

Consumer Liaison Group

Transmission in New England

December 3, 2015

New England States Committee on Electricity



NESCOE is New England's Regional State Committee, governed by a Board of Managers appointed by each of the New England Governors to represent the collective views of the six New England states on regional electricity matters

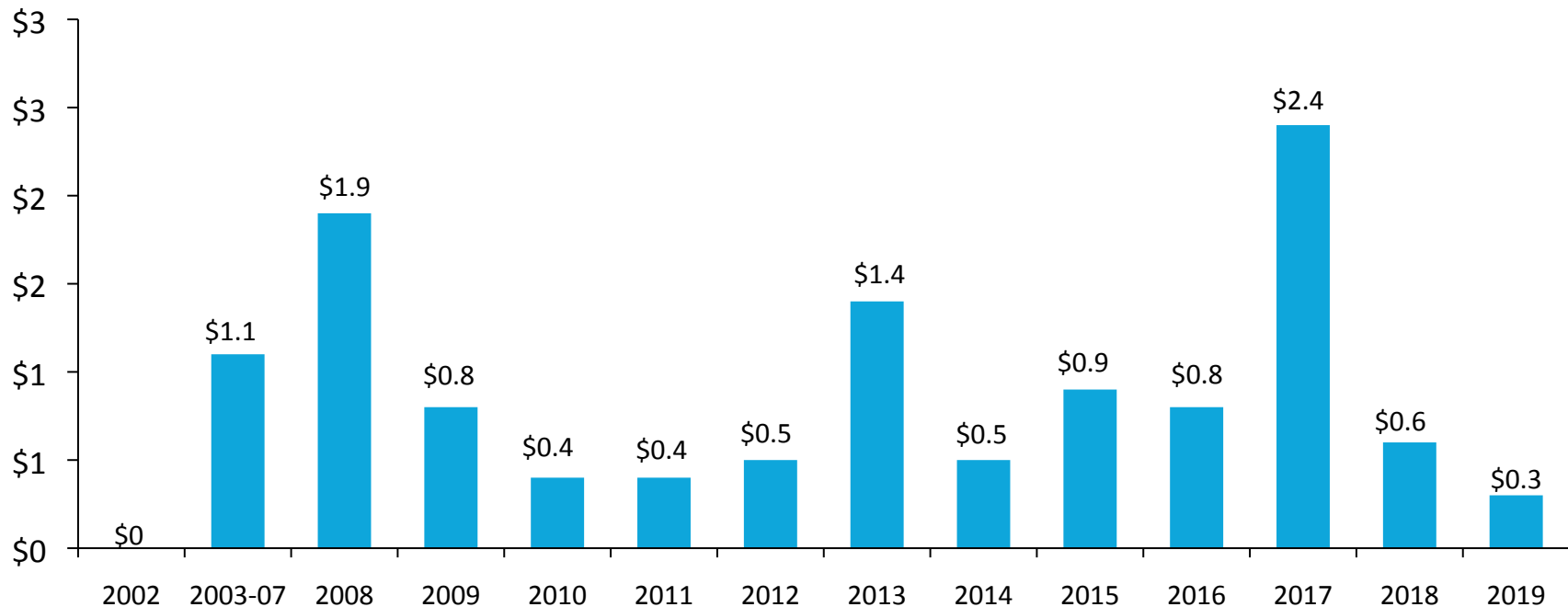
- ✓ **Focus:** Resource Adequacy, System Planning & Expansion
- ✓ **Resources:** 6 full-time staff with diverse disciplines & experience. Consultants, primarily for transmission engineering & independent studies
- ✓ **More information:** including filings & comments at
 - www.nescocoe.com
 - Twitter @NESCOEStates

Overview

- ✓ **New England Transmission Investment**
- ✓ **FERC Order 1000**
 - **Competitive Transmission**
 - **Public Policies**
- ✓ **Multi State Clean Energy Solicitation**
- ✓ **Snapshot of State Activities**

Transmission Investment in New England

Since 2002, about \$12 billion in reliability Tx placed in service, under construction or in planned/proposed phase



Cumulative Investment through June 2015

\$7.2 billion

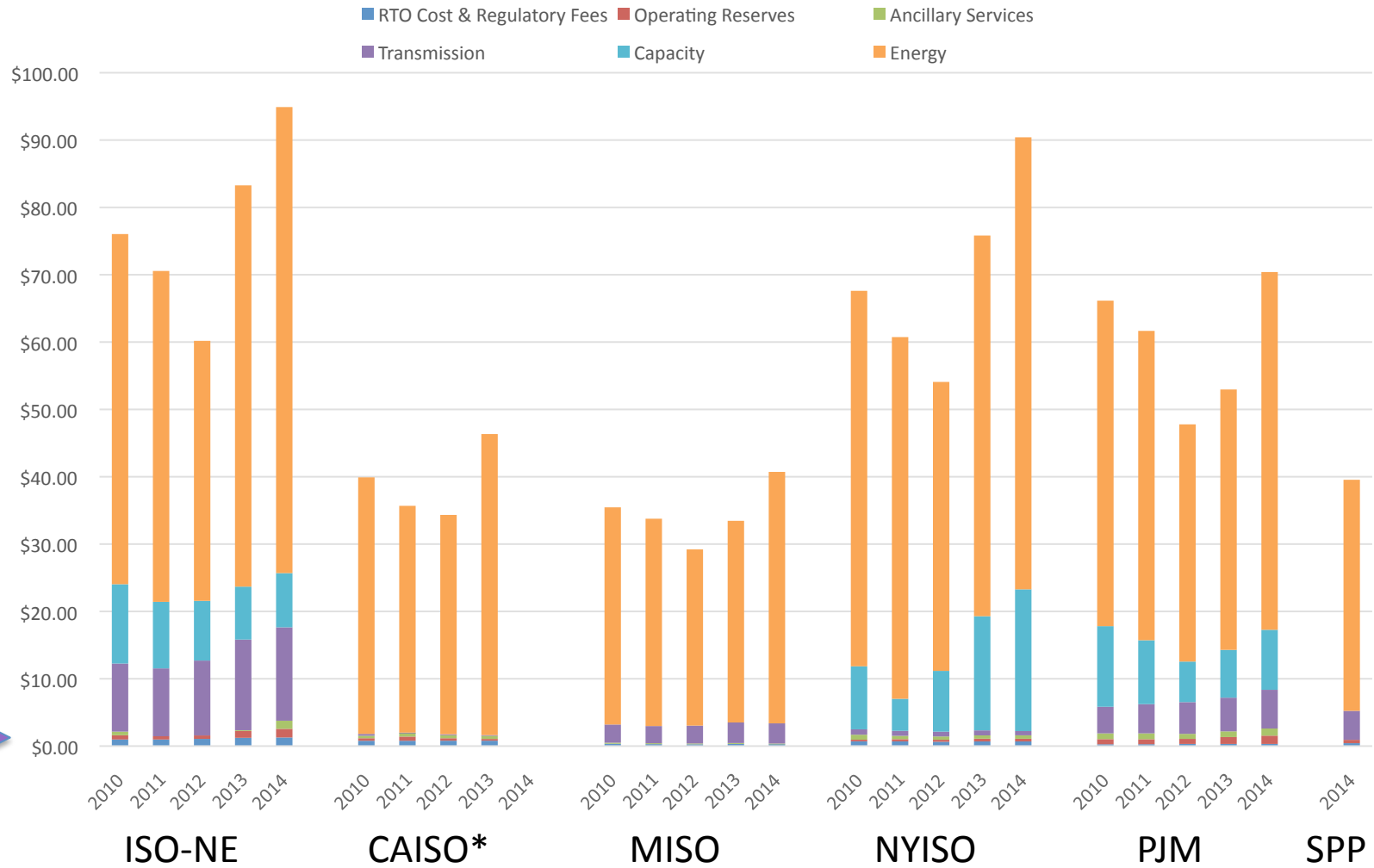
Estimated Future Investment through 2019

\$4.8 billion

Source: ISO-NE

A Comparative Look: Market Pricing Components, Including Transmission

Wholesale Power Cost Breakdown, 2010-2014 (\$/MWh)



Transmission

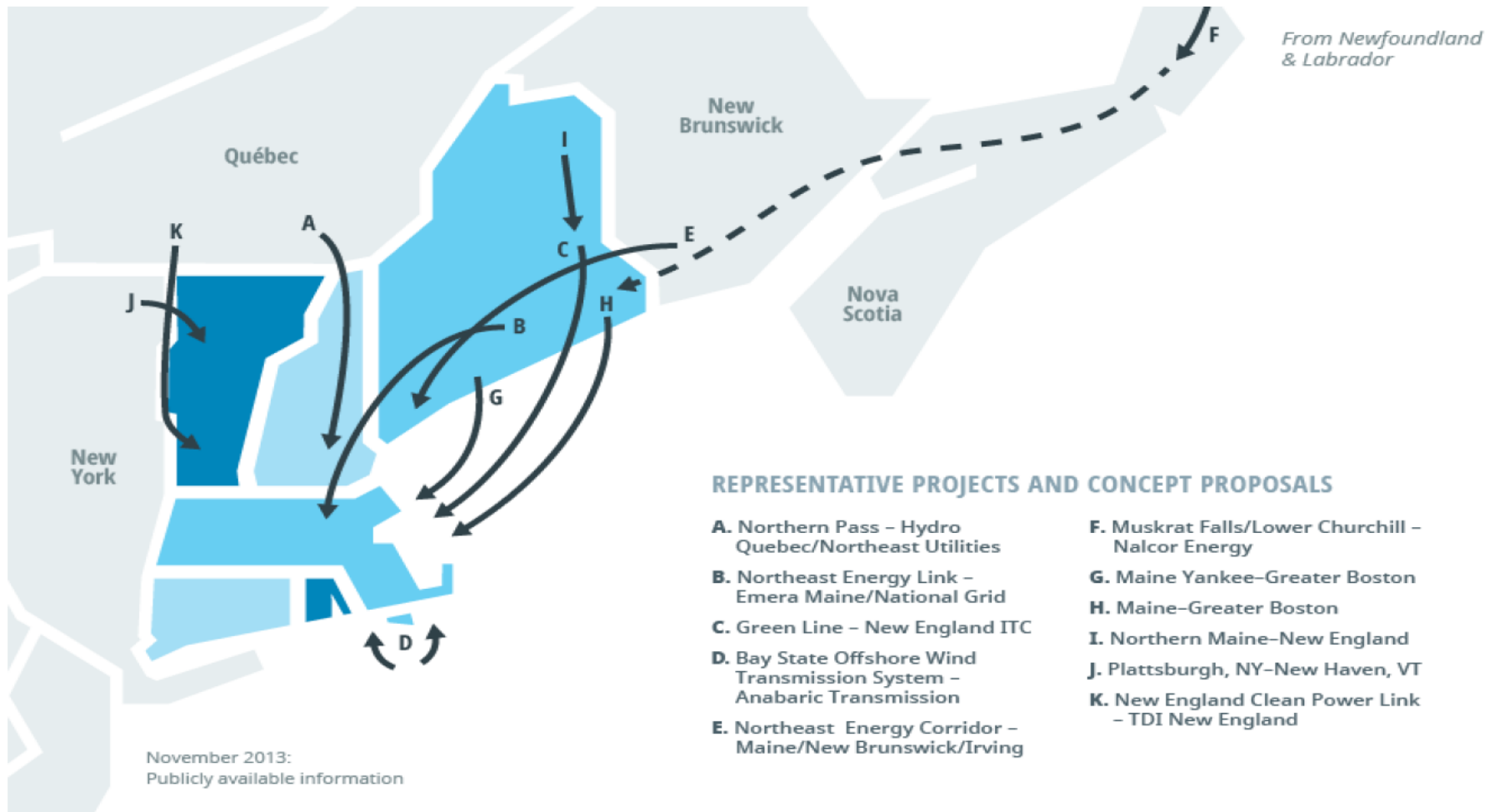
Data source: 2015 ISO/RTO Metrics Report

Perennial Debate in New England:

How do ISO-NE's Transmission Planning Assumptions and Methodologies Compare to Those of Other Regional Transmission Operators?

- ✓ **NESCOE commissioned a consultant to develop objective, fact-based detailed comparative summary of RTOs' transmission system reliability planning approaches and methodologies**
- ✓ **The survey will not have judgments or conclusions – it will provide objective data for consideration**
- ✓ **Completion – early 2016**

“Merchant” Transmission Proposals



Source: ISO-NE

Order 1000: NESCOE Perspective



- NESCOE/states actively participated in FERC rulemaking and in regional stakeholder process on compliance
- ***On competition:*** Supported all qualified project proponents having comparable project development & cost recovery opportunity
- ***On public policy:*** Advocated for a process states would use, with a central role for states. **Ultimately, state officials, not ISO-NE, decide whether and the means by which to satisfy state laws**

Order 1000: Competitive Transmission

Benefits of not being first

- ISO-NE last region to receive final set of FERC orders so has yet to run competitive solicitation as have other regions
- This fall, NESCOE and ISO-NE hosted forum to hear about experiences elsewhere - NY-ISO, PJM, SPP, Cal-ISO – and to hear from merchant developers that participated
- All material at www.nescoe.com



Some Competitive Transmission Questions

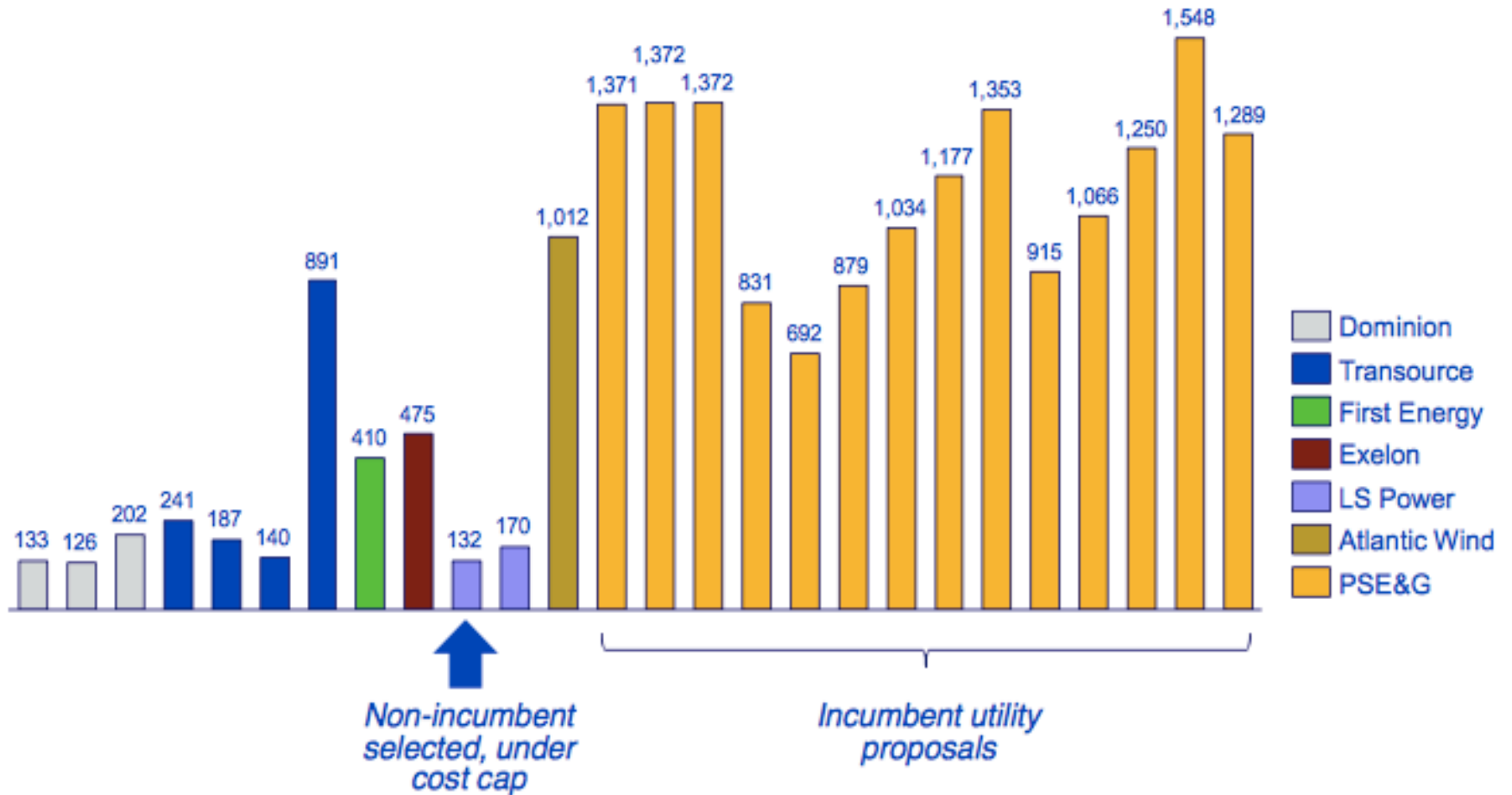
- What is the optimal solicitation model for consumers?
 - ISO identify the need *and* solution or just the need and let market bring forward ideas?
- How should evaluation criteria be structured?
 - Should cost be the only thing that matters?
 - If not, what else matters, and to what extent?
- Does ISO have the right resources?
 - Bid evaluation is new for ISO, bids could be many
- How how should various cost containment features be structured or evaluated?
 - Hard cap or allow developers to determine risks they are willing to take?
 - What about off-ramps from caps?

Illustration: How much should cost matter in bid evaluation?

Competitive Process	Bid/ Sponsorship	Cost as Evaluation Factor
AESO (Alberta)	Bid	100%
CAISO	Bid	Cost as one of several unweighted factors
ISO-NE	Sponsorship	Cost as one of several unweighted factors
MISO	Bid	30%
NYISO	Sponsorship	Cost as one of several unweighted factors
PJM	Sponsorship	Cost as one of several unweighted factors
SPP	Bid	37.5%

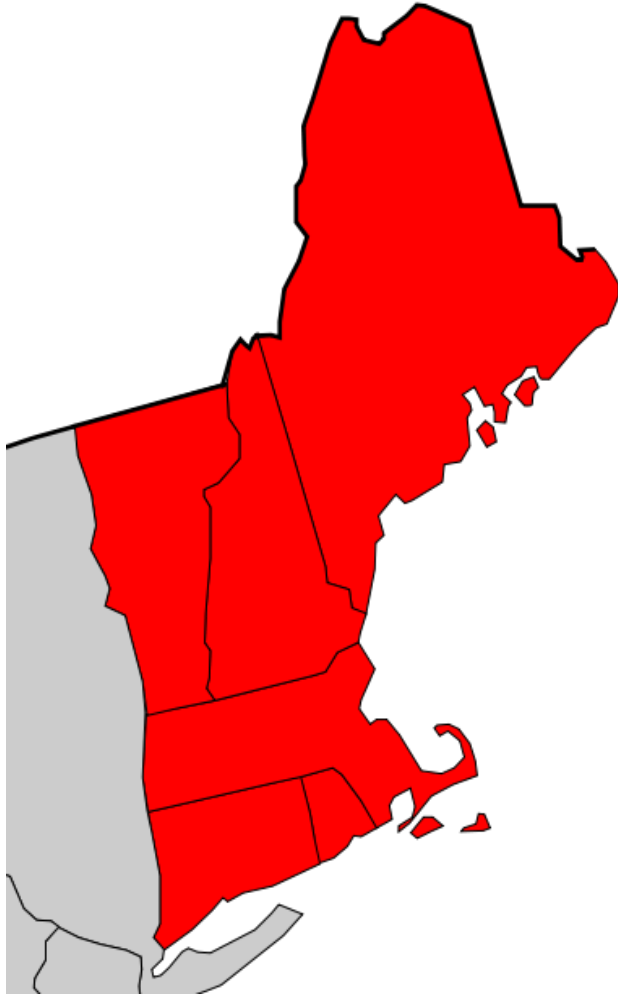
Illustration: Cost Variation in Bids

Artificial Island Project Proposals (PJM, 2014)



Source: NextEra Energy Presentation, October 26, 2015 Competitive Transmission Forum

Order 1000: Policy-Driven Projects



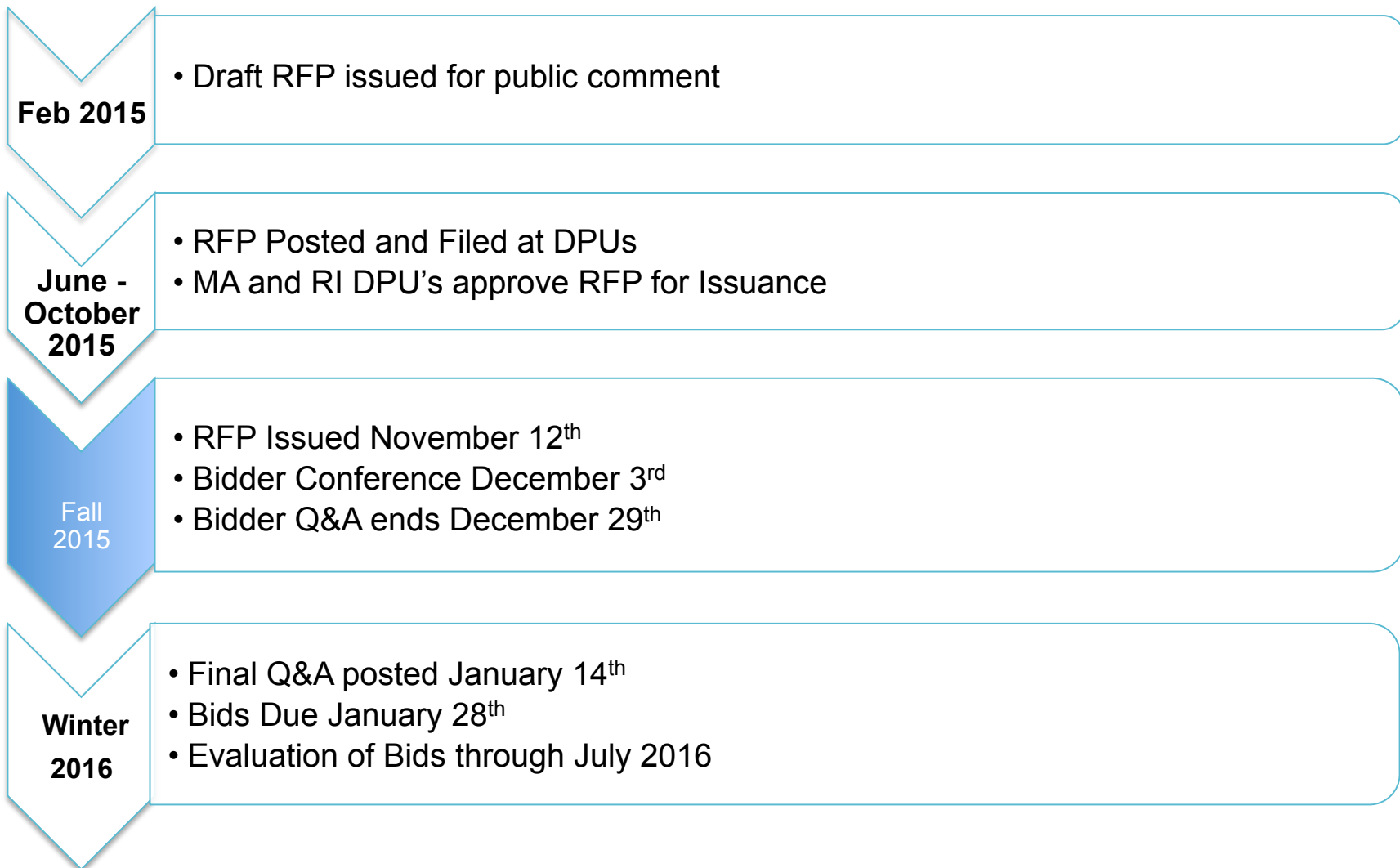
- NESCOE/5 States challenging compliance orders at D.C. Circuit
- FERC unlawfully expanded the rule to require project *selection* rather than *consideration* of public policies
 - *Not just academic*: by requiring selection and at the same time denying states a central role in that process, FERC substitutes ISO-NE judgment for that of state officials charged with implementing state laws
- Expect clarity on process prior to implementation

Multi-State Clean Energy RFP

Certain state agencies and utilities in CT, MA and RI developed, with NESCOE assistance, a draft joint RFP for clean energy projects based on each state's current authority. www.CleanEnergyRFP.com

Objective: To explore whether a multi-state procurement might attract larger-scale projects and transmission than single state procurements and achieve individual states' clean energy goals more cost effectively than if each state proceeded on its own.

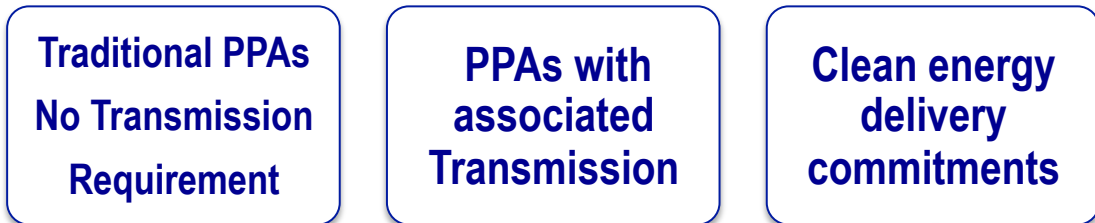
Multi-State RFP Schedule



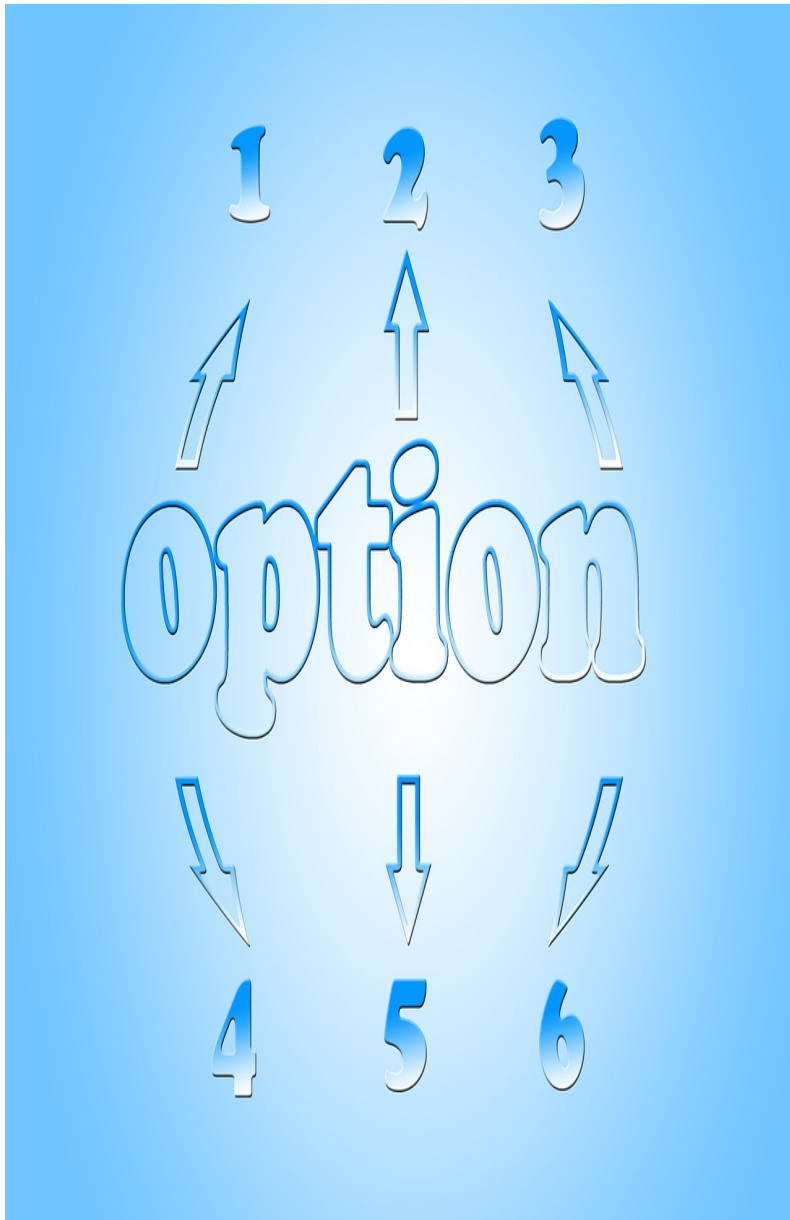
Resource Types: Class I renewable power (wind, solar) or large-scale hydro meeting requirements of states' laws. 20 MW minimum threshold.

Over 5,000 GWh in total.

Project types:



- **Clean energy delivery commitment** proposals tie transmission-only payments to project's performance in fulfilling commitments for clean energy delivery
- Support payments under a FERC filed/accepted Tx tariff/rate schedule paid for by participating states
 - Tx developer, clean energy supplier negotiate commercial terms



RFP issuers to jointly *and* individually evaluate bids

- ✓ No obligation to procure anything at all
- ✓ Each state, EDC use own authority, criteria, judgment to determine whether a proposed project is cost-effective and beneficial for its consumers

Green Tracking

- ✓ Verification of clean energy attributes for imported power is critical if Canadian resources wish to be credited with helping states satisfy carbon reduction requirements or environmental objectives
 - No uniform structure currently in place in Eastern Canada to measure, verify, and track emissions characteristics of imports into New England.
- ✓ In 2013, N.E. Governors and Eastern Canadian Premiers adopted a resolution (Resolution 37-1) encouraging Canadian provinces to evaluate existing options and opportunities to adopt verification mechanisms of generation sources and environmental attributes that correspond with the existing New England Power Pool (NEPOOL) GIS verification system
 - **Recent changes to NEPOOL GIS rules to facilitate tracking *but corresponding changes* likely needed on other side of the New England's borders.**

Snapshot: Some Parallel State Actions

- ✓ **CT DEEP** implementing new legislative authority for diverse resource solicitations (natural gas, energy efficiency, renewable energy, large-scale hydropower, energy storage)
 - Comment opportunity on three proceedings to procure resources
- ✓ **NH PUC** investigation, with electric utility involvement, into “potential approaches . . . to address cost and price volatility issues currently affecting wholesale markets”
 - Sept. 2015 Staff Report to PUC, issued for public comment
- ✓ **MA DPU** order October 2015 determined that it has legal authority to review and approve contracts filed by EDCs for pipeline capacity, and established a standard of review for such contract
 - National Grid, Eversource Gas Capacity/Supply RFPs issued
 - Separately, broad legislative proposals under discussion
- ✓ **VT** in process of siting evaluation of TDI Clean Power Link
- ✓ **ME** and **RI** have enabling laws
 - Maine PUC proceeding underway to evaluate gas pipeline
 - National Grid Gas Capacity/Supply RFP issued

www.nescoe.com