Planning Advisory Committee Doubletree Hotel, Westborough, MA September 27, 2018

Joe Adadjo*	Eversource Energy
Bob Andrew	Eversource Energy
Peter Bernard	ISO New England Inc.
Carl Benker*	Eversource Energy
Denis Bergeron	Maine PUC
Cal Bowie*	Eversource Energy
Dave Bradt	Avangrid
Jon Breard	ISO New England Inc.
	NESCOE
Dorothy Capra John Case	Eversource Energy
Rick Conant*	RLC Engineering
Ray Coxe	Mosaic Energy Insights for Brookfield
Kelley Csizmesia	New England Power
Fabio Dallorto	ISO New England Inc.
Jim DiLuca*	Eversource Energy
Michael Drzewianowski	ISO New England Inc.
Frank Ettori	VELCO
Jeff Fenn	Emera Maine
Brian Forshaw	CMEEC
Bill Fowler	Dynegy/Exelon
Michele Gardner	Next Era Energy
Joel Gordon*	PSEG
Mike Henderson	ISO New England Inc.
Bruce Ho*	NRDC
David Ismay	Conservation Law Foundation
Bruce Jagolinzer	Avangrid
Jeff Jones*	Maine Power
Steve Judd	ISO New England Inc.
Tom Kaslow	First Light
Steve Kirk	Exelon
Andrew Kniska	ISO New England Inc.
Abby Krish	Boreas Renewables
Kaushal Kumar	ISO New England Inc.
Marc Lyons	ISO New England Inc.
Eva Maillot	ISO New England Inc.
Lisa Martin*	Emera Maine
Al McBride	ISO New England Inc.
Bruce McKinnon	New Hampshire Electric CoOp/Norwood Municipal/Utility Services
Shaun Morin	Eversource Energy
Brent Oberlin	ISO New England Inc.
Paul Peterson	Synapse Economics
Hantz Presume*	VELCO
Nithya Reddy Tada	ISO New England Inc.
Alex Rost	ISO New England Inc.
Eric Runge*	Day Pitney
Bob Russo	Eversource Energy
Abhinav Singh	ISO New England Inc.
Bob Stein	HQUS/PSEG/NRG/Footprint

Pradip Vijayan	ISO New England Inc.
George Wegh	Eversource Energy
Jinlin Zhang	ISO New England Inc.

^{*} Participated by phone

Item 1.0 – Chairs Remarks

Mr. Pete Bernard welcomed the committee and reviewed the day's agenda.

Mr. Bernard reminded the committee that we will be reviewing the TO's annual Local System Plans (LSP) at the October PAC meeting. Please provide your presentations to ISO as soon as possible but no later than October 3, 2018, as there will be a quick turnaround between the September PAC and the October PAC meetings.

<u>Item 2.0 – Need-By Date Determination for Steady-State Needs</u>

Mr. Pradip Vijayan (ISO) provided an overview of the Need-By Date Determination for Steady-State Needs.

There were no questions from the committee on this topic.

<u>Item 3.0 – Updates to the Boston Imports and Southeast New England Import Transfer</u> <u>Capabilities for Capacity Commitment Periods 10 & 11</u>

Mr. Pradip Vijayan (ISO) provided an overview of the Updates to the Boston Imports and Southeast New England Import Transfer Capabilities for Capacity Commitment Periods 10 & 11.

There were no questions from the committee on this topic.

<u>Item 4.0 – Glenbrook STATCOM Asset Condition Replacement</u>

Mr. George Wegh and Mr. John Case (Eversource Energy) provided an overview of the Glenbrook STATCOM Asset Conditions Replacement project.

- Q Is a 14-year life span normal for a STATCOM?
- A The original STATCOM technology has become obsolete.
- Q Do you have a cost estimate for replacing the STATCOM?
- A The initial cost at the time of installation was \$40M but we will try to reuse as much of the existing STACOM equipment as possible to reduce costs. We don't have an exact cost for replacement at this time.
- Q Would you consider replacing it with an SVC versus a new STATCOM.
- A We did consider an SVC but space limitation in the switchyard makes that problematic.

<u>Item 5.0 – Carpenter Hill Control House Rebuild Asset Conditions Needs and Solutions</u>

Ms. Kelley Csizmesia (New England Power) provided an overview of the Carpenter Hill Control House Rebuild Asset Conditions Needs and Solutions.

- Q Would the project costs be all covered under PTF?
- A No, the cost breakdown is roughly 75% PTF and 25 % non-PTF.

<u>Item 6.0 – New Hampshire 2027 Needs Assessment</u>

Ms. Jinlin Zhang (ISO) provided an overview of the New Hampshire 2027 Needs Assessment.

- Q How are we coordinating with the local TOs for non-PTF overloads?
- A When we set up the base case, we coordinate with the area TO's so they are aware of our ongoing work. Order 1000 prohibits ISO from directly coordinating with the TO's. The TO's now cover the non-PTF issues as part of their Local System Plan work.

Comment – It would be helpful to add a slide that shows the difference and changes between the 2023 study and the 2027 study, such as new assumptions, what violations went away and what new violations occurred.

Item 7.0 – Eastern Connecticut 2027 Needs Solution Study Updates

Mr. Jon Breard (ISO) provided an update to the Eastern Connecticut 2027 Solution Study Update.

Comment – The ECT issues are near term and CMEEC is pleased to see we are moving to the solution stage. However, CMEEC does not believe all the issues that they are seeing are not addressed in the study. Also there are facilities that will need to be replaced as part of asset conditions and that should have been considered in this study. CMEEC advocates for Option 2 as their preferred solution.

Other minor clarification questions were asked and responded to by Mr. Breard.

<u>Item 8.0 – 1608/1880 115 kV Line Cable Replacement</u>

Mr. John Case (Eversource Energy provided an overview of the 1608/1880 115 kV Line Cable Replacement Project.

- Q Will you be planning to run a second circuit in parallel?
- A We are not considering that at this time due to increased project duration and costs.

<u>Item 9.0 – ISO Recommendations for Cost Regionalization in Flood Hazard Areas</u>

Mr. Michael Drzewianowski (ISO) provided an overview of the ISO Recommendations for Cost Regionalization in Flood Hazard Areas.

- Q What is eligible for PTF cost recovery as part of these guidelines?
- A Equipment that would be affected at the current 100-year flood level.

<u>Item 10.0 – Boston 2028 Needs Assessment Scope of Work</u>

Mr. Andrew Kniska (ISO) provided an overview of the Boston 2028 Needs Assessment Scope of Work.

Comment – You should account for the projected off-shore wind resources and the winter fuel security issues.

- A That is beyond the scope of this work as the off-shore wind has no firm contract nor has cleared in an FCA. Also, no transmission work has been proposed to address the fuel security issues.
- Q Why isn't the new CMP line to Quebec included in the study?
- A ISO is not aware that the contract is signed yet. Any state sponsored contract needs to be provided to ISO so it can be reviewed and verify its validity.

Item 11.0 – West/Central Massachusetts 2028 Needs Assessment Scope of Work

Mr. Andrew Kniska (ISO) provided an overview of the West/Central Massachusetts 2028 Needs Assessment Scope of Work.

- Q Will the 69 kV system be included in the study?
- A As the 69 kV system is considered part of PTF, it will be included in the study.

Other minor clarifying questions were asked and responded to my Mr. Kniska.

<u>Item 12.0 – Second Maine Resource Integration Study - Scope</u>

Mr. Al McBride (ISO) provided an overview of the Second Maine Resource Integration Study - Scope.

- Q What is the MW amount for all the resources in the cluster study?
- A Roughly 3000 MWs.
- Q Have you considered Tewksbury as a possible interconnection point?
- A We don't feel that would be a good injection point.

Comment – ISO is looking for feedback if it is technically viable to interconnect more than 1200 MWs of wind to a 1200 MW HVDC terminal and if there is any commercial interest to do so from the cluster members.

<u>Item 13.0 – Discussion of Stakeholder Comments on 2017 Economic Study Report</u>

Mr. Mike Henderson (ISO) reviewed the comments received on the 2017 Economic Study.

The 2017 Economic Study will be finalized by Q4 2018.

There were no questions from the committee on this topic.

Planning Advisory Committee meeting adjourned at 3:15 PM

Respectively submitted

Marc Lyons Secretary, Planning Advisory Committee