2008 Comprehensive Plan for the Procurement of Energy Resources at page 19.

The IRP includes the following summary of findings and recommendations:

- Summary of Analytical Findings:
 - Assuming New England builds sufficient renewable generation and associated transmission to meet the regions RPS, there should be no need to build any additional generation to meet regional resource adequacy requirements through 2020 even with a wide degree of demand uncertainty.
 - CT has sufficient resources installed or under contract to meet locational resource adequacy need requirements through 2020 even with a significant level of retirements of high-emitting generation units.
 - As a result of meeting the RPS and federal climate legislation requirements, power supply related costs are expected to increase from about \$0.11kWh today to \$0.14 kWh in 2020.
 - The Targeted DSM Strategy expansion would lead to reductions in emissions and costs and be more than offset by reductions in generation service costs and rates.
 - Meeting the RPS requirements of the New England states for 2020 will require the construction of about 4,800 MW of Class I renewable generation – primarily wind - which will require a capital investment of about \$20 Billion for generation and \$10 Billion for transmission. Assuming the renewable build out and a continuation of the state’s DSM programs, emissions of CO₂, NO_x and SO₂ will be significantly lower than current levels.
 - Electric prices are very dependent on natural gas prices. The increased supply of economically recoverable shale gas may allow prices to remain moderate thereby helping moderate energy prices. Passage of federal climate legislation will further reduce CO₂ emissions and lead to increased output from gas fired plants to replace coal.
 - The optimal strategy for meeting the state’s RPS requirement is to procure renewable energy as part of a New England regional market.
 - Renewable potential in New England is substantially larger than what is needed to meet the RPS
 - Constructing sufficient new renewable generation in New England would require a major capital investment, in the range of about \$20 billion for the generation plus about \$10 billion for associated transmission by 2020. Much of the capital investment in generation would be paid for by revenues from the energy and capacity markets, but REC payments and out-of-market payments would also be required for some resources.

- Connecticut policy makers need to engage with other New England states to develop a comprehensive regional renewable energy policy. The New England states should work to define the best and most cost-effective means to expand renewable energy development in New England and the surrounding regions while meeting environmental goals
 - The RPS requirements of the New England states are likely to be met through 2012. There is significant uncertainty regarding the overall supply and demand balance and the likely REC prices beyond 2012.
 - Substantial transmission investment will be needed to connect sufficient renewables to meet regional RPS requirements. The cost of such transmission is likely to be large, but much less than the cost of building renewables in-state, and not significantly larger than the cost of failing to meet the RPS entirely.
 - Investing in new renewable generation provides significant environmental benefits to New England.
 - Connecticut has limited cost-effective renewable potential in-state. An in-state renewable strategy would rely heavily on natural gas powered fuel cells, and would not significantly abate CO2 emissions.
 - Based on current cost and price projections, landfill gas, biomass, small hydro, and onshore wind require REC prices that are below the Connecticut's ACP. However, fuel cells, offshore wind, and solar PV would require payments greater than the ACP and would require support from additional subsidies or out-of-market instruments to be developed.
- Recommendations:
 - Fund the Targeted DSM Expansion strategy which would reduce customer costs and emissions and rates for both participants and non-participants.
 - Engage with other New England policy makers to develop a comprehensive renewable energy policy that determines the best and most cost-effective ways to expand renewable energy and meet environmental goals in the region.

UI recommends that the CEAB undertake a cost/benefit study of nuclear

3. ENE Comments on Recommendation I – Energy Efficiency

“ Fund the Targeted DSM Expansion strategy which would reduce customer costs and emissions and rates for both participants and non-participants.”

ENE Strongly Recommends that the All Cost-Effective DSM Strategy Be Adopted Rather Than the Target.

The IRP examines two strategies for expanding DSM – the Target and All Cost-Effective. These strategies are compared to a Reference Strategy based on current DSM funding and programs. The IRP examines the results of these strategies under six different scenarios representing possible future conditions, including “Current Trends” and different combinations of high and low natural gas

and carbon prices. The following comparisons from the IRP and additional data regarding the associated economic impacts of the two strategies demonstrates the clear benefits to customers, the environment and the economy of adopting the All Cost-Effective strategy and why its adoption is required by the provisions of Public Act No. 07-242.

3.1 All Cost-Effective Strategy.

The All Cost-Effective strategy is based on the results of a detailed study of the potential for implementing cost-effective energy efficiency measures (Potential Study). The study was conducted on behalf of the Energy Conservation Management Board by KEMA. As is described in the IRP, the Potential Study demonstrated that there is a substantial potential for obtaining additional resources that are less expensive than the supply alternatives. IRP at 2-1, 2-7 to 2-9. Notably the All Cost-Effective strategy addresses a broad array of opportunities in each of the customer classes - residential, commercial, industrial and governmental.

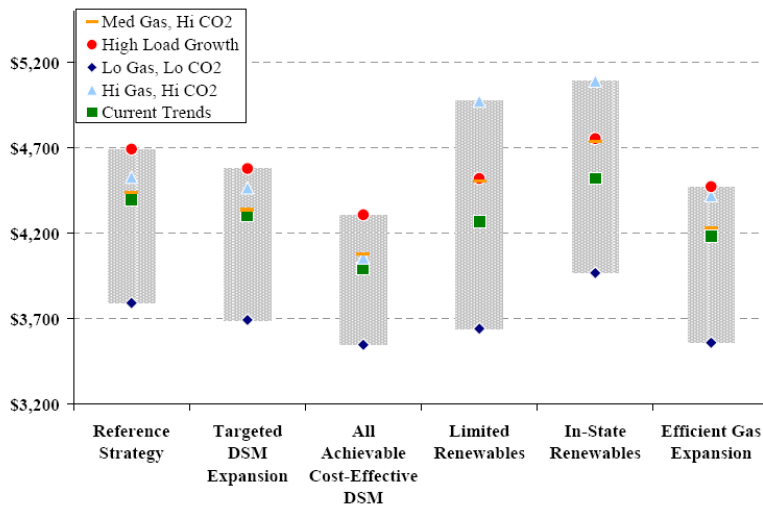
The All Cost-Effective strategy would produce a very substantial level of benefits to customers, the environment and the Connecticut economy. According to the IRP, the increased savings and costs in 2020¹, as compared to the Reference Case, would be as follows:

- \$423 million in customer savings.
- 633,079 tons of reduced carbon emissions
- 144 tons of reduced NO_x emissions
- 552 tons of reduced SO₂ emissions
- \$89 million dollars in increased customer investment in DSM
- Rate impact of 0 .11cents/kWh if funded solely through rate charges.

The provisions of the Act clearly establish that the primary objective is to minimize the cost of energy and capacity resources, including efficiency, over time and consistent with the state's environmental goals and standards. Accordingly, assessments of various options should be made on the basis of total customer costs and not rates. Customer bills are determined primarily by consumption times the rate per kWh. Energy efficiency drives down the consumption portion of the bill while causing minor changes in rates. Figure 29 of the IRP illustrates the relative costs of the various scenarios to customers. The All Cost-Effective strategy is clearly the lowest cost option against all other scenarios and across all of the sensitivities examined.

¹ The Plan provides detailed future results for 2020 only. The data below is from pp. II-40, 41 and 43 of the Plan. Peak Load reductions are shown on pp. 2-15 and 2-16.

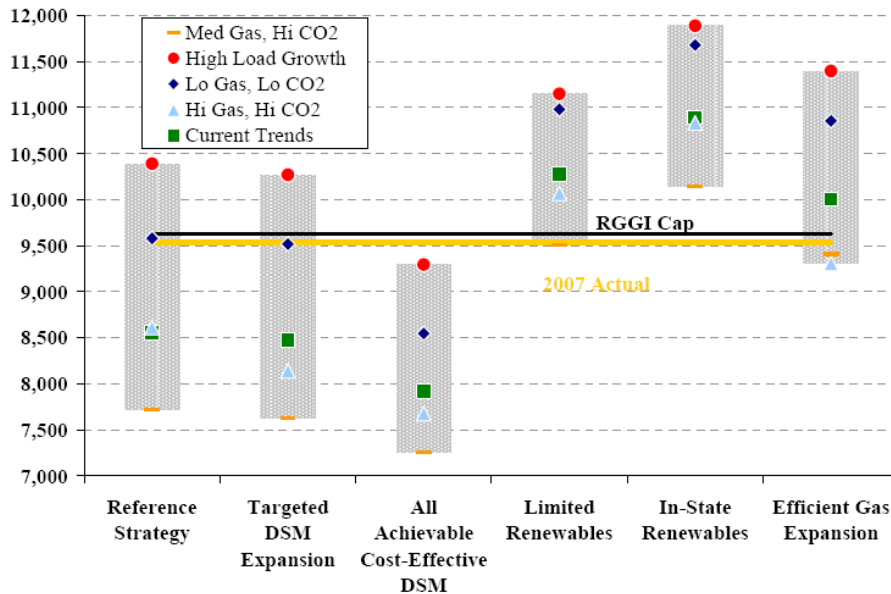
Figure 29
Connecticut Customers' Annual Power Supply-Related Costs in 2020 (2010 \$Mill)



In addition to the benefits described in the IRP, there would also be very substantial benefits to the Connecticut economy due to the “multiplier effect” of dollars not spent on natural gas imported from other regions and countries being re-circulated into the economy to support new jobs and grow the Gross State Product. These economic benefits are discussed below in Sec. 3.3.

As noted in the summary above, the All Cost-Effective strategy also does the best job of helping the state achieve its environmental goals. This is shown in Figure 31 of the IRP with respect to state CO2 emissions. The All Cost-Effective strategy is clearly the lowest CO2 emission option for the state against all other scenarios and across all of the sensitivities examined.

Figure 31
Annual CO₂ Emissions in Connecticut in 2020 (Tons 000)



3.2 Target Strategy

In contrast to the broad approach of the All Cost-Effective strategy, the Target strategy proposes a much narrower focus consisting of four programs addressing specific areas:

- Residential New Construction – Zero Energy Homes
- Residential Cooling
- High Potential Commercial/Industrial Measures
- Commercial/Industrial Chiller Initiative

It is clear that this strategy would not address many of the savings opportunities identified in the Potential Study and incorporated in the All Cost-Effective strategy and would serve a restricted customer base. In particular, it appears that low-income residential and small business customers would see little direct benefit from these initiatives.

The corresponding incremental benefits in 2020 from these programs would also be much smaller than those for the All Cost-Effective strategy:

- \$109 million in customer savings
- 73,264 tons of reduced carbon emissions

- 24 tons of reduced NO_x emissions
- 18 tons of reduced SO₂ emissions
- \$29 million dollars in increased customer investment in DSM
- Rate impact of 0.02 cents/kwh if funded solely through rate charges

3.3 Economic Impact of DSM Programs.

An important factor in considering the benefits that DSM programs can bring to electric customers and the State is the effect these programs have on the State's economy by contributing to the Gross State Product and increasing employment within the State. These impacts were not included in the IRP's evaluations, but they have been examined in detail in a recent study of New England energy efficiency programs completed by ENE and the EDR Group titled "Energy Efficiency: Engine of Economic Growth". The study utilized the multi-state policy forecasting model developed by Regional Economic Models, Inc. (REMI) to project the macroeconomic impacts of expanded energy efficiency programs. A copy of the study is attached as Appendix A to these Comments.

For the study, the model operates using assumptions about efficiency program budgets, costs to achieve energy savings, and energy prices and consumption levels during the study period. ENE developed modeling assumptions based on conservative extrapolations from current and proposed efficiency program data. The modeling assumptions and results of the report were vetted by an Advisory Board of industry professionals, regulators and others experienced in the field and in the region. Expanded efficiency programs were modeled over 15 years, and funding ramp-up periods were incorporated to reflect sustainable program growth rates. The model continued for another 20 years to capture the economic benefits achieved over the life of efficiency measures.

In order to investigate the complementary nature of efficiency programs across jurisdictions, two scenarios were modeled: the first in which each state acts alone (the "individual" scenario); and the second in which all New England states implement at once (the "simultaneous" scenario). In all cases simultaneous action resulted in greater economic benefits to the region, as energy savings improved states' relative national competitiveness and increased trade among states and with the rest of the world.

Annual electric efficiency program budgets were modeled to ramp up in Connecticut to \$259 million for electricity. Increasing efficiency program investments to this level over 15 years (\$4.4 billion invested by program administrators) would increase economic activity by \$40 billion (2008 dollars)¹ as consumers spend energy bill savings in the wider economy. Sixty-four percent of increased economic activity (\$25 billion) would contribute to the gross state product (GSP), with \$17 billion returned to workers through increased real household income and employment equivalent to 179,000 job years (one full-time job for a period of one year). These are the results for the individual scenario (Connecticut acting alone). The benefits are slightly higher when all the New England states act together. The majority of these impacts (85-90%) are the result of increased economic activity resulting from customer energy bill savings. Only the remaining 10-15% is the product of the purchase and installation of the efficiency measures themselves.

The effectiveness of efficiency investments can be evaluated by considering economic benefits relative to efficiency program dollars invested. Every program dollar invested in electric efficiency was projected to lead to \$5.6 in increased Gross State Product. Similarly, 40 additional job-years were added to the state's economy for every million dollars invested in electric efficiency programs. These relative

metrics can be used to estimate the differing economic impacts resulting from various efficiency spending measures. Using these metrics, the Target strategy would provide an additional \$162.4 million in Gross State Product and an additional 1160 jobs. The All Cost-Effective strategy would provide an additional \$509.6 million in Gross State Product and an additional 3640 jobs.

3.4 The IRP's Recommendation to Adopt the Target Strategy Instead of the All Cost-Effective Strategy is Contrary to Both the Statutory Requirements and the Best Interests of Customers and the State.

The IRP was prepared pursuant to Sec. 51 of Public Act No. 07-242 (the "Statute") which requires the development of a comprehensive plan to meet the electric energy and capacity requirements of customers "in a manner which minimizes the cost of such resources to customers over time and maximizes consumer benefits consistent with the state's environmental goals and standards." Energy resources are defined to include "conventional and renewable generating facilities, energy efficiency, load management, demand response, combined heat and power facilities, distributed generation and other emerging energy technologies." A broad assessment of the state's energy situation is required, including a specific assessment of "the energy and capacity requirements of customers for the next three, five and ten years." Since the All Cost-Effective strategy reduces customer costs and increases customer and environmental benefits to a much greater extent than does the Target strategy, the All Cost-Effective strategy should be adopted as the recommended DSM strategy in the IRP and the primary recommendation for implementation coming out of this planning process.

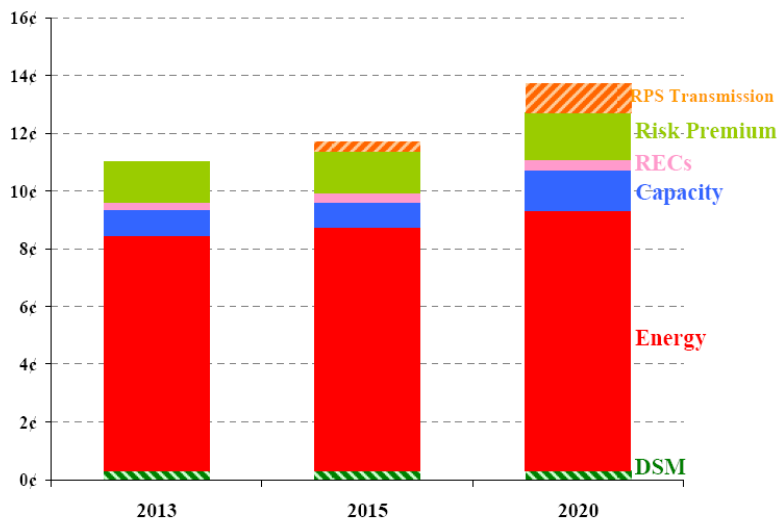
The Statute establishes a clear mandate for the prioritized use of demand-side resources. It requires that "resource needs shall first be met through all available energy efficiency resources that are cost-effective, reliable and feasible" and that "the projected customer cost impact of any demand-side resources...shall be reviewed on an equitable bases with nondemand-side resources." Further, the IRP is required to specify "(1) the total amount of energy and capacity resources needed to meet the requirements of all customers" and "(2) the extent to which demand-side measures, including efficiency, conservation, demand response and load management can cost-effectively meet these needs." The Statute also requires an assessment of "the impact of current and projected environmental standards...and how different resources could help achieve those standards and goals" and of "energy security and economic risks associated with potential energy resources".

In its most recent decision under the Statute, the DPUC stated that it "intends to examine the issue of DSM goal setting in the 2010 IRP proceeding after the DSM Potential study and the 2010 C&LM and IRP Plans have been submitted." DPUC Docket No. 09-05-02 at page 15. The Department also clarified the nature of its proposed review of procurement plans in the absence of any need for additional capacity. "In proposing additional ratepayer funded DSM resources ahead of the reliability year of need, the EDCs and CEAB must provide specific measurable environmental goals, other goals as specified in Conn. Gen. Stat. Sec. 16a-3a(d) and must quantify how DSM resources meet these needs." Id. The goals set forth in subsection (d) of the Statute include "approaches to maximizing the impact of demand-side measures," "the extent to which generation needs can be met by renewable and combined heat and power facilities" and "the impact of the procurement plan on the costs of electric customers."

Given this statutory framework, the focus of the IRP recommendations on increasing the acquisition of DSM and renewable resources is entirely appropriate. Since the DSM resources are required to be cost-effective, they provide both economic and environmental benefits.

As required by the Statute, the IRP sets forth a detailed assessment of both capacity and energy requirements. The IRP concludes that New England and Connecticut are likely to have a surplus of capacity resources through 2020. However, since energy requirements can be met from a variety of sources, including consumption reductions through energy efficiency, the IRP concludes that the development of new energy efficiency and other resources will play a key role in meeting future energy needs. IRP at page 1-10. In fact, most of the benefit from the All-Cost-Effective strategy comes from reduced energy consumption and associated RPS needs. IRP at page 2-16. The reason for this is clear from the charts showing that the major portion of customers' average power supply-related costs is energy, with smaller components for transmission, capacity and DSM. IRP at II-9 and shown below.

Figure 6
Connecticut Customers' Annual Average Power Supply-Related Costs (2010 ¢/kWh)
 Base Case Projection



The chart below provides a summary of the comparative costs and benefits of the Target and All Cost-Effective strategies. It is apparent that the All Cost-Effective strategy provides much higher levels of customer savings, peak load reductions, and emissions reductions than does the Target strategy. In addition, the State would reap enormous benefits from the increases in Gross State Product and new employment shown in the two right hand columns of the chart. Based on the statutory criteria of maximizing consumer benefits, minimizing customer costs and meeting resource needs with all cost-effective DSM, the All Cost-Effective scenario is the clear choice.



2010 Integrated Resource Plan - DSM Costs and Benefits
Year 2020

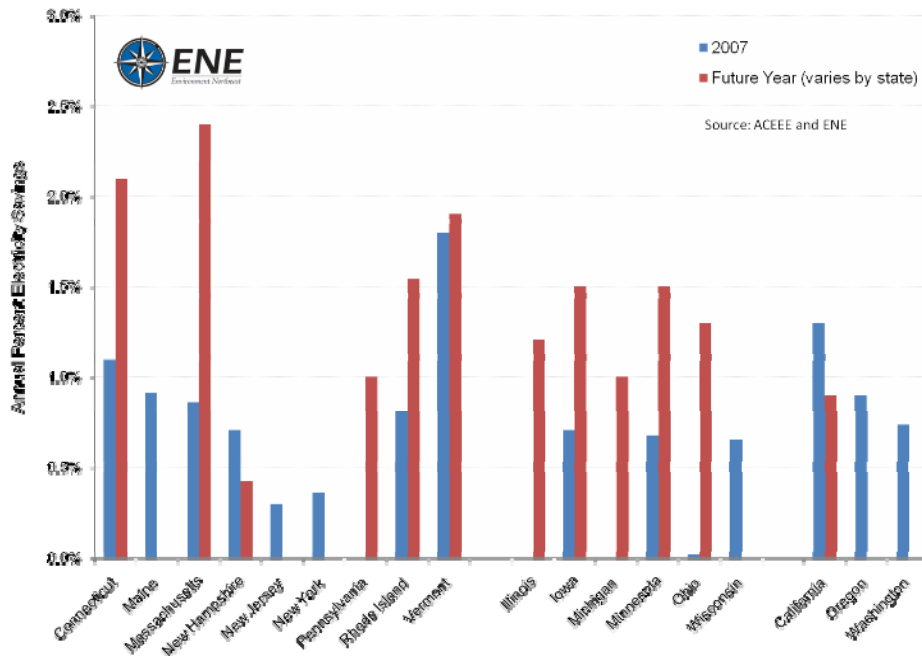
Costs and Charges							
	Total DSM Program Cost (\$ Mil.)	FCM Credit for Added DSM (\$ Mil.)	Net DSM Program Cost (\$ Mil.)	Average Gen. Rate * (cts/kWh)	Additional Rate Impact (cts/kWh)		
Reference	96	0	96	13.70	0		
Target	125	10	115	13.68	-0.02		
All Cost-Effective	187	25	162	13.81	0.11		
Incremental Benefits							
	Customer Savings (\$ Mil.)	Peak Load Reductions (MW)	Carbon Reductions (Tons)	NO _x Reductions (Tons)	SO _x Reductions (Tons)	Increased Gross State Product (\$ Mil.)	Increased Employment (Job Years)
Reference	0	0	0	0	0	0	0
Target	109	191	73,264	24	18	162.4	1160
All Cost-Effective	423	561 (2018)	633,079	144	552	509.6	3640

Sources: Costs and charges and savings are from pp. II-40,41. Emissions reductions are from p. II-43. Peak load reductions are from pp. 2-14 to 2-16.
* Average generation rate includes DSM charges.

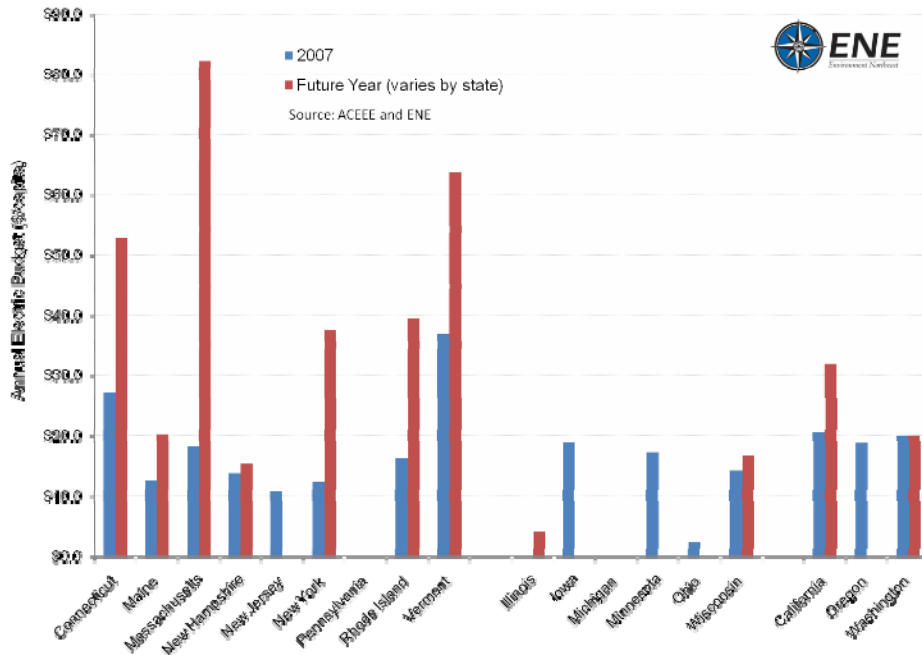
Other New England states have recently adopted DSM plans which would expand their programs in a manner greater than the All Cost-Effective Strategy. Vermont and Massachusetts are currently in the process of dramatically increasing efficiency investments. The plan approved by the Massachusetts Council would boost programs by 287% over the next 3 years, resulting in a 1.4% annual decrease in load such that by 2020 30% of the state’s energy needs would be met through efficiency. By comparison, the Target level in this IRP would increase DSM spending by about 36% by 2020 and reduce energy needs by 2%. The All Cost-Effective strategy would increase DSM spending by about 103% over the same period and reduce energy needs by 10%. IRP at II-38, 39.

The following figures compiled by ENE illustrate proposed energy savings and investment levels in a range of states and how the CT all cost-effective proposal compares to other states;

Electricity Energy Efficiency Program Results – Current and Future Year Annual Percent Savings



Electricity Energy Efficiency Program Budgets – Current and Future Year Investment per Capita



The only rationale provided for the recommendation of the Target Strategy is that it would reduce customer rates, albeit by the very small amount of .2 mills/ kWh, thereby providing a minute advantage to customers who never participate in the DSM programs. IRP at 2-2. The Companies reach this conclusion despite an admonition that “for strategies designed to reduce consumption, average costs alone may not be a good measure of overall strategy performance since the volume is changing.” IRP at II-28. This should be particularly true when the average cost differences are as small as projected in the IRP. The projected average generation rates (including DSM costs) in 2020 are 13.70 cts./kwh for the Reference Case, 13.68 cts./kwh for the Target Strategy and 13.81 cts./ kwh for the All Cost- Effective strategy. On the other hand, the de minimis rate increase of the All-Cost Effective strategy over the Target strategy would produce additional annual customer energy savings of \$ 314 million, 370 MW of additional peak load reductions, much greater emissions reductions, (including an additional 560 tons of reductions in carbon) as well as a much more substantial overall boost to the Connecticut economy. Specifically, in addition to the above energy and environmental savings, the increase from the Target’s \$126 million efficiency investment to the \$187 million investment in All-Cost Effective would result in a \$350 million addition to the GSP and create an average of 2,500 job-years for each year of investment.

Moreover, the expansion of the DSM program to higher levels would mean that more customers and customer segments would be able to participate over time, thereby spreading the program benefits even more broadly. It should also be noted that the discussion of “participants” and “non-participants” often proceeds on the assumption that these are fixed quantities when in reality the composition of these groupings changes over time and a substantial proportion of customers have participated in the current programs.

A critically important factor in the success of a DSM expansion plan over time is establishing long term goals and maintaining a “deliberate, consistent approach to delivering efficiency programs.” IRP at 2-3. As the IRP points out, “EE programs rely heavily on skilled and experienced engineers and technicians to identify savings opportunities, recommend savings strategies and then implement those strategies. In Connecticut these staff resources are found partly within the utility program administrators and more in the energy service companies who implement the savings measures in customer facilities.” Id. Adopting the long term goals of the All Cost-Effective strategy would provide the framework to mount a consistent effort over time to meet the statutory objectives of minimizing costs and meeting environmental goals. On the other hand, the Target strategy of adding a few limited programs for a short period of time would not provide the long term goals that are essential to maintaining a consistent effort into the future. It would also not provide the same level of opportunities for all customer classes to participate in reducing their costs.

The All Cost-Effective strategy meets the statutory requirements, provides a much higher level of benefits to customers and to the State as a whole, with very little additional rate impact. The All Cost-Effective strategy should be adopted as the DSM component of the IRP.

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4. ENE Comments on IRP Recommendation II - Renewables

“Connecticut policy makers need to engage with other New England states to develop a comprehensive regional renewable energy policy. The New England states should work to define the best and most cost-effective means to expand renewable energy development in New England and the surrounding regions while meeting environmental goals.”

ENE agrees that Connecticut should seek to meet its RPS with regional energy resources, but that we should do so while seeking to maximize in-state resources within reasonable cost parameters and by contracting for regional resources in order to ensure that anticipated resources needed to meet the RPS

are actually built. Although sufficient regional renewable resources may be in the queue to meet the RPS through 2013, we would caution that, given the current economic climate, we should not assume that financing will materialize for all the projects in the ISO queue. In order to maximize the development of projects, long-term contracts should be entered into either by the state's utilities or as a part of a regional procurement process.

ENE supports development of the level and mix of renewables outlined in the Reference strategy. The environmental, as well as economic, benefits of developing enough renewables and their associated transmission within the region to meet the RPS are clear, but assuring such actually happens is not. The IRP does not begin to adequately address how to assure that a process is developed to put the financing and siting processes in place that are essential to getting these resources built and to market. In order to assure progress toward meeting these goals, the IRP should include specific next steps that Connecticut needs to take to engage state policy makers, regulators and utilities in moving the region forward toward developing the comprehensive plan and policy that we agree is essential.

Figures II -11, 12 & 13 illustrate the importance to Connecticut's environment of the dual approaches of investing in the All Cost-Effective strategy and opting for the Reference Renewable strategy. This dual strategy is essential to help avoid the increase in NOx emissions under the Reference greater efficiency investments in order to avoid an increase in NOx emissions on high energy demand days.

ENE supports the comments in the IRP that market-based procurement of RECs alone will not be likely to deliver adequate renewables (and transmission). In addition, we believe that spot market REC purchases are likely to cost consumers and the state more than bundled energy and REC contracts, as customers will pay for rising energy prices based on natural gas price increases (as forecast in the IRP) plus the cost of RECs which could be close to the ACP. Long-term energy and REC contracts could be negotiated at a cost closer to the actual overnight costs modeled in the IRP.

ENE supports the idea of developing a regional process to procure renewables as envisioned by the Governors and partially endorsed by the IRP. However, ENE believes the regional process should be focused on developing a long-term contracting process in which Connecticut utilities would participate in. While we understand that there are the utilities have some concerns with long-term contracting, we believe they offer the best option to achieve the RPS and keep costs down for the state's consumers.

ENE would suggest the following more specific recommendation related to regional renewable planning and contracting:

- The state should continue to engage with other states on the development of a regional renewable planning and procurement process.
- The DPUC should initiate a general policy docket after the completion of the IRP docket to investigate the changes that would need to be made to allow Connecticut to participate in a regional renewables procurement process.
- This docket would likely identify things such as:
 - A need to separate some of the renewables contracting from the current 3 month-3 year standard offer contracts

- Development of recommendations on contract terms and maximum pricing (building on the IRP modeling)
- A model for who should be required to participate in the contracting, who takes power, how contracts are paid for, etc. – for example: LDC contracts for a portion of standard offer requirements over a 10 year period, contracts for energy and RECs, establishment of a cap on contract costs by energy type, retain RECs for compliance, resell energy into the spot market, costs would be built into generation/energy rates.
- Ways to incent the utilities to negotiate for low cost contracts and address balance sheet concerns – i.e., LDC could keep a small fraction of any savings coming back to consumers due to the difference in the contracted price for energy vs. what they are able to resell energy for in the spot market – essentially shared savings
- The docket should be used to inform Connecticut regulators and the regional discussion going forward.

ENE does not believe that the state can or should take on increased responsibility for achieving the RPS as mentioned in “3.I.2 State Financing of Renewable Energy” – it does not have the resources or capability of doing so and doing such is not consistent with current law.

ENE is quite concerned with the idea of LDC renewable ownership without a thorough investigation of the pros and cons and establishment of a new incentive structure that would maximize energy production at low cost, rather than the traditional model which creates an incentive to maximize capital expenditures which tends to drive up customer costs (i.e., nuclear example of the past).

5. ENE Comments on Transmission Section

We believe more discussion is needed to address how transmission infrastructure to support renewables development will occur without either long-term contracts that support generators paying for interconnections, or revisions to ISO/NEPOOL rules that establish standards for some transmission costs to be socialized to interconnect renewable projects.

Proposed changes to the state transmission planning process related to assessment of alternatives have some merit and some changes should be considered, but much more investigation and discussion of this issue is required before any recommendations are made to the legislature for statutory changes.

A few initial comments on the utility proposal:

- Alternatives should be considered if they are more cost-effective, address the reliability need, and are consistent with meeting state environmental goals and requirements
- An explicit commitment should be made to fund non-transmission alternatives (NTAs) that meet the above requirements
- More analysis and discussion is needed related to cost allocation for NTAs, since the transmission option may have costs socialized across New England and the NTA are not eligible for this treatment under current ISO rules. A better policy outcome may be to have the state

work with others in the region to change ISO rules to allow funding of NTAs regionally as an alternative to transmission.

- Without a clear funding mechanism for NTAs that places them on a level playing field with transmission, the whole process the LDCs have proposed may still be a waste of time.

Thank you for the consideration of our comments. Please do not hesitate to contact us if there are any questions.

Respectfully submitted,
ENVIRONMENT NORTHEAST

By: Jessie Stratton, Director, Government Relations
Roger E. Koontz, Senior Attorney
Jamie Howland, Policy Analyst