# Planning Advisory Committee Doubletree Hotel, Westborough, MA April 13, 2011

| Syed Ahmed         | National Grid                                     |
|--------------------|---|
| Bob Andrew         | NSTAR   |
| Jeff Bentz         | NESCOE  |
| Curt Beveridge     | Central Maine Power Company                       |
| Chris Bernard      | Northeast Utilities System Company                |
| Christian Bilcheck | United Illuminating Company, The                  |
| Marcia Bloomberg   | ISO New England Inc.                              |
| Nicolas Bosse      | Brookfield Energy Marketing                       |
| Dave Bradt         | United Illuminating                               |
| James Cleary       | NGRID   |
| Steve Conant       | NEITC   |
| David Conroy       | Central Maine Power                               |
| Ray Coxe           | Mosaic Energy Insights                            |
| Kurt Dahdah        | MMWEC   |
| Jim DiLuca         | Northeast Utilities System Company                |
| Stacy Dimou        | Bangor Hydro Electric Company                     |
| Fernando DaSilva   | NextEra Energy                                    |
| Sean Foley         | Vermont Department of Public Service              |
| Kevin Flynn        | ISO New England Inc.                              |
| Ellen Foley        | ISO New England Inc.                              |
| Bill Fowler        | Boston Generating                                 |
| Deena Frankel      | Vermont Electric Power Company                    |
| Peter Fuller       | NRG   |
| Don Gates          | ISO New England Inc.                              |
| Joseph Gredder     | New England Power Company                         |
| Mike Henderson     | ISO New England Inc.                              |
| John Higgins       | Long Island Power Authority                       |
| Jack Holodak       | The Valley Group                                  |
| Heather Hunt       | NESCOE  |
| Mike Jacobs        | Xtreme Power Inc.                                 |
| Eric Johnson       | ISO New England Inc.                              |
| Jeff Jones         | Bangor Hydro                                      |
| Steve Judd         | ISO New England Inc.                              |
| Mark Karl          | ISO New England Inc.                              |
| Thomas Kaslow      | GDF Suez  |
| Robert Keen        | Robert Keen                                       |
| Steven Kirk        | Constellation Energy Commodities                  |
| Rich Kowalski      | ISO New England Inc.                              |
|                    | -   |
| Sandra Levine      | Conservation Law Foundation                       |
| Marc Lyons         | ISO New England Inc.                              |
| Alan McBride       | ISO New England Inc.                              |
| Bruce McKinnon     | Connecticut Municipal Electric Energy Cooperative |
| Hans Mertens       | Vermont DPS                                       |
| Rich Milici        | Entergy Provided Review                           |
| Tim Morrissey      | Dominion Power                                    |
| George Nagle       | VT DPS  |
| Carolyn O'Connor   | ISO New England Inc.                              |
| Arthur Patrick     | LS Power  |
| Rose Ann Pelletier | Massachusetts Department of Public Utilities      |
| Marianne Perben    | ISO New England Inc.                              |

| Paul Peterson    | New Hampshire Office of Consumer Advocate         |
|------------------|---|
| Richard Pinto    | United Illuminating                               |
| Fred Plett       | Massachusetts Attorney General                    |
| Hantz Presume    | Vermont Electric Power Company, Inc. (VELCO)      |
| Jose Rotger      | ESAI Power,LLC for Cross-Sound Cable Company, LLC |
| Steve Rourke     | ISO New England Inc.                              |
| Eric Runge       | Day Pitney  |
| Robert Russo     | Northeast Utilities System Company                |
| William Ryan     | Central Vermont Public Service                    |
| Bryan Sanderson  | NEITC   |
| Dan Schwarting   | ISO New England Inc.                              |
| Carter Scott     | First Wind  |
| Carissa Sedlacek | ISO New England Inc.                              |
| Meera Shukla     | ISO New England Inc.                              |
| Patricio Silva   | Massachusetts DEP                                 |
| Ghassan Simaan   | Northeast Utilities System Company                |
| Allison Smith    | NESCOE  |
| Doug Smith       | Green Mountain Power Corp.                        |
| Philip Smith     | GenOn   |
| Joe Staszowski   | Northeast Utilities System Companies              |
| Bob Stein        | HQUS  |
| Jim Stetson      | Massachusetts Attorney General                    |
| Pam Stonier      | Vermont Public Service Board                      |
| Gene Taddeo      | Northeast Utilities System Companies              |
| Jeff Turcotte    | ISO New England Inc.                              |
| Carol Wendel     | ISO New England Inc.                              |
| Steve Wible      | XTreme Power                                      |
| Eric Wilkinson   | ISO New England Inc.                              |
| Jinlin Zhang     | ISO Nw England Inc.                               |

#### Administrative

Mr. Michael Henderson welcomed all attendees to the day's meeting and provided an overview of the day's agenda as part of Vermont/New Hampshire Day.

Mr. Henderson advised that draft PAC Minutes were available for review on the ISO-NE web site. Please provide any comments on the minutes to <a href="mailto:PACMatters@iso-ne.com">PACMatters@iso-ne.com</a>.

Mr. Henderson stated that a draft of the New England East-West Solution (NEEWS) Updated Needs Assessment was posted on March 24, 2011 for a 30 day comment period. In addition, comments have been received on the draft Vermont/New Hampshire Transmission System 2010 Needs Assessment. Responses to comments and the final version of the document will be posted in the next few weeks.

A status update was provided on the Energy Efficiency Forecast Project. Discussions will be held regarding possible short and long term planning recommendations that capture state sponsored Energy Efficiency and other passive demand resources. An evaluation of different approaches will be reviewed including those used by other ISOs/RTOs. An evaluation of existing ISO planning procedures and treatment of Energy Efficiency will be completed by May 31, 2011. More in depth discussions will be held with PAC at the June and July 2011 meeting. An

assessment of comments related to this topic from PAC will be conducted with a referral to the Technical Committees by mid-year 2011.

#### **Questions/Comments (PAC in Italics, presenter in Roman)**

PJM is performing EE study as well. Is ISO performing state studies and goals on EE year by year? Yes, ISO-NE has performed a similar study and it will be included in the RSP. The other states use the escalating EE numbers in their load forecast. Is ISO doing this? PJM Energy Efficiency evaluation is almost identical to what we do. We are conducting additional analysis of how NYISO performs their EE studies.

An overview of future PAC meetings was provided along with a tentative PAC schedule through September 21, 2011. The PAC was advised that an additional meeting date has been scheduled for July, 22, 2011. The next Environmental Advisory Group (EAG) meeting is set for June 3, 2011. An overview of that meeting agenda was provided. Preliminary EAG meeting dates are scheduled for July 8, September 23, and December 12, 2011.

Will PAC discuss Clean Water Discharge? ISO is reviewing the Order on this topic. We are ageing regional impacts at this time and will share those results with PAC. Perhaps this could be discussed on Environmental Day on June 29, 2011.

A review was provided of the IPSAC meeting topics from the March 30, 2011 WebEx conference.

Is there a goal for IPSAC to use a common tool for modeling? The issue is syncing the databases. Different ISO's use different platforms but use a common vendor. The ISOs have the ability to share data with each other.

It was announced that the issuing of individual CEII passwords has been put on hold for the time being.

The PAC attendees expressed certain level of frustration with meeting registration process within ISO TEN, in particular the password process. They stated the process was not customer friendly.

The schedule of upcoming Environmental Advisory Group meetings was discussed. In addition an agenda was provided for the IPSAC WebEx teleconference on March 30, 2011.

An EIPC update was provided by Mr. Bob Stein along with an EISPC update from Ms. Heather Hunt

Mr. Henderson advised that ISO-NE could be going to individual CEII passwords. PAC attendees voiced no concerns.

Mr. Don Gates of ISO-NE provided an EIPC update. The stakeholders selected cases for macro analysis on March 28 and 29, 2011. The PAC was advised of the project schedule update.

## **Vermont/New Hampshire Solution Studies**

Ms. Jinlin Zhang of ISO-NE provided a presentation overview of the New Hampshire/ Vermont (NH/VT) Solutions Study. A project background was reviewed along with the area needs. A presentation was given regarding the NH/VT Transmission Solutions Study and the next steps for the project. The draft NH/VT Needs report was posted on February 11, 2011. The list of transmission alternatives was presented on February 2, 2011. NH and VT Needs study N-1 and N-1-1 results were reviewed. The NH/VT Solutions Study Goals and Assumptions were reviewed along with Alternatives Considered in VT/NH Transmission Solutions Study.

Can a high level overview be provided regarding the conditions that created this set of needs? The initial NH and VT Needs Assessment were preformed separately. With the uncertainty of the status of VermontYankee (VY) and the PV20, the NH and VT Needs Assessment was restudied to consider VY permanent retirement and stay-in-service scenarios. Who participated in this study? The VT/NH working group includes VELCO, NU, and NGRID, Unitil, and CMP. Participation was limited due to the Information Policy and sensitive market information was disclosed regarding individual Participants.

Why wasn't a broader range of stakeholders included in this study? All stakeholders are involved through the PAC process. The scope, input and assumptions, and results of the Needs Assessment, the list of transmission alternatives of the Solutions study were presented to PAC for review and comments. All relative report, presentation and study cases were made available for the stakeholders.

How were NY and HQ involved regarding their part of the solution? The base case was originated from a MMWG case, which have NY and HQ's involvement. In addition, NY was involved in base case setup and contingency preparation during the Needs Assessment study.

If a NE solution for VT/NH cost a certain dollar value and then another lower cost solution could be found in another area. How would that be pursued? We would conduct coordinated studies regarding interregional solution and we would need to be mindful of our tariff and our neighbor's tariff.

Is there a process for soliciting solutions from the markets? We do not issue an RFP, but our planning process is clearly stated in RSP 10. Also FCM is an avenue for the markets to participate in this process.

Who was in the process of the deciding base case studies? All stakeholders are involved through the PAC process. The scope, input and assumptions, and results of the Needs Assessment, the list of transmission alternatives of the Solutions study were presented to PAC for review and comments.

Is the worst case scenario used in the N-1-1 base case analysis? There have been past studies that apply events that have never occurred. I believe the analysis is over conservative. We use summer 90/10 peak load condition as a starting point. The system stresses were applied and then NERC/NPCC/ISO criteria were considered to avoid non compliance issue with existing standards. We consider unit(s) out of service to stress the transmission system and then evaluate system reliability. Probability is not a factor. The Needs Assessment is a deterministic study.

Comment - On slide 5, N-1-1, it all begins on where the study assumptions begin. As such you get the results we are looking at. I agree that the study should be reasonable and probabilistic. I believe this discussion is worth following up on.

It seems that we show something new, however, this is the way we've been doing studies for the past 5 or 10 years as part of a deterministic review. Perhaps this discussion should move to a different forum. I agree that this topic has been discussed often. Perhaps ISO could develop a presentation that could review the study and planning process for the group.

How does ISO account for dispatch and contingencies? The Scope of Work was discussed with PAC and posted for comment. The study looks at a reasonably stressed system which is different from the contingencies.

We need to understand better the conditions used by ISO to stress the system. This is a different transmission system today than it was 10 years ago. We need to have a discussion on that process at a future PAC meeting. We make all materials and base case information available to the Participants in accordance with the guidelines stated in Order 890 and Attachment K.

Comment - There is a concern of how the planning assumptions are done and perhaps we could look at the process from a probabilistic view. In regards to deterministic vs. probabilistic, there is some room for flexibility in the base cases but not the contingencies.

Comment - This is not a new issue. We seem to believe this is a one way process between ISO and the TOs. The perception is that no one else sees those results till the process is completed and presented to PAC. Others are requesting to be part of the process.

It would be helpful to have an overview of the planning process at the beginning of each year and a review of which projects will be coming before review. We will come back to the committee at a future date to address this topic and issue regarding the base case review process.

When you look at turning on the generation resources, how many to you expect to respond? Roughly 80% of the fast start units per NPCC criteria.

What set of resources are looked at? Was it just the ones participating in the LFRM program? We use all resources that have claim 10 minute capability along with some other units based on physical ramp rate.

Comment - There are several resources with Claimed 30 capability that could be Claimed 10 if required.

Comment - There are not enough incentives in the LFRM market. If we are relying on these units as part of the planning process, this could be an issue to discus or proper compensation on the market side.

Is Demand Response being considered as part of 10 minute reserves? It's a reduction of load for active and passive DR within the base case.

Comment - On the active DR, the current rules state acting on the DR resources will not occur until the 30 minute reserves are depleted.

Why wouldn't a 345 kV line extend all the way up VT instead of from W. Rutland to Champlain? The 345 kV line was proposed as one of the alternatives to solve the thermal violations on the parallel 115 kV lines. Does the North VT solution extend that 345 kV line for the rest of the state? It is possible but we have not decided the preferred solution yet.

On slide 15, it is stated that ISO has no FERC authority to order NY to complete the DCT separation. If so, what are your thoughts on the recent FERC Order regarding MISO and charging other control areas? ISO-NE disagrees with the FERC order on the subject and we will ask for a rehearing on the subject. As such, the statement on slide 15 stands.

*On slide 24, are these alternatives with VY in or out of service.* Both.

Several additional questions were asked and responded to regarding area transmission requirements with VY both in and out of service.

Various transmission alternatives were reviewed for all of the NH/VT sub-areas.

Has ISO added up the total miles of new transmission that would be added as part of this project? Not at this time but the total amount (in miles) of new transmission lines will be included in the Solutions study report.

The Next Steps are to complete the Solutions study and select preferred regulated transmission solutions for NH/VT. In addition, a concurrent assessment of the impacts of system changes on the Seabrook generator breaker duty is being performed.

Comments will be accepted regarding this presentation for the next 30 days.

Will the PAC be able to discuss and review the various costs associated with the project as part of the process. Yes. This will be included in the next presentation.

## **Vermont/New Hampshire Non-Transmission Alternatives Analysis**

Mr. Steve Rourke of ISO-NE provided an overview of the VT/NH Non-Transmission Alternatives including the project background and scope of analysis.

Ms. Marianne Perben of ISO-NE presented the detailed assumptions and results of the pilot Non-Transmission Alternatives analysis.

On slide 10, Northwest Vermont has a sub-area. Does it align with the Northwest Vermont dispatch zone? They overlap.

The load forecast was for year 2020, these numbers are year 2010? No, they are year 2020.

In the presentation the table illustrates the DR that was included. Was that both passive and active DR? The table illustrates 100% of passive DR and 75% of active DR.

There were several questions that were posed and responded to regarding the interpretation of the values within the table on slide 10.

Several committee members expressed appreciation for the ISO efforts in developing this presentation.

Has a hybrid study been performed where you add NTAs along with some transmission projects? No. Not at this time but some transmission projects may be necessary in addition to the NTAs depending on the results of the overlapping impact test.

Comment - Please consider removing VT Citizen Block Load from the Quebec system and model it in New England. The base case analysis does not assume any input from Hydro Quebec into the Newport, Vermont import location for the isolated block load contract, but rather it is assumed that those Northern Vermont loads of VEC are being served from the Interconnected Vermont 115KV grid loop. If that is the basic assumption for the VT/NH study, there should be a sensitivity in the NTA analysis that assumes that the Newport VT load is disconnected from the VT grid and is served from Quebec as a block load, thereby becoming analyzed as a NTA of 35 to 50 MW. This might have impacts on the situation as shown on slides 19 and 31.

A review of the next steps was provided that included an overlapping impact test with final results to be presented at the May PAC meeting.

Due to time constraints, agenda item 4: Reassessment of Advanced NEEWS Rhode Island Needs and Preferred Solution, and agenda item 5: Advanced Southwest Connecticut Solution was deferred until the April 14, 2011 PAC meeting.

The PAC meeting adjourned at 5:00 p.m.