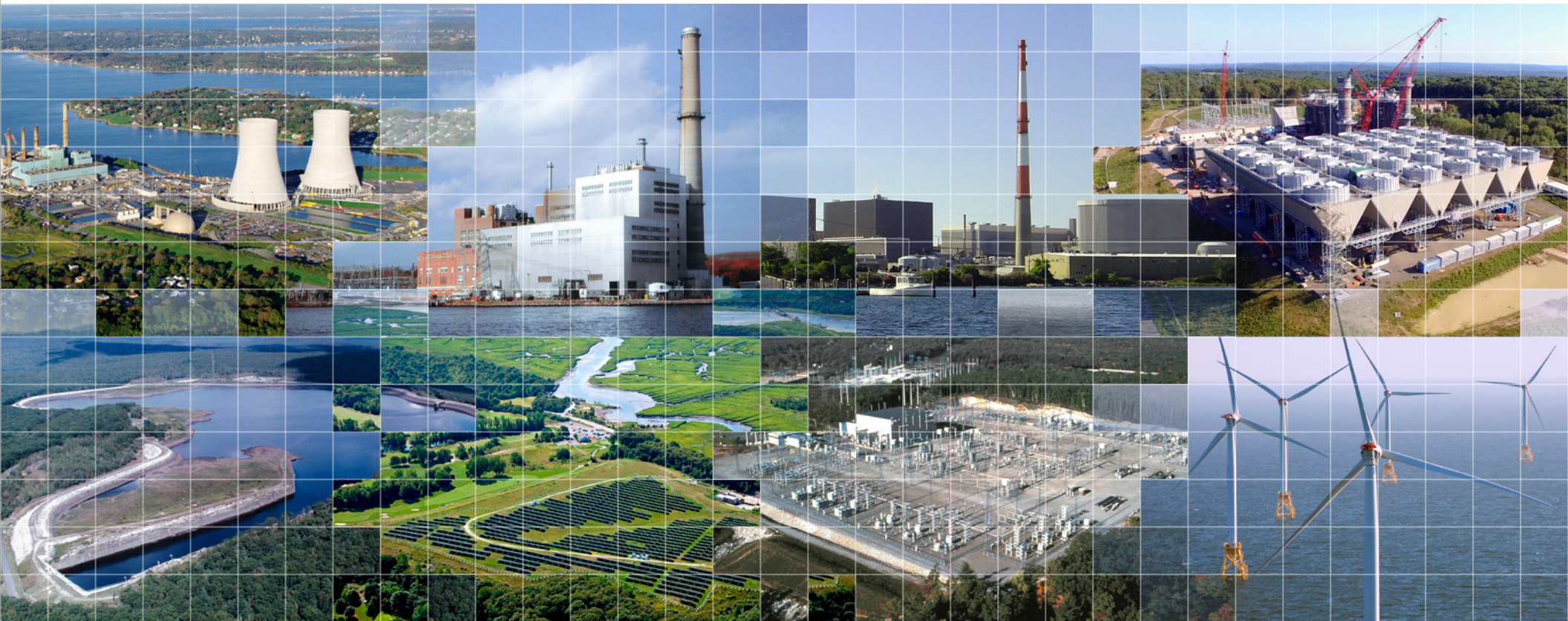


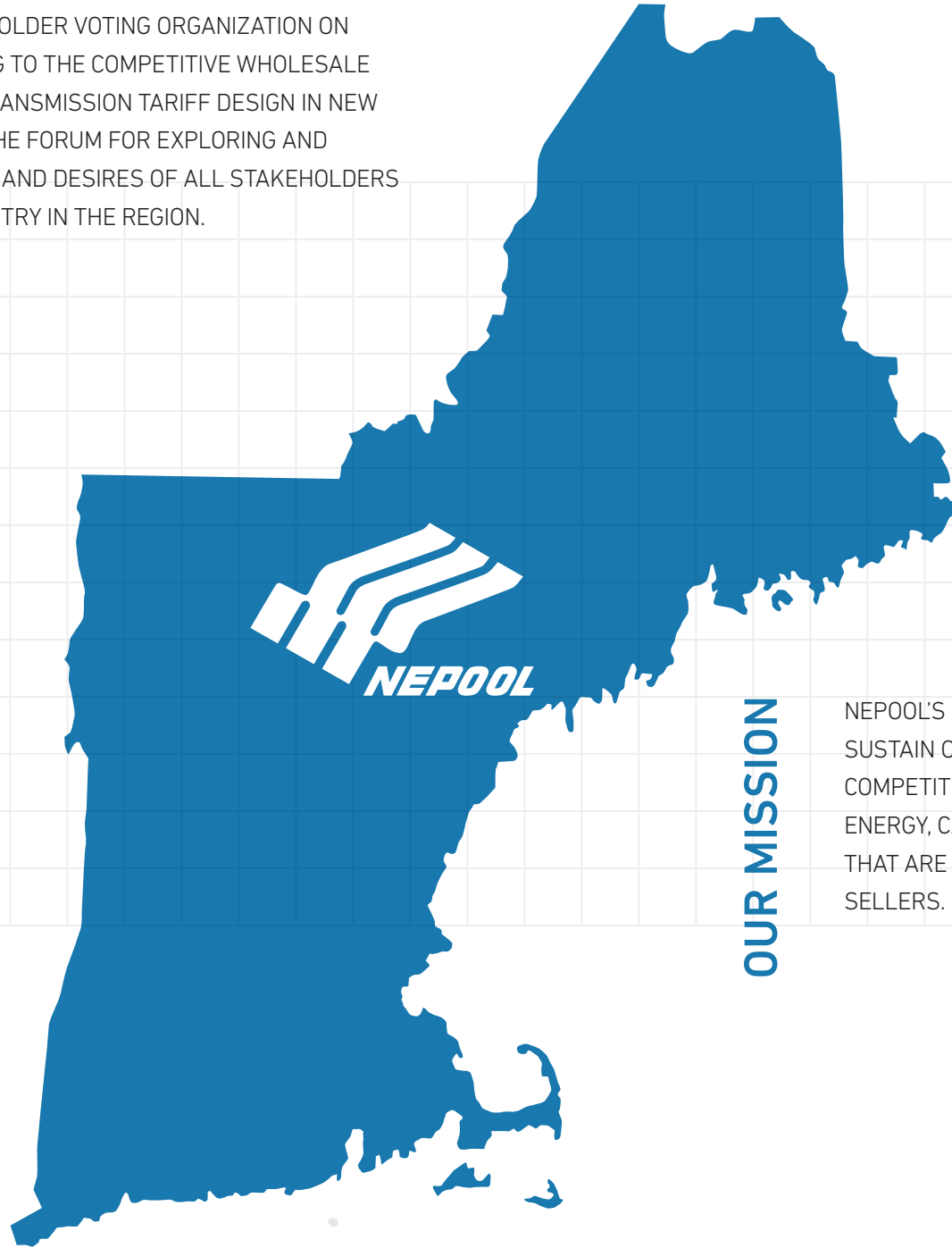
# SEEKING SOLUTIONS. WORKING TOGETHER.



NEW ENGLAND POWER POOL | ANNUAL REPORT 2017

## WHO WE ARE

NEPOOL IS THE STAKEHOLDER VOTING ORGANIZATION ON ALL MATTERS RELATING TO THE COMPETITIVE WHOLESALE MARKET RULES AND TRANSMISSION TARIFF DESIGN IN NEW ENGLAND. NEPOOL IS THE FORUM FOR EXPLORING AND BALANCING THE NEEDS AND DESIRES OF ALL STAKEHOLDERS OF THE ELECTRIC INDUSTRY IN THE REGION.



## OUR MISSION

NEPOOL'S MISSION IS TO CREATE AND SUSTAIN OPEN, NON-DISCRIMINATORY, COMPETITIVE, UNBUNDLED MARKETS FOR ENERGY, CAPACITY AND ANCILLARY SERVICES THAT ARE BALANCED BETWEEN BUYERS AND SELLERS.

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\*Statistical and other information in this report have been supported by Participants or derived from NEPOOL records or ISO-NE records, except as specifically referenced. Many of the photographs used in this report have been supplied courtesy of NEPOOL Participants. Further information on photographs and a list of acronyms and abbreviations that appear in this report are posted on the NEPOOL website at [http://nepool.com/Annual\\_Reports.php](http://nepool.com/Annual_Reports.php). Capitalized terms used but not defined in this report are intended to have the same meaning given to such terms in the Second Restated NEPOOL Agreement, the Participants Agreement or the ISO New England Transmission, Markets and Services Tariff (Tariff).



**As New England faces significant changes driven by the economics of new technologies, fuel markets and specific resource procurements pursuant to state policies, the New England Power Pool (NEPOOL) stakeholders are seizing the opportunity to shape the future of the New England wholesale competitive electric market. That market is the engine that drives the merchant investment in generating resources, demand resources and other emerging technologies needed to continue to deliver the low-cost, reliable power that fuels New England's economy.**

NEPOOL formed the initial wholesale competitive electric markets in the late 1990s to capture the opportunity for competitive market investment to supply the region's wholesale electric needs at the lowest economically efficient cost. It created an independent system operator, ISO New England Inc. (ISO-NE), to independently run the system, operate the wholesale competitive markets and administer the tariff, with the mission "to create and sustain open, non-discriminatory, competitive, unbundled markets for energy, capacity and ancillary services that are balanced between buyers and sellers."

#### **TAKING ON THE CHALLENGE**

With an evolving and changing landscape, NEPOOL has been taking on the challenge to find an approach to better integrate its wholesale competitive markets with state public policies targeting specific resource investments in renewable and emission-free generation, both in the near term through market changes to accommodate those policies and possibly at a later point through changes to help advance evolving public policies through the competitive markets.

The NEPOOL Integrating Markets and Public Policy (IMAPP) stakeholder process opened a regional dialogue and generated numerous ideas regarding how best to meet this challenge. ISO-NE, building

off a Participant proposal submitted in IMAPP, has suggested accommodating the expanding entry of renewable power driven by state public policies through its Capacity Auctions with Sponsored Policy Resources (CASPR) design proposal.

NEPOOL continues to consider the efficacy of details in ISO-NE's CASPR design and stakeholder-suggested modifications in its efforts to shape the successful implementation of this design. The diversity of expertise and experiences of its more than 480 members across six governance sectors is unequalled. While I remain hopeful that a CASPR design broadly supported by NEPOOL stakeholders and ISO-NE can be achieved, unique among RTO/ISO stakeholder groups, NEPOOL ultimately has the capability to require ISO-NE to contemporaneously file NEPOOL's own proposed changes, where they differ from ISO-NE's. Proposed changes, however, are not adopted by NEPOOL unless its members together have built broad support across the six governance sectors. NEPOOL presents its strongest voice when its proposed changes enjoy support by all sectors.



## THE VALUE OF NEPOOL

Sustaining the strength of NEPOOL's voice depends heavily on healthy dialogue and leadership within and across sectors to achieve broad consensus. As NEPOOL's elected chairman, I am committed to ensuring NEPOOL stakeholders have the information, understanding and time to achieve that consensus. Whether or not we are successful in achieving consensus on CASPR, the NEPOOL stakeholder process has absolutely succeeded here, as it has throughout its history, in providing significant value by allowing for full identification and discussion of diverse perspectives and increasing the understanding among stakeholders, ISO-NE staff, New England States Committee on Electricity (NESCOE), state and federal regulators, and consumer advocates.

## NEPOOL'S VITAL ROLE

The NEPOOL stakeholder process remains an essential ingredient in the future success of the competitive wholesale electric markets in New England. NEPOOL stakeholders will continue to play a key role in addressing the challenges the New England wholesale electric grid faces in 2018 and beyond. I look forward to NEPOOL's continued tradition of developing the best path forward through continued stakeholder collaboration.

**Thomas W. Kaslow**

Chairman, NEPOOL Participants Committee

"With an evolving and changing landscape, NEPOOL has been taking on the challenge to find an approach to better integrate its wholesale competitive markets with state public policies targeting specific resource investments in renewable and emission-free generation ..."

# SEEKING SOLUTIONS. WORKING TOGETHER. NEW ENGLAND'S COMPETITIVE MARKETS: CHALLENGES AND OPPORTUNITIES



For over two decades of its 46-year existence, NEPOOL, responding to changes in policy and regulation, has worked closely with ISO-NE “to create and sustain open, non-discriminatory, competitive, unbundled markets for Energy, capacity and ancillary services” that are “balanced between buyers and sellers.” That effort has produced substantial and remarkable benefits for the region, ensuring reliable electric service through competitive investment driven by New England’s wholesale power markets. More recently, though, New England state policymakers are seeking to increase electric generation contributions from renewable resources, and in some cases, from specific, new renewable resources. These environmentally driven policies can drive investments different from those signaled by the competitive wholesale power market. NEPOOL, once again, is working to address these new challenges head-on.

Through its IMAPP initiative, NEPOOL took a lead role nationally in working through the conflicting interactions that can arise between environmentally driven state directives and the federally regulated wholesale competitive market. From the NEPOOL stakeholder input in that effort, ISO-NE selected an approach to accommodate sponsored public policy resources in the Forward Capacity Market (FCM) while preserving competitive market operation, its proposed CASPR design.

## NEPOOL IMAPP INITIATIVE — SEEKING TO BRIDGE THE GAP

As reflected in last year’s NEPOOL annual report, IMAPP was formed in response to a growing recognition that changing public policy requirements could substantially and adversely impact New England’s competitive wholesale markets. Under NEPOOL’s leadership, and with the encouragement of New England state officials and ISO-NE, NEPOOL initiated the IMAPP process last year to provide an opportunity and forum for the region to identify and explore potential changes to the existing wholesale competitive market design that could achieve, advance or, at the very least, accommodate these public policy goals of the New England states.

During the winter and spring of 2017, NEPOOL continued its IMAPP stakeholder process with robust engagement among state officials, federal officials, representatives of ISO-NE, and market participants and their invited guests. Over 17 conceptual proposals were developed and advanced by numerous stakeholders in the IMAPP process, many of which were offered as proposed designs to help “achieve” state policies through the wholesale market, with a few other proposals offered to “accommodate” state-sponsored resources while addressing capacity market pricing concerns. All IMAPP presentations and materials, as well as a reference library containing additional related materials, are posted on the NEPOOL website at <http://nepool.com/IMAPP.php>.

Throughout the year the dialogue continued, even during pauses in the IMAPP process while additional studies were undertaken and proposals were generated. Many of the ideas and proposals explored in the IMAPP process were also discussed more broadly at a two-day Federal Energy Regulatory Commission (FERC) technical conference in early May on “State Policies and Wholesale Markets” (FERC Docket No. AD17-11-000). The New England panels at that technical conference included NEPOOL’s Chairman, Tom Kaslow, who spoke on

behalf of NEPOOL, demonstrating the clear benefits of NEPOOL's IMAPP efforts in advancing the understanding of the challenges and alternatives to address those challenges, and emphasizing the importance of allowing NEPOOL to develop an appropriate response for New England's competitive market. Regional discussions on the IMAPP subject continued in June at the annual New England Conference of Public Utilities Commissioners (NECPUC) Symposium and at the NEPOOL Participants Committee annual summer meeting.

The New England region, and indeed the industry more broadly, has been well-served by the IMAPP discussions. The CASPR proposal from ISO-NE, which is discussed below, is built off of concepts raised first by a NEPOOL stakeholder in the IMAPP process. The IMAPP process has also advanced efforts to consider longer-term "achieve"-style proposals.

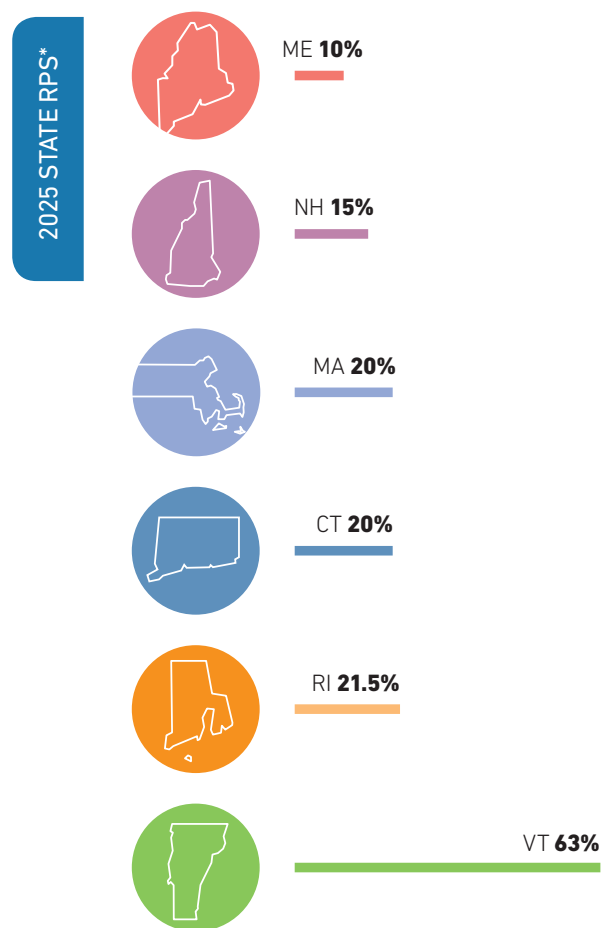
### NEW ENGLAND'S EFFORT TO ACCOMMODATE SPONSORED PUBLIC POLICY RESOURCES, WHILE PRESERVING COMPETITIVE MARKET PRICING

In late spring, ISO-NE introduced its CASPR proposal, which it designed conceptually to accommodate the entry in the FCM of resources that are developed in response to sponsored public policy actions/initiatives, while preserving competitively based capacity prices for nonsponsored resources. CASPR would achieve this by pairing the entry of new sponsored resources with the exit of existing capacity in return for a payment to retire. The proposed CASPR design would conduct the Forward Capacity Auction (FCA) in two stages. In the first stage, existing and new capacity resources would clear based generally on all current FCM rules, including rules designed to

mitigate the offers of capacity seeking to offer below competitive levels, including from state-sponsored resources. In the second stage, existing capacity that cleared in the primary FCA would be able to transfer their capacity obligations to new sponsored resources that did not clear, with the existing resource agreeing to retire early in exchange for a "severance" payment.

Details of ISO-NE's CASPR proposal, as well as proposed alternatives and modifications to that proposal, have been explored throughout the summer and into the fall in the NEPOOL stakeholder process. A final NEPOOL vote is scheduled before the end of 2017. A FERC filing would be expected shortly after that NEPOOL vote, potentially in time for reforms to be approved for and implemented in the 13th FCA, which has pre-auction steps beginning in the spring of 2018 and the final auction scheduled for February 2019. All CASPR presentations and materials are available on the ISO-NE website at [www.iso-ne.com/committees/markets/markets-committee](http://www.iso-ne.com/committees/markets/markets-committee).

As it has with very complex and challenging issues in the past, NEPOOL has used its stakeholder process to broaden the understanding and perspectives of all interests. It will continue to work to achieve broad consensus. Irrespective of the final NEPOOL vote on CASPR and the proposed amendments, there is no doubt that the interests of NEPOOL members are much better defined and understood through the NEPOOL stakeholder discussions that have occurred. NEPOOL, through its members and in close collaboration with state officials and ISO-NE, will continue to work to satisfy its objective of sustaining competitive wholesale market operation and achieving an appropriate balance in the wholesale power markets between buyers and sellers.



\* State Renewable Portfolio Standard (RPS)\* for Class I or New Renewable Energy by 2025. Vermont's Renewable Energy Standard has a "total renewable energy" requirement (reflected above), which recognizes all forms of new and existing renewable energy.

## SEEKING SOLUTIONS. WORKING TOGETHER. IMPROVING THE INTERCONNECTION PROCESS



For several years, the interconnection queue for projects in northern and western Maine has been backlogged due to many developers seeking limited interconnection space on existing transmission infrastructure and the cost of new transmission infrastructure needed to accommodate significant new interconnections, which is well beyond the economics of individual developers. In 2015, NEPOOL identified among its business priorities for 2016-17 the improvement of the interconnection process to facilitate new entry into the New England Markets. NEPOOL worked with ISO-NE to establish this as a mutual priority.

To advance this priority in 2016, ISO-NE initiated discussion with NEPOOL within the NEPOOL Transmission Committee to develop a proposal to adjust the process for serial studies of interconnection requests on a first-come, first-served basis, in order to accommodate a joint study of a clustered group of proposed interconnections for generators and Elective Transmission Upgrades. That study of clustered interconnections would then drive a consolidated set of proposed transmission upgrades to accommodate the cluster of interconnections, and the costs of the study and the upgrades would then be allocated among the clustered generators and Elective Transmission Upgrades.

The stakeholder process for this proposal involved eight meetings of the Transmission Committee, first for vetting of the conceptual proposal, and then to review specific tariff language designed to implement the proposal, the requested modifications, and the understanding of the issues and complexities involved. The Transmission Committee reviewed and discussed many pages of detailed and complicated proposed tariff language. As a result of this joint effort, the Transmission Committee recommended Participants Committee support for the interconnection clustering proposal. At its February 3 meeting, the Participants Committee supported the proposal with a 95

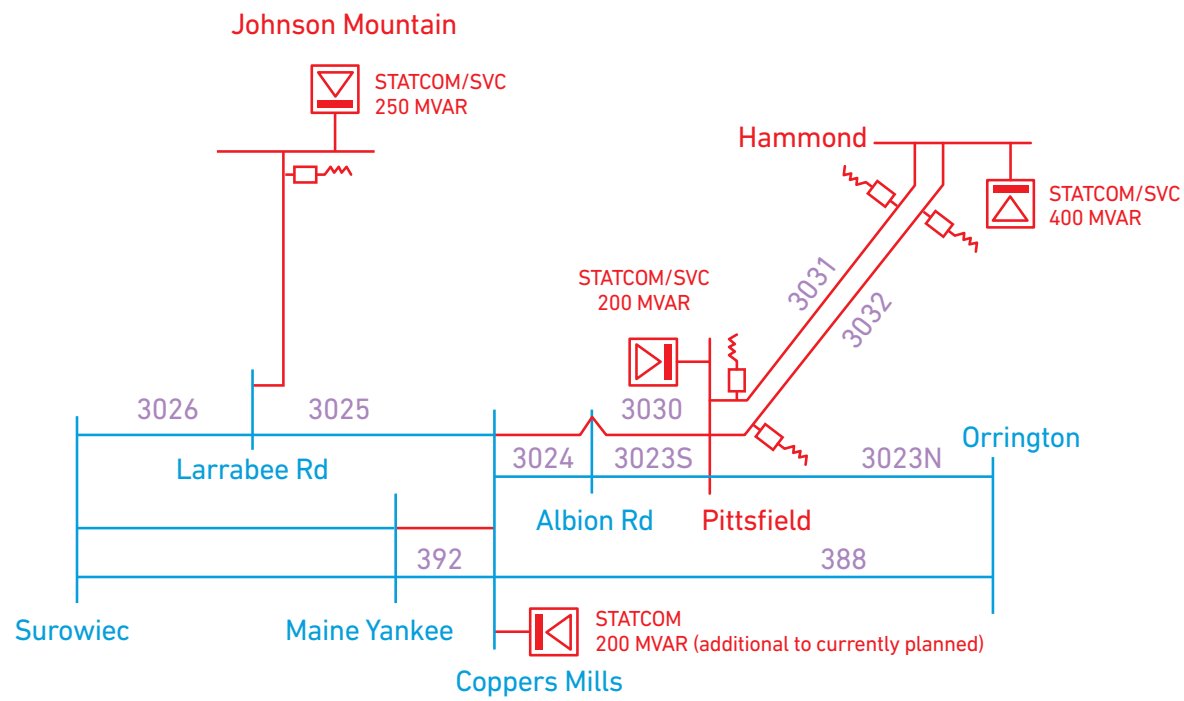
percent vote in favor. That vote resulted in a joint filing of the clustering proposal by ISO-NE, NEPOOL and the Participating Transmission Owners.

As noted by the FERC, “while not determinative, the Clustering Revisions result from an extensive stakeholder process, and garnered substantial support from stakeholders across all sectors in NEPOOL.”

On October 31, the FERC accepted, without condition or modification, the jointly filed proposal. That result would not have been possible without the comprehensive stakeholder process and the broad support achieved through the NEPOOL stakeholder process. As noted by the FERC, “while not determinative, the Clustering Revisions result from an extensive stakeholder process, and garnered substantial support from stakeholders across all sectors in NEPOOL.” *ISO New England Inc.*, 161 FERC ¶ 61,123 at P 18 (2017). The clustering provisions of the Tariff are now in effect, with the first cluster window expected to open in the near future.



MAINE CLUSTER ENABLING TRANSMISSION UPGRADES



This figure shows a one-line diagram from the ISO-NE draft final report of its 2016/17 Maine Resource Integration Study of the Cluster Enabling Transmission Upgrades for the Interconnection Requests in northern and western Maine that could become part of the first cluster study. *Draft 2017/17 Maine Resources Integration Study presentation, ISO-NE (November 2017) p. 7.*

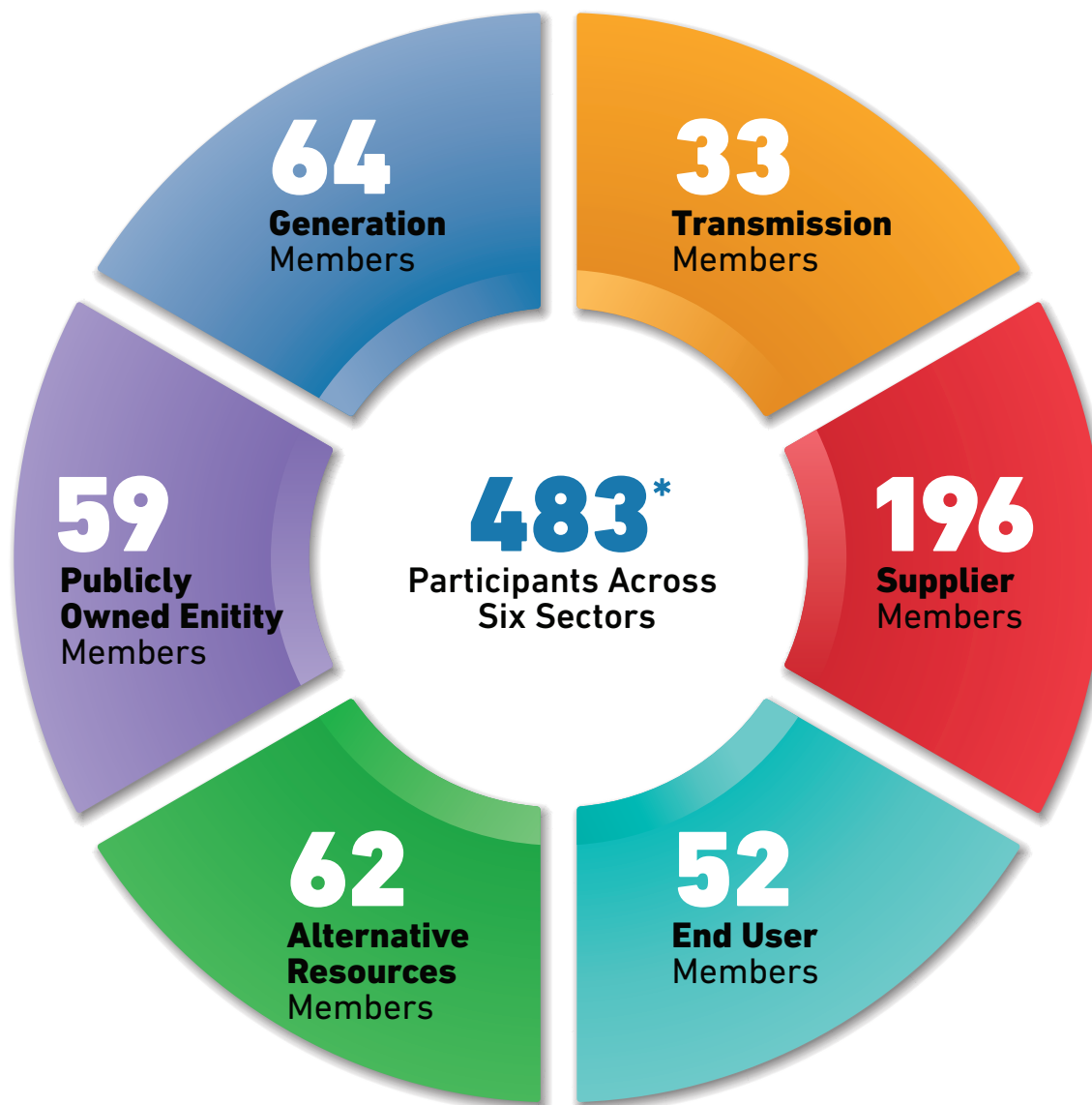
## NEPOOL STAKEHOLDERS PROCESS NEPOOL SECTORS

### DIVERSITY IN AND AMONG SECTORS

NEPOOL's 483 members are generally organized and act on matters by Sector.\* Each Sector has certain criteria that a Participant must meet in order to participate in a Sector, which are described in more detail in the ensuing pages of this report. A Participant and its Related Persons may join only one of NEPOOL's six Sectors, regardless of how many Sectors they might qualify for.

### SECTOR-WEIGHTED VOTING

Sectors have equal aggregate votes (Voting Shares), with the exception of the AR Sector, which has a slightly smaller Voting Share because its numbers are not yet sufficient for full activation. Within each Sector, individual voting members have an equal per capita vote. To qualify as an individual voting member, Participants must meet certain criteria and/or minimum threshold requirements. In certain circumstances, members may (and some must) be represented by a group voting member. Group voting members and members required to vote with Related Persons are entitled to split their votes to reflect the diversity of those they represent.



\* Includes 17 Non-Sector Members. See page 32 of this Annual Report.

**NEPOOL STAKEHOLDERS PROCESS**  
WORKING TOGETHER. SEEKING SOLUTIONS.



## GENERATION SECTOR

To qualify for membership in the Generation Sector, an entity must either own facilities in New England that generate power, or have been approved by ISO-NE to interconnect to the system, or have secured environmental air or siting approvals in New England for new generators, or have committed as a capacity resource in a New England FCA. Generation Sector members include independent power producers, exempt wholesale generators, and qualifying cogeneration and small power production facilities. Their facilities cover the gamut of generation, using a variety of fuel sources including natural gas, fuel oil, coal and nuclear fuel, as well as by steam, hydro, bio/refuse resources and other renewable resources. The facilities are similarly varied in age and technologies used to produce electricity. Unit types include combined cycle and combustion turbines, steam turbines, pumped storage, run-of-river, pondage hydro, and renewable resources that include wind, solar and bio/refuse-fueled units.

350 Generators

Over 30,000 MW in 2017 generating capacity

Over 13,000 MW of new generation proposed for New England, including over 4,800 MW of natural gas-fired generation and over 7,300 MW of wind

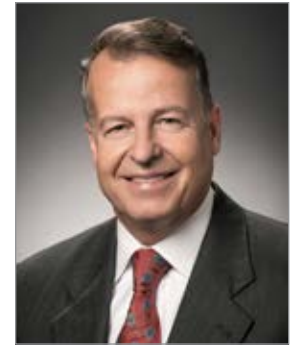
2017 System Weighted Equivalent Availability Factor (through Oct 30) – 87%

Participants in the Generation Sector that have at least 15 MW of New England-based generation are entitled to designate an individual voting member for each of the Principal Committees. Other Participants in the Generation Sector that have not designated an individual voting member are represented through a group seat. In 2017, the Generation Group Seat represented nearly 20 members with more than 1,790 MW in aggregate. Approximately 15,285 MW are represented by the remaining 12 voting members.

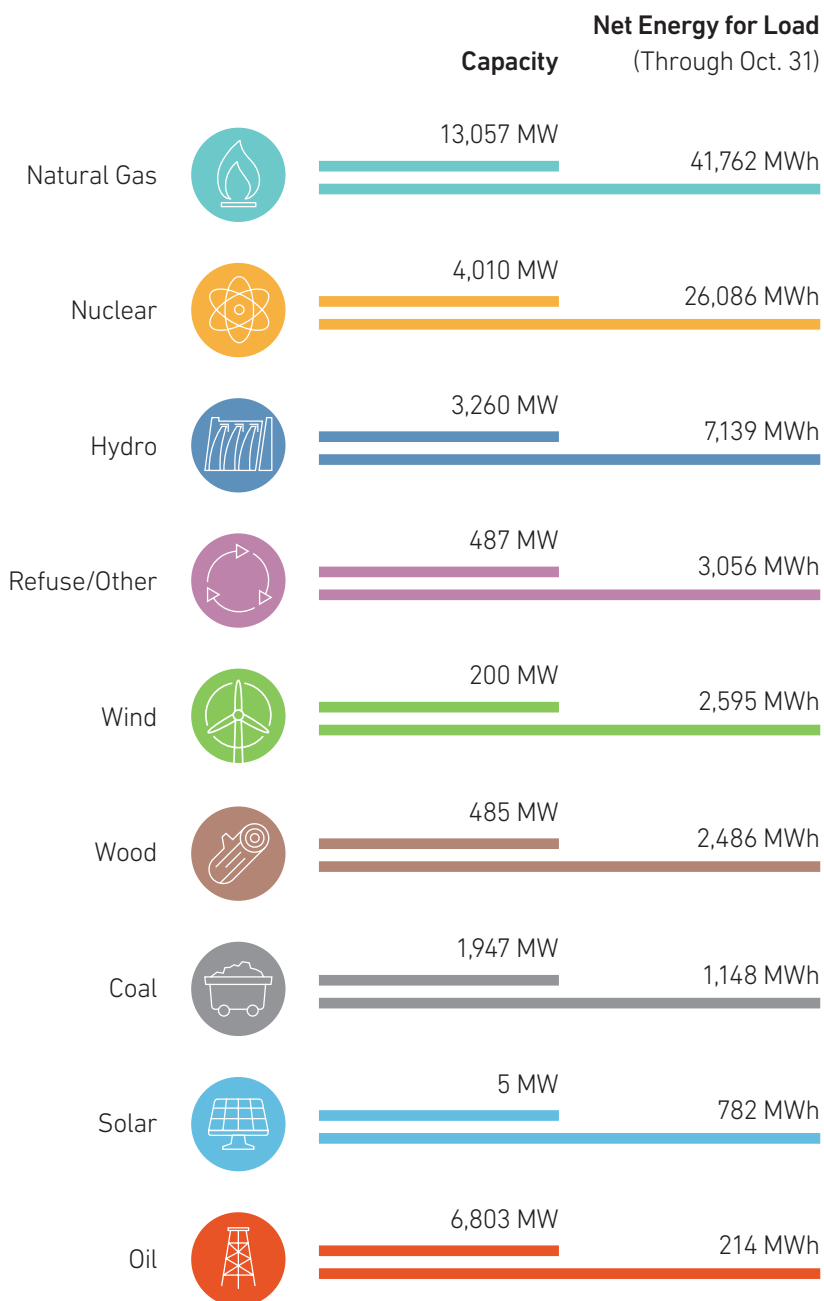
Under the NEPOOL arrangements, Related Persons must all participate and vote together in only one Sector. They generally are entitled to choose to be members in any Sector in which any of them individually qualify to join. Thus, Generation Sector members include not only owners of generation facilities but also member companies that have significant power marketing interests and retail load-serving interests.

**Thomas W. Kaslow**  
Vice-Chair,  
Generation Sector

Thomas W. Kaslow served as the 2017 Chairman of the Participants Committee. Tom has participated in the NEPOOL stakeholder process since the late 1990s, with a leadership role in defining New England's original competitive market design and later serving as a NEPOOL witness in the FERC proceeding to review that design. He has been tapped many times since then to serve in various leadership roles, including as the 2004 Cold Snap Task Force Co-Chair, the Review Board Liaison Committee Chairman, the Markets Committee Vice-Chair (2010-12), and the Generation Sector Vice-Chair (2014-present). Tom is the Participants Committee member for FirstLight Power Resources Management, LLC.



# GENERATION MIX



# GENERATION SECTOR MEMBERS

Beacon Falls Energy Park, LLC  
 Berkshire Power Company, LLC  
 Berlin Station, LLC  
 Blackstone Hydro, Inc.  
 Boston Energy Trading and Marketing LLC  
 Bridgewater Power Company, LP  
 Brown Bear II Hydro, Inc.  
 Bucksport Generation LLC  
 Connecticut Jet Power LLC  
 CPV Towantic, LLC  
 Dartmouth Power Associates, LP  
 Devon Power LLC  
 Dominion Energy Generation Marketing, Inc.  
 Dominion Energy Nuclear Connecticut, Inc.  
 EmpireCo Limited Partnership  
 Energy Management Inc.  
 Energy Plus Holdings LLC  
 ENGIE Energy Marketing NA, Inc.  
 ENGIE Resources LLC  
 Entergy Nuclear Power Marketing LLC  
 ESI Northeast Energy GP, Inc.  
 Essential Power Massachusetts, LLC  
 Essential Power Newington, LLC  
 FirstLight Power Resources Management, LLC  
 Footprint Power Salem Harbor Development LP  
 FPL Energy Mason LLC  
 FPL Energy Wyman IV LLC  
 FPL Energy Wyman LLC  
 GenConn Energy LLC  
 GenOn Energy Management, LLC  
 Green Mountain Energy Company  
 Indeck Energy-Alexandria, LLC  
 Independence Energy Group LLC  
 Invenergy Energy Management LLC  
 Kendall Green Energy LLC  
 Kleen Energy Systems, LLC  
 Middletown Power LLC  
 Montville Power LLC  
 Nautilus Hydro, LLC  
 Nautilus Power, LLC  
 NEPM II, LLC  
 New England Confectionery Company, Inc.  
 New Hampshire Transmission, LLC  
 NextEra Energy Maine, LLC  
 NextEra Energy Marketing, LLC  
 NextEra Energy Resources, LLC  
 NextEra Energy Seabrook LLC  
 Norwalk Power LLC  
 NRG Canal LLC  
 NRG Curtailment Solutions, Inc.  
 NRG Power Marketing, LLC  
 Pawtucket Power Holding Company LLC  
 Plainfield Renewable Energy, LLC  
 Record Hill Wind LLC  
 ReEnergy Stratton LLC  
 Reliant Energy Northeast LLC  
 Rhode Island State Energy Center, LP  
 Somerset Power LLC  
 Springfield Power LLC  
 Spruce Mountain Wind, LLC  
 TrailStone Power, LLC  
 Verso Energy Services LLC  
 Waterbury Generation LLC  
 Waterside Power, LLC

# TRANSMISSION SECTOR

A Transmission Sector member must own transmission facilities that are Pool Transmission Facilities (PTF). PTFs are defined as transmission facilities rated 69 kV or above, over which ISO-NE exercises operational control, and which are required to allow energy from significant power sources to move freely on the New England Transmission System.

Transmission Sector members cast individual votes if they own PTF with an original capital investment of at least \$30 million. While members must meet those requirements to vote in the Transmission Sector, their Related Persons also include members that have significant non-transmission facilities in New England. Those members include companies with generation and power marketing interests that operate in New England independently of their Related Person that owns PTF. In some cases, those Related Persons have exercised their right to split the single Transmission Sector vote between or among the related affiliate(s). There are also Related Persons that have joined as Provisional Members (members that do not yet meet the eligibility requirements for NEPOOL membership in any Sector, and often are in the early stage of their business development, that are nevertheless required and/or interested in becoming Participants before meeting those requirements) in order to participate in Order 1000 transmission development efforts.

Over 9,000 miles of high voltage transmission lines

13 interconnections to New York and Canadian electricity systems

Over \$10.0 billion in transmission investments since 2002 with over \$2.0 billion of planned future investments

Over 745 project components placed in service since 2002; with over 120 planned, proposed or under construction through 2024

Over 6 million Transmission Sector customers






23 Elective Transmission Upgrades proposed as of August 2017

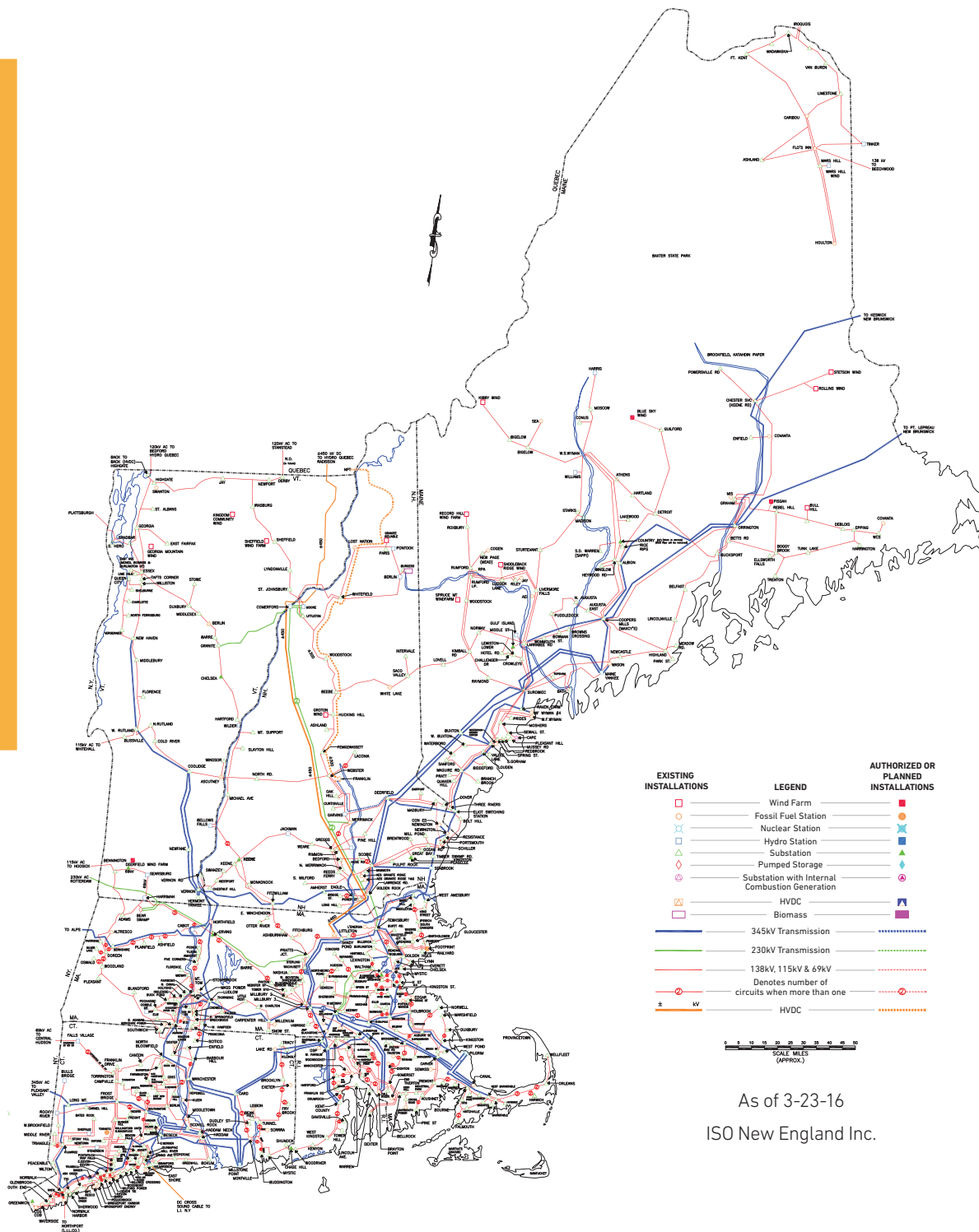


**Calvin A. Bowie**  
Vice-Chair,  
Transmission Sector

Calvin A. Bowie served as 2017 Vice-Chair for the Transmission Sector. Cal has long been active in NEPOOL governance and membership, including service as Chairman of the Participants

Committee in 2012 and 2013. He also served as the Chairman of the Membership Subcommittee from 1997 to 2000 and as the Transmission Committee Vice-Chair from 2007 to 2009. He was elected and served as the Transmission Sector Vice-Chair from 2006 through 2013. Cal is the Participants Committee alternate for Eversource Energy.

		Service Territory	Electric Customers	Transmission Lines (miles)	Distribution Lines (miles)
	AVANGRID (UI/CMP)	Central & Southern ME, Parts of CT	925,000	2,977	26,930
	EMERA Maine	Northern ME	158,000	1,265	6,090
	Eversource Energy	Parts of CT, MA and NH	3.15 million	4,341	57,364
	National Grid	RI and parts of MA	1.80 million	2,900	24,174
	VELCO/ VT Transco	VT	362,988	738	n/a



Avangrid Renewables, LLC  
 Central Maine Power Company  
 Connecticut Light and Power Company, The  
 Emera Energy Services Subsidiary No. 1 LLC  
 Emera Energy Services Subsidiary No. 2 LLC  
 Emera Energy Services Subsidiary No. 3 LLC  
 Emera Energy Services Subsidiary No. 4 LLC  
 Emera Energy Services Subsidiary No. 5 LLC  
 Emera Energy Services Subsidiary No. 6 LLC  
 Emera Energy Services Subsidiary No. 7 LLC  
 Emera Energy Services Subsidiary No. 8 LLC  
 Emera Energy Services Subsidiary No. 9 LLC  
 Emera Energy Services Subsidiary No. 10 LLC  
 Emera Energy Services Subsidiary No. 11 LLC  
 Emera Energy Services Subsidiary No. 12 LLC  
 Emera Energy Services Subsidiary No. 13 LLC  
 Emera Energy Services Subsidiary No. 14 LLC  
 Emera Energy Services Subsidiary No. 15 LLC  
 Emera Maine, Inc.  
 Eversource Energy Transmission Ventures, Inc.  
 Green Mountain Power Corporation  
 GridAmerica Holdings Inc.  
 Massachusetts Electric Company  
 Narragansett Electric Company, The  
 New England Power Company  
 New York State Electric & Gas Corporation  
 NSTAR Electric Company  
 Public Service Company of New Hampshire  
 UIL Distributed Resources LLC  
 United Illuminating Company, The  
 Vermont Electric Power Company, Inc.  
 Vermont Transco LLC  
 Western Massachusetts Electric Company

## SUPPLIER SECTOR

A Supplier Sector member must be engaged, or be authorized to be engaged, in power marketing, power brokering or load aggregation within New England. Supplier Sector members include brokers, traders (physical and/or financial), load aggregators, distribution-only companies and a merchant transmission provider. Some current members qualify for membership in the Generation, Supplier and Alternative Resource Sectors, but due to governance rules requiring membership of Related Persons in a single Sector, have elected membership in the Supplier Sector. The Supplier Sector is by far NEPOOL's most populous Sector.

Average Real-Time Locational Marginal Price (LMP) (All hours; through October 31) — \$29.28/MWh

Financial Transmission Rights (FTR) Auctions  
Annual — 20,959 MW awarded  
Monthly — 355,878 MW awarded

Cleared Virtual Transactions — more than 4.1 million MW (475 MW per hour)

**Nancy P. Chafetz**  
Vice-Chair,  
Supplier Sector

Nancy P. Chafetz served her first term as the 2017 Vice-Chair for the Supplier Sector. She has actively participated in the NEPOOL stakeholder process for more than 12 years. Nancy is the designated committee representative for multiple members of the Supplier Sector.



Abest Power & Gas, LLC	Connecticut Central Energy, LLC	Granite Reliable Power, LLC	Niagara Wind Power, LLC	Solea Energy, LLC
Aesir Power, LLC	Connecticut Gas & Electric, Inc.	Great American Power, LLC	Noble Americas Gas & Power Corp.	South Jersey Energy Company
Agera Energy LLC	Consolidated Edison Co. of New York, Inc.	H.Q. Energy Services (U.S.) Inc.	Nordic Energy Services, LLC	South Jersey Energy ISO1, LLC
Algonquin Energy Services Inc.	Consolidated Edison Development, Inc.	Harborside Energy of Massachusetts LLC	North American Power and Gas, LLC	South Jersey Energy ISO3, LLC
Alphataraxia Nickel LLC	Consolidated Edison Energy, Inc.	HIKO Energy, LLC	Northern States Power Company	Spark Energy, LLC
Ambit Northeast LLC	Consolidated Edison Solutions, Inc.	Howard Wind LLC	Number Nine Wind Farm LLC	Starion Energy Inc.
American Power & Gas of MA, LLC	Constellation Energy Power Choice, LLC	Hudson Energy Services, LLC	Oasis Power, LLC d/b/a Oasis Energy	Stetson Holdings, LLC
American PowerNet Management, LP	Constellation Energy Services, Inc.	IDT Energy, Inc.	Ontario Power Generation Energy Trading	Stetson Wind II, LLC
AmericaWide Energy, LLC	Constellation NewEnergy, Inc.	Inertia Power III LP	Ontario Power Generation Inc.	Summer Energy Northeast, LLC
Ampersand Energy Partners LLC	Cross-Sound Cable Company, LLC	Inspire Energy Holdings, Inc.	Pacific Summit Energy LLC	Sunwave USA Holdings Inc.
Archer Energy, LLC	Cumulus Master Fund	Interstate Gas Supply, Inc.	Palmco Power CT, LLC	Sustaining Power Solutions LLC
Aspirity Energy, LLC	CWP Energy Inc.	J. Aron & Company LLC	Palmco Power MA, LLC	Talen Energy Marketing, LLC
Astral Energy LLC	Darby Energy, LLLP	Just Energy (U.S.) Corp.	Patriot Partnership LLC	TCPL Power Ltd.
Atlantic Energy MA LLC	DC Energy, LLC	Kimberly-Clark Corporation	Peninsula Power, LLC	TEC Energy, Inc.
BBPC LLC d/b/a Great Eastern Energy	Devonshire Energy LLC	Liberty Power Delaware LLC	Perigee Energy, LLC	Tenaska Power Management, LLC
Bear Swamp Power Company LLC	Direct Energy Business Marketing, LLC	Liberty Power Holdings LLC	Phoenix Energy New England, LLC	Tenaska Power Services Co.
Black Bear Hydro Partners, LLC	Direct Energy Business, LLC	Liberty Utilities (Granite State Electric) Corp.	Plant-E Corp.	Texas Retail Energy, LLC
Block Island Power Company	Discount Power, Inc.	Linde Energy Services, Inc.	Plymouth Rock Energy, LLC	Titan Gas LLC
Blue Sky East, LLC	DTE Energy Trading, Inc.	Long Island Lighting Company d/b/a LIPA	PNE Energy Supply LLC	Torofino Trading, LLC
BlueRock Energy, Inc.	Dynasty Power Inc.	MA Operating Holdings, LLC	Power Bidding Strategies, LLC	Town Square Energy, LLC
BP Energy Company	Dynegy Marketing and Trade, LLC	Macquarie Energy, LLC	Provider Power Mass, LLC	TransAlta Energy Marketing (U.S.) Inc.
Brookfield Energy Marketing Inc.	EDF Energy Services, LLC	MAG Energy Solutions, Inc.	PSEG Energy Resources & Trade LLC	TransCanada Energy Ltd.
Brookfield Energy Marketing LP	EDF Trading North America, LLC	Major Energy Electric Services	PSEG New Haven LLC	TransCanada Power Marketing Ltd.
Brookfield Renewable Energy Marketing US LLC	eKapital Investments LLC	Marble River, LLC	Public Power, LLC	Twin Eagle Resource Management, LLC
Brookfield White Pine Hydro LLC	Electricity Maine, LLC	Mass Solar 1, LLC	Rainbow Energy Marketing Corporation	Uncia Energy, LP – Series G
C.N. Brown Electricity, LLC	Electricity NH, LLC	Massachusetts Gas and Electric, Inc.	RBC Energy Services LP	Union Atlantic Electricity
Calpine Energy Services, LP	Eligo Energy, LLC	MATEP LLC	Renaissance Power & Gas	Uniper Global Commodities North America
Calpine Energy Solutions, LLC	Engelhart CTP (US) LLC	Mega Energy Holdings, LLC	Rensselaer Generating, LLC	Unitil Energy Systems, Inc.
Canandaigua Power Partners, LLC	Entrust Energy East, Inc.	Mercuria Energy America, Inc.	Residents Energy, LLC	UNITIL Power Corp.
Cargill Power Markets, LLC	ETC Endure Energy, L.L.C.	Merrill Lynch Commodities, Inc.	Rhode Island Engine Genco, LLC	Utility Expense Reduction LLC
Castleton Commodities Merchant Trading	Evergreen Wind Power III, LLC	Millennium Power Partners, LP	Roctop Investments Inc.	VECO Power Trading, LLC
Celtic Power Analytics LLC	EverPower Commercial Services LLC	Mint Energy, LLC	Roseton Generating, LLC	Verde Energy USA, Inc.
Centre Lane Trading Ltd.	Exelon Generation Company, LLC	Morgan Stanley Capital Group, Inc.	Royal Bank of Canada	Vermont Wind, LLC
Champion Energy Marketing, LLC	Fairpoint Energy, LLC	MPower Energy LLC	Rubicon NYP Corp.	Viridian Energy, LLC
Choice Energy LLC	First Point Power, LLC	Nalcor Energy Marketing Corporation	Saracen Energy East LP	Vitol Inc.
Citigroup Energy Inc.	Fitchburg Gas and Electric Light Company	National Gas & Electric, LLC	Saracen Power LP	Wolverine Holdings, L.P.
CleanChoice Energy, Inc.	Freepoint Commodities LLC	New Brunswick Energy Marketing Corporation	SFE Energy Connecticut Inc.	XOOM Energy, LLC
Clear Choice Energy, LLC	Galt Power Inc.	New Shoreham, Rhode Island, Town of	SFE Energy Massachusetts Inc.	
Clearview Electric Inc.	GBE Power Inc.		Shell Energy North America (US), L.P.	
Competitive Energy Services, LLC			Shipley Choice, LLC d/b/a Shipley Energy	
			SmartEnergy Holdings LLC	

Any NEPOOL member that is a New England municipality (or agency thereof) or a public corporation created under the authority of one of the New England states, authorized to own, lease and operate electric generation, transmission or distribution facilities must be a member of the Publicly Owned Entity Sector. Electric cooperatives and organizations of Publicly Owned Entities must also be members of the Publicly Owned Entity Sector.

696,855 Meters Served

12,174,070 MWh Sales

Over 80 Public Power Systems; 59 NEPOOL Participants

Approximately 2 million retail customers served



## Brian E. Forshaw

Vice-Chair, Publicly Owned Entity Sector

Brian E. Forshaw served as the 2017 Vice-Chair for the Publicly Owned Entity Sector. Brian has participated in the NEPOOL stakeholder process since the mid-1980s and is the longest-serving Participants Committee officer, having served as the Publicly Owned Entity Vice-Chair since 2001. He previously served as Participants Committee Chairman in 2010 and 2011. Brian is the committee representative for the Connecticut Municipal Electric Energy Cooperative and a number of other members of the Publicly Owned Entity Sector.

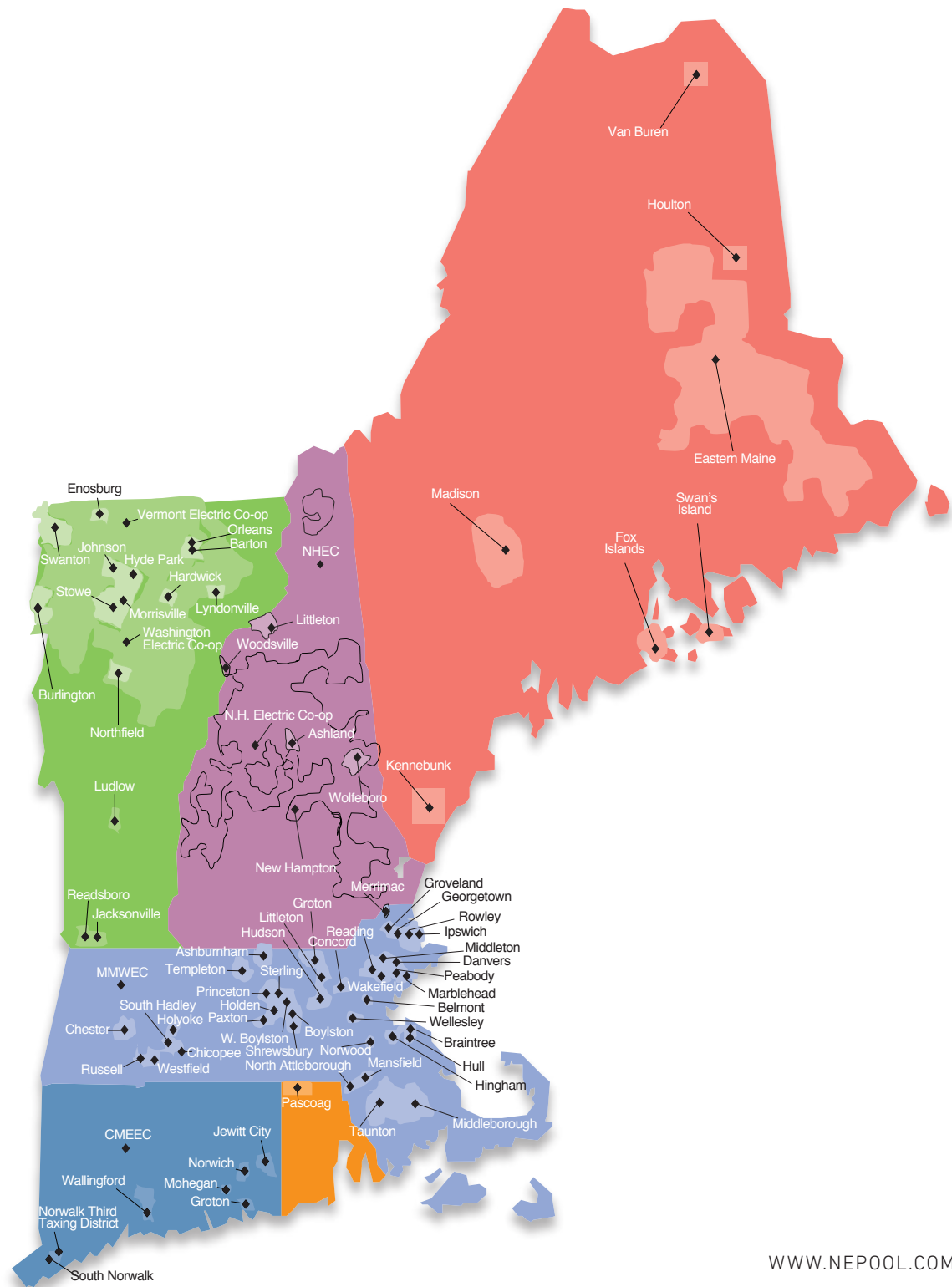


## PUBLICLY OWNED ENTITY SECTOR MEMBERS

Ashburnham Municipal Light Department  
 Belmont Municipal Light Department  
 Boylston Municipal Light Department  
 Braintree Electric Light Department  
 Burlington Electric Department  
 Chester Municipal Electric Light Department  
 Chicopee Municipal Lighting Plant  
 Concord Municipal Light Plant  
 Conn. Materials Innovations and Recycling Authority  
 Conn. Municipal Electric Energy Cooperative  
 Connecticut Transmission Municipal Electric Energy Cooperative d/b/a The Transmission Authority  
 Danvers Electric Division  
 Energy New England LLC  
 Georgetown Municipal Light Department  
 Groton Electric Light Department  
 Groveland Electric Light Department  
 Hingham Municipal Lighting Plant  
 Holden Municipal Light Department  
 Holyoke Gas & Electric Department  
 Hudson Light and Power Department  
 Hull Municipal Lighting Plant

Ipswich Municipal Light Department  
 Littleton (MA) Electric Light Department  
 Littleton (NH) Water and Light Department  
 Madison Electric Works  
 Mansfield Municipal Electric Department  
 Marblehead Municipal Light Department  
 Mass. Municipal Wholesale Electric Company  
 Massachusetts Bay Transportation Authority  
 Massachusetts Development Finance Agency  
 Massachusetts Port Authority  
 Merrimac Municipal Light Department  
 Middleborough Gas & Electric Department  
 Middleton Municipal Light Department  
 New Hampshire Electric Cooperative, Inc.  
 North Attleborough Electric Department  
 Norwood Municipal Light Department  
 Pascoag Utility District  
 Paxton Municipal Light Department  
 Peabody Municipal Light Plant  
 Princeton Municipal Light Department  
 Reading Municipal Light Department  
 Rowley Municipal Lighting Plant  
 Russell Municipal Light Dept  
 Shrewsbury Electric & Cable Operations  
 South Hadley Electric Light Department  
 Sterling Municipal Electric Light Department  
 Stowe (VT) Electric Department  
 Taunton Municipal Lighting Plant  
 Templeton Municipal Lighting Plant  
 University of Massachusetts at Amherst  
 Vermont Electric Cooperative  
 Vermont Public Power Supply Authority  
 Wakefield Municipal Gas and Light Department  
 Wallingford, Town of  
 Wellesley Municipal Light Plant  
 West Boylston Municipal Lighting Plant  
 Westfield Gas & Electric Light Department  
 Wolfeboro Municipal Electric Department

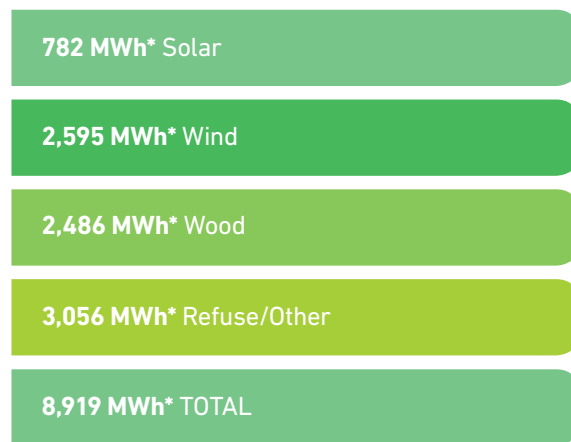
NEW ENGLAND MUNICIPAL ELECTRIC SYSTEMS & COOPERATIVES



An Alternative Resources (AR) Sector member must be a provider of renewable generation, distributed generation, demand response or energy efficiency. Renewable generation facilities generally produce energy through use of wind, photovoltaic/solar, hydro, bio/refuse or fuel cells. Distributed generation resources generally produce electricity at the point of consumption rather than centrally, and Distributed Generation Sub-Sector members also include providers of grid-connected electricity storage devices. Load response providers are entities that can effect reductions in energy sales/usage through either reductions or shifts in energy consumption or through energy efficiency measures.

AR Sector members with at least five megawatts (MWs) of resources located within New England may designate an individual voting member within the Renewable Generation, Distributed Generation or Load Response Sub-Sectors, as appropriate. Other members are entitled to participate in group seats within those Sub-Sectors. As is often the case, some AR Sector members qualify for membership in other NEPOOL Sectors, but because they may be members of only one of those Sectors, have elected membership in the AR Sector. The AR Sector continues to be an area of increasing membership growth.

## 2017 Annual Energy Production



\* Through October 31, 2017

## John J. Keene Jr.

Vice-Chair,  
Alternative  
Resources Sector

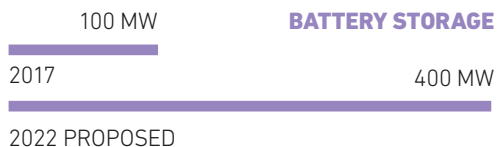
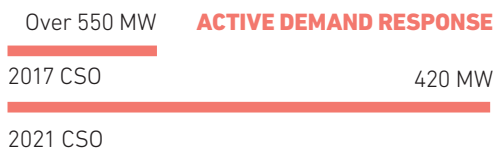
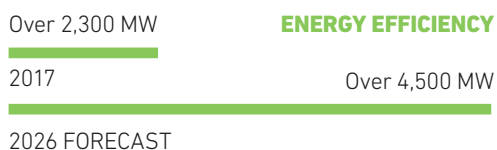
John J. Keene, Jr. served a third term as AR Sector Vice-Chair in 2017. In October, the TerraForm companies he represented were acquired and became members of the Supplier Sector. At that point, the AR Sector Vice-Chair position changed hands.



**Douglas Hurley**, committee representative for members of both the Distributed Generation and Load Response Sub-Sectors, was then selected and stepped in as the AR Sector Vice-Chair for the remainder of 2017. He returns to the AR Sector Vice-Chair position, having served from mid-2009 through 2014. (Doug is pictured with the NEPOOL leadership on p. 25 of this report.)



# ALTERNATIVE RESOURCE CAPACITY



# ALTERNATIVE RESOURCES SECTOR MEMBERS

## RENEWABLE GENERATION SUB-SECTOR

Anthony, Christopher M.  
 Antrim Wind Energy LLC  
 Athens Energy LLC  
 Blue Sky West, LLC  
 Cianbro Energy, LLC  
 Commonwealth Resource Management Corp.  
 Covanta Energy Marketing, LLC  
 Covanta Haverhill Associates, LP  
 Covanta Projects of Wallingford, LLC  
 Deepwater Wind Block Island, LLC  
 DFC ERG CT, LLC  
 Epico USA, Inc.  
 Evergreen Wind Power II, LLC  
 Fisher Road Solar I LLC  
 Gas Recovery Systems, LLC  
 Goose River Hydro, Inc.  
 Gravity Renewables, Inc.  
 Great Bay Power Marketing, Inc.  
 Great River Hydro, LLC  
 Green Development, LLC d/b/a  
 Wind Energy Development  
 Green Power USA, LLC  
 Hancock Wind, LLC  
 Industrial Power Services Corp.  
 Jericho Power, LLC  
 LifeEnergy, LLC  
 Manchester Methane, LLC  
 Marie's Way Solar I, LLC  
 Messalonskee Stream Hydro, LLC  
 Mid-Maine Waste Action Corporation  
 New England Energy Connection, LLC  
 Orbit Energy Rhode Island, LLC  
 Pioneer Hydro Electric Co., Inc.  
 Power Supply Services, LLC  
 Putnam Hydropower, Inc.  
 Rocky Gorge Corporation  
 Stored Solar J&WE, LLC  
 SWEB Development USA, LLC  
 Swift River Trading Company LLC  
 Syncarpha Lexington, LLC

Wallingford Energy II, LLC  
 Wheelabrator Bridgeport, LP  
 Wheelabrator North Andover, Inc.  
 WM Renewable Energy, LLC

## DISTRIBUTED GENERATION SUB-SECTOR

Acushnet Company  
 Bloom Energy Corporation  
 CLEAResult Consulting Inc.  
 Seneca Energy II, LLC  
 Yellow Jacket Energy, LLC

## LOAD RESPONSE SUB-SECTOR

Ameresco CT LLC  
 CHI Power Marketing, Inc.  
 Convergent Energy and Power LLC  
 Energy Federation Inc.  
 EnerNOC, Inc.  
 Enerwise Global Technologies, Inc. d/b/a CPower  
 Genbright, LLC  
 Ictec Energy Services, Inc.  
 IPKeys Power Partners LLC  
 Ohmconnect, Inc.  
 Tangent Energy Solutions, Inc.  
 VCharge Inc.  
 Vermont Energy Investment Corporation  
 Viridity Energy Solutions Inc.

## END USER SECTOR

End User Sector members are New England-based consumers that either purchase or generate electricity primarily for their own consumption. End User Sector members may also be New England-based municipalities or other governmental agencies that are not Publicly Owned Entities. These members principally buy, but may sell excess, electricity directly into and from the New England Markets. Members of the End User Sector also include nonprofit groups and consumer advocates representing New England consumers in the market-making processes.

New England Population: 14.7 million

Retail Customers: 7.1 million

Total Annual Energy Served in 2017:  
98,855 GWh (through October 31, 2017)

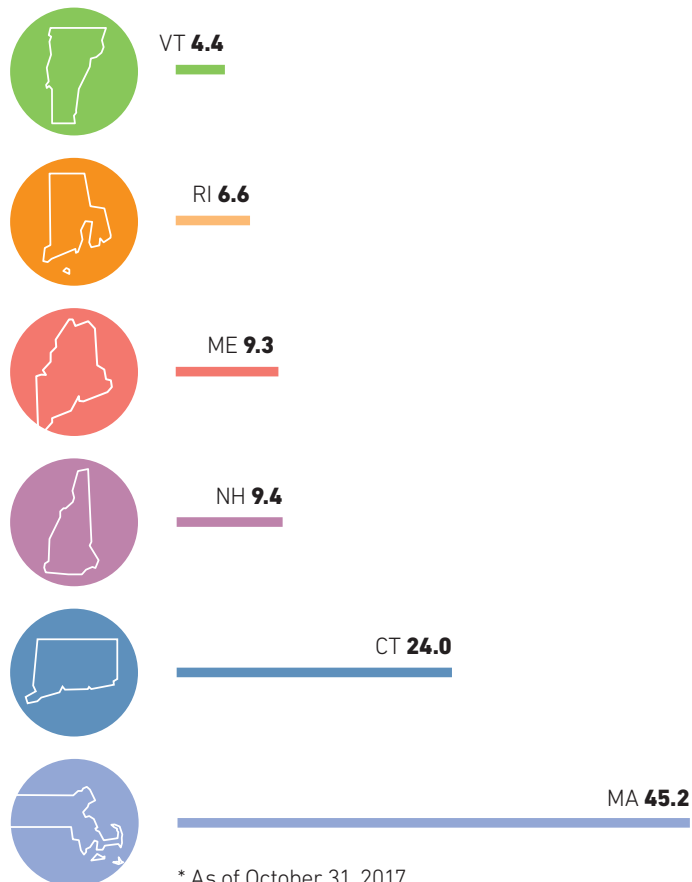
### Frederick R. Plett

Vice-Chair, End User Sector

Frederick R. Plett served his first term as the 2017 Vice-Chair of the End User Sector. He has been an active participant in NEPOOL and has brought to the table a wealth of leadership experience from his time as an NPCC board member, on the NERC Member Representatives Committee, and as an executive committee member and Vice Chair for the NERC Standards Committee. Fred is the committee representative for the Massachusetts Attorney General's office.



# REAL-TIME DEMAND (GWh)\*



\* As of October 31, 2017

# END USER SECTOR MEMBERS

Acadia Center  
 Associated Industries of Massachusetts  
 Backyard Farms Energy, LLC  
 Backyard Farms LLC  
 Bath Iron Works Corporation  
 Cape Light Compact  
 Connecticut Office of Consumer Counsel  
 Conservation Law Foundation  
 Durgin and Crowell Lumber Company, Inc.  
 East Avenue Energy, LLC  
 Elektrisola, Inc.  
 Environmental Defense Fund  
 Fairchild Energy, LLC  
 Fairchild Semiconductor Corp  
 Farhad Aminpour  
 Food City, Inc.  
 Garland Manufacturing Company  
 Garland Power Company  
 Green Berkshires, Inc.  
 Hammond Belgrade Energy LLC  
 Hammond Lumber Company  
 Hampshire Council of Governments  
 Hanover, NH (Town of)  
 Harvard Dedicated Energy Limited  
 High Liner Foods (USA) Incorporated  
 Industrial Energy Consumer Group

J. F. Gray & Associates, LLC  
 King Forest Industries, Inc.  
 Longreach Energy, LLC  
 Longwood Medical Energy Collaborative, Inc.  
 Maine Public Advocate Office  
 Maine Skiing, Inc.  
 Massachusetts Attorney General's Office  
 Massachusetts, Commonwealth of, DCAM  
 Moore Energy LLC  
 Natural Resources Defense Council  
 New England Wire Technologies  
 New Hampshire Industries Inc.  
 New Hampshire Office of Consumer Advocate  
 Nylon Corporation of America, Inc.  
 PowerOptions, Inc.  
 Praxair, Inc.  
 Saint Anselm College  
 Shipyard Brewing Co., LLC  
 Shipyard Energy LLC  
 The Energy Consortium  
 The Energy Council of Rhode Island  
 The Moore Company  
 Union of Concerned Scientists  
 University System of New Hampshire  
 Utility Services, Inc.  
 Z-TECH LLC



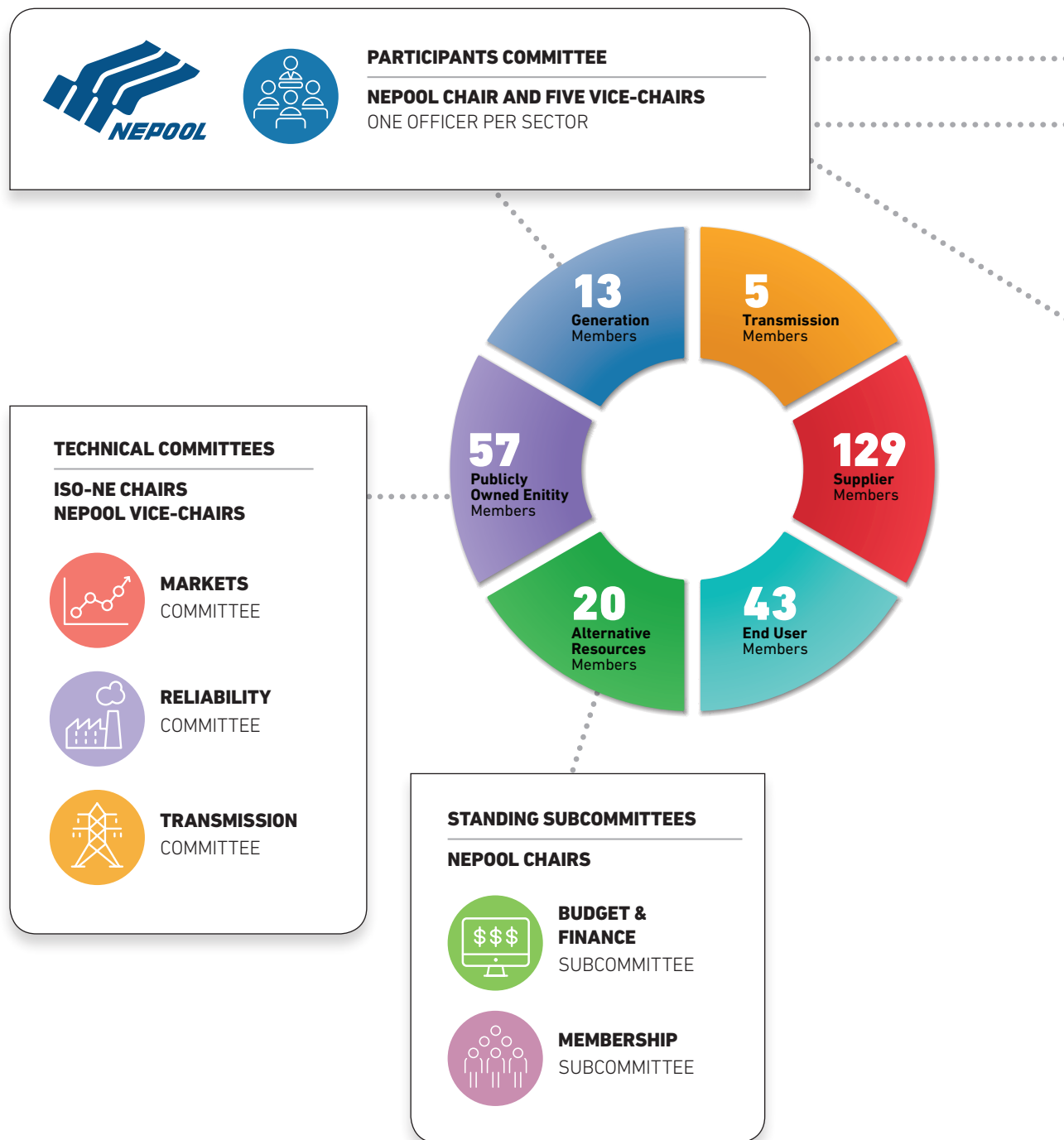
# NEPOOL STAKEHOLDER PROCESS NEPOOL STRUCTURE

The Participants Committee is the highest-level committee to which all matters are submitted unless they have been otherwise delegated to one of the Technical Committees – the Markets, Reliability and Transmission Committees. The Participants Committee is also supported by two standing, self-selected subcommittees – the Budget & Finance and Membership Subcommittees.

The Participants Committee elects eight officers – the Chair and five Vice-Chairs – from among the Sector members, and a nonmember Secretary and Assistant Secretary.

The Technical Committees' Chairs and Secretaries are ISO-NE personnel appointed by ISO-NE after consultation with NEPOOL. Each Technical Committee Vice-Chair is elected from and by the voting members of that Technical Committee. The leaders of all other subcommittees and working groups are selected by the Chair of the Participants Committee or ISO-NE, following consultation, as appropriate.

NEPOOL meetings are always attended by ISO-NE representatives and state representatives, including NESCOE and NECPUC representatives, who participate actively in discussions.



PARTICIPANTS AGREEMENT

MOU



TRANSMISSION  
OPERATING  
AGREEMENT



Participating  
Transmission  
Owners



**FERC**

Federal Energy Regulatory Commission

## NEPOOL STAKEHOLDER PROCESS RELATIONSHIP WITH OTHERS

NEPOOL is the stakeholder voting organization to advise on all matters relating to the competitive wholesale market rules and transmission tariff design. Its Participant Processes are designed to maximize active and informed participation and consensus among stakeholders, and where consensus is not possible, to articulate, define and limit unresolved issues.

Through NEPOOL, Participants and representatives of the states, ISO-NE, and the FERC provide informed and quality feedback at all levels. Informal feedback, which is a combination of education on and definition of positions, lays the foundation for consensus. Of course, consensus is not always possible, and in those circumstances, the NEPOOL process narrows and sharpens disagreements for resolution by the FERC. NEPOOL's feedback culminates in votes of the Principal Committees.

# NEPOOL STAKEHOLDER PROCESS COMMITTEES

## COMMITTEE MEETINGS

Active and informed participation at NEPOOL meetings is strongly encouraged. Principal Committees meet regularly, with the schedule for those meetings established in advance for the entire year. Each committee follows strict notice requirements so that no matter is subject to action that has not been noticed, with supporting materials, well in advance of the meeting. NEPOOL committees follow normal parliamentary procedures with an opportunity for any individual member participating in the meeting who wishes, to comment on a matter up for discussion and to advocate if and as appropriate. Participation may be in person or by phone; voting may be in person, by phone or by proxy.

## COMMITTEE VOTES

NEPOOL takes actions through super-majority voting at the Principal Committees. For changes to Market Rules, the Information Policy and Installed Capacity Requirements (ICR), that super-majority vote is 60 percent. For votes on amendments to the Participants Agreement and to endorse slates of candidates for election to the ISO-NE board of directors, the super-majority vote is 70 percent. For all other actions, the requisite vote is a two-thirds majority. Final votes are recorded transparently and reported at the meeting.



### **PARTICIPANTS** COMMITTEE

MEETING DAYS

VOTES

**12**

**84\***



### **MARKETS** COMMITTEE

**22**

**45\***



### **RELIABILITY** COMMITTEE

**13**

**103\***



### **TRANSMISSION** COMMITTEE

**9**

**21\***



### **BUDGET & FINANCE** SUBCOMMITTEE

**9**

n/a



### **MEMBERSHIP** SUBCOMMITTEE

**15**

n/a

\*Votes through November 30, 2017



### NEPOOL LEADERSHIP

Pictured left to right are Kenneth Dell Orto (Budget & Finance Subcommittee Chair), Jose A. Rotger (Transmission Committee Vice-Chair), John J. Keene Jr. (NPC Vice-Chair [Jan-Oct]), Douglas Hurley (NPC Vice-Chair [Oct-Dec]), Thomas W. Kaslow (NPC Chairman), Calvin A. Bowie (NPC Vice-Chair), Nancy P. Chafetz (NPC Vice-Chair), William S. Fowler (Markets Committee Vice-Chair), Robert de R. Stein (Reliability Committee Vice-Chair), Brian E. Forshaw (NPC Vice-Chair), and Frederick R. Plett (NPC Vice-Chair).

## PARTICIPANTS COMMITTEE



**Thomas W. Kaslow**  
Chair



**David T. Doot**  
NEPOOL Secretary, Counsel



**Cynthia K. Jacobs**  
NEPOOL Administrator

The Participants Committee has authority over all issues on which NEPOOL acts. It is NEPOOL's principal governing body, and it acts primarily on recommendations from more targeted and focused Technical Committees and subcommittees (with occasional input from working groups). The Participants Committee votes on, among other things, all modifications to wholesale power markets, on all changes to the regional transmission tariff arrangements, on all changes to NEPOOL's Generation Information System (GIS) arrangements, on nominees for the ISO-NE board, on changes to the Financial Assurance Policy, and on its own budget and the budgets for ISO-NE and NESCOE.

Materials for Participants Committee meetings are circulated to members and posted publicly for review ahead of the meeting on the NEPOOL and ISO-NE websites. Unless Participants Committee discussion among the members or individual voting is requested or warranted, actions recommended to the Participants Committee by a Technical Committee are generally voted on as a group (Consent Agenda). In 2017, nearly half of the 80 votes taken by the Participants Committee were accomplished by Consent Agenda. The outcome of those votes are reflected preliminarily in notices of actions circulated and posted following each meeting, and finally in the minutes of the meeting that are reviewed and approved by the committee.

The Participants Committee, which is the most widely attended of all NEPOOL's committees, held 12 days of meetings in 2017 – nine in person and three by teleconference. Those 2017 meetings included the Participants Committee three-day summer meeting in Chatham, Massachusetts, at which the region continued its focus on the



integration of state public policies into New England's competitive wholesale markets (IMAPP), including lessons to be learned from efforts to advance public policies in the California and European wholesale power markets.

As provided for in the Participants Agreement, the Participants Committee held two separate days of meetings with members of the ISO-NE board of directors, together with opportunities to meet separately with representatives of the New England states and the FERC. Those meetings were structured in smaller breakout sessions among

the six member groups with common business interests (as generally defined by the Sector in which they participate). Each group establishes its own agenda, with elements of the agendas often overlapping based on key challenges facing the region at the time. This year, the breakout sessions all included discussions concerning IMAPP and the

not standing for re-election, a Sector-designated representative from each of the six NEPOOL Sectors, and a NECPUC-designated representative. In 2017, the Participants Committee endorsed a slate of candidates composed of Roberto Denis and Christopher Wilson, both nominated for an additional term, and Brook Colangelo, who was nominated

the NEPOOL website. In 2017, the Participants Committee participated in or actively monitored more than 220 legal proceedings involving New England matters. Those proceedings are identified on pages 38 to 43 of this Annual Report.



evolving CASPR proposal, fuel security, and the Department of Energy's proposal for a FERC grid reliability and resilience pricing rule. In addition, each of those groups also had other matters of specific interest to the breakout group.

As required by the Participants Agreement, the Participants Committee vote in 2017 on the slate of nominees for the ISO-NE board of directors was preceded and informed by a recommendation of a Joint Nominating Committee. That committee is comprised of incumbent ISO-NE board members

to fill the vacancy that was left by Paul Levy, who completed his third and final term in September. NEPOOL voted to endorse that slate, and the slate was formally elected by the ISO-NE board for terms that began in October.

The Participants Committee also represents NEPOOL's interest in regulatory and legal proceedings. It receives a monthly litigation report that is posted publicly, with key developments flagged for members as appropriate during meetings and updated during the month on



**Alex Kuznecow**  
Chair  
ISO-NE-Appointed



**William S. Fowler**  
Vice-Chair  
Participant-Elected



**Sebastian M. Lombardi**  
NEPOOL Counsel

The role of the NEPOOL Markets Committee is to explore any and all changes to the design and operation of the region's wholesale electric markets, whether those changes are proposed by ISO-NE, the states or Market Participants. It is the forum for informing all stakeholders about those changes, the reasons for them and alternatives for consideration.

The Markets Committee members' diverse interests, experiences and varied perspectives based on their respective business models and goals are critical to identifying efficient and fair wholesale power market design. Reflecting that diversity of interests, the objective of the Markets Committee is to provide an opportunity for stakeholders collectively to examine all proposed changes to Market Rules to ensure they are fully understood, and to identify and resolve, if possible, concerns raised by any of NEPOOL's over 480 members operating across all aspects of the wholesale markets.

To accomplish its responsibilities in 2017, the Markets Committee met at least monthly. Through November, the Markets Committee met 15 times over 22 days, evaluating and discussing each proposal brought to the committee for vote. The committee took 45 votes over the year. In many of these cases, Markets Committee input resulted in modifications or refinements to proposed changes to achieve a better outcome for the market.

Much of the committee's efforts in 2017 focused on discussion and dialogue of the functional impact of proposed changes, identification of issues and consideration of potential solutions among NEPOOL members, state officials and ISO-NE representatives concerning New England's FCM,

especially ISO-NE's newly proposed CASPR design and related state- and Participant-sponsored alternatives and amendments to that design. The various other changes and refinements to the FCM included (1) the replacement of the current annual Capacity Supply Obligation (CSO) Bilateral construct with a new Annual Reconfiguration Transaction (ART) instrument to facilitate substitutable annual bilateral transfers of CSOs under the new sloped FCM zonal demand curve framework; and (2) modifications to the capacity market requirements for covering an obligation associated with a repowering project that is not commercial on its expected date.

The committee also focused on improvements to energy market pricing mechanisms. Those improvements included:

- Implementation of a cap on the energy offers for Rapid Response Pricing Assets under the Real-Time Fast-Start Pricing design for purposes of calculations for setting the locational marginal price.
- Changes to allow small generators to opt out of the resource dispatchability requirements if they could otherwise qualify to be a Settlement Only Resource.
- Modifications to enable meter readers to submit five-minute data for use in sub-hourly Real-Time settlement.
- A package of market rule revisions to support the implementation of full integration of Demand Response into the Energy, Capacity and Ancillary Services Markets.

Other Market Rule changes recommended by the Markets Committee in 2017 included: (1) modifications to the ISO-NE/NYISO Coordination Agreement and the term sheet for pricing emergency energy deliveries between ISO-NE and Hydro-Quebec Transenergié; (2) changes to facilitate Balance of Planning Period (BoPP) auctions for transactions in Financial Transmission Rights; (3) modifications to the Net Commitment Period Compensation (NCPC) for ramp-constrained resources; (4) revisions to add specificity in the Tariff on Real-Time reserve designation and settlement rules; and (5) numerous changes to Manuals to reflect recent initiatives, including the Elective Transmission Upgrade provisions and resource retirement reforms and resource dispatchability requirements projects. The committee also considered modifications to reduce the Dynamic De-List Bid Threshold in the FCM, which is the administratively set value below which existing resources that have not elected to exit the FCA at a higher price can opt to leave the auction.

As with past years, the Markets Committee also considered and supported Market Rule changes to address FERC directives, although there were many fewer directives given the absence of a FERC quorum for much of 2017. Notably, those changes included market reforms to comply with FERC's Order No. 831, which the FERC directed to improve price formation and to ensure market participants the opportunity to recover their marginal costs for operating in the Energy Market.

## MORE THAN 430 NEPOOL MARKET PARTICIPANTS

### \$5.4 BILLION IN TRANSACTIONS IN 2016

#### ENERGY MARKETS — \$4.1 BILLION

##### ■ DAY-AHEAD ENERGY MARKET

Market Participants secure prices for electric energy the day before delivery to hedge prices.

##### ■ REAL-TIME ENERGY MARKET

Price-based dispatch to meet the Real-Time demand for electricity across New England.

##### ■ FINANCIAL TRANSMISSION RIGHTS

Provides a hedge against the cost of transmission network congestion.

#### CAPACITY MARKET — \$1.2 BILLION

##### ■ FORWARD CAPACITY MARKET

Buys resources to meet the future demand for electricity. Auctions are designed to send price signals to attract new investment and maintain existing resources.

#### ANCILLARY SERVICES — \$0.1 BILLION

##### ■ REGULATION MARKET

Pays resources that increase or decrease output moment-by-moment to balance system frequency.

##### ■ REAL-TIME RESERVE PRICING

Values resources operating in a ready-to-respond state to preserve system reliability.

##### ■ VOLTAGE SUPPORT SYSTEM

Tariff-based mechanism for maintaining voltage control on the system.

##### ■ BLACKSTART PROGRAM

Pays specific power plants to provide the capability to restart the transmission system following a blackout.

##### ■ FORWARD RESERVE MARKET

Procures "fast start or synchronized" capability to meet future local or system needs for electric energy within 10 or 30 minutes, allowing the New England system to withstand unexpected outages and other adverse events.

## RELIABILITY COMMITTEE

The Reliability Committee provides advisory input to ISO-NE and recommendations to the Participants Committee on reliability-related matters. Every proposed plan that impacts the region's interconnected transmission system must first come before the committee for its consideration and advisory vote. In addition, the committee reviews, provides feedback and votes on reliability-related rules and procedures, cost allocation for regional transmission upgrades, ICRs and related values, FCM Capacity Zones, and other matters with a reliability focus.

The Reliability Committee held 13 meetings in 2017 and received input from its task forces and subcommittees, including the Voltage Task Force, the Stability Task Force, the Transmission Task Force and the Power Supply Planning Committee. Through November, the Reliability Committee processed 26 votes on proposed plan applications to add new resources to or to retire resources from New England's bulk power system, and voted 28 times on proposed changes to Operating Procedures and Planning Procedures. It also voted on Capacity Zones for the next FCA (FCA12), ICR-related values for FCA12 and the upcoming Annual Reconfiguration Auctions, supply resource retirement requests, revisions to the ISO-NE/ NYISO Coordination Agreement, and almost \$2 billion worth of Transmission Cost Allocation applications (including the Greater Boston Reliability Project upgrades).

As part of its work for 2017, the Reliability Committee provided recommendations from a reliability perspective on broader efforts designed to improve markets and market infrastructure, including review and advisory input on a new proposal for price responsive demand, and a proposal to better integrate the Order 1000 processes with proposed plan application processes.



**Robert de R. Stein**  
(Supplier)  
Vice-Chair  
Participant-Elected  
Reliability Committee



**Mariah E. Winkler**  
(ISO-NE-Appointed)  
Chair  
Reliability Committee  
Transmission Committee



**José A. Rotger**  
(Transmission)  
Vice-Chair  
Participant-Elected  
Transmission Committee



**Eric K. Runge**  
NEPOOL Counsel

## TRANSMISSION COMMITTEE

The Transmission Committee provides advisory input to ISO-NE and recommendations to the Participants Committee on proposed changes to both ISO-NE's general tariff provisions and the Open Access Transmission Tariff (OATT), which are Sections I and II of the ISO-NE Tariff, respectively. In early 2017, the Transmission Committee finished its work of reviewing and providing input on the proposal for interconnection clustering revisions to the ISO-NE Tariff. The Transmission Committee-recommended proposal was approved by an overwhelming majority of members of the Participants Committee, and the FERC accepted those changes without condition or modification by an order dated October 31, 2017. During 2017, the Transmission Committee also: (1) provided advisory input on tariff revisions related to price responsive demand, Real-Time external transactions, Force Majeure events, Qualified Transmission Project Sponsors (QTPS), and ISO-NE's CASPR proposal; (2) developed and recommended to the Participants Committee NEPOOL comments on the generator interconnection Notice of Proposed Rulemaking in RM17-8-000; and (3) actively monitored the New England transmission rate proceedings at the FERC on return on equity (ROE) and formula rates.



**Kenneth Dell Orto**  
(Generation)  
Chair






**Paul N. Belval**  
NEPOOL Counsel

NEPOOL looks to the Budget & Finance Subcommittee, which is a nonvoting body, for two primary responsibilities: reviewing and making recommendations to the Participants Committee on annual budgets for ISO-NE, NESCOE and NEPOOL; and considering and making recommendations to the Participants Committee on any changes to the ISO-NE Financial Assurance and Billing Policies.




During 2017, in addition to considering budgets, the Budget & Finance Subcommittee considered changes to the FCM Capacity Charge Requirements for Market Participants with Capacity Load Obligations in the FCM in order to better account for actual charges resulting from FCAs. The subcommittee also examined revisions to the FTR Market financial assurance requirements

supporting the future implementation of Balance of Planning Period auctions. The subcommittee also reviewed a proposal eliminating the obligation of energy efficiency resources to provide Pay-for-Performance-related financial assurance during the months when those resources are not subject to Capacity Performance Penalties. Finally, the subcommittee continues to review ISO-NE's quarterly filings under its Capital Funding Tariff.

With respect to budget reviews, the subcommittee fully considered and discussed the 2018 budgets for ISO-NE and NESCOE, ultimately recommending their endorsement by the Participants Committee. Those budgets, which are pending before the FERC for approval, are as follows (with the 2017 budgets for comparison):

(\$000s)		2018 PROPOSED	2017 (BUDGET)
	Operating Budget	\$164,200	\$158,900
	ISO-NE Capital Budget	\$28,000	\$28,000
	NESCOE Budget	\$2,282	\$2,258

Most recently, the Subcommittee recommended the following NEPOOL budget for 2018 (with 2017 budget figures included for comparison):

(\$000s)		2018 PROPOSED	2017 (BUDGET)
	Operating Expense	\$5,830	\$6,060
	Revenue	(\$3,145)	(\$3,350)
	Net Participant Expenses	\$2,685	\$2,710

The number of NEPOOL members working together on solutions to New England's energy challenges was up more than 5 percent (on a net basis) from 2016. In 2017 (through November 30), 37 new members joined NEPOOL while 15 members left the Pool.

The Membership Subcommittee, chaired by End User representative Stacy Dimou, is tasked with approving applications for membership in, and terminations of membership from, NEPOOL. The subcommittee met 15 times in 2017, considering more than 35 applications for membership in, and the requests of 15 members to terminate the membership from, NEPOOL. Actions by the subcommittee and all FERC membership filings are posted on the NEPOOL website at [http://nepool.com/Memb\\_Subcomm.php](http://nepool.com/Memb_Subcomm.php). The NEPOOL website also provides instructions for becoming a member, changing a Participant name and terminating a membership.

The increase in overall membership continues to be led by new members in the Supplier and AR Sectors. Nearly 60 percent of the new members that joined NEPOOL in 2017 were competitive electric suppliers, power marketers and/or financial marketers/traders, helping to grow the Supplier Sector, NEPOOL's most populous Sector, to 196 members. More than 24 percent of the new members were AR Providers. 10 percent of the new members joined the End User Sector, equally split between Market Participant End Users and environmentally focused End User Organizations. The remaining new members joined as Provisional Members, allowing them to work with NEPOOL Participants as they

sought qualification in FCA12 or to participate in Order 1000 transmission development efforts.

Of the members who left NEPOOL in 2017, a little more than half were from the Supplier Sector, with the remaining terminations split nearly evenly among generation owners, End Users and Provisional Members.

During the early part of 2017, the Membership Subcommittee also developed arrangements that allow Entities that exclusively serve a small amount of standard offer load (an average hourly aggregate Real-Time Load Obligation of 10 megawatt hours (MWh) or less), the opportunity to become Provisional Members and to work with NEPOOL Participants on issues facing the region as members of the Provisional Member Group Seat, until such time as their business grows to the point where they no longer qualify as small. Clarifying changes to the Provisional Member arrangements in the NEPOOL Agreement and Participants Agreement were also identified and implemented.

## NON-SECTOR MEMBERS

### PROVISIONAL GROUP MEMBERS

Champlain VT, LLC  
Cricket Valley Energy Center, LLC  
Georges River Energy, LLC  
Lotus Danbury LMS100 One, LLC  
Lotus Danbury LMS100 Two, LLC  
Maine Power LLC  
Maple Energy, LLC  
Noble Environmental Power, LLC  
NTE Connecticut, LLC  
Viridity Energy, Inc.

### DATA ONLY PARTICIPANTS

Cambridge Energy Solutions  
Energy GPS LLC  
EnvaPower, Inc.  
Rinar Power LLC  
Yes Energy, LLC

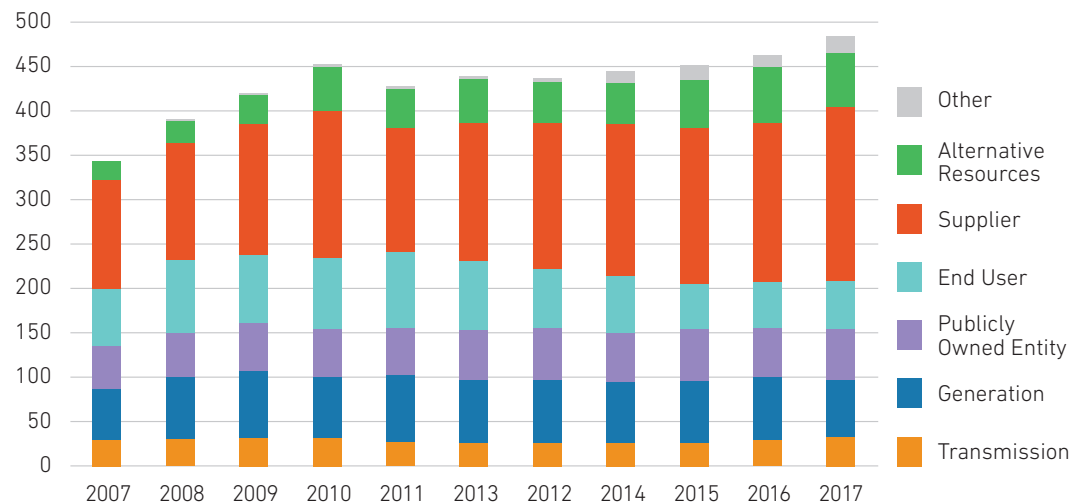
### GIS-ONLY PARTICIPANT

SRECTrade, Inc.

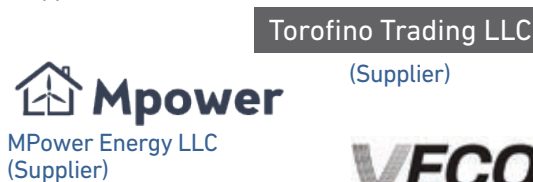
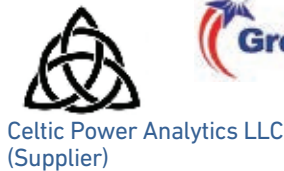
### GAS INDUSTRY PARTICIPANT

Repsol Energy North America Corporation

## MEMBERSHIP GROWTH



# 2017 NEW NEPOOL MEMBERS



Durgin and Crowell  
Lumber Company,  
Inc. (End User)



GREAT RIVER HYDRO  
(AR)



## NEPOOL GIS

NEPOOL's Generation Information System, which is operated through a contract with APX, Inc., is the means for tracking and trading renewable energy certificates (RECs) needed in New England to demonstrate compliance with state mandates for generation attributes. The GIS creates and manages one REC for every MWh of energy produced and identifies the fuel source, emissions and other attributes of each MWh, including energy settled in the ISO-NE market settlement system, energy produced by certain behind-the-meter generators and conservation resources that are not settled regionally, and energy from certain generators that import power into New England. These certificates can be separately bought and traded to provide a separate revenue stream to power generation resources and a means for the ultimate owners of the certificates to prove that they have satisfied renewable energy requirements imposed by each of the New England states.

## GIS AGREEMENT WORKING GROUP

NEPOOL was especially busy in 2017 negotiating an amended and restated agreement with APX that extended the term of the GIS Administration Agreement through the end of 2020. Some of the benefits realized by NEPOOL as a result of that new agreement are:

- A reduction of the per-MWh fee charged by APX for operating the GIS.
- Enhancements to the GIS relating to access, database searchability, REC transfers and conversion of New York RECs to GIS RECs.

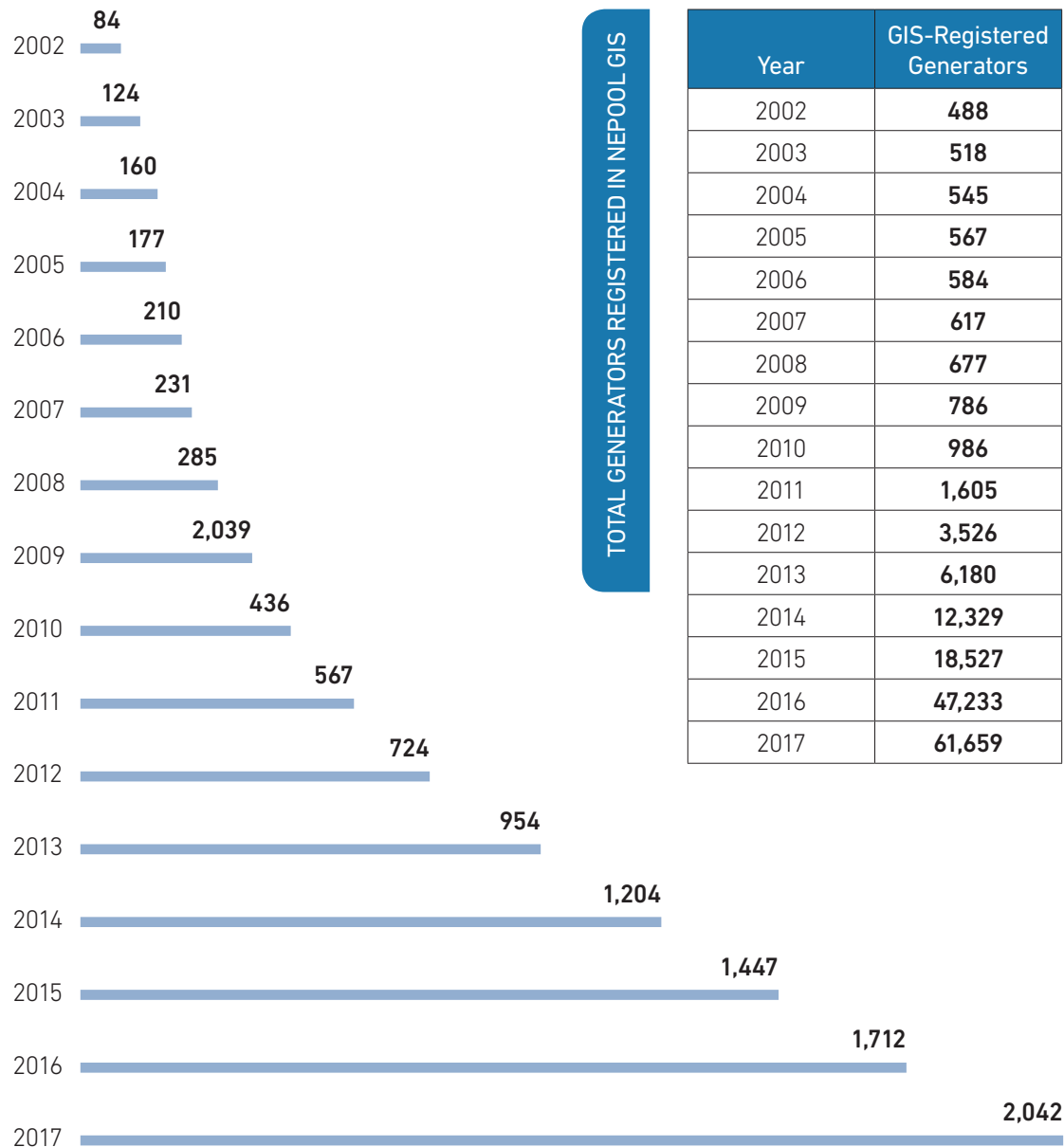
- Up to 200 hours a year of development work for changes to the GIS without additional charge.
- The creation of a user group to regularly review GIS performance and suggest enhancements.
- The creation of criteria for response times, GIS availability, GIS capacity, and resolution times for problems and questions.

## GIS OPERATING RULES WORKING GROUP

In addition, the GIS Operating Rules Working Group successfully identified, and NEPOOL approved, revisions to the GIS Operating Rules to eliminate the cap on the number of RECs that can be deposited in a retail subaccount in any quarterly trading period and to facilitate the inclusion of biodiesel production in the New Hampshire renewable portfolio standard. The working group is currently considering changes to the GIS to permit the automatic banking of RECs for emission-free generators at the end of each trading period, as it currently does for certain renewable fuel types and other categories of RECs.

As of October 31, there were 2,042 active accounts in the GIS, with 327 of those accounts added in 2017. Generator registrations number 61,659, with 14,426 of those registrations from new generators joining in 2017. The GIS created and managed 112,506,392 certificates from the third quarter of 2016 through the second quarter of 2017.

# TOTAL GIS ACCOUNT HOLDERS



# TOTAL GENERATORS REGISTERED IN NEPOOL GIS

Year	GIS-Registered Generators
2002	488
2003	518
2004	545
2005	567
2006	584
2007	617
2008	677
2009	786
2010	986
2011	1,605
2012	3,526
2013	6,180
2014	12,329
2015	18,527
2016	47,233
2017	61,659

## VARIABLE RESOURCE WORKING GROUP

The Variable Resource Working Group (VRWG) provides a focused forum for the exchange of information and ideas on issues affecting the participation of variable resources (e.g., wind, solar, run-of-river hydro) in the New England Markets. The VRWG met quarterly in 2017 and received updates and discussed operational topics of specific interest and applicability to variable resources, including the use of wind forecast values in the Resource Adequacy Assessment process, impacts of plant outage delays on, and the use of wind high limits in, automatic redeclaration processes, Seasonal Claimed Capability timing for intermittent resources, and an update on the prototype rules for identifying undelivered energy.

## DEMAND RESOURCES WORKING GROUP

The Demand Resources Working Group held eight meetings in 2017 and focused its discussions on demand resource-related issues, including the transition to fully integrated Price Responsive Demand (PRD) and sessions addressing energy efficiency measures, FCM qualification and FCA11 results for demand resources.

## METER READER WORKING GROUP

The Meter Reader Working Group met seven times in 2017 and provided input related to meter data gathering, reconciliation, and load estimation, including the implementation of sub-hourly settlement and five-minute revenue quality meter (RQM) value reporting.

NEPOOL updates its members on key legislative developments on a regular basis, including publishing an annual summary of energy legislation passed in each New England state during its 2017 legislative session. The summary was distributed during the Participants Committee summer meeting in Chatham, Massachusetts, and an updated version is available on the NEPOOL website at [http://nepool.com/uploads/Legislative\\_Update\\_2017\\_FINAL.pdf](http://nepool.com/uploads/Legislative_Update_2017_FINAL.pdf).

The most noteworthy new legislation in each state includes the following:

#### CONNECTICUT

*An Act Promoting the Use of Fuel Cells for Electric Distribution System Benefits and Reliability (Public Act No. 17-144)* allows electric distribution companies under certain conditions: (1) to build, own and operate new fuel cell generation; (2) to enter into power purchase agreements with persons to build, own and operate new fuel cell generation not exceeding 10 MWs; and (3) to provide financial incentives to install fuel cell-powered combined heat and power systems no larger than 10 MWs, provided such incentives are consistent with the Comprehensive Energy Strategy. See <https://www.cga.ct.gov/2017/act/pa/pdf/2017PA-00144-R00HB-07036-PA.pdf>.

*An Act Concerning Zero Carbon Solicitation and Procurement (Public Act No. 17-3)* requires Connecticut regulators to conduct an appraisal on nuclear power generating facilities and to determine whether to include nuclear power generating facilities in the group of zero carbon energy sources from which power is solicited for Connecticut. See <https://www.cga.ct.gov/2017/ACT/pa/2017PA-00003-R00SB-01501SS1-PA.htm>.



#### MAINE

*An Act to Increase Investment and Regulatory Stability in the Electric Industry (LD 1061)* gives the Maine Public Utilities Commission authority to direct investor-owned transmission and distribution utilities to enter into long-term contracts for regional procurement of capacity resources, energy or renewable energy credits. See [https://legislature.maine.gov/legis/bills/display\\_ps.asp?LD=1061&snum=128](https://legislature.maine.gov/legis/bills/display_ps.asp?LD=1061&snum=128).

*An Act to Improve Transparency in the Electric Supply Market (LD 803)* makes numerous statutory changes intended to protect consumers that choose generation service through a competitive electricity provider, including requiring a competitive electricity provider to disclose to the consumer if the rate of generation service is higher than the standard-offer service rate. See [https://legislature.maine.gov/legis/bills/display\\_ps.asp?LD=803&snum=128](https://legislature.maine.gov/legis/bills/display_ps.asp?LD=803&snum=128).

*An Act to Modernize the Renewable Portfolio Standard (LD 1147)* extends the new renewable capacity resources portfolio requirement of 10 percent through 2028. See [https://legislature.maine.gov/legis/bills/display\\_ps.asp?LD=1147&snum=128](https://legislature.maine.gov/legis/bills/display_ps.asp?LD=1147&snum=128).



*An Act to Clarify the Authority of an Affiliate of a Utility to Own Power Generation Outside of the Utility's Territory (LD 756)* amends Maine statutes to allow affiliates of Maine transmission and distribution utilities to own generation or generation-related assets in accordance with standards of conduct adopted pursuant to the amendment, as long as the generation or generation-related assets are not directly interconnected into facilities that are owned or operated by that utility. See [https://legislature.maine.gov/legis/bills/display\\_ps.asp?LD=756&snum=128](https://legislature.maine.gov/legis/bills/display_ps.asp?LD=756&snum=128).

## MASSACHUSETTS

The Massachusetts General Court is in its first year of its two-year session, which will conclude on July 31, 2018. Among bills still being considered by the legislature are:

- *An Act Transitioning Massachusetts to 100 Percent Renewable Energy (2017 MA S 1849)*
- *An Act Relative to Meeting the Energy Needs of the Commonwealth (2017 MA S 1886)*
- *An Act Relative to Solar Power and the Green Economy (2017 MA H 2706)*
- *An Act Relative to Energy Storage Procurement for 2025 and 2030 (2017 MA S 1874)*
- *An Act Regarding Net Metering (2017 MA S 1885)*



## NEW HAMPSHIRE

*An Act Requiring Notice to Affected Municipalities of Energy Facility Siting (Public Act No. 115)* requires applicants for an energy facility certificate to give notice to affected municipalities and also provides for an opportunity at one or more public hearings for comments from the governing body of each affected municipality and its residents. See [http://www.gencourt.state.nh.us/bill\\_status/billText.aspx?sy=2017&id=371&txtFormat=pdf&v=current](http://www.gencourt.state.nh.us/bill_status/billText.aspx?sy=2017&id=371&txtFormat=pdf&v=current).

*An Act Requiring a Portion of the Renewable Energy Fund to Benefit Low to Moderate Income Residential Customers, Relative to Electric Renewable Energy Classes, Relative to the Class Rate for Biomass, and Relative to Requirements for Incentive Payments from the Renewable Energy Fund (Public Act No. 226)* requires a portion of New Hampshire's Renewable Energy Fund to benefit low- to moderate-income residential customers and raises the Renewable Energy Portfolio Standard for Class II renewables (which includes biomass facilities). This legislation also eliminates the generation capacity requirement for incentive payments from the Renewable Energy Fund. See [http://www.gencourt.state.nh.us/bill\\_status/billText.aspx?sy=2017&id=957&txtFormat=pdf&v=current](http://www.gencourt.state.nh.us/bill_status/billText.aspx?sy=2017&id=957&txtFormat=pdf&v=current).

## RHODE ISLAND

*An Act Relating to Public Utilities and Carriers – Renewable Energy Growth Program (Public Law 2017, Ch. 017)* expands the Renewable Energy Growth Program (RE Growth Program) through 2029, which is an additional 10 years after the fifth program year. The RE Growth Program allows eligible renewable distributed generation



projects to sell generation output under long-term tariffs at fixed prices to National Grid. See <http://webserver.rilin.state.ri.us/PublicLaws/law17/law17017.htm>.

*An Act Relating to Public Utilities and Carriers – Renewable Energy Growth Program (Public Law 2017, Ch. 056)* modifies the existing distributed generation procurement legislation by increasing the annual target procurement for each program for the years 2020 through 2029 by an additional 40 MWs (nameplate) above the prior year's annual target. See <http://webserver.rilin.state.ri.us/PublicLaws/law17/law17056.htm>.

## VERMONT

*An Act Relating to Public Service Boards, Energy and Telecommunications (Public Act No. 53)* makes, among other changes, numerous revisions to procedures in cases before the Public Service Board (PSB) primarily relating to energy and telecommunications facility siting and changes the name of the PSB to the Vermont Public Utility Commission. See <http://legislature.vermont.gov/assets/Documents/2018/Docs/ACTS/ACT053/ACT053%20As%20Enacted.pdf>.



The FERC, and in some cases the federal courts, must evaluate proposed changes or challenges to the rates, terms and conditions of service in the New England Markets. Despite the absence of a FERC quorum for half the year, significant efforts to evaluate and refine the CASPR proposal, and a focus on implementation of previously approved changes, there were more than 220 active FERC proceedings in 2017 involving regional New England matters. Those proceedings included updates to the estimates of the total and net costs of developing a new capacity resource in New England and the prices used to mitigate potential buyer-side market power in a FCA; the incorporation of a cluster-based methodology for considering Interconnection Requests and allocating interconnection upgrade costs in certain defined circumstances; changes that

modified the timeline associated with the Public Policy Transmission Study Process; changes to the coordination arrangements between ISO-NE and NYISO and between ISO-NE and Hydro-Quebec Transenergié; price formation enhancements; amendments to the NEPOOL Agreement and Participants Agreement; and refinements to the Financial Assurance Policy.

2017's legal proceedings continue to underscore that, working together through the NEPOOL stakeholder process, the level of contested regulatory involvement in the solutions identified can be significantly decreased when tariff changes enjoy the joint support of NEPOOL and ISO-NE, and where applicable, transmission owners and others with affected filing rights. Even where regional consensus is elusive and the final balance is to be set by the FERC, the FERC's

direction is informed by, and made more efficient as a result of, the systematic, purposeful and collaborative course and comments produced by the Participant Processes. The collective insights and perspectives that emerged through the Participant Processes continued to guide and clarify FERC action on New England matters.

Each month, NEPOOL counsel summarizes for members the legal proceedings relating to New England matters and developments in those proceedings from the prior month. Those reports, as well as a brief summary of the developments since the last posted report, are available in the NEPOOL website's library at [http://nepool.com/Litigation\\_Reports.php](http://nepool.com/Litigation_Reports.php). A full listing of the FERC proceedings that were active in 2017 is included at pages 40 to 43 of this Annual Report.



U.S. Court of Appeals for the District of Columbia Circuit (unless otherwise noted)

Docket	Appellants	Underlying Proceedings
15-1071/ 16-1042	NEPGA / Exelon	FCM Pricing Rules Complaints (EL14-7; EL15-23). Oral argument held Oct 6. Pending.
15-1118 et al.	New England Transmission Owners (NETOs)	Base ROE Complaint I (2011) (EL11-66). Petitions for review granted. FERC's orders vacated. Case remanded for further proceedings.
15-1139	NETOs; NESCOE/CT DEEP/CT PURA, et al.	Order 1000 Compliance Filings (ER13-193; ER13-196). Petitions for review denied.
15-1212	NETOs	Base ROE Complaints II & III (2012 & 2014) (EL13-33; EL14-86). Being held in abeyance pending outcome of EL13-33 et al.
15-1452	NRG	PJM MOPR mechanism. Decision holding FERC contravened the limitation on its Section 205 authority (a "passive and reactive role") by directing modifications that created a new rate scheme that was significantly different from that proposed. Remanded for further proceedings.
16-1023/ 16-1024	NEPGA	NEPGA PER Complaint and FCM Jump Ball and Compliance Proceedings (ER14-1050; EL15-25). Oral argument held Oct 27. Pending.
16-1068/ 16-1408	Utility Workers Union of America	FCA9 and FCA 10 Results (ER15-1137). Briefing completed June 26. Pending.
16-1329	Sierra Club et al.	Appeal by environmental groups and landowners challenging FERC's approval of the construction and operation of three new interstate natural gas pipelines in the southeastern United States granted. Remanded for further proceedings in which "the FERC must consider not only the direct effects, but also the indirect environmental effects, of [projects] under consideration."
17-1110	<i>NextEra, NRG, PSEG</i>	Demand Curve Changes Remand Proceedings (ER14-1639). Appeal challenging exemption of certain renewable generation resources from minimum offer price rules governing new entry in the FCM (Renewable Technology Resource (RTR) exemption). Briefing to continue through early 2018.
16-2946 (2d Cir.)	<i>Allco Finance Limited v. Klee et al.</i>	Connecticut District Court's judgment that Allco failed to state a claim that either (1) Connecticut's 2015 Clean Energy RFP was pre-empted by federal law or that (2) Connecticut's Renewable Portfolio Standard program violates the dormant Commerce Clause was affirmed.
5:15-cv-00230 (N.D.N.Y.)	<i>Entergy Nuclear Fitzpatrick, LLC et al. v. Zibelman et al.</i>	Complaint challenging NYPSC order approving an agreement to keep Dunkirk facility in the NYISO market, "repowered" as a natural gas-fired plant.

**FCM Market Rule Changes**

ER16-2126	FCM Composite Offers & Price Lock Mechanisms (FERC Compliance)
ER16-2451	FCM Enhancements
ER16-551	FCM Resource Retirement Reforms

**FCA Filings**

ER17-1073	FCA11 Results Filing
ER17-2110	FCA12 De-List Bids Filing
ER18-264	FCA12 Qualification Information Filing

**Waiver Requests**

EL18-5	Braintree: 2017-18 Winter Rel. Prog. Notice Deadline
ER18-185	CPower: DR Auditing Reqs.
ER17-1031	Emera ESS6: FCM Qualification for FCA8 MRAs
ER16-1904	ISO-NE: RTEG Resource Type/De-List
ER17-1615	McCallum Enterprises: RTU Req.

**ICR, HQICC and Demand Curve Values**

ER17-472	2017-18 Annual Reconfig. Auctions
ER18-371	2018-19 Annual Reconfig. Auctions
ER17-320	2020-21 Capacity Commitment Period
ER18-263	2021-22 Capacity Commitment Period

**Financial Assurance/Billing Policy Amendments**

ER17-1103	FCM Capacity Charge Calc. Changes
ER17-1441	FTR BOPP Changes (withdrawn)

**Other Market Rule Changes**

ER13-2266	2013-14 Winter Rel. Program Remand
ER17-1706	5-Minute RQM Settlement Enhancement
ER17-925	Active DR Types Removal
ER17-795	CONE & ORTP Updates
ER14-1639	Demand Curve Changes Remand
ER17-576	Effective Date Update: Fast-Start Pricing & DARD Pump Parameter Changes
ER17-96	Effective Date Update: MR1 §§ 2.7(a) & (g)
ER17-1542	Fast-Start Interim Cap Revision
ER17-337	Natural Gas Index Changes
ER17-2569	NCPC Calculation Changes for Ramp Constrained Down Resources
ER17-680	NCPC Sub-Hourly Settlement Changes
ER17-774	Order 825 Compliance: 5-Min. Settlement of Regulation Capacity & Service Credit
ER15-1565	Order 831 Revisions (Modified Energy Market Offer Caps)
ER17-2164	PRD: Full Integration Conforming Changes
ER17-68	Resource Dispatchability Changes
ER18-122	Small Generator Modeling Options Change

**Complaints/FPA Section 206 Proceedings**

EL18-31	Clear River Sched. 11 O&M Complaint
EL16-19	RNS/LNS Rates and Rate Protocols
EL16-120	NEPGA PER Adjustment Complaint
ER17-2153	NEPGA PER Settlement Agreement

**NEPOOL/Participants Agreement Amendments**

ER17-2522	Provisional Member Clean-Up (130th Agreement/PA Amend. No. 10)
ER17-2425	Small Standard Offer Service Provider Amendments (131st Agreement)

**OATT Changes**

ER17-857	Attachment K Revisions (Public Policy Transmission Study Process Deadline Revisions)
ER17-2514	Attachment K Revisions (QTPS List (Appendix 3) Updates)
ER17-2421	Clustering Revisions
ER17-2118	DAM Scheduling Deadline Conforming Change (II.44(1)(a))
ER17-1625	Emergency Energy Pricing Revisions
ER17-2533	Force Majeure Clarifications
ER16-2695	Orders 827/828 Compliance Filing

**Rate Filings**

ER09-1532	2017-18 Power Year Transmission Rate Filing
ER18-77	2018 ISO-NE Admin. Costs and Capital Budgets
ER18-85	2018 NESCOE Budget
ER18-210	Emera MPD OATT Attachment J Revision
ER17-933	Exelon Request for Additional Cost Recovery
ES17-15	ISO-NE Securities: Authorization for Future Drawdowns
ER17-2062	NESCOE 5-year (2018-2022) Pro Forma Budget

**ROE Proceedings**

EL11-66	Base ROE Complaint I (2011) Remand
EL13-33 et al.	Base ROE Complaints II & III (2012/2014)
EL16-64	Base ROE Complaint IV (2016)
ER15-414	Opinion 531-A Compliance Filing Undo
EL11-66	Opinions 531-A/531-B Local & Regional Refund Reports

### Schedule 20/21/22/23 Updates

ER18-132	Eversource Reorg. Tariff Changes
ER09-938	Sched. 21-CMP Annual Info. Filing
ER17-407	Sched. 21-CMP: Blue Sky LSA
ER17-1668	Sched. 21-CMP: Saddleback Ridge/Canton Mountain LGIAs
ER15-1434	Sched. 21-EM: Annual Info. Filing
ER15-1434 et al.	Sched. 21-EM: BHE/MPS Merger-Related Costs Recovery
ER16-1023	Sched. 21-ES: NU/NSTAR Merger-Related Costs Recovery
ER17-2449	Sched. 21-ES: PSNH/Pontook IA
ER09-1498	Sched. 21-FG&E Annual Info. Filing
ER09-1243	Sched. 21-NSTAR Annual Info. Filing
ER17-1713	Sched. 21-NSTAR: Dartmouth Power LSA
ER10-1181	Sched. 21-VEC and 20-VEC Annual Info. Filing
ER17-1589	Sched. 21-VTransco: Revised Depreciation Rates
ER17-581	Sched. 23: FPL Energy Wyman SGIA

### Market Participant Suspension Notices

not docketed	BNP Paribas Energy Trading GP
not docketed	First Wind Energy Marketing LLC
not docketed	Lotus Danbury LMS100 Two
not docketed	Manchester Methane LLC

### Membership Filings

ER17-682	Jan 2017 Membership Filing
ER17-899	Feb 2017 Membership Filing
ER17-1048	Mar 2017 Membership Filing
ER17-1364	Apr 2017 Membership Filing
ER17-1506	May 2017 Membership Filing
ER17-1744	June 2017 Membership Filing
ER17-2039	July 2017 Membership Filing
ER17-2184	Aug 2017 Membership Filing
ER17-2405	Sep 2017 Membership Filing
ER17-2582	Oct 2017 Membership Filing
ER18-186	Nov 2017 Membership Filing
ER18-358	Dec 2017 Membership Filing

### Regional Reports

AD10-2-009	2015 ISO-NE SIL Limits
ER17-963	Capital Projects Report - 2016 Q4
ER17-1595	Capital Projects Report - 2017 Q1
ER17-2289	Capital Projects Report - 2017 Q2
ER18-81	Capital Projects Report - 2017 Q3
ZZ17-4	IMM Annual Markets Report (2016)
ZZ17-4	IMM Quarterly Markets Reports
not docketed	ISO-NE FERC Form 1
not docketed	ISO-NE FERC Form 582
not docketed	ISO-NE FERC Form 714
not docketed	ISO-NE FERC Form 715
not docketed	ISO-NE FERC Forms 3Q
ER07-476	LFTR Implementation Status Reports
ER06-613	Reserve Market Semi-Annual Reports



## ERO Reliability Standards

RM13-6	BAL-002-1a Interpretation Remand
RD17-1	BAL-004-0 (Retirement)
RM17-11	CIP-003-7
RM17-13	CIP-005-6, CIP-010-3, CIP-013-1
RM15-14	CIP-014 Report (Expansion to Cover All High Impact Control Centers)
RM17-12	EOP-004-4, EOP-005-3, EOP-006-3, EOP-008-2
RD17-4	IRO-002-5; TOP-001-4
RD16-6	IRO-018-1 & TOP-010-1
RM14-7	MOD-001-2
RM16-18	NOL: Control Center Cyber Systems
RM15-11	Order 830: TPL-007-1
RM16-7	Order 835: BAL-002-2
RM16-13	Order 836: BAL-005-1 & FAC-001-3
RM16-20	Order 837: PRC-012-2 (Remedial Action Schemes)
RM16-22	PRC-027-1 and PER-006-1
RD17-7	VAR-001-4.1, VAR-002-4
RD17-6	VRFs (BAL-002-2)

## Other ERO Matters

RR17-7	2018 NERC/NPCC Business Plans and Budgets
RR15-2	Annual NERC CMEP Filing
not docketed	FERC Staff Report: CIP v5 Audits
RR17-6	Rules of Procedure Changes (§§ 600, 900)
RR18-1	Rules of Procedure Changes (Appendix 3D)

## Mergers & Acquisitions

EC16-145	Belmont/NSTAR
EC17-182	Calpine/ECP
EC17-158	CPV Towantic/Archmore
EC17-146	Dynegy/Marco DM Holdings (Dighton/Milford)
EC16-93	GDF Suez /Atlas Power
EC17-152	GenOn Reorganization
EC17-76	Green Mountain Power/ENEL Hydros
EC17-86	Green Mountain Power/VT Transco (Highgate)
EC17-38	TransCanada/Helix Generation
EC17-144	NAPG/Mercuria
EC17-62	NSTAR/WMECO Merger
EC17-132	PSNH/FPL Energy Wyman IV
EC18-12	PSNH/Granite Shore
EC17-122	TerraForm /Brookfield

## Regional Interest

ER17-1431	Cost Reimbursement Agreement: NEP/ Wynn, MA LLC
ER17-1915	D&E Agreement: NSTAR/Essential Power Newington
ER18-111	D&E Agreement: Pootatuck Ring Bus Expansion
ER17-1495	D&E Agreement: PSNH/Essential Power Newington
ER15-1429	Emera MPD OATT Changes
ER17-290	External Market Monitor Contract
ER17-376	IA Cancellation: Superseded PSNH/ Springfield Power IA
ER17-1038	IA: CL&P/Covanta (Preston, CT)

## Regional Interest (continued)

ER18-316	IA: CL&P/Woods Hole
ER17-2198	IA: CMP/Bucksport
ER17-2557	IA: NEP/Wheelabrator Millbury
ER17-2449	IA: PSNH/Pontook
ER17-1322	IA: WMECO/Essential Power
ER17-1340	IAs: WMECO/Nautilus Hydros
ER17-2339	LCC Agreement: National Grid
ER17-2324	LCC Agreement: NSTAR/Reading
ER17-1779	LGIA Cancellation: Superseded CL&P/ Milford LGIA
ER17-909	LGIA: CMP/ReEnergy Livermore Falls
ER17-937	LGIA: CMP/Stony Brook
ER17-967	LSA: CL&P/Wallingford, CT Transmission Line Separation Agreement
ER16-1619	Maine Power Express Negotiated Rates Determination Request
ER13-62; ER16-49	MOPR-Related Proceedings (NYISO, PJM)
ER10-523	NEP Integrated Facilities Agreement Annual Informational True-Up Filing
ER17-446	NYISO Tariff Revisions in Response to FCM Enhancements
EL17-6 et al.	PURPA Complaint: Allco v. MA Agencies
ER17-1296	SGIA: ISO-NE/GMP
ER17-1564	SGIA: PSNH/Sugar River
ER17-2539	TSA Cancellation: NSTAR/Belmont

### Rulemaking Proceedings

RM16-17	Data Collection for Analytics & Surveillance and MBR Purposes
RM18-1	DOE NOPR -- Grid Reliability & Resilience Pricing
RM16-23	Electric Storage Participation in RTO/ISO Markets
RM17-3	Fast-Start Pricing
PL17-1	Income Tax Cost Recovery & ROE Policies
RM17-8	LGIA/LGIP Reforms
RM96-1	NAESB WGQ Version 3.1 Standards
RM15-24	Order 825: Settlement Intervals/Shortage Pricing
RM16-5	Order 831: Price Caps in RTO/ISO Markets
RM16-15	Order 833: CEI Procedures
RM17-9	Order 834: Civil Monetary Penalty Inflation Adjustments
RM16-6	Primary Frequency Response
RM17-2	Uplift Cost Allocation and Transparency

### FERC Enforcement Matters

IN17-5	American Transmission Company
IN08-8	Barclays Bank PLC
IN13-15	BP Initial Decision
IN15-5	City Power Marketing and Tsingas
IN17-3	Covanta Haverhill Associates
IN17-2	GDF SUEZ Energy Marketing NA
IN15-10	MISO Zone 4 Planning Resource Auction Offers
not docketed	Rover-Staff Notice of Alleged Violation
IN12-17	Total Gas & Power North America, Inc.
IN15-8	Westar Energy

### Administrative Proceedings

AD17-10	Agency Operations in the Absence of a FERC Quorum
AD17-8	BPS Reliability Technical Conference
AD16-18	Competitive Transmission Development Rates
AD16-25	Electric Storage Resource Utilization
AD07-13-010	Enforcement Annual Report
AD14-14	Price Formation in RTO/ISO Energy and Ancillary Services Markets
AD16-16	PURPA Implementation
AD16-17	Reactive Supply Compensation
AD17-11	State Policies & Wholesale Markets Operated by ISO-NE, NYISO, PJM
AD17-12	Technical Conference: Natural Gas Index Liquidity, Price Discovery & Price Formation

### Natural Gas Proceedings

RP16-618	Algonquin EDC Capacity Release Bidding Requirements Exemption Request
16-1329	Sierra Club, et al v. FERC

### Gas Pipeline Proceedings

CP14-96	Algonquin Incremental Market Project
CP16-9	Atlantic Bridge Project
CP14-529	Connecticut Expansion Project
CP13-499	Constitution Pipeline
CP16-17	Millennium Pipeline Valley Lateral Project
CP15-115	Northern Access Project
CP14-554 et al.	Southeast Market Pipelines Project
CP13-50	Wright Interconnection Project



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# OPERATIVE DOCUMENTS

- ↓ **Second Restated NEPOOL Agreement (2d RNA)**  
[http://nepool.com/uploads/Op-2d\\_RNA.pdf](http://nepool.com/uploads/Op-2d_RNA.pdf)
- ↓ **Participants Agreement (PA)**  
<http://nepool.com/uploads/Op-PA.pdf>
- ↓ **Market Participant Service Agreement (MPSA)**  
[http://nepool.com/uploads/Op-MPSA\\_form.pdf](http://nepool.com/uploads/Op-MPSA_form.pdf)
- ↓ **Memorandum of Understanding Among ISO-NE, NEPOOL, and NESCOE**  
[http://nepool.com/uploads/MOU\\_Final.pdf](http://nepool.com/uploads/MOU_Final.pdf)
- ↓ **ISO-NE Tariff (Tariff)**  
<http://www.iso-ne.com/regulatory/tariff/index.html>
- ↓ **Manuals**  
[http://www.iso-ne.com/rules\\_proceeds/isonemnl/index.html](http://www.iso-ne.com/rules_proceeds/isonemnl/index.html)
- ↓ **Operating Procedures (OPs)**  
[http://www.iso-ne.com/rules\\_proceeds/operating/isonel/index.html](http://www.iso-ne.com/rules_proceeds/operating/isonel/index.html)
- ↓ **Planning Procedures (PPs)**  
[http://www.iso-ne.com/rules\\_proceeds/isonelplan/index.html](http://www.iso-ne.com/rules_proceeds/isonelplan/index.html)
- ↓ **Generation Information System Operating Rules**  
<http://www.nepoolgis.com/documents/>

- ↓ **Transmission Owners Agreement (TOA)**  
<http://www.iso-ne.com/regulatory/toa/index.html> Phase I/II
- ↓ **Asset Owners Agreement (AOA)**  
[http://www.iso-ne.com/regulatory/co\\_agree/index.html](http://www.iso-ne.com/regulatory/co_agree/index.html) Phase I/II
- ↓ **Interconnection Operators Agreement (IOA)**  
[http://www.iso-ne.com/regulatory/co\\_agree/index.html](http://www.iso-ne.com/regulatory/co_agree/index.html)
- ↓ **Phase I/II HVDC Transmission Operating Agreement (HVDC TOA)**  
<http://www.iso-ne.com/regulatory/toa/index.html>
- ↓ **Phase I/II HVDC-TF Transmission Service Administration Agreement (TSAA)**  
<http://www.iso-ne.com/regulatory/toa/index.html>
- ↓ **Highgate Interconnection Operators Agreement**  
[http://www.iso-ne.com/regulatory/co\\_agree/index.html](http://www.iso-ne.com/regulatory/co_agree/index.html)
- ↓ **New Brunswick and NYISO Coordination Agreements**  
[http://iso-ne.com/static-assets/documents/regulatory/tariff/attach\\_f/attach\\_f.pdf](http://iso-ne.com/static-assets/documents/regulatory/tariff/attach_f/attach_f.pdf)



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