Planning Advisory Committee Doubletree Hotel, Westborough, MA January 18, 2017

Bob Andrew	Eversource Energy
Mike Barrett	Taunton Municipal Power
Dwayne Basler	Eversource Energy
Denis Bergeron	Maine Public Utilities Commission
Peter Bernard	ISO New England Inc.
Cal Bowie	Eversource Energy
David Burnham	Eversource Energy
Dorothy Capra	NESCOE
Nicholas Cicale	NextEra
Ray Coxe	Mosaic Energy Insights for Brookfield
Jim Davis	Dominion
Fabio Dallorto	ISO New England Inc.
Frank Ettori	Vermont Electric Power Company
Jeff Fenn	Emera Maine
Craig Foley	Taunton Municipal Power
Brian Forshaw	CMEEC
Kevin Fougere	Quantum Technologies
Bill Fowler	Exelon/Dynegy
Nicholas Gangi	Eversource Energy
Michelle Gardner	NextEra NextEra
Tom Gentile	Quanta Technologies
Monica Gonzalez	ISO New England Inc.
Mike Henderson	ISO New England Inc.
Bruce Ho	Natural Resources Defense Council
Jeff Iafrati	Customized Energy Solutions
Eric Jacobi	FERC
Shelia Keane	Massachusetts Department of Public Utilities
Steve Kirk	Exelon
Paul Lopes	Massachusetts DCAM
Marc Lyons	ISO New England Inc.
Chris Malone	United Illuminating
Jack Martin	New England Power Company
Tim Martin	New England Power Company
AL McBride	ISO New England Inc.
Bruce McKinnon	CMEEC
Ed McNamara	Vermont Department of Public Service
John Moskal	U.S. EPA
Susan Muller	Bores Renewables
Brent Oberlin	ISO New England Inc.
Bill Opalka Hisham Othman	RTO Insider Quanta Technologies
Marianne Perben Paul Peterson	ISO New England Inc.
Fred Plett	Synapse Massachusetts Attorney General Office
	Vermont Electric Power Company
Hantz Presume	
Alex Rost	ISO New England Inc.
Jose Rotger	Emera Energy
Patricio Silva	ISO New England Inc.
Mike Smalec	Connecticut PURA

Ross Stairs	NB Power
Bob Stein	HQUS/PSEG/NRG/Footprint
Phil Tatro	EIG
Brian Thomson	Massachusetts Wholesale Electric Company
David Thompson	Connecticut Public Utilities Commission
Greg Wade	ISO New England Inc.
George Wegh	Eversource Energy
Jinlin Zhang	ISO New England Inc.

Item 1 – Chair's Remarks

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

Mr. Patricio Silva (ISO) provided a 2015 Emissions Report Update. Additional information can be found on the EAG link on the ISO-NE website.

<u>Item 2.0 – FCA 12 Zonal Development Scope of Work</u>

Mr. Al McBride (ISO) provided an overview of the FCA 12 Zonal Development Scope of Work.

- Q On slide 8, there is a column called "Project Completion", what does that indicate?
- A The intention was for it to signify the project completion date. There is an error on the slide for Greater Hartford that states project completion is 2017 when in fact it's anticipated it will be completed in 2019. We will take that back for review and correct any additional errors.
- Q Why isn't there a Northern Maine Zone if Keene Road is binding?
- A The Keene Road area is a very small pocket, even smaller than north of Orrington, as such, it did not meet the criteria for development of an individual zone.

Item 3.0 – SEMA/RI 2026 NGrid Recommendations on Group 2 Preferred Solutions

Mr. Brian Hayduk (NGrid) provided an overview of the SEMA/RI 2026 NGrid Recommendations on Group 2 Preferred Solutions.

- Q On slide 4, which is the ISO recommendation?
- A ISO's recommendation is not on this chart. This just shows the various alternatives proposed by NGrid.
- Q Who determined that 300 MWs is an acceptable loss of load in contingency analysis for projects?
- A ISO has been using the 300 MW loss of load criteria since roughly 2010 in a SWCT DCT project. That was fully vetted and received no objection from the PAC. Since that time, the 300 MW criteria have been used for Greater Boston projects and again received no objections. Comment The states did not give support for the NGrid alternative due to the increased localized costs associated with the project. While the project is fully within Rhode Island, the localized costs would be allocated to all NGrid customers in both Rhode Island and Massachusetts.

<u>Item 4.0 – Maine 2023 Solution Study Update</u>

Ms. Jinlin Zhang (ISO) provided a review of the Maine 2023 Solution Study Update.

Minor clarification questions were asked and responded to by Ms. Zhang.

<u>Item 5.0 – Cleary Station 115 kV Switching Station Asset Replacement Analysis</u>

Ms. Mike Barrett (TMLP) provided an overview of the Cleary Station 115 kV Switching Station Asset Replacement Analysis.

There were no questions from the committee on this topic.

<u>Item 6.0 – Moody's 2017 Economic Analysis</u>

Mr. Edward Friedman (Moody's Analytics) provided an overview of Moody's 2017 Economic Analysis.

- Q Is the information on slide 13, based on both legal and illegal immigration?
- A It is based on legal immigration.
- Q How does inflation factor into the economy?
- A As wages increase, inflation tends to be a result for a time.
- Q What is your projection for the rate of inflation in the near future?
- A We estimate inflation at the high 2% or up to 3%.

<u>Item 7.0 – 2016 Economic Study – Response to PAC Comments on FCA and Regulation, Ramping, and Reserves</u>

Mr. Mike Henderson (ISO) reviewed the comments received from Brookfield on the FCA and Regulation, Ramping, and Reserves. ISO will post formal responses on the PAC website in the near future.

<u>Item 7.0 – 2016 Economic Study – Preliminary High Order of Magnitude Transmission</u> <u>Development Costs for Scenario 6</u>

Ms. Marianne Perben (ISO) provided an overview of the 2016 Economic Study – Preliminary High Order of Magnitude Transmission Development Costs for Scenario 6.

- Q How were the STATCOMS accounted for on the converters? The costs seem excessive.
- A You are correct, we could use existing STATCOMS and we were very conservative in our cost estimates.
- Q Why didn't you use HVDC ties for scenario 3? It seems there would be a great savings with HVDC.

A – We didn't revisit the other scenarios. Our focus was on scenario 6 only.

<u>Item 8.0 – RSP 17 Scope of Work</u>

Mr. Mike Henderson (ISO) provided an overview of the RSP 17 Scope of Work.

Comment – Add any reference materials for the RSP as an appendix where the links to those references are not subject to change.

Q – What do you mean by anticipated resource retirements?

A – An example would be Vermont Yankee when the states did not renew their permitting. ISO was then anticipating the resource retirement but the formal retirement announcement from the participant had not occurred at the time for the RSP publication.

Item 9.0 – Keene Road METU

Mr. Brent Oberlin (ISO) provided an overview of the Keene Road METU.

Comment – An SPS could resolve the congestion issue at a lower cost without going through the METU.

Q – As congestion issues are resolved downstream from Keene Road, will ISO relook at a Keene Road METU as there could be increased cost savings?

A-It is something that ISO may consider.

Item 10.0 – Public Policy Transmission Upgrade Process

Mr. Brent Oberlin (ISO) provided an overview of the Public Policy Transmission Upgrade Process.

Q – Do we have a filing date for the Public Policy changes?

A – January 25, 2017.

Planning Advisory Committee meeting adjourned at 4:30 PM

Respectively submitted

Marc Lyons Secretary, Planning Advisory Committee