

Date: July 6, 1999

To: Chairman Douglas L. Patch  
Commissioner Susan S. Geiger  
Commissioner Nancy Brockway

From: Jonathan Raab, Facilitator NH Energy Efficiency Working Group

Re: Final Working Group Report

Attached please find the final report of the Energy Efficiency Working Group. It is the product of intensive study and deliberations by the entire Working Group over the last 14 months. This diverse Group of stakeholders worked diligently to respond to the issues raised by the Commission in its Rehearing Order dated March 20, 1998. In doing so, the Group began to take a "fresh look" at energy efficiency issues in light of the evolution of energy efficiency activities in product and service markets and the coming of electric utility restructuring. On every issue, the Group sought solutions appropriate specifically for New Hampshire.

In the end, as you will see in the Report, the Group reached a substantial degree of consensus on many recommendations including a modified cost-effectiveness test, program design objectives, a statewide coordinated low-income program design, the formation of an energy efficiency coordinating committee, and the design of a shareholder incentive mechanism for measures installed on a going-forward basis. On the few issues where consensus was not reached, the Group describes a limited number of options for the Commission's consideration, and describes different stakeholders' perspectives.

On a personal note, I thank the Commission for its patience and willingness to provide the Group with the time it needed to complete this challenging task. I also thank each and every Group member for working so hard and so creatively in crafting these proposals, and allowing me to be part of the process.

I am available to answer any questions the Commission may have after reviewing the Group's Report, as is each and every Group member. On behalf of the Group, I hope that the Report meets the Commission's needs and represents a positive first step forward for future ratepayer-funded energy efficiency activities in New Hampshire.

Report to the New Hampshire  
Public Utilities Commission

On Ratepayer-Funded Energy Efficiency  
Issues in New Hampshire

Docket No. DR 96-150

From the New Hampshire Energy Efficiency  
Working Group

Submitted on July 6, 1999

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## Executive Summary

In an Order issued on March 20, 1998, the New Hampshire Public Utilities Commission directed interested stakeholders to form a working group on energy efficiency issues.<sup>1</sup> The Commission's Order delineated a set of questions for the group to address.

The New Hampshire Energy Efficiency Working Group (the Group) was constituted in May 1998 with a diverse group of interested parties. In July 1998 the Group agreed on the following mission statement:

We will produce a comprehensive report related to energy efficiency programs and services funded by utility ratepayers that:

- 1) addresses the issues identified by the New Hampshire Public Utilities Commission in its Order No. 22,875 issued March 20, 1998 (pp. 75-86);
- 2) provides recommendations and the framework upon which such recommendations were developed;
- 3) takes a fresh look at utility sponsored programs and other energy efficiency programs and services in New Hampshire including the funding, design and implementation of such programs and services; and
- 4) assists the Commission in resolving the issues under consideration.

As a primary goal, the Group will seek consensus in developing its report and recommendations. Where consensus is not possible, the Group will report the alternate positions and identify the parties subscribing to each position.

In August 1998, the Group selected Dr. Jonathan Raab, Raab Associates, Ltd. to facilitate the Group's process.

The Group discussed and deliberated on the issues raised in the Commission's order for a little over a year. During that time the full Group met approximately 20 times and various subcommittees of the Group also met often. This report to the Commission constitutes the culmination of the Group's efforts to date.

The Group reached agreement on numerous recommendations to the Commission regarding the future of ratepayer-funded energy efficiency in New Hampshire, including the following highlights:

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<sup>1</sup> Order No. 22,875 in DR 96-150: Electric Utility Restructuring on Requests for Rehearing, Reconsideration and Clarification.

1. Cost-Effectiveness Testing: The Commission should adopt a New Hampshire cost-effectiveness test that includes the following:
  - A. quantifiable benefits and costs associated with other resources in addition to electricity (e.g., water, gas, oil);
  - B. a 15% adder for additional non-quantified benefits (e.g., environmental);<sup>2</sup>
  - C. both the benefits and costs associated with market effects (e.g., spillover, post-program participants); and
  - D. the cost of utility shareholder incentives, but applied to all programs together rather than to individual programs.

The Group agrees that all programs including new market transformation initiatives should be screened using this new cost-effectiveness test, and that programs are expected to surpass a 1.0 benefit/cost ratio. Both low-income programs and educational programs could still be approved by the Commission even if they do not surpass a 1.0 benefit/cost ratio given their additional hard-to-quantify benefits. The Group also agreed on numerous other methodological issues and assumptions, but is deferring on a recommendation with respect to the appropriate avoided costs pending some forthcoming research being done in the region that members wish to review.

2. Formation of an Energy Efficiency Committee: The Group agrees that New Hampshire utilities could continue to be the primary program administrators, at least over the next few years (i.e., during the period when transition service is offered). However, the Group recommends the formation of a New Hampshire Energy Efficiency Committee to improve program consistency and reduce program administration and implementation costs through closer cooperation among utilities and other stakeholders. The mission of the Committee would be to develop a core set of consistent programs for New Hampshire ratepayers. The Group recommends broad stakeholder involvement in the Committee and the development of an annual report to the Commission. Recommended membership includes representatives from all of the jurisdictional electric utilities, key state agencies (ECS, DES, OCA), and other stakeholders groups (consumer, environmental, suppliers/energy service companies).
3. Energy Efficiency Budgets: The Group agrees that as is implicit in the restructuring legislation, after 70% of the State has gone to retail competition, each jurisdictional electric utility shall budget 1 mill in the first year and 1.5 mills in the second year for energy efficiency, with the option for an individual utility to exceed that level if the company, other parties, or both so choose and the Commission approves. The Group did not reach agreement on funding rates after the second year, with some members believing that it is premature to do so and others believing that funding rates in the range of 2.5-3.2 mills/kWh are appropriate. The Group also acknowledges and accepts the Commission's recent decision that low-income funding for energy efficiency should come directly from the energy efficiency fund rather than the low-income electric bill assistance portion of the system benefits charge (SBC). However, the Group agrees that once the electric assistance program (EAP) is fully operational, the Commission should review the EAP program to determine if

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<sup>2</sup> The entire Group except for one utility supports this recommendation.

any EAP funds can be made available for low-income energy efficiency programs. The Group has not developed detailed budgets by distribution company, by rate class, or by program type. However, the Group did agree that energy efficiency program funds should be allocated to the residential and commercial and industrial (C/I) sectors in approximate proportion to their contributions to the fund. Additionally, the Group agreed that low-income programs should be funded by all customers. Also, the Group, with the exception of two utilities and Staff, agreed that under- and over-expenditures on energy efficiency programs should be carried into the subsequent year for purposes of calculating energy efficiency budgets.

4. Shareholder Incentives and Lost Fixed Cost Recovery: The Group recommends that utilities be entitled to earn shareholder incentives for post-Implementation Date installations, as defined in this report. The shareholder incentive approach agreed to by the Group is based on the performance of the programs measured in terms of their actual cost-effectiveness and energy savings relative to the projected cost-effectiveness and energy saving savings, respectively. Separate target incentives are proposed for the residential and C/I sectors set at 8% of the total program and evaluation budgets for each sector. Superior performance could be rewarded by up to 12% of the planned sector budgets. The Group, with the exception of two utility members, agreed that there should be no LFCR for measures installed post-Implementation Date. The two utilities who did not agree assert that they should be entitled to LFCR for future programs until ratemaking changes diminish the need for LFCR. The Group agreed that issues associated with historic LFCR should be dealt with on a utility-specific basis by the Commission.
5. Market Framework: The Group spent substantial time trying to forge a framework for determining when particular markets should be eligible for ratepayer funding. The Group wrestled with different perspectives among its members about the definition of a “market barrier” and whether particular market conditions justified consideration for targeted programs. For instance, Group members could not agree whether: 1.) lack of awareness about an energy efficient technology or practice; 2.) lack of availability; or 3.) lack of widespread utilization are indicative of market barriers or market failures; are normal for new products and services, or both. Despite its lack of consensus on definitions and thresholds, the Group worked hard to develop potential tools to use in assessing the eligibility of a given energy efficiency technology or practice for funding. These tools include a detailed framework in matrix form located in Appendix 2A and another narrative framework located in Appendix 2B. Some members prefer one over the other. Nevertheless, the entire Group agreed that these frameworks have many similarities, are not mutually exclusive and are not yet fully fleshed-out. Still, the Group recommends them to the Commission and the proposed Energy Efficiency Committee for potential refinement and use.

In the process of working on the frameworks, the Group analyzed in some detail the use of energy efficient technologies and practices in certain markets. The Group, with the exception of PUC Staff, concluded that there are sufficient undesirable market conditions for low-income customers, residential new construction, and comprehensive lighting design and

emerging new lighting technologies to attempt to design programs in these areas. The Group also sponsored a focus-group study on commercial lighting practices in New Hampshire (see Appendix 4), but has not made recommendations based on that study.

6. Program Design: The Group agreed that proposals for programs in markets eligible for ratepayer funding should identify the reasons for addressing the market, the type of intervention and intervention target, the evaluation and exit strategies, a budget, a program administration proposal, and a cost-effectiveness analysis. The Group also agreed to certain program design principles related to: market transformation, encouraging and not hindering private sector efficiency activities, efficient and effective program administration, and transition and exit strategies. Although the Group did not develop detailed program designs due to limited time and a desire to first have feedback from the Commission on the various recommendations in this Report, the Group did develop and propose a statewide, coordinated low-income program. This program could potentially serve 2,500 low-income ratepayers per year and save approximately 1,000 kWh per participant (see Appendix 5).

## 1. Introduction and Overview

In March 1998, the New Hampshire Public Utilities Commission directed stakeholders to form an Energy Efficiency Working Group to explore a wide range of issues pertaining to the future of ratepayer-funded energy efficiency activities in New Hampshire. This report is the culmination of that effort. It contains the Group's findings and recommendations on many subjects including: the development of a market framework, program design, cost-effectiveness testing, program administration, financial remuneration for utilities, and funding levels. The report includes a separate section on each of these subjects as well as sections describing the background and the process. In the instances where the Group did not reach a consensus, the Report delineates the differences of opinion. Following the body of the Report are a series of appendices which include the Group's groundrules and supporting information for many of the sections in the Report.

## 2. Background

The State's interest in energy efficiency is well established in law, as outlined in the RSA's listed in Appendix 3. On March 20, 1998, the New Hampshire Public Utilities Commission issued Order No. 22,875 in DR 96-150: Electric Utility Restructuring on Requests for Rehearing, Reconsideration and Clarification. A section of the Order focused on a range of energy efficiency issues raised by intervenors. In the energy efficiency section, the Commission recommended the formation of a working group for energy efficiency issues:

“We believe that the best way to proceed is to create a working group, as advocated by a number of parties, to help us develop standards for evaluating energy efficiency programs as outlined in more detail below and to assist us in designing an appropriate cost-effectiveness test that we will apply to future programs.” p.83.<sup>3</sup>

The Commission went on to emphasize that the Energy Efficiency Working Group needed to take a “fresh look” at utility-sponsored energy efficiency programs in light of the following principles laid out in the Commission's order:

- build in obsolescence wherever possible;
- transform markets;
- complement new energy markets, do not hinder their development;
- move as quickly as possible from the payment of lost revenues for DSM programs;
- undertake energy efficiency programs that avoid more costly distribution system alternatives; and
- work within any funding limitations set by the legislature for utilities with rates above the regional average.

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<sup>3</sup> This Order is available on the PUC's website at [www.puc.state.nh.us](http://www.puc.state.nh.us).

The Commission then posed a number of specific questions for the Working Group to address. These are provided in Table 1 below, along with the relevant sections in this report where each question is addressed.

**Table 1: Commission Questions for Working Group**

1. What is the appropriate cost-effectiveness test for future program evaluation and whether there should be a different standard to evaluate cost-effectiveness of transformation programs? [*Section 7*]
2. What, if any, market barriers exist, and what are the alternatives to reduce or eliminate these barriers during the transition to market-based programs? We believe the Working Group and others should recognize the effect our public education program may have on reducing informational barriers. [*Section 4*]
3. How the Commission can quantitatively evaluate the effects of these alternatives during the transition? [*Sections 4 & 7*]
4. What market transformation initiatives are needed to stimulate market development of energy efficiency products and services? [*Section 5*]
5. For each market barrier identified, provide a measure(s) that the Commission can use to evaluate the significance of the market barrier as well as how the Commission will know when the barrier is no longer significant. [*Section 4*]
6. What level of funding is appropriate for low-income energy efficiency programs and does sufficient funding exist in the \$13.2 million low-income system benefits charge to use for energy efficiency programs for eligible low-income customers? We remind the Working Group and others that the \$13.2 million low-income fund was intended not only to make bills affordable but also to encourage conservation and energy efficiency to make bills manageable. [*Sections 5 & 8*]
7. What the effects are of utility-sponsored programs on rates and how will the costs of these programs be collected through rates? [*Section 8*]
8. Whether all large commercial and industrial customers should contribute to utility-sponsored DSM programs, even if they do not participate in the programs or receive transition service? [*Section 8*]

Finally, the Commission stated its belief that a working group comprised of a diverse group representing utilities, low-income assistance advocates, energy service providers, conservation and environmental groups, and representatives of affected public agencies such as the Governor's Office of Energy and Community Services (ECS), the NH Department of Environmental Services - Air Resources Division (DES), and the Office of the Consumer Advocate (OCA) would contribute significantly to resolving these issues.

### 3. Participants, Mission, and Process

In response to the Commission’s directive, the New Hampshire Energy Efficiency Working Group was constituted in May 1998 with a diverse group of interested parties. The list below identifies the organizations which have participated in one or more Group meetings. Participating organizations which have had representatives in attendance for at least half of the meetings are demarcated with an asterisk (\*).

<b>Table 2: Organizations Participating in Working Group</b>
Business and Industry Association (BIA)
Campaign for Ratepayer Rights (CRR)
*Conservation Law Foundation (CLF)
*Connecticut Valley Electric Company (CVEC)
*New Hampshire Dept. of Environmental Services-Air Resources Division (DES)
ENRON Corporation (Enron)
*Province I Environmental Network, Episcopal Church (Environmental Network)
*Governor’s Office of Energy & Community Services (ECS)
*Granite State Electric Co. (GSE)
LighTec Inc. (LighTec)
*New Hampshire Legal Assistance (NHLA)
*New Hampshire Electric Cooperative (Coop)
*New Hampshire Public Utilities Commission, Staff (Staff)
New Hampshire State Representative MacGillivray
HNorthern Utilities (Northern)
*Northeast Utilities Services Company (NU)
Office of the Consumer Advocate (OCA)
*Northeast Energy Efficiency Council (NEEC)
*Public Service Company of New Hampshire (PSNH)
*Tri-County Community Action Program (Tri-County)
*Unitil Service Corporation (representing Concord Electric Company and Exeter & Hampton Electric Company) (Unitil)
* = attendance > 50% of Working Group meetings
H = joined Group in 1999

On July 14, 1998, the Group adopted the following Mission Statement:

<b><u>Mission Statement</u></b>
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We will produce a comprehensive report related to energy efficiency programs and services funded by utility ratepayers that:

- 1) addresses the issues identified by the New Hampshire Public Utilities Commission in its Order No. 22,875 issued March 20, 1998 (pp. 75-86);
- 2) provides recommendations and the framework upon which such recommendations were developed;
- 3) takes a fresh look at utility sponsored programs and other energy efficiency programs and services in New Hampshire including the funding, design and implementation of such programs and services; and
- 4) assists the Commission in resolving the issues under consideration.

As a primary goal, the Working Group will seek consensus in developing its report and recommendations. Where consensus is not possible, the Working Group will report the alternate positions and identify the parties subscribing to each position.

On July 17, 1998, the Group issued a request for proposals to hire a facilitator to help run the Group process and to provide some limited technical assistance. The Group selected Dr. Jonathan Raab, President of Raab Associates, Ltd. as facilitator in August 1998.

Prior to Dr. Raab's commencement of work in September 1998, the full Group met six times, plus additional meetings for three standing committees (low-income, market barriers, and cost-effectiveness). Since September, there have been approximately 20 full-day meetings, plus many additional meetings and conference calls by various subcommittees and task forces established by the Group. In short, this was an extremely intensive process for Group members, with many difficult issues to process and resolve. One of the Group's first tasks with the facilitator was to develop a comprehensive set of groundrules to help govern the Group's interactions with each other, including Group decision making. These consensus groundrules can be found in Appendix 1.

#### **4. Market Barriers, Undesirable Market Conditions, and Markets Eligible for Continued Ratepayer Funding**

In its Rehearing Order, the Commission directed the Group to address several questions relating to the existence of market barriers. (The Commission's questions can be found on page 85 of its Rehearing Order and also in Table 1 of this Report.)

The Group pursued these questions within the context of its broader inquiry to determine which markets, if any, warrant ratepayer funding and what types of programs make the most sense in each of those markets. One stumbling block the Group encountered early-on was a lack of consensus among the members and in the literature regarding how to define the relevant market, the definition of a market barrier, whether market barriers exist, and if so, what those market barriers are. Staff asserted that the perceived market barriers often cited in the energy efficiency literature are not market failures, and that according to traditional economic theory only market failures result in an inefficient allocation of resources that may be improved with government intervention. Most other group members disagreed and asserted that market barriers do indeed exist, may be market failures, and may, in certain circumstances, be addressed by ratepayer-funded programs. This disagreement within the Group became apparent in discussions of newer energy efficient technologies and practices. Members could not agree whether lack of awareness about the technology or practice, lack of availability, or lack of widespread utilization are indicative of market barriers or market failures, are normal for new products and services, or both.

Unable to reach consensus on the definition of a "market barrier," the Group decided to explore potentially undesirable market conditions as they apply to energy efficiency markets. Under this approach, the Undesirable Market Conditions Task Force (Task Force) articulated a relatively broad set of market conditions to assess markets. These market conditions are listed under the second column in Appendix 2A. The Group agreed to compile available information on a given market, to identify any gaps in the data, and to fill in information gaps where feasible. When adequate information was available, the Group agreed to address the following questions:

1. Does the information reveal undesirable market conditions?
2. Are the undesirable market conditions changeable?
3. Can ratepayer funding be used to effectively change the undesirable market conditions?

If a particular market is found to have undesirable market conditions and those conditions can be changed effectively using ratepayer-funding and without hindering private sector efficiency activities, the Group agreed to evaluate possible programs for the market that would be subjected to further program design screenings.

The Task Force identified the following non-exhaustive table of energy efficiency products and services to examine in greater detail:

<b>Table 3: Energy Efficiency Products and Services</b>	
<b><u>Residential</u></b>	<b><u>Commercial &amp; Industrial</u></b>
Lighting – bulbs*	Variable speed drives – replacement
Lighting – fixtures*	Variable speed drives – retrofit
Clothes washers*	Motors – replacement
New construction*	Motors – retrofit
Domestic hot water	Lighting*
Ground source heat pumps	Major renovation
Refrigeration	HVAC – central chiller
Stand-alone freezers	HVAC – unitary (package rooftop)
Air conditioning	Industrial process
Shell measures	Controls
Low Income*	Compressed air
	Refrigeration
	Cooking
	New Construction*

Realizing that time would not permit the thorough examination of every item on the above list, the Group focused on those markets above marked with an asterisk (\*) in hope that such an analysis would allow the Group to draw conclusions that could be applied to the remaining markets.

After compiling and analyzing readily available information on the targeted markets, the Task Force reported back to the Group. The Group initially concluded the following:

1. Low-income customers appear to face sufficient “persistent undesirable market conditions” to warrant an exploration of program design targeted at this residential sub-sector. The two key undesirable conditions are lack of access to information and capital.
2. The residential new construction market also seems to face sufficient “persistent undesirable market conditions” that warrant an exploration of program design. These persistent undesirable market conditions include split decision making among multiple actors (e.g., builders vs. owners) and inadequate access to information on the latest energy efficient technologies and practices.
3. For commercial lighting, the Group accepted the Task Force's recommendation to move comprehensive lighting design and emerging new technologies to program design and budget screening. The Group decided that primary research was necessary to examine the extent to which the commercial lighting products and services in New Hampshire have already been transformed and to identify any gaps where on-going ratepayer support may be justified. Using several focus groups, consultants probed to learn what different market actors consider standard practice for lighting in commercial and industrial buildings throughout New

Hampshire, how that may have changed over time, how it may change in the future, and perceived reasons for the changes. The consultant's findings are located in Appendix 4.

Upon further research and consideration, Staff reexamined these conclusions reached by the Group and subsequently concludes the following which differs from the Group: regarding low-income customers, Staff agrees that it is appropriate to make targeted assistance available to low-income customers; however Staff reaches this conclusion for reasons relating to social policy; regarding the residential new construction market, Staff believes that it exhibits behavior typical of normal, healthy competitive markets and that government intervention, if any, should be addressed through the existing Residential Energy Code; regarding commercial lighting, Staff agreed that primary research was necessary to make an initial assessment of the market before deciding whether the Group should move comprehensive lighting design and emerging new technologies to program design and budget screening.

No decisions were initially made for the three other markets (i.e., C/I new construction, residential lighting, and clothes washers) examined by the Group. Although commercial new construction seems to suffer from comparable institutional conditions as residential new construction (e.g., many actors and split incentives), Staff was not comfortable making a recommendation due to the difficulty in compiling information at a comparable level of detail as for the other markets.

For residential lighting, the Group agreed to bifurcate this market into two markets - compact fluorescent lights (CFLs) and efficient fixtures. The Task Force completed tables for both sub-markets using a fairly recent regional baseline study. The numbers indicate that the market for CFLs may be more developed than the fixture market due to greater consumer awareness, greater availability of product, and more experience using the product. However, the Group could not agree on the market implications of the numbers presented, or whether or not to recommend moving this market to program design.

The debate over residential lighting highlighted the need to develop criteria identifying when it would be appropriate to enter and to exit a market. The Group agreed to step back from its market-by-market analysis to see if it could agree on the threshold issue of when a particular market may be eligible for consideration for ratepayer funding.

From these discussions, the Group developed a potential overall market framework located in Appendix 2B. The framework provides one way to segment markets, a set of indicators to look at when assessing whether to enter or exit a particular type of market (e.g., technology or practice), and a list of principles for applying the framework.

Appendices 2A and 2B were both developed during discussions and negotiations of the Group. The Group agrees that neither framework is fully fleshed-out yet. Both are in need of further theoretical and practical refinements. The Group also agrees that there are many similarities between the two (e.g., the researchable questions in Appendix 2B are in many cases virtually identical to the questions in Appendix 2A), and that they are not necessarily mutually exclusive.

The Group's original intent in developing Appendix 2B was to create a simpler framework to complement the matrix in 2A. While some members favor one over the other, the Group as a whole agrees that both merit further consideration. The Group also agrees that the Energy Efficiency Committee (which it proposes later in this report in Section 6) should continue to monitor the market(s) for undesirable market conditions and to track the effectiveness of ratepayer funded programs. The Group further believes that the Committee will need to use some framework. The Committee should look at such issues as consumer awareness, as well as the availability and comparability of energy efficiency products and services compared to less efficient substitutes.

## **5. Program Design Issues**

The Group agrees that a proposal for a program in a market eligible for ratepayer funding should identify:

1. The reasons for addressing this market
2. The general approach or approaches that could best address those conditions
  - A. Type of intervention - education, financing, training, rebates, "pay-as-you-save," etc.
  - B. Intervention target - consumer, retailer, manufacturer, etc.
3. The evaluation metrics and exit strategy
4. Budget
5. Program administration
6. Cost-effectiveness

The Group further agrees that in designing programs, administrators and others should adhere to certain principles including, but not limited to:

1. Maximize opportunities for market transformation such that long-term impacts continue to occur after the program has concluded, thus creating permanent market changes.
2. Assure that ratepayer-funded efficiency programs are designed in a manner such that they complement and do not hinder the development of private sector efficiency products, services, and programs and that they encourage the development of private sector products, services, and programs whenever possible, with the ultimate goal of achieving energy efficiency markets that operate effectively without ratepayer funding;
3. Assure that existing program delivery mechanisms are continued where they provide benefits (e.g., from existing expertise, infrastructure, etc.), do not compete with private sector alternatives, and are cost effective. Consider and recommend to the Commission alternative delivery mechanisms where appropriate; and
4. Assure that there are well-constructed exit or market transitioning strategies for technologies

and practices. Implementation of these transitioning strategies should not wait until reaching exit thresholds, but should begin as you approach them -- i.e., as the market matures. Such strategies may include such things as increasing customer contributions of measure cost, using financing mechanisms over rebates, and retail-focused programs over utility catalogs.

It was not the intent of this Group to develop detailed program designs given the magnitude of its other tasks and the timeframe for reporting to the Commission. Moreover, the Group felt it would not be very productive to move to detailed program design prior to getting feedback from the Commission on the various recommendations included in this report. Nonetheless, the Group provides its basic program design recommendations for a low-income program for New Hampshire with supporting documentation in Appendices 5, 5A, 5B, and 5C. These recommendations are based on substantial work by the Group's Low-Income Subcommittee and numerous discussions with the full Group,<sup>4</sup> and include:

- A statewide coordinated program.
- Comprehensive energy efficiency products, services, and education that could save 1,000/kWh per year per household on average.
- Funding and infrastructure to ultimately serve approximately 2,500 low-income customers per year.

## **6. Program Administration**

In the course of its deliberations, the Group examined various administrative models including traditional utility administration and other alternatives. The Group examined alternatives either proposed or implemented in California, New York, Vermont and the Pacific Northwest. Under these models, program administration would be provided respectively by: winners of requests for proposals (RFPs),<sup>5</sup> an existing state agency (NYSERDA); a new statewide entity; and a new regional organization (the Northwest Energy Efficiency Alliance) run by a board comprised of utilities and non-utility stakeholders. The Group also considered the decisions in Massachusetts, Connecticut and Rhode Island for the continuation of traditional utility administration. After careful consideration, the Group agreed that New Hampshire utilities could continue to be the primary program administrators, at least over the next few years (i.e., during the period when transition service is being offered).

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<sup>4</sup> The Energy Efficiency Working Group created a Low Income Subcommittee to study and report to the full Working Group on energy efficiency matters as they pertain to low-income customers. The Low Income Subcommittee was comprised of representatives from the utilities, state agencies, and low-income service providers. The Subcommittee reviewed literature, researched questions assigned to it by the full Group, and produced written reports and presentations for the full Group. The Subcommittee and other interested parties met with the Vermont Energy Investment Corporation ("VEIC") which has designed and implemented low-income energy efficiency programs in other states. The Subcommittee and the full Group also heard presentations by New England Electric System (NEES) and NU on their low-income efficiency programs in other states.

<sup>5</sup> In California there were to be three RFPs for statewide administrators – one each for residential, commercial/industrial, and new construction programs. Utilities would have been allowed to bid. However, this approach is on hold for several years, as the Governor did not approve funding.

In making this decision, the Group noted that, at least in the short-term, the costs of designing and implementing an entirely new administrative structure probably outweigh the potential benefits, particularly given the uncertainty of long-term ratepayer-funded energy efficiency activities in New Hampshire. Instead, the Group felt that many of the benefits espoused by proponents of alternative administrative structures, such as greater program consistency and reduced costs, could be obtained through closer cooperation among utilities and other stakeholders and greater coordination of program designs, administration, implementation, and evaluations, at least for a core set of programs for New Hampshire ratepayers. As such, the Group agreed to recommend the formation of a New Hampshire Energy Efficiency Committee with the purpose, objectives, membership, governance and duties as described below. However, the Group agreed that this recommendation would be revisited in the future along with the broader issue of continued ratepayer funding for energy efficiency beyond the period when transition service is offered by one or more utilities.

A. Purpose:

The primary purpose of the New Hampshire Energy Efficiency Committee is to assist the New Hampshire Public Utilities Commission in carrying out its statutory authority regarding energy efficiency programs by facilitating collaboration and cooperation in the development of consistent, cost-effective ratepayer-funded energy efficiency programs for New Hampshire, including market transformation activities. The Committee will operate within the policy framework for energy efficiency programs established by the Legislature and the Commission.

B. Objectives:

The primary objective of the Committee is to facilitate collaboration and cooperation among key stakeholders in the development of a consistent set of statewide core programs that:

- are delivered in a manner that provides consumers with access to the programs irrespective of their geographic location within New Hampshire;
- have the same participation criteria, application process, incentives and name in those instances where such “seamlessness” across electric utilities’ service territories is determined important for program success, market transformation objectives, or both; and
- are planned and delivered with the lowest possible administrative costs.

### C. Composition:

The Group recommends that the New Hampshire Energy Efficiency Committee be composed of representatives of regulated electric utilities, consumer and environmental advocates, government bodies, and other interested stakeholders. Initially, the Committee should consist of representatives from a broad group of key stakeholders including the following:

- One representative from each of the following utilities:
  - Public Service Company of New Hampshire
  - Granite State Electric
  - Connecticut Valley Electric Company
  - New Hampshire Electric Cooperative
  - Unitil<sup>6</sup>
- One representative from each of the following three State agencies:
  - NH Department of Environmental Services
  - Governor's Office of Energy and Community Services
  - Office of the Consumer Advocate
- Representatives from each of the following stakeholder groups:
  - Consumers' Groups:
    - NH Legal Assistance
    - Other Non-Low Income Residential (to be determined, TBD)
    - Small commercial/industrial representative (TBD)
    - Business and Industry Association of New Hampshire
  - Environmental Groups:<sup>7</sup>
    - Conservation Law Foundation
    - Environmental Network
  - ESCO/Supplier Groups:
    - Power Marketers (TBD)
    - Northeast Energy Efficiency Council
- NHPUC Staff as Ex Officio, Non-Voting Member

The Group also agrees that the Committee should consult with individuals and companies (e.g., ESCOs, customers, gas and water utilities) who may not be voting members of the committee but whose input may be invaluable on specific program design issues.

### D. Governance:

The Committee will strive for consensus in its decision making. Where consensus is not possible, a 2/3 vote among all representatives present is required in order for a recommendation to pass. Divided votes will be represented as such in any work products (e.g., reports, recommendations, etc.) and minority reports are an option if any party so desires.

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<sup>6</sup> Unitil - representing both Concord Electric Company and Exeter & Hampton Electric Company

<sup>7</sup> Staff maintains that there should be only one environmental interest group representative given the presence of DES and ECS.

The Committee will annually elect a Chairperson and a Vice-Chair. The responsibilities of the Chairperson will include, but may not be limited to:

- Chairing Committee meetings;
- Issuance of meeting minutes;
- Coordination of Committee work products (e.g., reports, recommendations);
- Any other responsibilities assigned by the Committee that are consistent with and appropriate to the furtherance of the Group's defined objectives and duties.

Once constituted, the Committee will develop groundrules for operating and making decisions (including adding members, defining a quorum). Group members suggested that the existing Working Group's groundrules (see Appendix 1) could be utilized as the starting text from which the Committee would formulate their own groundrules.

#### E. Funding:

The Group expects that the Committee will spend money as necessary to carry-out its joint market research, program design, and evaluation studies. The Group agreed that such funds, once approved by the Committee, should come from the SBC funds and be apportioned to the distribution companies. Hiring staff is not anticipated and would require prior Commission approval.

#### F. Duties:

Within a policy framework established by the Legislature and the Commission, the Committee will help guide the development of statewide energy efficiency programs to be administered by electric distribution companies or other administrators, subject to the Commission's final approval.

Within this framework, the Committee will:

1. Make recommendations for goals and implementation strategies for a core set of system benefits-funded energy efficiency programs for New Hampshire, including:
  - A. recommendations on the most appropriate program administration and delivery mechanisms, after assessing the benefits and cost-effectiveness of various models;
  - B. recommendations regarding proposed administrator implementation plans consistent with the recommended program objectives and strategies, after reviewing and discussing program criteria and structures for core programs in sufficient detail to guide development of full program implementation plans;
2. Coordinate evaluation of program implementation for cost-effectiveness, performance, and consistency with objectives, and recommend modifications as suggested by evaluation results or changed market circumstances;

3. Identify and select contracting and consulting services necessary to carry out the Committee's tasks;
4. Prepare an annual report to the Commission on the progress of the Committee's activities that will include a portfolio of recommended core programs.<sup>8</sup> Periodically provide reports to various stakeholders; and
5. Any other duties requested or required by the Commission.

The Group also agrees that in the process of meeting the objectives and fulfilling the duties described herein, it may find it necessary or appropriate for the Committee to return to the Commission from time to time for additional clarification or with recommendations.

## **7. Cost-Effectiveness Testing**

Cost-effectiveness tests are a means to evaluate the relative value of ratepayer-funded energy efficiency programs in the context of energy policy goals including, but not limited to, promoting market transformation, lowering energy bills, providing energy savings, capturing lost opportunities, maintaining equity among customer groups, and lessening environmental impacts. Cost-effectiveness testing is not the only consideration in evaluating and prioritizing plans and programs that together form a portfolio of initiatives designed to meet these and other important energy policy goals. (See Appendix 3)

The Group agrees that cost-effectiveness testing results should be reviewed prior to implementing a program to help inform decisions such as setting program priorities and evaluating alternative design strategies. It further agrees that test results should also be reviewed during and after program implementation to assess program progress, refine programs, and calculate utility incentives.

The Group spent time reviewing New Hampshire's current total resource cost (TRC) test, as well as examining tests used or proposed in other states including societal tests, utility tests, electric system tests, participant tests, and ratepayer impact tests. The tests differ in what they include and exclude as both benefits and costs. Often tests using the same name (e.g., electric system test) differ in how they are designed. It is also common for states to use hybrid tests that borrow some elements from one type of test and other elements from another test type (e.g., merging elements from societal and utility or electric system tests). Finally, some jurisdictions look at results from more than one test.

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<sup>8</sup> This report should be filed at least a couple of months before individual utility filings are due so the Commission can review the joint program designs and hold hearings or technical sessions if they deem it useful or necessary. Utility filing dates may need to be changed to better dovetail with the annual report.

In the end, the Group agreed to propose having one test, and that New Hampshire would be well served by making some important modifications to its existing cost-effectiveness test. This modified test compares the total resource costs for an energy efficiency program to the total resource benefits, including quantifiable costs and benefits associated with saving electricity and other resources (e.g., water, gas, or oil), market effects of energy efficiency programs (e.g., spillover and post program participation) and additional non-quantified benefits. The table below shows the components of the cost-effectiveness test recommended by the Group.

<b>Table 4: Proposed New Hampshire Cost-effectiveness Test</b>	
	<b>Proposed New Hampshire Cost-effectiveness Test</b>
<b>Benefits:</b>	
Avoided generation, transmission & distribution costs for:	
A. Program participants	Yes
B. Market effects (e.g., spillover, post-program adoptions)	Yes
Customer Benefits (including O&M)	Yes
Quantifiable avoided resource costs (e.g., water, natural gas)	Yes
Adder for other non-quantified benefits (e.g., environmental and other benefits)	15%
<b>Costs:</b>	
Program costs (e.g., incentives, admin, monitoring, evaluation) for:	
A. Program participants	Yes
B. Market effects (e.g., spillover, post-program adoptions)	Yes
Customer Costs (including O&M)	Yes
Quantifiable additional resource costs (e.g., water, natural gas)	Yes
Utility performance incentives	Yes <sup>9</sup>

A description of each component of the modified cost-effectiveness test, along with consensus recommendations on methods, follows:

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<sup>9</sup> The target rate of utility performance incentives (e.g. 8% of program and evaluation budgets, see Section 9) will be considered at the program portfolio level but not at the individual program level.

- The Group agreed that standardized regional assumptions for avoided electric generation costs (short and long term) should be used in the calculation of cost-effectiveness, unless and until clearing prices in a maturing competitive retail power market offer more appropriate or representative values. It further agreed to hold off making recommendations on the avoided cost values until reviewing a study currently underway on the subject for Massachusetts utilities as well as conducting other research. The Group agreed that depending on the timing of the study and commencement of the New Hampshire Energy Efficiency Committee, either the Working Group or subsequent Committee would make recommendations to the Commission on this subject.
- For a statewide or regional program, avoided electric T&D costs should be based on a weighted average of such costs of electric utilities in New Hampshire. For a separate, stand-alone program implemented in a given utility service territory, avoided T&D costs should be utility-specific.
- Program participants will include all customers who participate in a ratepayer-funded program and save electricity whether or not the customer receives a financial incentive. Neither benefits nor costs associated with free-riders need to be netted out.<sup>10</sup>
- Both the benefits and costs associated with market effects (i.e., spillover and post-program adoptions), where documented, will be estimated and included in cost-effectiveness analyses.<sup>11</sup> The Group agrees that this addition to the existing test is particularly important for activities focused on transforming markets.
- Quantifiable resource savings and costs such as water, gas, and oil are typically included in TRC analyses but have not historically been included in New Hampshire. The Group agrees that non-electric resource avoided costs should be included to the extent that they are attributable to a program and can be reasonably quantified based on expected customer savings associated with such resources. Standardized values should be used wherever possible. With this change, for example, water savings from energy-efficient clothes washers would count as a program benefit, while increased gas, oil, or electric consumption for winter heating due to more efficient lighting would count as a program cost.
- The Group, agrees that even with the inclusion of non-electric resource benefits and costs in the proposed New Hampshire Cost-Effectiveness analysis, energy efficiency programs produce environmental and other benefits that are not otherwise captured in the direct avoided costs. The Group, with the exception of Northern, agrees that 15% should be added to avoided energy costs at this time as a proxy for the net benefits from energy efficiency-related savings, and believes that including this adder is consistent with New Hampshire law. (See State Law in Appendix 3)

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10 Although Group members agree that program designs should attempt to minimize free-riders, the Group concluded that the methodological challenges and associated costs of accurately assessing free-riders no longer justifies the effort required to net these out of cost-effectiveness analyses.

11 Market effects may be included as point estimates or in the form of break-even or sensitivity analyses.

While some Group members strongly believe that adequate market-based price proxies currently exist for some of these benefits (e.g., using the price of credits for valuing avoided NO<sub>x</sub> and SO<sub>2</sub> emissions), uncertainty about the fuel source of marginal production in a restructured industry renders the application of these proxies difficult until some history has been established in this regard. These members further believe that use of these proxies should be considered once experience is gained with bid-based generation dispatch in the New England Power Pool, and that similar proxies for other benefits (e.g., avoided CO<sub>2</sub> and Mercury emissions) should also be considered as they become available. However, these members agree that, all else being equal, the 15% adder could be adjusted by an appropriate amount, if and when any pollutant-specific proxies are incorporated in the cost-effectiveness test. The Group agrees that as these proxies are developed, care should be taken to recognize that the value of the avoided emissions used to achieve existing regulatory thresholds may already be included in the avoided cost of generation.

- The Group also agrees that the cost to ratepayers for shareholder incentives should be applied at the "portfolio" level, i.e., after assessing the costs and benefits of all programs offered by a utility on an aggregate basis.

Using this revised test, proposed programs that screen with benefit/cost ratios equal to or greater than 1.0 may be approved by the Commission for implementation. Exceptions include low-income programs, where the Group believes that additional benefits unique to low-income programs exist that remain uncaptured even with the 15% adder (see Appendix 5C), and educational programs where the benefits often occur in the future and are difficult to estimate.<sup>12</sup> For both low-income and educational programs, cost-effectiveness analyses should still be run if feasible, and cost-effectiveness remains a concern. But the Group recommends that low-income and educational programs that fall below a benefit to cost ratio of 1.0 may still be approved by the Commission if the programs are otherwise well-designed.

The Group also agreed to the following methodological issues:

- Multi-year analyses should be conducted to judge the relative value of ratepayer-funded energy efficiency programs in the context of energy policy goals including, but not limited to, short and long-term energy savings, removing or reducing undesirable market conditions and transforming markets. Analyses should be conducted assuming programmatic activity over one and three years.
- Projected costs and benefits should be stated in present value terms. The Group agrees to use the Prime Rate adjusted annually (on or around June 1; i.e., 7.75% for the year 2000 programs). Program benefits should be calculated over the useful life of the program's energy efficiency measures. The costs and benefits of market effects should be treated consistently, and the estimates of such effects should be appropriate to the program design

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<sup>12</sup> See also Order No. 23, 172, in DR 98-174, PSNH 1999 C&LM Pre-Approval Filing docket, March 25, 1999, pages 6-7.

and time horizon over which it is reasonable to predict such effects. The level of precision of estimates should reflect a reasonable balance between the cost of obtaining various levels of precision, and the importance of long-term market effects to a program's cost effectiveness and design.

- Coordinated evaluation and cost-effectiveness analysis is preferred but not required for programs that are implemented on a coordinated or joint basis or which use the same program designs, procedures and implementation strategies, so as to reduce evaluation costs and increase consistency. Cost-effectiveness analyses for a joint or coordinated utility effort may be joint, individual, or some combination of these options based on the structure and operation of the initiative.

## 8. Energy Efficiency Funding

The Group reached consensus on the following language with respect to the ratepayer-funded energy efficiency funding rates for the first two years under competition:

“As is implicit in the legislation, after 70% of the market has gone to competition, each jurisdictional utility shall budget 1 mill in the first year and 1.5 mills in the second year for energy efficiency, with the option for an individual utility to exceed that level if the company, other parties, or both so choose and the Commission approves.”

The Group also agreed that after the second year, energy efficiency funding rates should be generally consistent across distribution companies. Some Group members believe it is premature, at this time, to set budgets beyond the second year for a number of reasons (CVEC, Unutil, NHEC, and Staff). Others believe, also for a number of reasons, that beyond the second year, the energy efficiency funding rate should be in the range of 2.5 – 3.2 mills/kWh (ECS, DES, GSE, PSNH,<sup>13</sup> CLF, Tri-County, Environmental Network, NEEC, and NHLA).

The Commission should consider numerous factors in setting program funding rates including, but by no means limited to, the overall rate reductions achieved in the context of restructuring and the relative level of a utility's rates.

The Group also acknowledges and accepts the Commission's recent decision that low-income funding for energy efficiency should come directly from the energy efficiency fund rather than the low-income electric bill assistance portion of the SBC.<sup>14</sup> However, the Group agrees that

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13 PSNH's support for these funding levels is contingent upon final Commission approval of the terms and conditions contained in the Memorandum Of Understanding dated June 14, 1999, by and between the Governor of the State of New Hampshire acting through her Office of Energy and Community Services, the Office of the Attorney General, Staff of the New Hampshire Public Utilities Commission, Public Service of New Hampshire and Northeast Utilities.

14 “There was a question as to whether Demand Side Management (DSM) programs for low-income customers ought to be part of the DSM portion of the system benefit charge or whether it should [be] a part of the low-income

once the electric assistance program ("EAP") is fully operational, the Commission should review the EAP program to determine if any EAP funds can be made available for low-income energy efficiency programs. Such a determination would depend on factors including, but not limited to, attainment of EAP goals, sufficient funding for the arrearage component, and the size of any waiting list. The determination could also be significantly impacted by the Commission's decision with respect to the source of funding for utility start-up costs and on-going utility administrative expenses for EAP.

Other than as described above, the Group has not developed detailed budgets by distribution company, by rate class, or by program type. However, the Group did agree that equity among customer groups is one of the many important factors to consider in the context of energy policy goals. The Group also agreed to stipulate that "as set forth in the statute, all customers should pay the SBC and be eligible for participating in programs." The Group also agreed that energy efficiency program funds should be allocated to the residential and C/I sectors in approximate proportion to their contributions to the fund. However, the Group agreed that low-income programs should be funded by all customers. Furthermore, the Group agreed that ratepayer funds collected for energy efficiency programs should be spent only on energy efficiency related expenses and not for other purposes. Therefore, the Group, with the exception of NHEC, CVEC, and Staff, agree that energy efficiency funding and spending shall be reconciled each year and any over- or under-collections shall be carried forward and added to or subtracted from, as appropriate, the subsequent year's budget.

## **9. Distribution Company Remuneration - Shareholder Incentives<sup>15</sup> and Lost-Fixed Cost Recovery**

In response to the Commission's directive to look at moving as quickly as possible from the payment of lost revenues for energy efficiency programs, the Group examined the entire issue of providing financial remuneration to utilities for implementing energy efficiency programs. The Group found that some utilities in New Hampshire have been remunerated through shareholder incentives (GSE), others through lost fixed cost recovery (PSNH, NHEC),<sup>16</sup> and some through both mechanisms (Unitil, CVEC). Moreover, the Group found that there has existed a range of

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portion of the system benefit charge. Chairman Patch moved that the Commission approve the proposal from the LIWG [Low Income Working Group] that the low-income DSM program be included as part of the DSM portion of the system benefit charge, not as a part of the low-income portion. Chairman Patch noted that he believes that the two are distinguishable programs and it would be more appropriate for the DSM related charges, to the extent that there are any, to be considered on a going-forward basis as part of any system benefit charge related DSM programs. Chairman Patch noted that the issue of such DSM-related charges will be addressed at a hearing in the future, after the Commission has reviewed the report from the Energy Efficiency Working Group (EEWG) and a hearing is held on the EEWG recommendations." (Minutes from the Commission Meeting on May 10, 1999)

<sup>15</sup> It should be noted that not all distribution utilities are "shareholder" owned; the New Hampshire Electric Coop is "member" owned and has a different financial structure than the investor-owned utilities (IOUs). "Shareholder incentives" should be thought of as "performance incentives" in their case.

<sup>16</sup> NHEC received LFCR from 1994 – 1996.

structures, levels, and assumptions in both the incentives and lost fixed cost-recovery (LFCR) mechanisms used by New Hampshire utilities.

The Group also examined the shareholder incentive and LFCR mechanisms either recently adopted or currently under consideration in several other states undergoing utility restructuring. After careful consideration, the Group has agreed that utilities should receive shareholder incentives for measures installed after the Implementation Date.<sup>17</sup> The Group further agrees, with the exception of Unitil, CVEC, and Northern,<sup>18</sup> that measures installed after Implementation Date would not be eligible for LFCR.<sup>19</sup> For measures installed prior to the Implementation Date, the Group agrees that historic LFCR should be dealt with on a utility-specific basis by the Commission. The details of the Group's proposed shareholder incentive mechanisms are set forth below.

### Shareholder Incentives:

The Group recommends that distribution utilities administering energy efficiency programs in a cost-effective manner receive a performance incentive for these activities. The purpose of the incentive is to motivate the utilities to aggressively pursue achievement of the performance goals of their energy efficiency programs. Shareholder performance incentives for a given utility shall be established annually in the following manner:

### Design of the Shareholder Incentive:

- 1) The proposed shareholder incentive is a sliding scale incentive with two components. The first, *the cost-effectiveness component*, is based on the relationship between the projected New Hampshire Cost-Effectiveness test (NHCE) and the actual year-end NHCE. The second, *the energy savings component*, is based on the relationship between the projected lifetime kWh savings from installed measures (planned savings) and the lifetime kWh savings from actual installations (installed savings).
- 2) There will be two separately calculated incentives – one for the combined programs in the *residential sector* and one for the combined programs in the *commercial/industrial (C/I) sector*.
- 3) Target or Design Performance

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17 Implementation Date is the date a distribution utility implements its new energy efficiency plan approved by the Commission, after the Commission reviews and rules on the Group's Report and recommendations.

18 CVEC, Unitil, and Northern assert that they should receive LFCR for future programs until ratemaking changes diminish the need for LFCR by decoupling mechanisms and/or other appropriate mechanisms to assure an opportunity to earn a return that is not diminished by revenue erosion from energy efficiency programs.

19 PSNH asserts that if the terms and conditions set forth in the June 14, 1999 Memorandum of Understanding (MOU) receive final approval by the Commission, it will not seek any further recovery of LFCR and will support the proposal for shareholder incentives. In the event that the terms and conditions set forth in the MOU are not approved, PSNH asserts that it may seek recovery of LFCR in accordance with its current methodology.

- a) In each sector, a utility that achieves an actual NHCE equal to the projected NHCE and installed savings equal to the planned savings earns a before tax incentive of 8.0% of its planned energy efficiency program budget for that sector.
- b) The proposed shareholder incentive will be calculated as follows:
  - i) Residential Sector Incentive =  $[\text{actual NHCE} \div \text{projected NHCE}] * [4\% * \text{residential planned energy efficiency budget}]$ , plus  $[\text{installed savings} \div \text{planned savings}] * [4\% * \text{residential planned energy efficiency budget}]$
  - ii) C/I Sector Incentive =  $[\text{actual NHCE} \div \text{projected NHCE}] * [4\% * \text{C/I planned energy efficiency budget}]$  plus  $[\text{installed savings} \div \text{planned savings}] * [4\% * \text{C/I planned energy efficiency budget}]$
- c) A utility will not earn anything on the cost-effectiveness component of its incentive in a sector if the actual NHCE for the combined programs in that sector is less than 1.0
- d) A utility will not earn anything on the energy savings component of its incentive in a sector if the actual energy savings for the combined programs in that sector is less than 65% of its planned energy savings.
- e) A utility's incentive in a given sector will be capped at 12% (before tax) of its planned energy efficiency budget. There is no cap on either component of the incentive as long as the combined incentive for any sector does not exceed 12% of that sector's planned budget.
- f) "For incentive calculation purposes only, planned energy efficiency budget" is defined as the total program budget minus shareholder incentives and lost fixed cost recovery, if any.
- g) The avoided costs used in calculating the actual NHCE shall be those used to calculate the Commission-approved projected NHCE.
- h) This incentive mechanism shall remain in place through the end of the transition service period of the last utility to introduce retail choice. At that time, the incentive structure will be revisited, along with the over-riding review of energy efficiency programs.
- i) The percentage incentive rates provided for in this proposal may be adjusted in the event of an extended period of either significant inflation or deflation following the effective date of this proposal.
- j) Any variance in spending for any individual program of 20% under or over budget shall require Commission approval.
- k) Final annual shareholder incentives will be determined retrospectively.<sup>20</sup>

An example of the Shareholder Incentive calculation and graphs are provided in Appendix 6.

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<sup>20</sup> A number of the accounting issues related to shareholder incentives still need to be fleshed-out, for example, whether incentives should be budgeted for the program year or the year in which they are ultimately determined, and treatment of incentives from years prior to Implementation Date.

## Signature Page

We the undersigned have participated in the New Hampshire Energy Efficiency Working Group process and endorse the findings and recommendations contained in this report:

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David Marshall for  
Conservation Law Foundation

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Bruce Bentley for  
Connecticut Valley Electric Company

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Kenneth A. Colburn for  
New Hampshire Dept. of Environmental  
Services – Air Resources Division  
Represented by  
Katherine Hartnett and  
Andrew M. Bodnarik

---

Jane Doherty for  
Province I Environmental Network,  
Episcopal Church

---

Heidi Kroll for  
Governor's Office of Energy & Community  
Services

---

Elizabeth Hicks (New England Power  
Service Company) for  
Granite State Electric Co.

---

Alan Linder for  
New Hampshire Legal Assistance

---

Bill Gabler for  
New Hampshire Electric Cooperative

---

Tom Frantz for the Staff of the  
New Hampshire Public Utilities  
Commission, Staff

---

Michael W. Townsley for  
Northeast Utilities Service Company

---

John Manning for  
Northeast Energy Efficiency Council

---

Paul Smith for  
Northern Utilities

---

Gil Gelineau for  
Public Service Company of New Hampshire

---

Lawrence Kelly for  
Tri-County Community Action Program

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Frederick Stewart, Unitil Service Corp. for  
Concord Electric Company and Exeter &  
Hampton Electric Company

## **Additional Signature Page**

We the undersigned have participated in the New Hampshire Energy Efficiency Working Group process and endorse the findings and recommendations contained in this report:

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Dennis A. Hebert for  
Campaign for Ratepayer Rights