Planning Advisory Committee Doubletree Hotel, Westborough, MA. April 28, 2015

Denis Bergeron	Maine Public Utilities Commission			
Peter Bernard	ISO New England Inc.			
Curt Beveridge	Central Maine Power Company			
Roger Borghesani	The Energy Consortium			
Alex Boutsioulis	United Illuminating Company			
Dave Bradt	United Illuminating Company			
Dorothy Capra	NESCOE			
Ray Coxe	Mosaic Energy for Brookfield			
Jeff Dannels	ConEdison			
Jim DiLuca	Eversource Energy			
Dave Ehrlich	ISO New England Inc.			
Frank Ettori	Vermont Electric Power Company			
Lisa Fink	Maine Public Utilities Commission			
Kevin Flynn	ISO New England Inc.			
Bill Fowler	Exelon Generation			
Cecile Fraser	Massachusetts Department of Public Utilities			
Don Gates	ISO New England Inc.			
Brian Hayduk	New England Power Company			
Eric Jacobi	FERC			
Jeff Jones	Emera Maine			
Tom Kaslow	GDF Suez			
Bill Killgoar				
Steve Kirk	Long Island Power Authority Exelon Generation			
Rich Kowalski				
	ISO New England Inc.			
Jessica Lau	ISO New England Inc.			
Marc Lyons	ISO New England Inc.			
Tim Martin	New England Power Company			
Al McBride	ISO New England Inc.			
Bruce McKinnon	CMEEC			
Mary Menino	Massachusetts Department of Public Utilities			
Jennifer Murphy	Massachusetts Department of Public Utilities			
Brent Oberlin	ISO New England Inc.			
Carlos Perez Perez	New England Power Company			
Rich Pinto	United Illuminating Company			
Hantz Presume	Vermont Electric Power Company			
Alex Rost	ISO New England Inc.			
Jose Rotger	Emera Energy Services			
Eric Runge	Day Pitney			
Maria Scibelli	ISO New England Inc.			
Melissa Scott	New England Power Company			
Patricio Silva	ISO New England Inc.			
Michael Simmons	Maine Public Utilities Commission			
Phil Smith				
	Energy New England			
Joe Staszowski	Eversource Energy			
Robert Stein	HQUS			
Peter Wong	ISO New England Inc.			

Item 1 – Chair's Remarks

Mr. Don Gates welcomed the committee and reviewed the day's agenda. Mr. Gates advised the committee that there is a second PAC date on the May calendar. However the meeting could be cancelled due to a lack of agenda items. A notice will be sent to the committee if the second meeting is not needed and cancelled.

Item 2 – Transmission Planning Assumptions and Methods

Mr. Rich Kowalski (ISO) provided an overview of the Transmission Planning Assumptions and Methods.

- *Q* Within the base case modeling, are extreme conditions modeled?
- A Its representative of one particular event or situation and not an extreme, multi failure situation in excess of N-1-1.
- Q Will transfer limits be addressed as part of the base case analysis as opposed to removal of generation in the base cases?
- A It is a topic that we do need to discuss and it will be reviewed as part of the modeling process.
- Q Can you define "reasonable anticipated conditions?" This term could have different meaning to different people.
- A We are trying to quantify that term as well as other terms. It's what should be in the base case. We will continue to work on improving those terms to be more specific.
- Q The control room treats different contingencies in different ways. Should we look at the different contingency review of line-line out of service versus line-generator out of service as part of the Planning process?
- A I agree with you and we will look into that further.
- Q Is there an effort to gather data of different types of DG in addition to the data collected for the PV analysis?
- A We are as to analyze the system risk and properly plan the system going forward.
- Comment Please include the different planning standards and models used for different purposes as part of the discussion for next steps moving forward.
- Q Can you include a timeframe as part of the next steps and a discussion of how the base cases are initially set up?
- A We will take that back for review.
- Q When does Operations provide input to the Planning process?
- A This is a continuous discussion that we have daily with Operations.
- Comment The states regulators proposal of a few years ago requested a definition of what is reasonable as part of the base case analysis. Once the numbers are derived, they can be applied consistently to a variety of scenarios. In addition, consider using the probabilistic analysis to supplement the deterministic analysis.

Item 3 – RSP15 Resource Adequacy and Related Studies

Mr. Peter Wong (ISO) provided an overview of the RSP15 Resource Adequacy and Related Studies.

- Q How will the transmission expansion be accounted for?
- A We will include all transmission projects that have been certified.
- *Q In regards to indicative ICR do you use the 14%?*
- A Yes, it is actually 14.3%.
- Q On slide 18, the reserves are for 14.4%, is that for rounding?
- A Yes it is.
- Q What is accounting for the drop in reserve percentage from the 18% to 16% range to the 14.3% going forward?
- A We have a new load forecast that factors in the PV and behind the meter resources.
- Q On slide 17, Why is 2375MWs consistent and unchanging throughout the presentation, what is the expectation for the duration of this value?
- A Understood and we will revise that as the need arises based observations of system contingencies.
- Q Could you investigate the impact of the fast start resources on the operating reserve values?
- A We will look into that.
- Q Will you explain on how you calculate the representative values at the PSPC in June?
- A We will go through a through walk through on the calculation methodology at the June PSPC.

Comment – There is an absence of any denomination of imports on this graphic. This is a proper illustration of New England's internal resources. However we do rely upon measureable quantities of imported resources to meet our reliability criteria via the FCM auction clearing process. Please be aware of that in characterizing the usage of this data within the RSP-15 document

Item 4 – RSP15 Load and Capacity Resource Overview

Ms. Maria Scibelli (ISO) provided an overview of the RSP15 Load and Capacity Resources.

- Q-On slide 13, you should differentiate between the capacity values and the actual energy flowing over the ties.
- A We can take that back and clarify the difference between the two values.
- Comment Slide 25 needs clarification. You need to define the net of imports and exports. Are you speaking of CSO's?
- A We will take that back to clarify the slides. Its CSO imports, less exports to derive the net values.

Q – In the past ISO developed a metrics report regarding the queue such as time in the queue, costs incurred to date, etc... The report then stopped. Is there a way to see why it stopped and could that be republished?

A - We will take that back.

Item 5 – Generic Cost of Supply Side Resources

Ms. Jessica Lau (ISO) provided an overview of the Generic Cost of Supply Side Resources.

Q - In regards to dual fuel units that can burn gas and oil, does that assume they are burning gas when calculating the heat rate?

A – We are assuming a burn based on the lower cost fuel. As such, we assume the heat rate will be calculated on the unit technology and efficiency of the unit.

Other minor clarification questions were asked and responded to by Ms. Lau.

Item 6 – 2015 Annual Energy and Seasonal Peak Forecast 2015-2024

Mr. Dave Ehrlich (ISO) provided an overview of the 2015 Annual Energy and Seasonal Peak Forecast 2015-2024.

Some minor clarifying questions were asked and responded to by Mr. Ehrlich

Item 7 – Newport Area Needs and Solutions

Mr. Carlos Perez Perez (NGrid) provided an overview of the Newport Area Needs and Solutions.

There were no questions from the committee on this topic.

Item 8 – Pittsfield/Greenfield 2022 Solutions Study

Mr. Alex Rost (ISO) provided an overview of the Pittsfield/Greenfield 2022 Solutions Study

Q – Is the PV modeled as supply side or behind the meter generation?

A – The values came out of the CELT and included all of the four currently classified types of PV summed to a single value.

Q – Are these final decisions on the area preferred solutions?

A – They are.

Planning Advisory Committee meeting adjourned at 3:05 PM

Respectively submitted

Marc Lyons Secretary, Planning Advisory Committee