

New England Demand Response Initiative Second Member Meeting

Tuesday, April 2, 2002

Conveners:

Dr. Jonathan Raab,
Raab Associates, Ltd.
Facilitator

Richard Cowart,
Regulatory Assistance Project
Policy & Program Director

Meeting #2: Summary

43 people attended the meeting, which began at 9:30 and concluded at 3:45. See attached attendance list.

I. Documents Distributed

Prior to meeting:

1. Agenda
2. Scoping Paper on Price Responsive Load
3. Scoping Paper on Demand Side Resources and Reliability
4. Proposed Ground Rule language regarding government recusals

At meeting:

1. Slides from Eric Hirst, "Reliability Benefits of Price-Responsive Demand."
2. Slides from Chuck Goldman, "Price Responsive Load Programs: Framing Paper #1."

II. Introduction and Administrative Issues

Dr. Raab welcomed the members, and everyone went around the room and introduced themselves. Dr. Raab then went over the agenda for the day and reviewed the Meeting Summary from the first NEDRI meeting. There were two changes:

- One participant noted that the word "set" on page 7 ("There was general agreement among the members that if the economic signals are set correctly the role of administrative, emergency programs could be reduced...") seemed inaccurate, as economic signals are not "set" in the normal meaning of the word. The members agreed that the word "sent" or phrase "are correct" are closer to the intended meaning.
- Another member expressed a concern that on page 5, the issue of Load Profiling seems to have been closed prematurely. The member noted that the New York program has been approved and the PJM program is still pending. These pilots should be included in the NEDRI discussions.

Membership

The Group agreed that at this juncture new members will be admitted only by consensus of the existing members, and that new members should be discouraged given the size and breadth of the Group and that two meetings already occurred. That said, the Members agreed to extend NEDRI membership to United Illuminating (UI) which is a small utility in the area with transmission constraints that has actively participated in ISO's programs plus is engaged in advanced metering. Dr. Raab agreed to inform UI of the Group's decision. The Group discussed several other potential new members. The Department of Energy has expressed a desire to participate in the meetings, and the members agreed to invite them as a non-voting resource. Peter Fuller from Mirant mentioned that he was in touch with a large industrial customer that was potentially interested but couldn't attend the April meeting. Members asked Peter several questions about the unnamed customer and were not willing to approve its membership into the Group without further information and consideration.

The members also considered whether the NEDRI meetings should be open to the public. Dr. Raab noted that there was significant interest in the process on the part of the public, but that funds only allow for so many chairs and so much lunch. One participant argued that the process should rely on self-selection until it gets unmanageable. Eventually the members agreed not to advertise the meetings, but to continue to let people observe on a case-by-case basis and to encourage non-members to follow the process through the website.

Ken Colburn also announced he is going to be shifting jobs, becoming the Director of NESCAUM. The Group agreed to let him stay involved with NEDRI but as a representative of NESCAUM instead of New Hampshire DES.

Dr. Raab then reviewed a proposed Ground Rule change to address an issue that had been raised by Commissioners Dworkin, Keating and Brockway. The language drafted by Dr. Raab in consultation with the Commissioners, reads:

“The NEDRI Group recognizes that some government members of this process (e.g., public utility commissions) may need to recuse their agencies and themselves from endorsing certain recommendations due to their regulatory and quasi-judicial responsibilities.”

The Members agreed unanimously to accept the change.

II. Price Responsive Load

Richard Cowart introduced the discussion of Price Responsive Load and then introduced Chuck Goldman from LBL. Mr. Goldman then made his presentation. The full Powerpoint presentation is available at:

Discussion/Input from Participants on Framing Paper #1

What follows are comments, observations and recommendations made by one or more NEDRI members in response to Dr. Goldman's presentation. It is not intended to capture every comment but to capture the main threads of the discussion.

Views on Key Policy/Threshold Issues

- We need to differentiate transition & steady state issues
- Do we need payments to incentivize a transition only? Or are they also needed in an end state?
- Build structure for long-run and then add S-R incentives to help get there
- Is there a double payment going on? Would we be paying too much?
- What should be the overall goal of load response – decrease price, enhance commerce?
- Need to develop potential criteria for gauging success of demand response. Some candidates include:
 - Promotes long-term, cost-effective efficiency
 - Envir. Improvement
 - Minimize local T&D costs

Input/Distinguishing Features of Various PRL Options

- The paper as written is really from the ISO perspective
- No baseline is needed from the ISO point of view for Option 1, but LSEs need a baseline.
- We need to look at how the Standard Offer and Default Service customer assignment act as barriers to load response.
- New York PRL won't be open to non-LSEs in 2002 due to IT difficulties.
- Once programs are run for a while we can begin to observe demand elasticities over time

Discussion of Policy Questions identified in Framing Paper #1

- Change "RTP" to "dynamic pricing"
- Are markets reasonably competitive? ISO has important role here in assessment of competition and market power.
- If the sum of payments to participants is less than the sum of benefits to society, this creates a potential pool of funds to pay incentives.
- Will the end state be all driven by market without the need for additional incentives?
- Do we need to choose between ISO or PUC focus when we may need both?
- How do we introduce elasticity?
- What about inter-ISO activity and transfers/seams issues

- As long as revenues are tied to KWH sales we may have problems getting true demand response.
- Need to figure out goals first
- Maximum social value is not equal to low prices
- Match customer value with prices
- Untangle what ISO needs to do vs. others. ISO needs to discover the correct price.
- Even w/ paying incentives will we get enough response to counter-balance supply and get workably competitive markets?

The members then broke for lunch at 12:45pm.

After coming back from lunch, Richard Cowart made a few summary remarks to close the discussion on Price Responsive Load and to transition the discussion into the reliability framing paper.

- A principal need at the outset is to determine the goals for price-response – are we seeking, ultimately, the lowest-cost of energy services to customers, or the lowest energy market clearing price? Or simply cost-effective demand-response to manage the worst price peaks and reliability problems?
- There is a critical distinction between the ISO *market structure* generally and ISO price-response *programs* (which are more affirmative in nature)
- As we consider the theoretical options of price-response, including price exposure to end-use customers, some practical realism is needed: Are we really going to tell legislators and regulators that that default service prices or other kinds of non-dynamic pricing for energy are undesirable and that consumers need to see the underlying prices in real time? Or would we say we can protect end-use consumers from volatility, but should still deliver dynamic prices to their suppliers – thus building more demand responsiveness into what LSEs and aggregators do
- For price response programs to work, they must provide savings opportunities to customers, and profit opportunities to wires companies and to LSEs. We will need to ask at each step of our process, “what is the profitable business model for this activity?”

The representatives from NE-ISO then explained that Paul McCurley is leaving, and ISO-New England needs a new Manager of Load Response. They explained that the position will be a senior one, and that position recruiting is now underway; information is posted on the ISO New England website.

III. Reliability

Dr. Hirst presented the framing paper on Reliability Benefits of Price Responsive Demand. The full Powerpoint presentation is available at:

http://nedri.raabassociates.org/Articles/NEDRI_Reliability_Hirst_4-2-02.ppt

What follows are his comments and recommendations made by Dr. Hirst or one or more members in response to Dr. Hirst's presentation. Again the list is intended as a reminder of the breadth and depth of discussion rather than a comprehensive recitation of the discussion.

- Dr. Hirst pointed out that, in filings with FERC, ISO-NE has stated that reserve markets are dysfunctional in New England
- Dr. Hirst believes that mandatory interval metering and dynamic pricing for larger customers (and optional for smaller customers) is a possible policy option, and may provide the large majority of the load response that's needed long-term. (In reply, Mr. Goldman stated that he believes that this position is politically naïve.)
- California spent only \$30 million to meter 30-40% of their load – all load > 200KW.
- Regulation Service: Some group members asserted that it's possible to foster demand response that could provide this service. For example, variable speed drives in water plants, possibly with domestic hot water. Dr. Hirst suggested that there are practical limitations to providing regulation service, and believes this can be done but should probably not be a high priority.
- Why are emergency programs being run? Why don't the preexisting reliability markets – such as the reserve markets – meet the needs? Would firm capacity/energy payments provide greater incentives to make reserves available?
- California had an Optional Binding Mandatory Curtailment Program
 - 15% voluntary participation 100 MW
 - The ISO agreed it wouldn't interrupt them
 - Don't need to pay \$1,000 MWh
- Is there a potential to reduce certain loads that don't need firm power – e.g., water pumping
- LSEs in principle could be Curtailment Service Providers – but maybe this is an infant emerging industry
- When should diesel generators be permitted to generate? Should diesels only be allowed to operate for emergency purposes or in economic programs as well?
- Be careful not to undermine NO_x compliance – uncontrolled diesels can emit 10 to 20 times more NO_x than other technologies, including some coal-fired central station units.
- Now backup generators can only run as emergency units when the ISO calls for voltage decreases. Right now BUGs can't bid into reserve markets – that is, they can't be paid to operate.

IV. Next Steps

Dr. Raab explained that the next meeting, which will focus on metering and pricing issues will take place May 2, 2002, in the same room (Foley Hoag, One Post Office Square, Boston, MA).

The June 4 meeting will focus on energy efficiency and on transmission related issues. At the June 25th meeting, the NEDRI conveners are proposing to work with the Group on

developing a framework for analyzing demand response. Two components include thinking about a vision for a long-term, steady-state demand response and then developing criteria for analyzing the success of demand response.

One participant noted that extensive modeling happening in the near future in the NERTO process, and if the NEDRI members were to provide input or guidance about what direction that modeling should take it might help in getting useful output. This also raised the question of whether or not the NEDRI process could or should attempt to inform the NERTO product (which will go to FERC around July 1st). This raised the broader issue of whether or not the NEDRI schedule should be changed to deal with NERTO. NERTO meetings relevant to these topics are being held on April 12th (market design) and April 8th (transmission planning). The members agreed that several individuals (Richard Cowart, Reuben Brown, Larry DeWitt, and Keith O'Neal) will speak on the phone about how NEDRI might influence NERTO (and possibly how to get some useful modeling data out of the NERTO process) and then report back to the NEDRI members at the next meeting. They will also need to work within the confines of the confidentiality constraints in the NERTO process.

The members also discussed Working Groups for NEDRI. Agreement was reached that the facilitation and consultation teams will develop and circulate some proposals by 4/25 and present them at the 5/2 NEDRI meeting. The members will make a decision on the Working Groups issue then.

VII. To Do List

- Meeting Summary – Raab
- Working Group Memo – Raab/Cowart
- Metering & Retail Pricing Framing Paper – Weston
- Agenda for Next Meeting – Raab
- Contact UI – Raab
- Discuss NERTO Modeling – Richard Cowart, Reuben Brown, Larry DeWitt, and Keith O'Neal

NEDRI Stakeholder Attendance

Name	Organization	2/26	4/2
Paul McCurley	ISO-NE	x	
Carolyn O'Connor	ISO-NE	x	
Dave LaPlante	ISO-NE		
Craig Kazin	ISO-NE		x
Robert Burke	ISO-NE		x
Michael Dworkin	Vt. PSB	x	
Ann Bishop (alternate)	Vt. PSB	x	
Tom Austin	Maine PUC	x	x
Denis Bergeron (alternate)	Maine PUC		
Bob Keating	MA DTE	x	
Bahar Celikkol (alternate)	MA DTE	x	x
Barry Perlmutter (alternate)	MA DTE	x	x
Doug Hartley	RI PUC		x
Nancy Brockway	NH PUC	x	
Alex Lee (alternate)	NH PUC	x	x
Cindy Jacobs	CT PUC	x	x
Nancy Seidman	MA DEP	x	x
Chris James	CT DEP	x	x
Ken Colburn	NH DES		x
David O'Connor	MA DOER	x	x
Joanne McBrien (alternate)	MA DOER	x	x
Hans Mertens	VT DPS		x
Steve Ward	ME Public Advocate		
Eric J. Bryant (alternate)	ME Public Advocate	x	
Elliott Jacobson	Low Income Network	x	
Jerry Oppenheim	Low Income Network	x	
Angela O'Connor	AIM		x
Jeff Bergman (alternate)	AIM/Texas Instruments		
Doug Stevenson	HEFA/MA Energy Buying Cltn.	x	x
Russ Sylva (alternate)	HEFA		
Richard Silkman	Competitive Energy Services	x	
Andrew Price (alternate)	Competitive Energy Services	x	x
Deborah Donovan	Union Concerned Scientists		
Lucy Johnston (alternate)	Union Concerned Scientists	x	x
Dan Sosland	Environment Northeast		

NEDRI Stakeholder Attendance (page 2)

Name	Organization	2/26	4/2
Tony DeFilippis	NU		
John Mutchler (alternate)	NU		x
Earle Taylor (alternate)	NU		x
Mike Hager	National Grid	x	x
John O'Brien	Sithe	x	
Phil Smith	PG&E	x	x
Chris Bursaw (alternate)	PG&E		
Pete Fuller	Mirant	x	x
Vance Mullis (alternate)	Mirant		x
Jason Gifford	Green Mountain Energy		x
Bob Kinscherf	AES New Energy		x
Harvey Michaels	Northeast Energy Effic.Council		x
Don Gilligan	NAESCO	x	x
George Roberts	DRAM		
Ruben Brown	Joint DRR Supporters/Ecubed		x
Keith O'Neal	Joint DRR Supporters/Ecubed	x	
Paul Gromer (alternate)	DRAM/Peregrine Energy	x	x
Judy Silvia	MTC		x
Raphael Herz (alternate)	MTC	x	
Sue Coakley	NEEP	x	x
Chris Neme	VEIC		x
Bill White	EPA	x	x
Craig Glazer	PJM		
Larry DeWitt	PACE	x	x
Dave Lawrence	NY ISO	x	x

Facilitators	Organization	2/26	4/2
Jonathan Raab	Raab Associates	x	x
Colin Rule	Raab Associates	x	x

Consultants	Organization		
Richard Cowart	Regulatory Assistance Proj.	x	x
Rick Weston	Regulatory Assistance Proj.	x	x
Chuck Goldman	Lawrence Berkeley Labs	x	x
Eric Hirst	Consultant		x
Francis Cummings	Xenergy / KEMA	x	x