

**Planning Advisory Committee  
Doubletree Hotel – Westborough, MA  
April 25, 2019**

Ray Albrecht	National Biodiesel Board
Bob Andrew	Eversource Energy
Katie Bellezza	Novatus Energy
Peter Bernard	ISO New England Inc.
Jon Black	ISO New England Inc.
Cal Bowie	Eversource Energy
Jon Breard	ISO New England Inc.
Dave Burnham	Eversource Energy
Dorothy Capra	NESCOE
John Case	Eversource Energy
Dave Cavanaugh	Energy New England
Digaunto Chatterjee	Eversource Energy
Ray Coxe	Mosaic Energy Insights for Brookfield
Fabio Dallorto	ISO New England Inc.
Liz Delaney	Environmental Defense Fund
Frank Etori	VELCO
Jeff Fenn	Emera Maine
Kevin Flynn	ISO New England Inc.
Brian Forshaw	CMEEC
Bill Fowler	Exelon
Steve Garwood	New Hampshire Transmission
Marcos Guispe	Massachusetts DPU
Mike Henderson	ISO New England Inc.
Carrie Cullen Hitt	New Hampshire Transmission
Jeff Iafrazi	Customized Energy Solutions
Eric Jacobi	FERC
Steve Judd	ISO New England Inc.
Matt Kakley	ISO New England Inc.
Shelia Keane	Massachusetts DPU
Tom Kiley	Northeast Gas Association
Steve Kirk	Exelon
Andrew Kniska	ISO New England Inc.
Michael Kuser	RTO Insider
Paul Lopes	Massachusetts DCAM
Marc Lyons	ISO New England Inc.
Eva Mailhot	ISO New England Inc.
Jack Martin	New England Power
Al McBride	ISO New England Inc.
George McCluskey	New Hampshire PUC
Bruce McKinnon	New Hampshire Electric CoOp/South Hadley Electric Light
Margaret Neves	Power Engineers
Brent Oberlin	ISO New England Inc.

Theodore Paradise	Anbaric
Marianne Perben	ISO New England Inc.
Paul Peterson	Synapse Economics
Francis Pullaro	Renew Northeast
Abhinav Rawat	New England Power Company
Eric Rodriguez	NextEra Energy
Ed Roedel	Avangrid
Steve Rourke	ISO New England Inc.
Bob Russo	Eversource Energy
Patricio Silva	ISO New England Inc.
Carissa Sedlacek	ISO New England Inc.
Bob Stein	HQUS/PSEG/NRG/Footprint
Phil Tatro	EN Engineering
Brian Thomson	Massachusetts Wholesale Electric Company
Peter Toomey	Terra Form Power
Pradip Vijayan	ISO New England Inc.

### **Item 1.0 – Chairs Remarks**

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

Mr. Bernard advised the committee that the Winter 2018/2019 Review presentation has been posted as part of today’s meeting materials. Stakeholder questions on the presentation can be directed to [PACMatters@iso-ne.com](mailto:PACMatters@iso-ne.com).

Mr. Bernard also reminded the committee that there will be two PAC meetings in May to include Grid Transformation Day on May 23, 2019.

### **Item 2.0 – 2019 Economic Study Request Presentations**

Ms. Dorothy Capra (NESCOE), Mr. Theodore Paradise (Anbaric), and Mr. Francis Pullero (RENEW) reviewed their 2019 Economic Study Requests to ISO-NE.

### **NESCOE**

The presentation focused on the economic analysis of incremental increases of off shore wind resources throughout New England for 2030 and 2035.

*Q- CLF supports this type of analysis. Regarding the amount of off shore wind in 2030, are the incremental increases of wind in addition to the existing off shore wind projects commercially active or under contract?*

*A - It is in addition to the existing resources and those under contract.*

### **Anbaric**

The presentation focused on the economic impact of an increase of off shore wind at three different levels (,8000 MWs, 10,000 MWs, 12,000 MWs) for the year 2030 with impacts in energy prices, air emissions, and fuel security.

*Q - Have you considered the impacts when the wind speeds get so high that the turbines are feathered and shuts down?*

A - The newer the turbine, the better it performs in high winds.

*Q - Do you expect the analysis will include the costs of construction?*

A - That will not be included in the analysis.

*Q - Will capacity costs be part of the analysis?*

A - It will not. There is the potential of having no capacity market by 2030.

*Q - Is there a maximum value of wind you will be analyzing? What is the max wind speed when a turbine will be feathered?*

A - We can get the latest data on that from the wind turbine developers.

*Q - Will energy storage in conjunction be considered?*

A - We will discuss that with ISO and the analysis develops.

*Q - Why are you considering Millstone being retired in this scenario and a potential interconnection point? There has been no submission of a de-list or retirement bid for the unit.*

A - We would like it included in the analysis as it is a possibility. That will have impacts on an interconnection point for off shore wind and well as fuel security implications.

## **RENEW**

The presentation focused on the economic analysis of the Orrington-South interface and the resources being curtailed behind the interface.

*Q - Is the study analysis including other congestion points both above and below Orrington?*

A - We will work with ISO on those impacts as well.

## **Item 3.0 – 667 69 kV Line Rebuild and Asset Conditions Project**

Mr. John Case (Eversource Energy) provided an overview of the 667 69 kV Line Rebuild and Asset Conditions Project.

There were no questions from the committee on this topic.

## **Item 4.0 – Final 2019 Load Forecast: Winter Peak Demand and Sub-Regional Forecast**

Mr. Jon Black (ISO-NE) provided an overview of the Final 2019 Load Forecast: Winter Peak Demand and Sub-Regional Forecast.

*Q - When will we be considering moving away from gross EE to net EE?*

A - We will take that back for additional discussion.

*Q - Is the winter peak weather normalized?*

A - It is not. These are the actual values.

*Q - Does the CELT use weather normalize values?*

A - By definition, weather normalized is the 50/50 forecast.

*Q - How will you factor in battery storage for BTM Solar?*

A - If the batteries are in the market it will not be part of the BTM solar forecast. We will continue to monitor batteries in the future but the amounts of storage are not a factor to the forecast at this time.

*Q - How much of an impact will the electrification of transportation and heating have on the forecast?*

A - That is part of a greenhouse gas policy initiative that is still in the very early stages of discussion. When those policies become clearer and we begin to see those changes, we will adjust or forecast accordingly.

### **Item 5.0 – Revisions to Typical Review Periods**

Mr. Brent Oberlin (ISO-NE) provided an overview of the Revisions to Typical Review Periods for transmission planning assessments.

*Comment – Engage the stakeholders earlier in the process for those organizations who are assisting the planning analysis. This will help reduce the study time.*

A - ISO has concerns that incumbent stakeholders could gain a competitive advantage if it is discovered that there will be a competitive solicitation for the area.

*Comment – Some concern was expressed regarding plans to reduce the comment periods from 30 to 15 days.*

*Comment – Could ISO provide the expected major milestone dates for each of the studies being performed?*

### **Item 6.0 – Boston 2028 Needs Assessment Results**

Mr. Andrew Kniska (ISO-NE) provided an overview of the Boston 2028 Needs Assessment Results.

*Q - Will the scope of work include a critical load assessment?*

A - That is not in the results. But we did do a time sensitive analysis. Last year the PAC requested that ISO stop performing a critical load assessment.

*Q - Why did you use the 20% of nameplate value for Vineyard Wind?*

A - It is based on historical performance levels for off-shore wind.

*Q - What is the purpose of the proposed Fulkerson Substation?*

A - To serve local load

*Comment – ISO should consider modeling the NECEC line at its full 1200 MW capability versus its contracted capability of 1090 MWs.*

*Q - Will Revolution Wind be included in the analysis? It was included as part of the Fuel Security Analysis.*

*A - It is not. But we will follow up on that.*

*Q - What is the driver that is causing the Greater Boston issues?*

*A - The minimum load levels are getting lower and lower which in turn causes high voltage.*

*Q - What is the duration of the overloads you are finding?*

*A - For the peak it is on a one-hour duration. For min load, it is several hours*

*Q - Are the Mystic units just off line or do you model the entire station gone? Is the station GSU still part of the system and model?*

*A - The Mystic units were modeled off line but the GSU remains.*

*Q - Are there any minimum load needs that are time sensitive?*

*A - There are not.*

*Comment – Perhaps battery storage and the level of storage could be a possible non-transmission option solution to the min load, high voltage issues.*

*Q - What is the anticipated date when ISO will issue the RFP for competitive solutions for needs in excess of three years from now?*

*A - ISO anticipates the RFP will be issued in late 2019 or early 2020.*

#### **Item 7.0 – 1130/1430 Line and Optical Ground Wire (OPGW) Replacement Project**

Mr. Edward Roedel (Avangrid) reviewed the 1130/1430 Line and Optical Ground Wire Replacement (OPGW) Project.

There were no questions from the committee on this topic.

#### **Item 8.0 – Qualified Transmission Project Sponsor Application Reminder**

Mr. Brent Oberlin (ISO-NE) reviewed the process for submission of a Qualified Transmission Project Sponsor Application.

*Q - If the solution proposal includes several different companies, do they all need to be QTPS eligible?*

*A - The submitter must be a QTPS and any contracted parties may or be not be a QTPS. However, there will only be one submission from one QTPS.*

#### **Item 9.0 – Eastern Connecticut (ECT) 2029 Needs Assessment Scope Details**

Mr. Jon Breard (ISO-NE) provided an overview of the ECT 2029 Needs Assessment Scope Details.

*Q - Why are you not using the most current RSP project list?*

*A - All the relevant projects have already been added to the base case.*

*Q - Why isn't the full capability of Vineyard Wind included in the study? It was included as part of the fuel security study.*

A - ISO Planning replied that they have asked for the contract but have not received it yet.

Planning Advisory Committee meeting adjourned at 3:30 PM

Respectively submitted

Marc Lyons  
Secretary, Planning Advisory Committee