

**MINUTES OF THE  
PLANNING ADVISORY COMMITTEE (PAC)  
MEETING HELD ON MARCH 16, 2023  
VIA WEBEX & TELECONFERENCE**

<b>Attendee</b>	<b>Organization</b>
J. Truswell - Chair	ISO New England
J. Macura - Secretary	ISO New England
Z. Ahmed	ISO New England
M. Ainspan	NRG Power Marketing, LLC
S. Allen	Eversource Energy
P. Asarese	ISO New England
C. Benker	Eversource Energy
P. Bernard	ISO New England
P. Boughan	ISO New England
J. Brodbeck	EDPR
J. Burlew	ISO New England
D. Burnham	Eversource Energy
J. Cebrik	Avangrid
E. Chapin	Onward Energy
R. Collins	ISO New England
D. Conroy	RLC Engineering
T. Dalakos	RWE
F. Dallorto	ISO New England
J. Dannels	Shell
J. Donovan	MA DPU
M. Drzewianowski	ISO New England
L. Durkin	ISO New England
J. Fenn	FENCO LLC
B. Forshaw	Energy Market Advisors, LLC
B. Fowler	Wheelabrator North Andover Inc.; Exelon Generating Company LLC; Nautilus Power; Dynegy Power Marketing, LLC; Entergy Nuclear Power Marketing LLC; Great River Hydro, LLC
P. Gandbhir	CLS
R. Guay	Maine PUC
J. Halpin	Eversource Energy
R. Harlan	Onward Energy
R. Harvey	Institute of Electrical and Electronics Engineers
S. Hodgdon	1898 Co.
P. Holloway	MA DOER

N. Hutchings	ISO New England
J. Iafrati	Customized Energy Solutions
S. Judd	ISO New England
M. Kakley	ISO New England
S. Keane	NESCOE
A. Kniska	ISO New England
F. Kugell	Central Maine Power Company
R. Lafayette	Eversource Energy
S. Lamotte	ISO New England
A. Lawton	Synapse Energy
J. Lowe	ISO New England
T. Lundin	LS Power
T. Martin	New England Power Company
J. Martin	New England Power Company
A. McBride	ISO New England
B. McKinnon	South Hadley Electric Light and Norwood Municipal
C. McKinnon	Eversource
A. Mitchell	National Grid
A. Newcomb	Daymark Energy Advisors
A. Nichols	ISO New England
B. Oberlin	ISO New England
R. Panos	National Grid
H. Pathan	Eversource Energy
D. Patnaude	Eversource Energy
M. Perben	ISO New England
J. Porter	PPL Web
H. Presume	VELCO
A. Rost	ISO New England
J. Rotger	Customized Energy Solutions
E. Runge	Day Pitney
D. Schwarting	ISO New England
M. Scott	National Grid
P. Shattuck	Anabarc Development Partners, LLC
B. Snook	CT DEEP
E. Snyder	Eversource Energy
C. Soderman	Eversource Energy
P. Sousa	Marble River
R. Stein	H.Q. Energy Services
B. Swalwell	Tangent Energy
Z. Teti	Avangrid
D. Tremont	Taunton Municipal Lighting Plant
P. Turner	CLF

M. Valencia-Perez	ISO New England
O. Vejzovic	Ultieg
P. Vijayan	ISO New England
J. Zhang	ISO New England

### **Item 1.0 – Chairs Remarks**

Ms. Jody Truswell welcomed the committee and reviewed the day’s agenda.

### **Item 2.0 – New East Eagle Substation Update**

Mr. David Burnham (Eversource Energy) presented a cost update on the new 115/13.8 kV East Eagle Substation. The existing Mystic-Chelsea line will loop into the new East Eagle Substation. The project was initiated because customer load additions exacerbated transformer capacity in East Boston (violating Eversource criteria). The estimated total PTF cost is \$74.8 million with an expected in-service date of Q4, 2025.

In response to Stakeholder questions, Eversource Energy responded with the following:

- The project’s total cost is the combination of both the PTF and distribution costs.
- Eversource did not present the project’s distribution costs in 2014.
- The basis for the costs presented to PAC are likely different than the \$103 million cost presented at December’s EFSB.

Stakeholders made the following comments:

- One stakeholder noted interest in better understanding Eversource’s distribution cost estimates/break-downs.

### **Item 3.0 – Mystic to Woburn Cost Update On RSP #1356**

Mr. David Burnham (Eversource Energy) presented a cost update on Mystic to Woburn RSP #1356. Due to the project’s challenging underground construction cost increases were attributed to 1) additional design and construction restrictions; 2) underground interferences and work hour restrictions; 3) field conditions; and 4) different geotechnical conditions. The project’s current cost estimate is \$223.1 million with an in-service date of December 2023.

In response to stakeholder questions, Eversource Energy issued the following statements:

- This project did not compare prices for other options; it was done in an overall suite.
- In 2017, the project was in its initial stages (e.g. construction prep-work and permitting). In 2020, physical construction began, which required cost updates. Today, that project has undergone substantial and complex construction, requiring more cost reassessments due to the unforeseen challenges the project has faced.

Stakeholder made the following comments:

- A stakeholder commented non-CEII presentations are easier to utilize.

### **Item 4.0 – NH Line Asset Condition Projects**

Mr. Chris Soderman (Eversource Energy) presented New Hampshire asset condition projects on lines F-139, M-183, and H-123.

In response to Stakeholder questions, Eversource Energy responded with the following:

- “ADSS” stands for All-Dielectric Self-Supporting fiber-optic cable.
- The three New Hampshire asset condition projects were grouped together because the projects’ comparable timeframes to one another.

#### **Item 5.0 – CT LINE ASSET CONDITION PROJECTS**

Mr. Chris Soderman (Eversource Energy) presented asset condition projects for the Card-Montville Corridor and lines 376 and 1620 in Connecticut. The primary asset condition upgrades included transitioning copper shield wire to OPGW, wood structure deficiencies (woodpecker damage, pole top rot, cracked arms, split pole tops, decay), and replacing deteriorated lattice towers.

In response to Stakeholder questions, Eversource Energy responded with the following:

- Likely, a line’s overall rating will not increase because of partial reconductoring.
- The asset condition projects are grouped together in this presentation because of timing and recent structure assessments.

#### **Item 6.0 – Shutesbury #704 Station Rebuild**

Mr. Rafael Panos (National Grid) provided an updated on Shutesbury #704 Station rebuild. The estimated cost is \$13.3 million, \$8.9 million PTF (+50/ 25%). The proposed upgrades include:

- Replace a 69kV circuit breaker with a 115kV circuit breaker (operating at 69kV)
- Replace air break switch with 115kV new load break switch
- Replace 69/13.8kV, 5/6.25MVA transformer with 115-69/13.8kV transformer (non-PTF)
- Install associated equipment, circuit switcher, and surge arresters (non-PTF)
- Replace control enclosure and associated equipment
- Install online monitoring on transmission equipment (PTF/non PTF)

In response to Stakeholder questions, National Grid responded with the following:

- The new transformer’s MVA rating may be 40 or 55, which will help to standardize the area.
- The recent transformer upgrades are primarily driven by asset condition needs, rather than solar development. National Grid is focused on minimizing its current fleet of transformers.
- Lines E-5 and F-6 were previously presented in other rebuild projects.
- The transformer will be dual ratio. The 69 kV tranformer can convert to 115 kV in the future. National Grid is using 115 kV rated substation equipment, operated at 69 kV.
- The presence or omission of a station on the color system diagram doesn’t necessarily correspond to what is in the system models.

#### **Item 7.0 – RSP Project List & Asset Condition List March 2023 Update**

Ms. Annalyse Nichols (ISO New England) presented an update on RSP Project List and asset condition list.

There were no Stakeholder questions on the presentation.

Stakeholders issued the following comments:

- Stakeholders thanked ISO and its presenter for the compiled information and corresponding graphs. The data was helpful.

### **Item 8.0 – FCA 18 Transmission Transfer Capabilities and Capacity Zone Development**

Mr. Alex Rost (ISO New England) presented FCA 18 Transmission Transfer Capabilities and Capacity Zone Development. The FCA 18 potential zones are evaluated using the Capacity Zone modeling objective criteria triggered by Section III.12.4 of the Tariff (unchanged from FCA 17). The proposed zones to examine with the objective criteria are Maine (potentially export constrained), Northern New England (potentially export constrained), Southeast New England (potentially import constrained) and Connecticut (potentially import constrained). Alex reviewed transfer capabilities used in the zone formation process. He also explained that any changes to the Maine interface transfer capabilities resulting from the recent NPCC A-10 criteria changes will not be considered for FCA 18. The analysis examining the impacts of the recent NPCC A-10 criteria changes on the Maine interface transfer capabilities will not be completed in time to support the FCA 18 zone formation and qualification processes.

In response to Stakeholder questions, ISO New England responded with the following:

- The analysis examining the impacts of the recent NPCC A-10 criteria changes on the Maine interface transfer capabilities should be complete by end of year, allowing for consideration of any increased transfer capabilities for FCA 19.
  - The analysis currently underway does not model the New England Clean Energy Connect (NECEC). The ISO will examine the impacts of including the NECEC in a subsequent analysis.
  - The ISO will discuss implications on the increased transfer limits on interconnection studies and reconfiguration auction participation once the analysis is complete and any transfer limit changes are presented.
- The table on slide 8 depicts transfer capabilities over multiple years, and the values highlighted in the red rectangle are those for FCA 18.

Comments:

- A stakeholder was apprehensive about Slide 16's simplicity.

### **Item 9.0 – 2023 Regional System Plan: Key Messages**

Patrick Boughan (ISO New England) presented the Kick-Off 2023 Process. The 2023 RSP focuses on the ISO's planning outlook for the New England grid. The public meeting will be part of the board meeting on November 1, 2023.

In response to Stakeholder questions, ISO New England responded with the following:

- The November RSP meeting and public ISO Board meeting are both scheduled for November 1, 2023 at the same venue. Those meeting details are still under development.
- On Slide 3, the data and tables provide context. An excel appendix is likely the best way to present the relevant load forecasting data.
- The ISO does not have distribution infrastructure jurisdiction and focuses on collaborating with the states.
- The ISO is transparent when it identifies a problem but does not have a solution.

- The 2023 RSP will be bring together multiple studies and their latest evolutions.
- The 2023 RSP will overview the current power grid and discuss the increase in asset condition projects and transmission/infrastructure needs. The ISO will take concerns over right sizing back for review.

Stakeholders issued the following comments:

- A stakeholder noted that providing access to the data represented in the tables would be useful.
- A stakeholder commented that ISO’s messaging surrounding market design and overall policy objectives extending beyond reliability and efficient markets resembles “a chicken and the egg” scenario.
- Providing ISO website references would be helpful because most stakeholders prefer starting at website rather than the RSP presentation.
- Over the next decade, growing electrification is causing a greater need for additional transmission policy.

**Item 10.0 – Closing Remarks/Adjourn for the Day**

Ms. Truswell announced the next Planning Advisory Committee meeting is on Thursday, April 20, 2023.

The meeting adjourned at 11:30 A.M.

Respectfully submitted,

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Jillian Macura

Secretary, Planning Advisory Committee