



MEMO

TO: Kate Epsen, NH Public Utilities Commission
FROM: Natalie Hildt, Manager of Public Policy Outreach, NEEP
RE: Thoughts on Possible New RPS Classes in New Hampshire
DATE: May 13, 2011

Northeast Energy Efficiency Partnerships (NEEP) appreciates the opportunity to provide input on the introduction of new Renewable Portfolio Standard rate classes, and I apologize for not making it to your April 21 work session. After conferring with colleagues here at NEEP and at Environment Northeast (ENE), I'd like to offer the following brief comments, including the attached whitepaper from ENE.

Historically, NEEP has argued against including efficiency as part of a renewable energy standard, for the simple reason that they are two very different resources and we do not believe it is good policy to mix them. Instead, NEEP advocates for a loading order that specifies efficiency first, followed by renewable sources, followed lastly by fossil fuel or nuclear generation. That's essentially how California's loading order has been structured.¹

Connecticut is the only state in the region that has included energy efficiency as part of its RPS requirement (Class III resources, though this is no longer applicable for 2010). None of the other states allow energy efficiency to count towards their RPS.

The attached paper from Environment Northeast is in reference to what had been proposed as federal policy, but the line of argument stands at the state level that efficiency and renewables should not be looked at interchangeably as a resource. ENE goes into detail as to why these resources should be treated differently.

If New Hampshire were interested in creating an energy efficiency portfolio standards (EEPS), that would be another course to take. New York is one state that has both an "EEPS" as well as system benefit charge (SBC) programs. New York is in the midst of regulatory proceedings aimed at allowing the EEPs to serve as the workhorse to get efficiency saving through customer incentives, while the SBC-IV programs – primarily administered by NYSERDA – will have greater leeway to undertake market transformation activities.²

I hope these comments are helpful. Please feel free to contact me with any questions.

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¹ <http://www.energy.ca.gov/2005publications/CEC-400-2005-043/CEC-400-2005-043.PDF>

² Read more about NYSERDA's vision at <http://www.nyserda.org/pdfs/sbc-iv-white-paper.pdf>

Energy Efficiency Policy & Clean/Renewable Energy Standards



Promoting an Effective Federal-State Partnership via Separate Efficiency and CES/RES Policy

Draft – January 20, 2011

ENE is gratified bipartisan efforts are underway in the 112th Congress to improve U.S. energy policy by increasing market investments in energy efficiency and non-emitting electric generation sources. There is tremendous potential for enhanced domestic investment, job creation and greenhouse gas reduction in the energy sector that can be unleashed by a 21st century federal energy policy.

ENE believes that current federal policy ideas can be strengthened to ensure they are better aligned with, and do not disrupt, existing state jurisdiction, policies and programs. These recommendations are intended to improve the interaction between federal and state energy policy – both on the generation or supply side, and on the consumption or demand side. These two sides of the energy system operate under different markets, market barriers and incentive needs. Federal efforts will be greatly enhanced if they reflect the technical and jurisdictional differences between supply and demand side markets and the important role of state energy jurisdiction. Our recommendations are based on the long history of state based efficiency and renewables policies in order to ensure new federal policy honors state progress and existing regulatory and implementation structures and builds on them appropriately for maximum effect.

A. Importance of Keeping Efficiency Separate from a Federal CES/RES

The generating side of our energy system – the operation and construction of large, central power stations, no matter how fueled, operates in a different regulatory and market structure than the demand side of the system. The differences in these two integrated but separate parts of our energy system are important to recognize as new policies are shaped to advance national goals.

Specifically, efficiency is on the demand side of the system and is a unique resource with unique characteristics – different from renewables or other non-emitting supply resources. Efficiency resources reside in our buildings, homes, and businesses and face unique markets, market barriers and very different cost structures than resources on the supply side. To be successful, policy reforms designed to support and increase efficiency investments – the least expensive, indigenous and cleanest energy resources – need to reflect the different market structures. Key differences between efficiency and renewables that require separate policies or mechanisms for the two resource types include:

- **Different Regulated Entities** – Efficiency programs are generally delivered by local distribution companies (LDCs) or by a designated state-wide efficiency administrator under Public Utility Commission oversight. This means *for efficiency the regulated entity is the local distribution company (LDC) or designated efficiency administrator*. Renewable energy standards apply to the entity supplying power – which can be a competitive load serving entity (LSE) or the distribution company acting as an energy supplier. In marked contrast to efficiency requirements, *renewable energy standards regulate the load serving entity (LSE)*. In many states, LSEs and LDCs are entirely different entities. In addition, efficiency standards should apply to both electric and natural gas distribution companies, while renewable standards only apply to electricity suppliers.
- **Different Market Barriers** – The largest *barriers to increased efficiency investments are on the consumer side*, whereas the largest *barriers to renewables are on the supply side*. Market failures for efficiency include

consumer issues such as: lack of consumer information about technical options and potential savings; split incentives between building owners (landlords) and energy bill payers (tenants); and consumer capital constraints to financing efficiency. These efficiency investment barriers are generally addressed through well planned and coordinated state-wide programs available to all energy users. Alternatively, the primary barriers to renewables are on the supply side, including: siting; conventional/fossil fuel power plants' ability to externalize carbon pollution costs; and contracting and financing issues. Different policy tools need to be deployed to address these different barriers effectively.

- **Different Markets, Price and Costs** – Efficiency is a resource procured at costs of roughly 2-4¢ per kWh (with the reduced energy consumption delivering a net savings over time) – meaning *efficiency is less expensive* than conventional electricity supply and saves consumers money over time. *Renewable energy and other non-emitting supply resources tend to be similarly priced or more expensive* than conventional electricity depending on the source. Because the cost structures and markets for efficiency resources are fundamentally separate from the markets and structures for generating plants, an effective federal energy policy should reflect these price and market differences. For example, if efficiency and supply resources are grouped into the same requirement as if they were in a unified market, efficiency resources could be unintentionally ignored or worse bid up well beyond their current market costs, resulting in unnecessary consumer over-payment for efficiency and demand side energy resources.

For these reasons, ENE recommends that federal energy reform policies reflect the two different markets that exist for supply side and demand side energy resources. Putting both under a common clean energy standard would cause several significant problems that can and should be avoided for the following reasons:

- 1) By mixing these two very different resources in one policy with one traded certificate (REC) price, it is likely that efficiency resources would be bid up to the cost of renewable supply. As a result, *consumers could end up significantly overpaying for efficiency*, losing the low cost benefit that is one of energy efficiency's most important characteristics. Indeed, efficiency energy resources are typically 1/3 the cost of supply side resources. When consumers overpay for any energy resource, in this case the lowest cost resource, the overall economic benefits to consumers and the broader economy are greatly reduced.
- 2) Placing a new federal efficiency requirement on load serving entities – rather than on LDCs – could significantly *disrupt state efficiency policy and make it hard for local distribution utilities to achieve quantified efficiency savings levels already required by state laws and PUCs*. This is especially true in the many states throughout the country that have established aggressive efficiency programs and adopted ambitious energy savings goals. Imposing a new efficiency requirement on LSEs with no or little experience in efficiency program design could result in LSEs bypassing the existing efficiency delivery infrastructure in states and engaging in cream skimming (only making the lowest cost and easy investments) rather than investing in all measures that are cost effective and providing customers with comprehensive and deep efficiency programs. LSEs could attempt to take credit for savings distribution utilities are already planning on delivering to meet their existing legislative and PUC-mandated efficiency targets.

- 3) Additionally, if a new combined federal renewable and efficiency standard unintentionally raised the cost of energy efficiency, it could *erode the widespread support that efficiency has gained among business groups, consumer advocates, and the public*. Efficiency is a low cost resource and can be procured based on a least-cost, or economically-based policy that frames the resource appropriately and delivers comprehensive programs carefully designed to overcome market failures on the consumer side that inhibit efficiency investments.

State policy-makers have long recognized the fundamental difference between efficiency and renewable resources and have appropriately kept policies for these two resources separate. Federal energy reforms, to be effective, should follow the lead and jurisdictional role of state energy policy makers and regulators and keep policies for efficiency and renewables separate.

B. Recommendations for a Stand-Alone Federal Efficiency Procurement Policy

Distribution Utility Procurement of Low-Cost Energy Efficiency

The following policy proposal for a federal efficiency investment requirement for local distribution utilities is based on the above points and reflects the substantial differences that exist between efficiency and renewable resource markets and regulatory oversight, as well as the history of local distribution companies (not load serving entities) delivering efficiency programs. Accordingly, ENE's recommendation separates the renewable or clean energy standard from a demand-side energy efficiency standard. This transformative proposal builds on the success and lessons learned from decades of state efficiency policy and would make distribution utilities true partners in the delivery of cost-saving efficiency programs, deliver on the promise of retrofitting a large portion of the existing building stock in the country, create tens of thousands of jobs, and save electric and natural gas consumers hundreds of billions of dollars over the next decade.

Our recommended policy accomplishes all of these objectives with no outlay from federal or state budgets, but rather delivers efficiency programs only if they are cost-effective and cost-saving for utility ratepayers – when efficiency is determined to be the lower cost energy option than energy supply resources (i.e., new power plants). This proposal would establish a new cost-saving efficiency procurement requirement for local electric and natural gas distribution companies but leave the decision making, program design, and regulatory details to state utility regulators who can best implement programs in manner appropriate for their state and in a manner that would not disrupt existing state efficiency program activities.

- Efficiency Resource Procurement: Cost-effective Efficiency Investment Requirement
 - Electric and natural gas local distribution utilities must procure or invest in efficiency programs for all customers in the state that ramp-up over a reasonable time to capture all cost-effective energy efficiency; costs would be compared between available efficiency resources and average supply costs in the LDCs local market.
 - In order to provide guidance to the states and ensure program expansion to capture the efficiency potential documented to exist across the country, utilities shall achieve first-year annual energy savings, within five years of bill passage, of 2.0% for electric customers and 1.5% for natural gas customers with subsequent annual savings goals determined by the opportunity for cost-effective programs; DOE shall conduct a study to estimate the opportunity for cost-effective energy efficiency in each state and may adjust these savings targets on a state-by-state basis if they find this level of savings is impossible to achieve cost-effectively in the given timeframe. Note that states have adopted savings goals of as much as 2.5% annually.

- Program costs for upfront investments needed to achieve long-term bill savings would be recovered from utility ratepayers in a fair and equitable manner as determined by the state utility regulator (PUC for investor owned distribution utilities, or regulator or board for federal, state, municipal, or cooperative distribution company).
 - Program Administration
 - States could choose to allow LDCs that bear the efficiency goal mandate to administer the efficiency programs as is already the case in most states or states could establish a designated third party program administrator.
 - Federal policy should support joint or multi-fuel efficiency programs (i.e., combined electric and natural gas efficiency programs and, in the certain regions, combined electric and heating oil/propane programs) to leverage savings opportunities and minimize administrative costs by treating all major energy uses in a building at the same time.
 - Program Oversight and Regulation
 - Federal policy should build on and not disrupt existing state efficiency program oversight processes established by state PUCs, regulators, and boards.
 - Stakeholder involvement should be encouraged in program oversight and regulation as the history of efficiency program delivery shows that this produces more rigorous results and raises awareness of the value of comprehensive efficiency programs.
 - Program review and final approval shall be conducted by the state utility regulator.
 - Public reporting of program costs and benefits
 - The history of efficiency program delivery has shown that public reporting of program costs and benefits help to ensure rigorous, well-run programs, transparency, accountability and raises awareness of the value of comprehensive efficiency programs.
 - Evaluation, monitoring, and verification of program costs and benefits to be conducted by a third party approved by the utility regulator, with guidance from DOE to increase consistency of EM&V processes across the country
 - Enforcement – DOE to review all program activities after five years; upon determination that a company is not in compliance with the Act; DOE to impose a fine on the utility equivalent to 75% of the investment level DOE determines to be required to capture all cost-effective efficiency, with monies used to contract for efficiency programs in the utility’s service territory in consultation with the utility regulator.
- ❖ Alignment of Utility Incentives
 - In many states, utilities’ earnings are linked to their volume of sales, i.e., their revenues increase when customer usage increases but decrease when customers use energy more efficiently. In such states utilities experience a strong financial disincentive to run aggressive consumer efficiency programs, or have them exist in their service territory. The following policies solve that problem:
 - State regulators shall investigate and mitigate the current disincentives utilities have to invest in energy efficiency programs which save customers money yet reduce utility revenues, by utilizing policies that decouple utility distribution revenues from sales or otherwise address lost revenues due to efficiency program investments
 - In order to develop a business model for efficiency program delivery, the state regulators shall consider the establishment of reasonable performance based incentives to reward the efficiency program administrator(s) for delivering energy savings and lowering customer energy bills. Efficiency program experience shows that performance incentives are an important tool to ensuring robust efficiency program results and consumer savings.

C. Recommendations for a Stand-Alone Renewable Energy Proposal:

Load Serving Entity Procurement of Renewables

The following proposal is designed to promote an effective renewable energy standard that reflects historic state jurisdiction and involvement in supply side energy planning. The elements of this proposal also illustrate the differences between demand side (efficiency) and supply side (renewable) resources and why these resources belong in separate standards. The proposal is designed to support existing state renewable energy programs and provide continuity for the established role of state energy policy makers and regulators. In order to minimize the costs of the program on ratepayers, the proposal also ensures that incentives for these technologies do not unfairly benefit existing facilities and are not paid indefinitely.

Following the established precedent of renewable portfolio standards in many states, this proposal establishes a federal minimum requirement of renewable energy to be procured by Load Serving Entities (LSE).

- ❖ Regulated Entity: all load serving entities (LSE) with annual sales over XXX thousand MWh
- ❖ Renewable Energy Supply: on an annual basis the LSE shall supply XX% of the load from renewable energy sources (insert table with percentages and years)
- ❖ Eligible Renewable Energy Production:
 - Eligible technologies could include renewable electricity supply resources such as wind, solar, geothermal, and sustainably harvested biomass.
 - Only new or incremental resources should qualify; or should qualify for the incentive (there is no need to give existing facilities that are already constructed and financed a premium, and yet states that have already made commitments to renewables should get some credit for that)
 - In order to reduce costs and prevent excessive incentives, projects should only qualify for a limited period (i.e., 10-15 years), so that financially mature projects do not receive a premium indefinitely – after the qualification period they should be expected to operate in competition with all other resources without receiving a premium.
- ❖ State-Specific Adjustments
 - The state should be able to request any or all of the following additional requirements be imposed on the load serving entities delivering electricity in their states:
 - Require the LSE(s) to enter into long-term contracts for energy and certificates and/or associated transmission interconnections from eligible renewable resources in order to deliver a hedge for customers against energy price fluctuations
 - Require delivery of energy associated with compliance certificates into the state or regional control area (ISO/RTO region)
 - Limit the eligible resource list for compliance with the requirements (i.e., if a particular resource type is deemed inappropriate by policy makers for a state or region)
 - Increase the percentage of load that must be served by eligible resources, or establish incremental technology specific requirements - the federal standard should be considered a floor

- A state wishing to implement any of these additional requirements must notify DOE of their plans, but can implement plans through state regulatory processes
- ❖ Reporting and Compliance: to DOE, with potential state role noted above.

For Further Information:

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Environment Northeast is a nonprofit research and advocacy organization focusing on the Northeastern United States and Eastern Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the environmental and economic sustainability of the region.