

**Planning Advisory Committee
Doubletree Hotel, Westborough, MA
December 20, 2017**

Bob Andrew	Eversource Energy
Peter Bernard	ISO New England Inc.
Jon Breard	ISO New England Inc.
Patrick Boughan	ISO New England Inc.
Dave Bradt	Avangrid
David Burnham	Eversource Energy
Dorothy Capra	NESCOE
John Case	Eversource Energy
Nicholas Cicale	NextEra
Liz Delaney	Environmental Defense Fund
Michael Drzewianowski	ISO New England
Jeff Fenn	Emera Maine
Bill Fowler	Exelon/Dynegy
Mike Henderson	ISO New England Inc.
Amro Farid	Dartmouth College
Jeff Iafrazi	Customized Energy Solutions
Faheem Ibrahim	ISO New England Inc.
Steven Judd	ISO New England Inc.
Michael Kuse	RTO Insider
Marc Lyons	ISO New England Inc.
Tim Martin	New England Power Company
Bruce McKinnon	CMEEC
Susan Muller	Boreas Renewables
Marianne Perben	ISO New England Inc.
Paul Peterson	Synapse
Fred Plett	Massachusetts Attorney General Office
Abhinav Rawat	New England Power
Josh Rawley	Burns and McDonald
Alex Rost	ISO New England Inc.
Eric Runge	Day Pitney
Patricio Silva	ISO New England Inc.
Greg Wade	ISO New England Inc.
George Wegh	Eversource Energy

Item 1 – Chair’s Remarks

Mr. Peter Bernard welcomed the committee and reviewed the day’s agenda.

Mr. Bernard announced that due to a lack of topics, the January PAC meeting will be held as a WebEx. Mr. Bernard also reminded the committee of the inclement weather policy and told the committee to reference the inclement weather instructions posted to the PAC home page.

Item 2 – 2016 ISO New England System Operational Analysis and Renewable Energy Integration Study

Mr. Steven Judd (ISO) provided an introductory overview of the 2016 ISO New England System Operational Analysis and Renewable Energy Integration Study.

Q – Regarding slide 14 of the presentation, are the transmission constraints in Area A ignored?

A - The transmission constraints are ignored in this particular slide but constraints are part of the study model.

Dr. Amro Farid (Dartmouth College) reviewed the results of the 2016 ISO New England System Operational Analysis and Renewable Energy Integration Study.

Q – On slide 8, in what order do the layers run?

A – The order that is shown on the slide is the layering that was used.

Q – Regarding slide 17, bullet 3, was additional transmission for Maine wind resources modeled?

A – No. We did not model additional Maine transmission because it was not “planned”.

Q – How did you arrive at the size of the forecast error?

A – We used historical data averages to model forecast error.

Q - How are determining the regulation values used in the model?

A - We model regulation levels of 1% of peak load.

Q – On slide 16, regarding the curtailments, will they be stated MW/Hours?

A – Yes, that is addressed and illustrated later in the report.

Q – On slide 37, the net load profile for solar using NREL data. Is there a constant output for the entire 30 minute period?

A – No, there is not.

Q – On slide 47, the forecast error. Are there different levels of forecast error?

A – No, we used current industry averages to determine the forecast error used.

Q – What is the typical range of ramping in today’s system?

A – Roughly +/- 300 MWs.

Q – What was the assumption was for the New Brunswick Tie and Northern Pass?

A – Northern Pass was not modeled. We used the 5 year historical average for the New Brunswick Tie.

Item 3 - Interregional Planning Update

Mr. Mike Henderson (ISO) provided a review of the Interregional Planning activities.

There were no questions from the committee on this topic.

Item 4 – Adams Substation Upgrades Project Update

Ms. Janny Dong (Eversource) provided an update to the Adams Substation Upgrade Project.

Q – The Proposed Plan Application for this project was approved in 2012. Why the delay in presenting this project to PAC?

A – There was engineering being developed as well as additional environmental issues discovered at the sight that further defined the scope of the project.

Q – Is this the same design as approved in 2012?

A – The major design is the same so we will not be submitting a revised PPA.

Item 5 – Eversource Manchester CT Control House Expansion

Mr. George Wegh (Eversource) provided an overview of the Eversource Manchester CT Control House Expansion Project.

There were no questions from the committee on this topic.

Item 6 – Asset Conditions Presentation Thresholds

Mr. Michael Drzewianowski (ISO) provided an overview of the Asset Conditions Presentation Thresholds

There were several clarifying questions regarding the 5 year time frame and the \$5M TCA threshold. The TO representatives stated that all their questions will be submitted by the January 8, 2018 submission deadline to ISO for formal response.

Item 7– Implementation Plan for Revised NPCC Directory I Update

Mr. Varsha Chatlani (NGrid) reviewed the Implementation Plan for Revised NPCC Directory I Update.

There were no questions from the committee on this topic.

Item 8 – Eversource Connecticut and Western Mass Oil Circuit Breaker

Mr. George Wegh (Eversource) provided an overview of the update to the Eversource Connecticut and Western Mass Oil Circuit Breaker Project.

Q – Once this project begins, how many oil circuit breakers will remain on the Eversource system?

A – None. These are the last oil circuit breakers in the Eversource system.

Item 9 – Eversource 345 kV Structure Replacement Projects

Mr. John Case (Eversource) provided an overview of the Eversource 345 kV Structure Replacement Project.

Q – It states that the project is due to be completed in 2018. You expect to replace 1000+ poles in one year?

A – We have begun some of the prep work in 2017, so we are well on our way.

Item 10 – Eversource Laminated Structure Replacement Projects

Mr. John Case (Eversource) provided an overview of the Eversource Laminated Structure Replacement Projects.

There were no questions from the committee on this topic.

Item 11 – SEMA/RI 2027 Needs Assessment Scope of Work

Mr. Jon Breard (ISO) provided an overview of the SEMA/RI 2027 Needs Assessment Scope of Work.

Minor clarifying questions were asked and responded to by Mr. Breard.

Planning Advisory Committee meeting adjourned at 2:50 PM

Respectively submitted

Marc Lyons
Secretary, Planning Advisory Committee