

**Planning Advisory Committee  
Doubletree Hotel – Westborough, MA  
November 20, 2019**

Joe Adadjo	Eversource Energy
Bob Andrew	Eversource Energy
Denis Bergeron	Maine PUC
Peter Bernard	ISO New England Inc.
Cal Bowie	Eversource Energy
Jon Breard	ISO New England Inc.
Dorothy Capra	NESCOE
Kathryn Cox	New England Power
Digaunto Chatterjee	Eversource Energy
Liz Delaney	Environmental Defense Fund
Michael Drzewianowski	ISO New England Inc.
Frank Etori	VELCO
Jeff Fenn	Emera Maine
Lisa Fink	Maine PUC
Kevin Flynn	ISO New England Inc.
Brian Forshaw	CMEEC
Michelle Gardner	NextEra Energy
Steve Garwood	New Hampshire Transmission
Ben Griffiths	Massachusetts AG
Marcos Guispe	Massachusetts DPU
Faheem Ibrahim	ISO New England Inc.
Eric Jacobi	FERC
Graham Jesner	ISO New England Inc.
Tom Kaslow	FirstLight Energy
Steve Kirk	Exelon Energy
Andrew Kniska	ISO New England Inc.
Rich Kowalski	ISO New England Inc.
Abby Krish	Boreas Renewables
Kaushal Kumar	ISO New England Inc.
Joe LaRusso	City of Boston
Paul Liang	Eversource Energy
Paul Lopes	Massachusetts DCAM
Marc Lyons	ISO New England Inc.
Eva Mailhot	ISO New England Inc.
Tim Martin	New England Power
Bruce McKinnon	South Hadley Municipal/Norwood Municipal
Don Nelson	Massachusetts DPU
Brent Oberlin	ISO New England Inc.
Nithya Reddy Tada	ISO New England Inc.
Abhinav Rawat	New England Power
Steve Smith	New England Power
Phil Tatro	EN Engineering

Pradip Vijayan	ISO New England Inc.
Frank Walsh	Avangrid
Lawrence Willick	LS Power

### **Item 1.0 – Chairs Remarks**

Mr. Pete Bernard welcomed the committee and reviewed the days’ agenda.

Next IPSAC Meeting is scheduled for December 9, 2019. Registration will be required for the meeting.

### **Item 2.0 – Moody’s Analytics 2019 Economic Update**

Mr. Ed Friedman (Moody’s Analytics) provided a 2019 Economic Update.

*Q - Do you believe the inverted yield curve inversion will reverse in the near future?*

A - Yes. We believe the fed adjustment of interest rates will reverse back to traditional yield curve and money will start flowing back into stocks.

*Q - What is the impact regarding auto loans where balances on new cars are exceeding the value of the car.*

A - While this is true, the household debt is at a very low percentage which include car loans.

*Q – Outside of the New England states, what other states are included as part of the Northeast?*

A – Pennsylvania, New Jersey, New York and Delaware.

*Q – Will a Brexit have a significant impact to the New England economy?*

A – It will have some impact but we do not believe it will drive New England, or the U.S. as a whole, into a recession.

*Q – Has any analysis been performed of any of the presidential candidates and how their economic policies could impact the economy?*

A – We have done some analysis on impact to taxes and GDP but no detailed analysis of the individual policies.

### **Item 3.0 – Second Maine Resource Integration Study – Final Results**

Mr. Al McBride (ISO-NE) reviewed the final results of the Second Maine Resource Integration Study.

*Q - Will there be additional changes to the Second Maine Resource Integration Study between now and when the final report is issued?*

A - There could be additional changes to the final report depending on if new projects come forward or drop out of the cluster. However, we do plan to move forward with this portion of the study.

*Q – Could you provide a cutoff date on when you will take a final look at the queue?*

A – ISO expects it to be the second half of January 2020.

*Q - How come you ignored the large injection at Larrabee Road (QP 639) even though it's not part of the cluster?*

A - We have included the injection at Larrabee in the cluster base case.

*Q - Will there be any staging of the transmission upgrades if more resources drop out of the cluster and the MWs are reduced?*

A – Yes we do have plans to modify the needed transmission upgrades if more MWs leave the cluster.

*Q – What ETUs will be part of the transmission upgrade?*

A – The ETU's are moving on their own path and are not directly related to cluster process SIS.

*Q – Shouldn't the 3027 Line from Coopers Mills to Maine Yankee be reflected as a future line (in red) to be constructed versus already constructed (shown in blue) on slide 16?*

A – Yes it should. That was an oversight.

*Q – How much of this project could be considered a traditional generator interconnection versus a transmission system upgrade?*

A – We consider the 3031 Line as a transmission upgrade.

*Q – Why are the synchronous condensers at the Number Nine substation included as generator interconnect and paid for by the developer versus network upgrades where the costs are socialized?*

A – These type of devices has been included as developer costs for other wind projects but we can take that back for a second look.

*Comment – You will need to include the cost of the Coopers Mill to Maine Yankee line as part of the project costs.*

A – That line is a contingent upgrade but we can include the possible cost as a footnote in the cost table.

*Q - Will the deposit requirement be \$40M for the 2<sup>nd</sup> Maine Cluster?*

A - The ETUs are not related to the CETUs and their deposit is \$1M each. The \$40M will be shared by each of the queue resources in the 2<sup>nd</sup> Maine Cluster.

#### **Item 4.0 – Forward Capacity Auction 15 (FCA 15) Capacity Zone Development Preview**

Mr. Al McBride (ISO-NE) previewed the capacity zonal development for FCA 15.

*Comment – It is not anticipated the retirement of Mystic 8 & 9 will change the zonal determination for SENE or require a need for a new zonal requirement within SENE.*

*Q – What would happen if Mystic 8 & 9 retire early and prior to FCA 14?*

A – We have no mechanism to change the FCA 14 results or zonal determination. We can look to see if there would be any transfer changes.

#### **Item 5.0 – New England Bulk Power System List Updates**

Mr. Dan Schwarting (ISO-NE) reviewed the updates to the Bulk Power System List.

*Q – What is the definition of a facility out in an N-1-1 contingency?*

A – A facility is defined as a generator, line, or transformer out of service.

*Q – Is there a timeline when BPS upgrades need to be in place?*

A – It depends on the severity of the BPS issue. Serious issues need to be resolved as soon as possible.

*Q – If BPS upgrades are required, could that affect other ongoing studies in the area?*

A – It is possible. It would depend on the nature of the upgrades.

*Q – Where does NPCC stand on their revisions to A10?*

A – There are changes on system conditions for testing but the core test has not changed. The changes are expected to be voted on by the RCC prior to Spring 2020.

### **Item 6.0 – 2019 Economic Study Request Status Update**

Mr. Patrick Boughan (ISO-NE) provided a status update for the 2019 Economic Studies.

*Q – What type of analysis went into the development of the injection points or 345 kV reinforcement?*

A – We looked at the most logical injection points and we plan to perform additional analysis to confirm that these are the best solutions.

*Comment - RENEW requested that their Economic Study include Interface Flows on Summer and Winter Days and Percent of Hours Interface Flows Exceed 100% of Ratings.*

*Q – For Energy Storage Modeling, will that include Pump Storage as well as Battery Storage? How will ISO address the combined solar and batteries?*

A – We will include Pumped Storage as well as batteries. The combined solar and batteries is something we need to look into.

*Q – Do you know what hub height is being considered as part of the 2025 wind profile? Will it be 100 meters or taking into account the new 150-meter hub height.*

A – I cannot exactly speak to which hub height we will use but we can discuss that further offline.

Planning Advisory Committee meeting adjourned at 2:00 PM.

Respectively submitted

Marc Lyons  
Secretary, Planning Advisory Committee