



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF AIR AND RADIATION

Climate Protection Partnerships Division
U.S. EPA 6202J
Washington, DC 20460

June 13, 2003

Dear NEDRI Participant,

In preparation for the next week's meeting, we are pleased to provide you with a summary of the results of the demand response modeling performed by Synapse Energy Economics. A discussion of the work is scheduled on Wednesday, June 18 in Holyoke, Massachusetts. A final report will be available shortly after the meeting.

A principal goal of this study is to examine the potential environmental impacts of NEDRI's load response and energy efficiency recommendations. As a general matter, the study's findings suggest that adoption of NEDRI's recommendations would be likely to improve the environmental profile of the New England electric system, assuming that environmental concerns receive appropriate attention. Here are a few highlights gleaned from the findings of Synapse study that have implications for the larger NEDRI effort:

- Regional Demand Response programs could provide significant environmental benefits in circumstances where DR resources are eligible for treatment as contingency reserves as recommended by NEDRI. This is due to the DR resources backing down generator-based spinning reserves, which in New England are often provided by units that are relatively highly-polluting. To ensure that these benefits are realized, mechanisms would need to be established to prevent the loss of these emission reductions through emissions trading.
- If demand response resources were not used to meet reserve requirements, emissions impacts would be much smaller, and emissions could increase or decrease depending on the amount of demand response generation and the fuel mix of that generation.
- More work is needed to assess the health risks posed by emissions from the on-site generators likely to participate in demand response programs.
- Energy efficiency improvements consistent with NEDRI's recommendations have quite positive environmental effects, since efficiency reduces generation needed

across many hours and displaces high-cost, high-emitting units at peak times as well. Significantly, modeled levels of energy efficiency approximate the levels achieved by current programs, whereas modeled levels of DR are several times the levels actually achieved thus far.

- Finally, the study finds that implementing both NEDRI's short-term load response programs and its longer-term efficiency recommendations would yield greater environmental improvements than pursuing either type of resource by itself.

As New England's policymakers move forward with implementation of NEDRI-recommended DR measures, we hope that this study will provide useful guidance regarding environmental matters that need attention, as well as guidance for monitoring environmental impacts over time.

This analysis by Synapse was conducted for the U.S. Environmental Protection Agency under a contract with ERG, Inc. EPA and the authors are grateful to the members of our environmental analysis group as well as NEDRI consultants, whose input facilitated improvements to both the analysis and the paper.

We look forward to discussing the paper at the NEDRI meeting next week.

Sincerely,

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* Inclusion of this letter in the Report is for informational purposes only and is not an endorsement of the Letter by the NEDRI Group. The NEDRI participants did not have the opportunity to fully consider the statements made by EPA or the Study upon which the Letter is based. Only a preliminary draft of the study was available at the time of NEDRI's final meeting.

NEW ENGLAND CONFERENCE OF PUBLIC UTILITIES COMMISSIONERS, INC.

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Elia Germani
President

Amy Ignatius
Executive Director

July 1, 2003

Richard Cowart
Jonathan Raab
New England Demand Response Initiative
50 State Street
Montpelier, VT
05602

Re: NEDRI Report and Recommendations

Dear Mr. Cowart and Mr. Raab:

The New England Conference of Public Utilities Commissioners (NECPUC)¹ expresses its appreciation to the New England Demand Response Initiative (NEDRI) technical and facilitation team for their hard work and successful efforts. NECPUC also appreciates the support of the Federal Energy Regulatory Commission, the U.S. Department of Energy, and the U.S. Environmental Protection Agency in the NEDRI process. The final NEDRI Report and Recommendations represent their efforts as well as those of a broad array of stakeholders throughout New England.

NECPUC believes that the development of markets for demand response resources is an integral component of the long-term success of restructured New England electric markets and that public policy efforts are necessary to fully and evenhandedly integrate demand side resources into electric power markets. The NEDRI Report provides an important foundation for understanding the contribution of demand side resources to electric reliability, price stability, and environmental improvement.

The NEDRI Report offers a technical and empirical analysis of demand resources and their potential in electric power markets. It also indicates a consensus on many policy recommendations, some of which are general, while others are more specific and technical.

¹ NECPUC comprises the public utility regulatory agencies for the six New England States. They are the Connecticut Department of Public Utility Control, the Maine Public Utilities Commission, the Massachusetts Department of Telecommunications and Energy; the New Hampshire Public Utilities Commission, the Rhode Island Public Utilities Commission, the Vermont Department of Public Service and the Vermont Public Service Board.

Some of the recommendations have not yet been fully considered by state public utility commissions, and an endorsement by a utility commission before full consideration could be interpreted as prejudging an issue. Other recommendations may exceed the legal authority of state utility commissions.

Therefore, consistent with NEDRI Revised Ground Rule No. 13, NECPUC abstains from approving the specific policy recommendations put forward in the NEDRI Report.² In a memorandum of August 2, 2002 on this topic, we stated that New England public utility commissions will give “(S)erious and expeditious consideration of suggestions made through this process for actions that could be taken in individual states.”³ The States will now consider the NEDRI Report. Ultimately, the six states comprising NECPUC have a variety of electric supply resources and may employ the NEDRI policy recommendations in various ways to suit states’ individual policy preferences and the unique characteristics of each state’s power markets and power delivery systems.

NECPUC thanks the NEDRI participants for their important contribution in formulating policy options for successfully integrating demand side resources into power markets. The Report provides a valuable resource guide and policy tool for New England public utility commissions as they consider the legal, technical, and economic intricacies of integrating demand side resources into electric power markets.

Sincerely,

Elia Germani

² Revised Ground Rules No. 13 states, “The NEDRI Group recognizes that the governmental members of this process do not have the right to commit their respective organizations to any specific recommendations and, in addition, may need to recuse themselves personally from reaching conclusions on specific recommendations, in order to preserve their ability to fairly consider similar questions elsewhere as part of their professional responsibilities.”

³ NECPUC Memorandum to FERC Commissioner Nora Brownell, et al dated August 2, 2002 (Appendix A, *Outline of Contributions and Commitments by Key Institutions*).



The Secretary of Energy
Washington, DC 20585

June 18, 2003

Dear NEDRI Participants:

As you meet for the last time and with your final report about to be issued, I am pleased to offer this letter of commendation and thanks from the U.S. Department of Energy to all the participants of the groundbreaking New England Demand Response Initiative (NEDRI).

Thanks to you for your hard work during 15 stakeholder meetings over the last 16 months, New England's citizens this summer will be able to get the benefit of better and improved demand response programs through ISO-New England. I expect even more benefits in future years.

I am heartened to see such a broad range of groups --ISO-New England, state utility and environmental regulators, power generators and marketers, utilities, consumer and environmental advocates, and other stakeholder groups --all working together to propose a comprehensive set of demand response programs for the region's wholesale and retail electric markets.

Details matter in demand response, and so I want to recognize all the help you have gotten from the technical experts that helped with those details: Chuck Goldman of LBNL, Brendan Kirby of ORNL, Rick Weston and Rich Sedano from Regulatory Assistance Project, Jim Lazar, Jeff Schlegel, and Eric Hirst --but particularly the professional work of your lead facilitator Jonathan Raab and lead consultant Rich Cowart.

I want to also acknowledge and thank ISO-New England, NYISO, U.S. EPA and the Energy Foundation for their funding and help. I especially want to thank DOE's sister agency FERC for its strong interest in NEDRI as shown by their expedited review of this summer's New England demand response programs.

I expect NEDRI's accomplishments will serve as a model for other regions to follow. Getting the customer to participate in wholesale markets through demand response is crucial to improving our country's electric markets.

Congratulations!

Sincerely,

A handwritten signature in black ink, appearing to read "Jimmy Glotfelty".

Jimmy Glotfelty

Senior Policy Advisor to the Secretary

