

Planning Advisory Committee
Doubletree Hotel, Westborough, MA
April 14, 2011

Syed Ahmed	National Grid
Bradley Bentley	Northeast Utilities Service Company
Jeff Bentz	NESCOE
Denis Bergeron	Maine Public Utilities Commission
Curt Beveridge	Central Maine Power Company
Christian Bilcheck	United Illuminating Company, The
Cal Bowie	Northeast Utilities Service Company
Dave Bradt	United Illuminating
Timothy Brennan	New England Power Company
Nancy Chafetz	Pepco Energy Services
Pradip Chattopadhyay	New Hampshire Public Utilities
James Cleary	NGRID
Shanna Cleveland	Conservation Law Foundation
Steve Conant	NEITC
David Conroy	Central Maine Power
Ray Coxe	Mosaic Energy Insights
Kurt Dahdah	MMWEC
Stacy Dimou	Bangor Hydro Electric Company
Fernando DaSilva	NextEra Energy
Evan Estes	LS Power
Bill Fowler	Boston Generating
Peter Fuller	NRG Power Marketing
Rishi Garg	Natural Resources Defense Council
Mike Harrington	New Hampshire Public Utilities Commission
Mike Henderson	ISO New England Inc.
John Higgins	Long Island Power Authority
Jack Holodak	The Valley Group
Heather Hunt	NESCOE
Eric Jacobi	Connecticut DPUC
Eric Johnson	ISO New England Inc.
Jeff Jones	Bangor Hydro
Steve Judd	ISO New England Inc.
Mark Karl	ISO New England Inc.
Bob Keen	Bob Keen
John Keene	Massachusetts Department of Public Utilities
Shawn Konary	GenOn
Rich Kowalski	ISO New England Inc.
Abigail Krich	Renewable Energy New England
Bill Lamkin	Massachusetts DEP
Sandra Levine	Conservation Law Foundation
Michael Long	AJG Risk Management
Marc Lyons	ISO New England Inc.
Jason Marshall	Massachusetts Department of Public Utilities
Bruce McKinnon	Connecticut Municipal Electric Energy Cooperative
Hans Mertens	Vermont DPS
Julie Michals	NEEP
John Miller	Cross Sound Cable Company
Tim Morrissey	Dominion Power
John Moskal	U.S. EPA
William Nugent	NECPUC

Brent Oberlin	ISO New England Inc.
Arthur Patrick	LS Power
Daniel Peaco	LaCapra Associates
Rose Ann Pelletier	Massachusetts Department of Public Utilities
Paul Peterson	New Hampshire Office of Consumer Advocate
Fred Plett	Massachusetts Attorney General
Danielle Powers	Concentric Energy Advisors
Francis Pullaro	Renewable Energy New England
Carol Purinton	Central Maine Power Company
Matthew Rist	AJG Risk Management
Jose Rotger	ESAI Power, LLC for Cross-Sound Cable Company, LLC
Eric Runge	Day Pitney
William Ryan	Central Vermont Public Service
Lou Sahl	Massachusetts DOER
Zach Samuels	NSTAR Electric and Gas Company
Mark Sciarrotta	Vermont Electric Power Company
Carter Scott	First Wind
Dilip Shah	Rhode Island Public Utilities Commission
Meera Shukla	ISO New England Inc.
Patricio Silva	Massachusetts DEP
Allison Smith	NESCOE
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.
Eric Wilkinson	ISO New England Inc.
Eric Winkler	ISO New England Inc.
Peter Wong	ISO New England Inc.

Administrative

Mr. Michael Henderson welcomed all attendees to the day’s meeting and provided an overview of the day’s agenda. An additional PAC meeting has been scheduled for May 23, 2011 as a WebEx presentation to discuss RSP 11 Scope of Work. Comments on the topic should be submitted to PACMatters@iso-ne.com.

RSP 11 Load Forecast of Energy and Seasonal Peaks: ISO-NE, States, and Subareas

Mr. Dave Ehrlich of ISO-NE provided an overview of the various forecast tables. Passive Demand Response was not included as part of the presentation.

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

As we look at the forecast, will those be matched up with the various dispatch zones?

Yes. However, that is looked at from an Operational perspective versus a Planning perspective.

Could the various states be shown both with and without Passive DR? If so, please post those results to PAC. We will do that.

A comparison of RSP 11 and RSP 10 90/10 Summer Peak Forecast was reviewed for ISO-NE, the States, and the Subareas.

There were no further questions from the PAC on this subject.

Economic Studies Proposals – Stakeholder Presentations Western Maine Economic Study Request

Mr. Dave Conroy from Central Maine Power Company requested an evaluation of the impact on Maine and Regional Energy production costs and LMPs on relieving Western Maine transmission constraints (Wyman/Bigelow) identified in the 2010 ISO-NE Economic Study Preliminary Results and in the CMP sponsored Western Maine Renewable Integration Study.

A review was provided regarding the Wyman/Bigelow Export Constraints. Upgrades needed for generators to qualify in FCM. Constraints are evident through the ISO 2010 Economic Study and Western Maine Renewable Integration Study. ISO-NE is observing Real Time constraints.

Current transfer limit for summer is 259 MWs. With Section 241, transfer limit is 326 MWs. With the WMRIS demonstrates upgrades could increase transfer limit to 1382 MWs in a series of upgrade steps.

Is the wind MWs in the presentation gross name plate but not deliverable? Yes

The studies to date, do they reflect stability concerns in this area along with NH and North/South? How will this be addressed going forward? It included steady state analysis. We did not look at ME/NH. As we get results of MPRP then we will do additional stability analysis for the larger area of ME/NH interfaces.

What level cost estimate is this project at? It is conceptual at this point. As such, the estimate is - 50%/+200%

Can we expand the study to include all RFI projects? That could be considered

Please provided any additional questions to Dave Conroy

Constraint Relief in Maine

Mr. Evan Estes of LS Power provided an overview of a presentation that augments the presentation previously provided by Central Maine Power to relieve the Maine constraints in the Wyman/Bigelow area to enhance the availability of wind generation in the region.

Comment - I would like to ensure that studies are consistent as we look at getting wind from the Maine western mountains. The same consideration and review should be performed to study wind coming from the northern part of the state.

Economic Impacts of Relieving Transmission Congestion for Near-Term Wind Development

Ms. Abigail Krich of Renewable Energy New England requested a near term evaluation be performed focusing on the next 5 years. Study should explore the economic impact of congestion out to 2016. Use the NEWIS Full Queue Scenario. Consideration should be given to all renewable generation rather than limiting the study to wind alone. Use a 2016 base case using RSP 10 as a guide and assume all resources cleared in FCA 5 are in service. Presentation provided an outlined for a step by step process to studying the impacts of relieving transmission constraints.

This is not a request for a Planning solution to relieve the constraints, but an economic analysis that shows the financial results of relieving the constraints. Show economic analysis that is as close to operationally feasible as possible.

Comment – Could the Central Maine Power and LS Power economic requests be integrated with the Renewable Energy New England economic request to include all renewable resources as opposed to just wind generation?

Comment - On slide 3, it's stated that a full interconnection queue should be used. The dropout rate in the queue is very high. It is not practical to study as a full queue.

Would the three requesters be willing to consolidate their economic requests into a single request? ISO would be willing to host a conference call with all party's to discuss the potential of this.

Advanced Southwest Connecticut Study

Ms. Meera Shukla of ISO-NE provided an overview of the project background and advanced solutions identified at Glenbrook-South End Sub Area (Greenwich-Stamford) and New Haven Sub Area to include 8300 Line reconfiguration.

The contingency driven issues, is that N-1 and N-1-1? The solutions will address both N-1 and N-1-1.

The presentation states load pocket issues, is that thermal or stability? All issues and that could include both thermal and voltage stability.

What were assumptions regarding Cross Sound Cable (CSC)? Cross Sound Cable was kept at 346 MW exporting. In the N-1-1 analysis CSC was reduced to 0 MWs.

Were imports from NY to NE over CSC considered? The review was consistent with other studies performed. ISO-NE can only count solid contracts over CSC.

Were import contracts over AC ties considered? The contracts are embedded in the analysis.

Is there a possibility that the analysis would consider imports over CSC? That is not consistent with Attachment K to consider imports over CSC due to the fact there are no long term contracts in place.

So none of the solution analysis will include imports into the region, to include CSC and the other interfaces. Not unless there is a long term contract in place.

SWCT Advanced Solutions - Mill River to Quinnipiac 8300 Line Reconfiguration Project

Mr. Dave Bradt from United Illuminating provided an overview of the project background in addition to various project alternatives and cost estimates for the 8300 Line reconfiguration. A problem summary was reviewed for the 8300 Line contingencies. Both N-1 and N-1-1 Needs were reviewed. United Illuminating is looking for PPA approval in Q3 2011 with construction expected to start Q3 2012. The proposed in service date of the project is Q3 2013.

On slide 6, where are the 3 new peaking units on this slide? They are plugged into East Shore

Violations occur for 2011 load levels? How did this situation occur? Usually we have a 5 year look out but the presentation states there are issues with the existing 2011 load levels. It's resulting from the N-1-1 testing per mandatory NERC standards and was not tested in the past prior to the stands being in place.

What is the project cost estimate? Slide 16 states the cost estimate at -25%/+50%

SWCT Advanced Solutions – Stamford Reliability Project

Mr. Brad Bentley from Northeast Utilities provided an overview of the project background and need. The presentation highlighted three potential solutions for the project along with a summary for each alternative solution performance. In addition, conceptual cost estimates for each of the three possible solutions was provided. The next steps are to provide the preferred solution to the PAC in Q2 2011 with a PPA submittal to the Reliability Committee expected in Q4 2011. Construction is expected to start in 2013/2014, with an in service date of 2014/2017.

Why wasn't this picked up as part of the earlier SWCT project? A progression of load growth necessitated this need.

The conceptual solution used the same right of way along the cable path. What are the conditions that you face? Northeast Utilities is not aware of anything we can readily use at this point. There is still a need to conduct an extensive survey before a definitive answer can be provided.

Energy Efficiency Update

Dr. Eric Winkler and Mr. Eric Wilkinson of ISO-NE provided an overview regarding the updates for Energy Efficiency (EE) analyzing state sponsored EE in New England. Initial observations indicate FCM seems to be capturing nearly all state sponsored EE in the region. The next steps are to meet with Massachusetts and Rhode Island regulators and continue discussions with ISO stakeholders.

A review was given regarding current ISO EE practices. The load forecasts reflect past EE not captured in FCM and also reflects future federal appliance efficiencies standards starting in 2013. The long term EE is not incorporated and is not used to reduce the load forecast. Future efforts focus on exploring non-FCM EE. Some states are concerned that EE investments outside FCM are not taken into account with existing practices. Open issues are to determine what is the EE savings available, where are they, and how does ISO find them.

EE going forward, some of the EE has a life cycle and could go away. Do you take that into account? Yes, the FCM market accounts for that reduction through delisting.

Preliminary observations find that program administrators are not reporting EE outside of what is offered into FCM. No trends in market participation over the six years of the FCM qualification process. There is no clear relationships between program funding and FCM project size or

delivery date. The program administrators indicate funding is primary variable driving future EE implementation.

Comment - It will be up to the states to determine an estimate of EE funding and provide that to ISO for use in their EE and load forecast analysis.

What kind of trends are you looking for? A consistent amount of EE from year to year.

What do you mean by Program year and FCM year? They are not the same. State Energy Efficiency Program year is January through December and the FCM year goes from June to May. The values between the two do not match up and that needs to be reconciled.

Comment - It was stated that some utilities drop out of EE from year to year. Does that indicate they transfer that program to aggregators as opposed to completely quitting the EE program? That should be tested. It is not clear the Aggregators/Merchants are picking up what is not delivered by the utilities.

Comment – A suggestion was made that the funding levels be looked at. The states are looking at after the FCA. You should look at the statutory requirements and mandates as your guide.

Long term estimates (5-10 years) of future EE savings has proven difficult. Only 2 of 16 program administrators were able to provide estimates of future EE savings.

Comment – Please consider adding a bullet to slide 10 regarding state programs regarding smart grid (one example is conservation voltage for the transformers) that could have a significant impact to EE.

While we recognize smart grid potential, the values cannot be quantified until they are offered into FCM.

Additional analysis is needed regarding how to prevent double counting of state sponsored EE. Also, how will measure life and technology advancements be addressed in the long term? In addition, discussions should continue with NYISO and PJM on how they treat and account for their EE programs.

Next steps are to complete data gathering with the program administrators. Evaluate approaches including those used by other ISOs/RTOs with a complete evaluation expected by May 31, 2011. Evaluate existing ISO planning procedures for EE by May 31, 2011. Update PAC through additional discussions at the June and July PAC meetings. Assess comments from PAC and refer the topic to the technical committees in Q3 or Q4 2011.

Suggest that the Program Administrators, as they develop their detailed plans for measures and measured life, some percentage from that could be used in the ISO studies. Agreed that could be one input along with inputs from the state program goals.

RSP 11 Transmission Project List

Mr. Brent Oberlin from ISO-NE provided an overview of the transmission projects that will be included in RSP 11. Presentation included April 2011 changes to the listing and the status of major transmission projects.

As of April 2011, changes include 31 new projects, the cost, along with the corresponding need. April 2011 changes also include 26 projects placed in service, the cost, along with the corresponding need.

A status update was given regarding major transmission project highlighting the status of the associated PPAs, TCA and projected completion date of the project.

Third Taxing District Substation

Mr. Bruce McKinnon from CMEEC provided an overview regarding the Third Taxing District (TDD) proposed 115 kV transmission connection via the CL&P distribution lines. A review was provided of the current power supply along with the existing area one line diagram and the proposed new configuration. The project request is based on reliability (aging equipment and increasing load growth in the area) and economics. The property for the substation project has been acquired. A timetable was provided with construction beginning fall 2012 and a projected in service date of fall 2013.

What is driving the load growth in the area? The proximity of I-91 and the development of a large waste water treatment plant in the area.

Bozrah Light & Power (BL&P) Stockhouse Rd Substation 115 kV Circuit Breaker Installation

Mr. Brian Roach of Bozrah Light & Power provided an overview of the regarding the Stockhouse Rd Substation 115 kV Circuit Breaker Installation project. A review was provided of the existing area 115 kV substation configuration and outlined the existing issues with the current configuration. Proposal was made to resolve the existing issues by installing a 115 kV 40 kA circuit breaker at Stockhouse Rd substation. In service date is projected fall 2011.

Minor clarification questions regarding the project were asked and responded to by Mr. Roach.

Due to time constraints, agenda item 8: Advanced NEEWS and Rhode Island Needs, and agenda item 9: RSP 11 Scope of Work was deferred until the May 23, 2011 PAC meeting.

The PAC meeting adjourned at 4:00 p.m.