

# Working Together for New England's Clean Energy Future

## Annual Report 2022





**ALONE  
WE CAN  
DO LITTLE;  
TOGETHER  
WE CAN  
DO SO  
MUCH.**

HELEN KELLER

# Annual Report

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\* Statistical and other information in this report have been supported by Participants or derived from NEPOOL or ISO New England Inc. (ISO-NE) records as of November 22, 2022, except as specifically referenced. 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 (2d RNA), the Participants Agreement or the ISO-NE Transmission, Markets and Services Tariff (Tariff).

# Chairman's Message

## Chairman's Message

The transition of New England's power grid from fossil fuel intensive to a carbon free future is well underway as the region's resource mix continues to evolve. Over the past year, NEPOOL, ISO-NE, and State officials continued to build upon the foundation of change that has been a hallmark of NEPOOL and its long-standing stakeholder processes.

## Tackling Important Market Reforms

Throughout the year, NEPOOL members considered, and approved a number of Tariff and Market Rule changes pivotal to spurring the market entry and participation of resources that further decarbonization efforts in the region. Among these important market reform efforts were evaluation and consideration of a package of tariff revisions to comply with *FERC Order 2222* that will facilitate greater participation of distributed energy resources in New England Markets, and NEPOOL approval of long-sought and fundamental reforms to the region's capacity market buyer-side market mitigation rules. The elimination and replacement of New England's Minimum Offer Price Rule (MOPR) construct, in particular, reflects a foundational shift for the region in its support of the entry of state-sponsored policy resources that are needed to achieve state environmental policies and decarbonization mandates.

Looking forward, the region has much to consider and accomplish in 2023, as NEPOOL, ISO-NE, and the States engage collaboratively to address issues of significance needed to decarbonize the grid while ensuring energy adequacy/security. Key efforts in the coming year, including continued work on Resource Capacity Accreditation (RCA), and Day-Ahead Ancillary Services initiatives (DASI), will be important to further the integration of new clean energy resources while supporting system reliability.

## NEPOOL Leadership in Action

In a new approach to business planning initiated this year, NEPOOL proactively identified its key priorities to inform the region's work plan for 2023-24.

Under the leadership of NEPOOL's six elected Vice-Chairs, the members of each Sector were invited to identify that Sector's key business priorities for next year. The NEPOOL Officers then worked together with



that list of Sectors' priorities to find consensus on the highest NEPOOL-wide priorities for the region and reported those consensus priorities back to NEPOOL members as well as to ISO-NE leadership and State officials. See page 47 of this Annual Report for additional information on NEPOOL's 2023 Priorities.

With the informed and active support and engagement of our members, I am confident that this proactive approach to regional business planning has helped to ensure NEPOOL's constructive input and influence on the development of the annual work plan, and I look forward to working in 2023 to build upon this strong foundation.

### Pathway Ahead—Working Together

Much work remains in solving long-dated and ever-evolving reliability risks to ensure a reliable pathway to New England's clean energy future.

NEPOOL has identified the energy adequacy/security topic as a top priority for the year ahead, and it is clear that the States, the FERC, and ISO-NE agree. One of ISO-NE's key Anchor Projects in the 2023 Work Plan is for the ISO to work with stakeholders to model and assess energy security risks from extreme weather under a changing power system and to also commence focused work and discussion among NEPOOL and the States to more precisely define New England's energy adequacy challenges.

Separately, as detailed more fully in this Annual Report, the ISO-NE commissioned Pathways Study Report was finalized and published earlier this year. This completed quantitative assessment of alternative market frameworks that could be employed to help advance New England's clean energy transition provides the region with useful information to support decision-making on next steps.

As we collectively move forward to address the challenges facing New England's power grid, the NEPOOL forum will continue to be of critical importance for the region. In the days and years ahead, substantial effort, candid dialogue, and good faith collaboration and negotiation among all affected parties within the NEPOOL process will be needed to tackle the hard problems together and to reach agreement on issues or reforms that will help us achieve a reliable transition to our decarbonized future.



I am confident that by working together, we can find the right pathway(s) to support a reliable and clean energy future for New England, and I thank the Participants for allowing me the privilege of chairing this critically important stakeholder process.

David A. Cavanaugh  
Chairman, NEPOOL Participants Committee

**Working  
Together**

## About NEPOOL



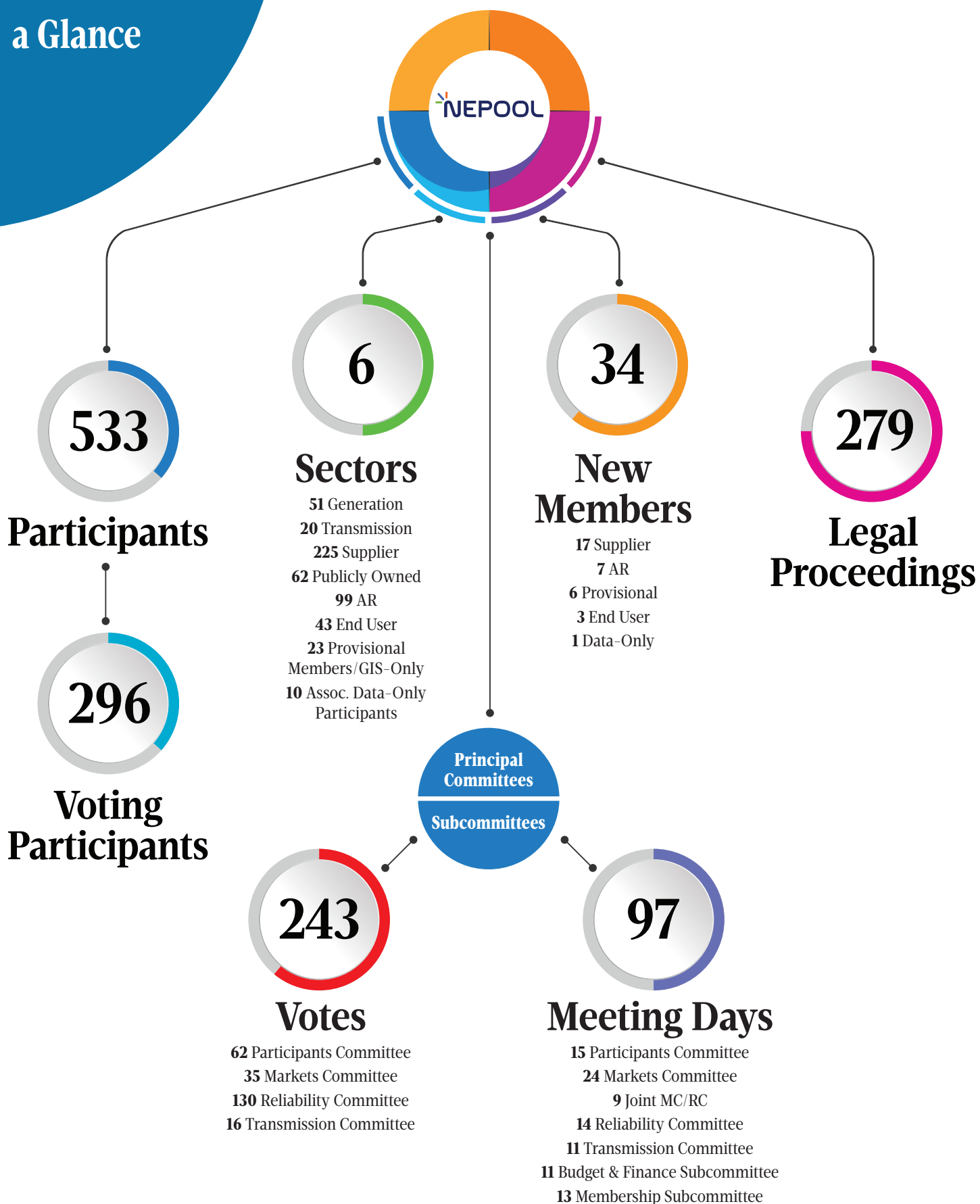
 **NEPOOL**

# Seeking Common Ground





# NEPOOL at a Glance



Working  
Together

WORKING TOGETHER  
FUTURE  
GRID  
TRANSITION  
RELIABILITY  
RESOURCE  
MIX  
SOLAR  
WIND  
STORAGE  
NUCLEAR  
NATURAL GAS  
HYDRO  
OIL

TRANSMISSION SOLUTIONS

# NEPOOL Participant Processes

The Participants Committee is the highest-level NEPOOL 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, and delegates some responsibilities to, two standing, self-selected subcommittees – the Budget & Finance Subcommittee and the Membership Subcommittee.

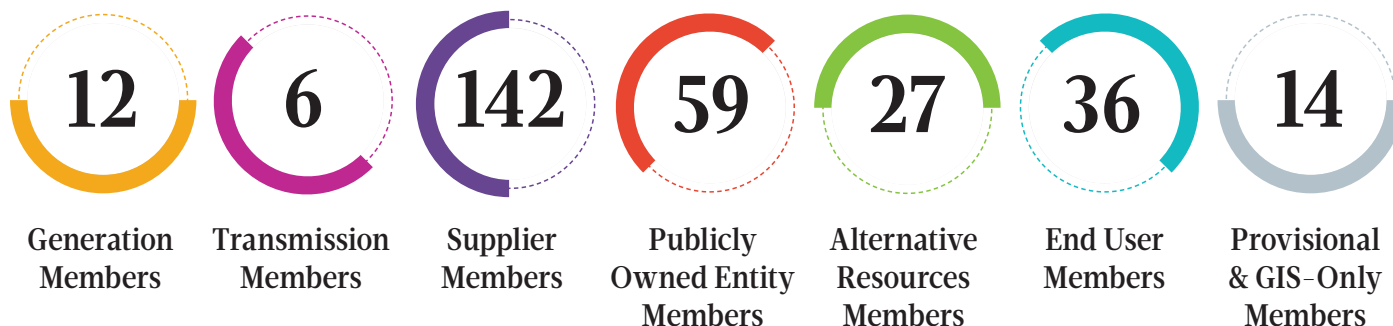
The Participants Committee has eight elected officers. One officer is elected from each of the six voting Sectors to serve as a Vice-Chair of the Sector. The Committee then elects a Chair from among those six Sector representatives. The Committee also elects a Secretary and an Assistant Secretary.

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

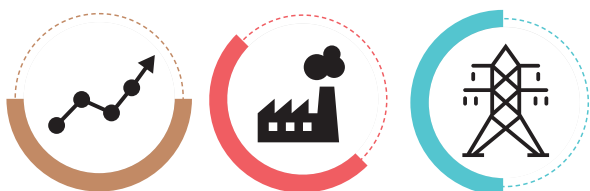


**Participants Committee**  
NEPOOL Chair and Five Vice-Chairs  
One Officer per Sector

**Voting Members**



**Technical Committees, ISO-NE Chairs**  
NEPOOL Vice-Chairs



**Markets Committee**  
**Reliability Committee**  
**Transmission Committee**

**Standing Subcommittees,**  
NEPOOL Chairs



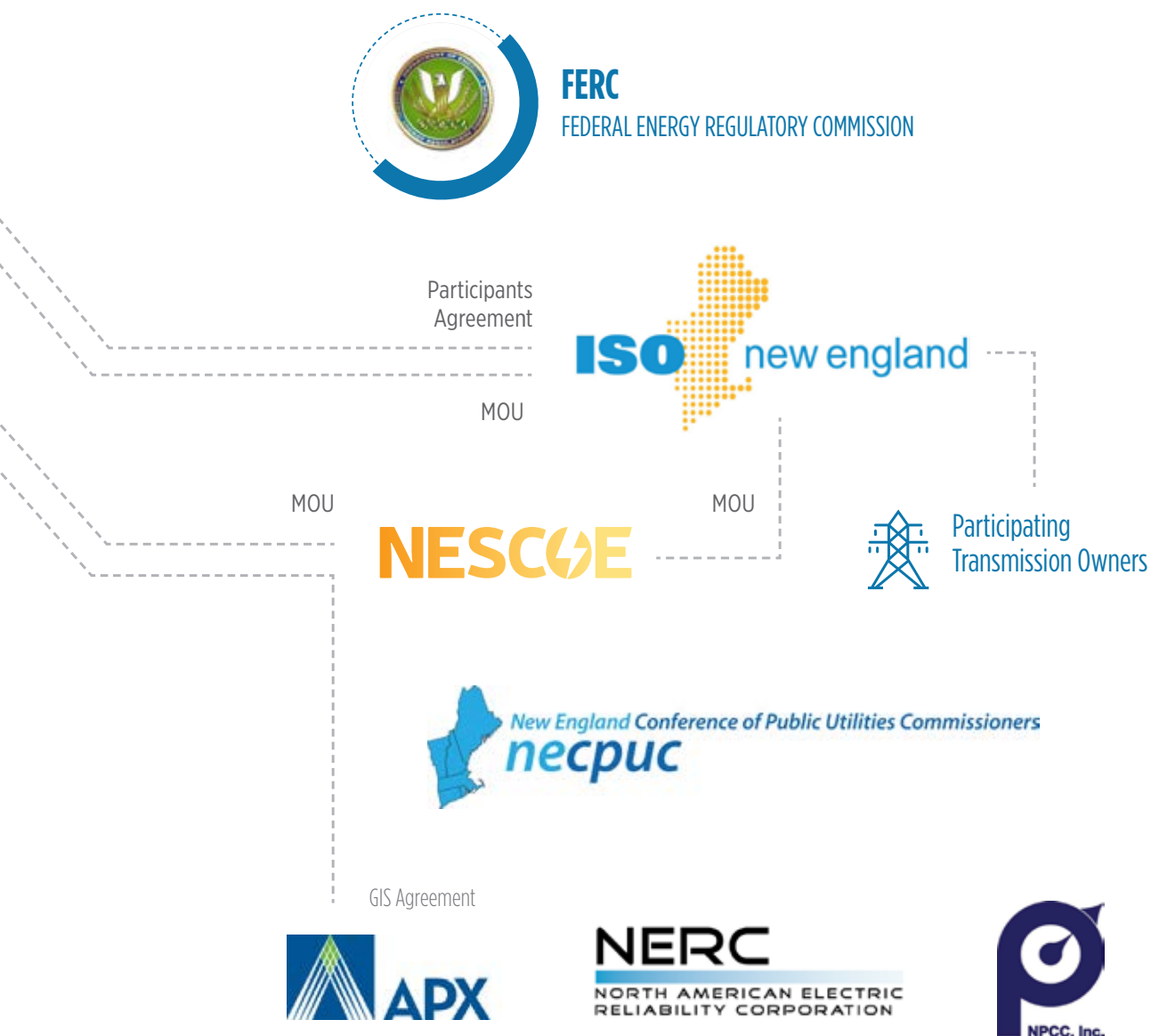
**Budget & Finance Subcommittee**  
**Membership Subcommittee**



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

NEPOOL is the stakeholder voting organization that advises on all matters relating to New England's competitive wholesale market rules and transmission tariff design. Its stakeholder processes are designed to maximize active and informed participation and negotiations to reach 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 clarifies disagreements for resolution by the FERC as appropriate. NEPOOL acts through votes of the Principal Committees or by delegation to its subcommittees or elected or designated representatives.



# NEPOOL Membership

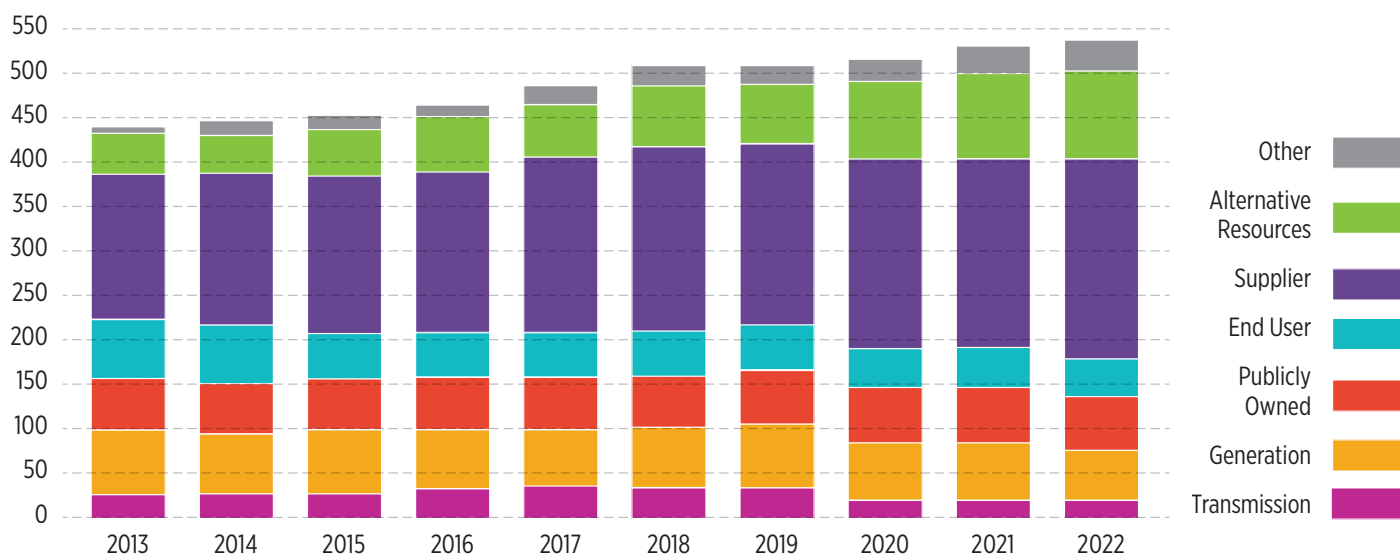
**NEPOOL membership now stands over 530 strong, having added 34 new members in 2022.**

The Participants Committee elects six Participant officers, the Chair and five Vice-Chairs from among the six NEPOOL Sectors: Alternative Resources, End User, Generation, Publicly Owned Entity, Supplier, and Transmission.

David Cavanaugh served as Chair of the Participants Committee in 2022, having been elected to a second term in December 2021. The Participants Committee meets generally the first Thursday of every month and is the key governing Committee on NEPOOL matters.

The Participants Committee is supported by three Technical Committees, the Markets, Reliability and Transmission Committees, and by two standing Subcommittees, the Budget & Finance and the Membership Subcommittee.

## NEPOOL Membership Continues to Grow



# NEPOOL Leadership 2022



Pictured above from left to right are José A. Rotger (Transmission Committee Vice-Chair), William S. Fowler (Markets Committee Vice-Chair), Sarah Bresolin (Participants Committee Vice-Chair and Membership Subcommittee Chair), Aleksandar Mitreski (Participants Committee Vice-Chair), David A. Cavanaugh (Participants Committee Chairman), Jason Frost (Participants Committee Vice-Chair), Robert de R. Stein (Reliability Committee Vice-Chair), Michelle C. Gardner (Participants Committee Vice-Chair), Thomas W. Kaslow (Budget & Finance Subcommittee Chair), and Francis J. Ettori, Jr. (Participants Committee Vice-Chair).

# Participant Listing

**A** Acadia Center  
Acadia Renewable Energy, L.L.C.  
Accelerate Renewables, LLC  
Actual Energy Inc.  
Acushnet Company  
Advanced Energy Economy Inc.  
AES Renewable Holdings, LLC  
Aesir Power, LLC  
Algonquin Energy Services Inc.  
Algonquin Gas Transmission, LLC  
Alpha Gas and Electric, LLC  
Alphataraxia Nickel LLC  
Altop Energy Trading LLC  
AM Trading Solutions, LLC  
Ameresco CT LLC  
American Petroleum Institute  
American Power & Gas of MA, LLC  
American PowerNet Management, LP  
AMP Solar US Holdings Inc.  
Ampersand Energy Partners LLC  
Anbaric Development Partners, LLC  
Antrim Wind Energy LLC  
Appian Way Energy Partners East, LLC  
Archer Energy, LLC  
Ashburnham Municipal Light Plant  
Associated Industries of Massachusetts  
Astral Energy LLC  
Astral Infrastructure Holdings, LLC  
Athens Energy LLC  
Atlantic Energy MA, LLC  
Avangrid Networks, Inc.  
Avangrid Renewables, LLC  
Axpo U.S. LLC  
**B** Backyard Farms LLC  
Backyard Farms Energy, LLC  
Bath Iron Works Corp.  
Bear Swamp Power Company LLC  
Belmont Municipal Light Dept  
Berkshire Power Company, LLC  
Berlin Station, LLC  
Black Bear Hydro Partners, LLC  
Blackstone Hydro, Inc.  
Block Island Utility District  
Blue Sky East, LLC  
Blue Sky West, LLC  
Blueprint Power Technologies Inc.  
Boston Energy Trading and Mktg LLC  
Boylston Municipal Light Dept  
BP Energy Company  
BP Energy Retail LLC  
Braintree Electric Light Dept  
Bridgeport Fuel Cell LLC  
Bridgewater Power Company, L.P.  
Brookfield Energy Mktg LP  
Brookfield Renewable Energy Mktg US  
Brookfield Renewable Trading and Mktg  
Brookfield White Pine Hydro LLC

**C** Brown Bear II Hydro, Inc.  
Bruce Power, Inc.  
BSW ProjectCo LLC  
Bucksport Generation LLC  
Burlington Electric Dept  
C.N. Brown Electricity, LLC  
Calpine Energy Services, LP  
Calpine Energy Solutions, LLC  
Canandaigua Power Partners, LLC  
Cape Light Compact JPE  
Cassadaga Wind LLC  
Castleton Comm. Merchant Trading  
Catalyst Power & Gas, LLC  
Celtic Power Analytics, LLC  
Central Maine Power Company  
Central Rivers Power MA, LLC  
Central Rivers Power NH, LLC  
Centre Lane Trading Limited  
Champion Energy Mktg LLC  
Champlain VT, LLC  
Chester Municipal Electric Light Dept  
Chicopee Municipal Lighting Plant  
Choice Energy LLC  
Cianbro Energy, LLC  
Citigroup Energy Inc.  
CleanChoice Energy, Inc.  
CLEAResult Consulting Inc.  
Clearview Electric Inc.  
Clearway Power Mktg LLC  
CommonWealth Resource Management  
Community Eco Power, LLC  
Competitive Energy Services, LLC  
Concord Municipal Light Plant  
Concurrent LLC  
Connecticut Central Energy, LLC  
Connecticut Light and Power Company  
Connecticut Materials Innovations and Recycling Authority  
Conn. Mun. Electric Energy Coop.  
Conn. Office of Consumer Counsel  
Conn. Transm'n Mun. Elec. Energy Coop.  
Conservation Law Foundation  
Consolidated Edison Co. of New York, Inc.  
Consolidated Edison Development, Inc.  
Consolidated Edison Energy, Inc.  
Consolidated Edison Solutions, Inc.  
Constellation Energy Generation  
Constellation NewEnergy, Inc.  
Covanta Energy Mktg, LLC  
CPV Towantic, LLC  
CPV Valley, LLC  
Cricket Valley Energy Center, LLC  
Cross-Sound Cable Company, LLC  
CS Berlin Ops, Inc.  
CWP Energy  
Cypress Creek Renewables, LLC  
**D** Danske Commodities US LLC  
Danvers Electric Division  
Darby Energy, LLC  
Dartmouth Power Associates, L.P.  
David Energy Supply, LLC  
DC Energy, LLC  
Deepwater Wind Block Island, LLC  
Derby Fuel Cell, LLC  
Devonshire Energy LLC  
DFC ERG CT, LLC  
Dichotomy Collins Hydro LLC  
Direct Energy Business, LLC  
Direct Energy Business Mktg, LLC  
Discount Power, Inc.  
Dominion Energy Generation Mktg  
Dominion Energy Nuclear Conn.  
DTE Energy Trading, Inc.

**E** Durgin and Crowell Lumber Co.  
DWW Solar II, LLC  
Dynasty Power Inc.  
Dynegy Mktg and Trade, LLC  
Ebsen LLC  
EDF Energy Services, LLC  
EDF Trading North America, LLC  
EDP Renewables North America LLC  
eKapital Investments LLC  
Electricity Maine, LLC  
Electricity N.H., LLC d/b/a E.N.H. Power  
Elektrisola, Inc.  
Eligo Energy, LLC  
Emera Energy Services Sub. No. 1 LLC  
Emera Energy Services Sub. No. 2 LLC  
Emera Energy Services Sub. No. 3 LLC  
Emera Energy Services Sub. No. 4 LLC  
Emera Energy Services Sub. No. 6 LLC  
Emera Energy Services Sub. No. 12 LLC  
Emera Energy Services Sub. No. 15 LLC  
Enel Trading North America, LLC  
Enel X North America, Inc.  
Energy Management, Inc.  
Energy New England LLC  
Energy GPS LLC  
Energy Harbor LLC  
Energy Plus Holdings LLC  
Energy Storage Resources, LLC  
Enerwise Global Technologies, LLC  
d/b/a CPower  
Engelhart CTP (US) LLC  
ENGIE Energy Mktg NA, Inc.  
ENGIE Resources LLC  
EnPowered USA Inc.  
EnvaPower, Inc.  
Environmental Defense Fund  
ESI Northeast Energy GP, Inc.  
Essential Power Massachusetts, LLC  
Essential Power Newington, LLC  
ETC Endure Energy, LLC  
Evergreen Wind Power II, LLC  
Evergreen Wind Power III, LLC  
Eversource Energy Trans. Ventures  
Excelerate Energy LP  
**F** First Point Power, LLC  
FirstLight Power Management LLC  
Fisher Road Solar I LLC  
Fitchburg Gas and Electric Light Company  
FPL Energy Mason, LLC  
FPL Energy Wyman, LLC  
FPL Energy Wyman IV, LLC  
Freeport Commodities LLC  
Fusion Solar Center, LLC  
**G** Galt Power Inc.  
Garland Manufacturing Company  
Garland Power Company  
Gas Recovery Systems, LLC  
GBE Power Inc.  
GB II Connecticut LLC  
GB II New Haven LLC  
Genbright, LLC  
GenConn Energy LLC  
Generate Colchester Fuel Cells, LLC  
Generation Bridge Conn. Holdings, LLC  
Generation Bridge M&M Holdings, LLC  
Georges River Energy, LLC  
Georgetown Municipal Light Dept  
Granite Reliable Power, LLC  
Gravel Pit Solar, L.L.C.  
Gravity Renewables, Inc.  
Great American Gas & Electric, LLC  
Great River Hydro, LLC  
Green Berkshires, Inc.

Green Development, LLC  
d/b/a Wind Energy Development  
Green Mountain Energy Company  
Green Mountain Power Corp.  
Green Power USA, LLC  
Grid Power Direct, LLC  
Gridmatic Isotria LLC  
Groton Electric Light Dept  
Group628, LLC  
Groveland Electric Light Dept  
GSP Lost Nation LLC  
GSP Merrimack LLC  
GSP Newington LLC  
GSP Schiller LLC  
GSP White Lake LLC  
**H** H.Q. Energy Services (U.S.) Inc.  
Hammond Belgrade Energy LLC  
Hammond Lumber Company  
Hampshire Power Corp.  
Hancock Wind, LLC  
Hanover, NH  
Harborside Energy of Massachusetts, LLC  
Hartree Partners, LP  
Harvard Dedicated Energy Limited  
High Liner Foods (USA) Inc.  
Hingham Municipal Lighting Plant  
Holden Municipal Light Dept  
Holyoke Gas & Electric Dept  
Howard Wind LLC  
Hudson Energy Services, LLC  
Hudson Light and Power Dept  
Hull Municipal Lighting Plant  
Hydroland, Inc.  
**I** Ictec Energy Services, Inc.  
IDT Energy, Inc.  
In Commodities US LLC  
InBalance, Inc.  
Independence Energy Group LLC  
Indra Power Business CT LLC  
Indra Power Business MA LLC  
Industrial Energy Consumer Group  
Industrial Power Services Corp.  
Inspire Energy Holdings, LLC  
Interconnect Energy Storage LLC  
Interstate Gas Supply, Inc.  
Invenergy Energy Management LLC  
Invenia Technical Computing Corp.  
Ipswich Municipal Light Dept  
**J** J. Aron & Company LLC  
J.P. Morgan Ventures Energy Corp.  
Jericho Power LLC  
Josco Energy MA LLC  
Jupiter Power LLC  
Just Energy (U.S.) Corp.  
**K** KCE CT 1, LLC  
KCE CT 2, LLC  
KCE CT 5, LLC  
KCE CT 7, LLC  
KCE CT 8, LLC  
KCE CT 9, LLC  
Kendall Green Energy LLC  
Kimberly-Clark Corporation  
Kleen Energy Systems, LLC  
**L** Leapfrog Power, Inc.  
Leicester Street Solar, LLC  
Liberty Utilities (Granite State Electric)  
Littleton (MA) Electric Light Dept  
Littleton (NH) Water and Light Dept  
Long Island Lighting Company d/b/a LIPA  
Longreach Energy, LLC  
Longwood Medical Energy Collaborative  
LS Power Grid Northeast, LLC  
MA Operating Holdings, LLC



**M** Macquarie Energy, LLC  
Macquarie Energy Trading LLC  
Madison BTM, LLC  
Madison Electric Works  
Madison ESS, LLC  
MAG Energy Solutions, Inc.  
Maine Power LLC  
Maine Public Advocate Office  
Maine Skiing, Inc.  
Major Energy Electric Services  
Manchester Methane, LLC  
Manchester Street, L.L.C.  
Mansfield Municipal Electric Dept  
Maple Energy, LLC  
Marble River, LLC  
Marblehead Municipal Light Dept  
Marco DM Holdings, L.L.C.  
Marie's Way Solar I, LLC  
Mass Solar I, LLC  
Mass. Attorney General's Office  
Mass. Bay Transportation Authority  
Mass. Climate Action Network  
Mass. Development Finance Agency  
Mass. Div. of Capital Asset Management  
Mass. Electric Company  
Mass. Mun. Wholesale Elec. Co.  
Mass. Port Authority  
MATEP LLC  
Maven Energy, LLC  
McCallum Enterprises I LP  
Mercuria Energy America, LLC  
Merrill Lynch Commodities, Inc.  
Merimac Municipal Light Dept  
Messalonskee Stream Hydro, LLC  
Messer Energy Services, Inc.  
MFT Energy US I LLC  
MidAmerican Energy Services, LLC  
Middleborough Gas and Electric Dept  
Middleton Municipal Electric Dept  
Millennium Power Company, LLC  
Mintz, Samuel J.  
Moore Company  
Moore Energy LLC  
Morgan Stanley Capital Group, Inc.  
MP2 Energy LLC  
MP2 Energy NE LLC  
MPower Energy LLC  
Nalcor Energy Mktg  
Narragansett Electric Company  
National Gas & Electric, LLC  
Natural Resources Defense Council  
Naugatuck Avenue Storage LLC  
Nautilus Power, LLC  
Nautilus Solar Energy, LLC  
NDC Partners LLC  
NEPM II, LLC  
New Brunswick Energy Mktg Corp.  
New England Battery Storage, LLC  
New England Power Company  
New England Power Generators Assoc.  
New England Wire Technologies Corp.  
New Hampshire Electric Cooperative, Inc.  
New Hamp. Office of Consumer Advocate  
New Hampshire Transmission, LLC  
New York State Electric & Gas, Inc.  
Nexamp Markets, LLC  
NextEra Energy Mktg, LLC  
NextEra Energy Maine, Inc.  
NextEra Energy Resources, LLC  
NextEra Energy Seabrook LLC  
Nexus Energy Inc.  
NGV US Transmission Inc.  
Niagara Wind Power, LLC  
NN8, LLC  
Nordic Energy Services, LLC

**O**

**P**

**R**

**S**

Norman Street ES LLC  
North American Power and Gas, LLC  
North Attleborough Electric Dept  
North East Offshore, LLC  
North Stonington Solar Center, LLC  
Northern States Power Company  
Norwalk Power LLC  
Norwood Municipal Light Dept  
NRG Curtailment Solutions, Inc.  
NRG Kiosk LLC (d/b/a Power Kiosk)  
NRG Power Mktg LLC  
NS Power Energy Mktg Inc.  
NSTAR Electric Company  
NTE Connecticut, LLC  
Number Nine Wind Farm LLC  
Nylon Corporation of America  
Ocean State BTM LLC  
Octopus Energy LLC  
Old Middleboro Road Solar, LLC  
Ontario Power Generation Energy Trading  
Ontario Power Generation Inc.  
Oxford Energy Center, LLC  
Pacific Summit Energy, LLC  
Palm Energy LLC  
Palmco Power MA, LLC d/b/a Indra Energy  
Paper Birch Energy, LLC  
Pascoag Utility District  
Pawtucket Power Holding Company  
Paxton Municipal Light Dept  
Peabody Municipal Light Plant  
Peninsula Power, LLC  
Pioneer Hydro Electric Co., Inc.  
Pixelle Energy Services LLC  
Plainfield Renewable Energy, LLC  
Plant-E Corp.  
Power Ledger Pty Ltd  
Power Supply Services, LLC  
PowerOptions, Inc.  
Princeton Municipal Light Dept  
Protor Energy, LLC  
Provider Power Mass, LLC  
PSEG Energy Resources & Trade LLC  
Public Service Co. of New Hampshire  
Putnam Hydropower, Inc.  
Rainbow Energy Mktg Corp.  
Reading Municipal Light Plant  
Record Hill Wind LLC  
ReEnergy Stratton LLC  
Reliant Energy Northeast LLC  
Renaissance Power & Gas, Inc.  
Rensselaer Generating LLC  
Repsol Energy North American Corp.  
Residents Energy, LLC  
Revere Power, LLC  
Rhode Island Bioenergy Facility, LLC  
Rhode Island Bioenergy, LLC  
Rhode Island Div. of Pub. Utils. Carriers  
Rhode Island Engine Genco, LLC  
Rhode Island State Energy Center, LP  
Rivercrest Power-SOUTH, LLC  
Rocky Gorge Corp.  
Roctop Investments Inc.  
Rodan Energy Solutions (USA) Inc.  
Roseton Generating LLC  
Rowley Municipal Light Plant  
RoxWind LLC  
RPA Energy Inc.  
d/b/a Green Choice Energy  
Rumford ESS, LLC  
Russell Municipal Light Dept  
Salem Harbor Power Development LP  
Saracen Energy East LLC  
Saracen Power LLC  
Seneca Energy II, LLC  
SFE Energy Massachusetts, Inc.

**T**

**U**

Sheldon Energy LLC  
Shell Energy North America (US) L.P.  
Shipyard Brewing Co., LLC  
Shipyard Energy, LLC  
Shrewsbury Electric & Cable Ops.  
Sky View Ventures, LLC  
SmartEnergy Holdings, LLC  
SmartestEnergy US LLC  
SociVolta Inc.  
Somerset Power LLC  
South Hadley Electric Light Dept  
SP Transmission, LLC  
Spark Energy, LLC  
Spruce Mountain Wind, LLC  
Spotlight Power LLC  
SRETrade, Inc.  
St. Anselm College  
Starion Energy, Inc.  
Sterling Municipal Electric Light Dept  
Stetson Holdings, LLC  
Stetson Wind II, LLC  
Stonepeak Kestrel Energy Mktg  
Stones DR, LLC  
Stored Solar J&WE, LLC  
Stowe Electric Dept  
Summer Energy Northeast, LLC  
Sunnova Energy Corp.  
Sunrun Inc.  
Sustaining Power Solutions LLC  
SWEB Development USA, LLC  
Syncarpha Billerica, LLC  
Syncarpha Bondsville, LLC  
Syncarpha Hancock, LLC  
Syncarpha Lexington, LLC  
Syncarpha North Adams, LLC  
SYSO LLC  
Talen Energy Mktg, LLC  
Tangent Energy Solutions, Inc.  
Taunton Municipal Lighting Plant  
TEC Energy Inc.  
Templeton Mun. Light and Water Plant  
Tenaska Power Management, LLC  
Tenaska Power Services Co.  
Texas Retail Energy, LLC  
The Energy Consortium  
Thordin ApS  
Three Corners Solar, LLC  
Tidal Energy Mktg (U.S.) L.L.C.  
Titan Gas, LLC d/b/a CleanSky Energy  
Town Square Energy, LLC  
Trafigura Trading LLC  
TrailStone Energy Mktg, LLC  
TransAlta Energy Mktg (U.S.) Inc.  
Transgrid Midwest LLC  
Transource New England, LLC  
Triolith Energy Fund, LP  
TrueLight Commodities, LLC  
Tyr Energy, LLC  
UIL Distributed Resources LLC  
Umber LLC  
Uncia Energy, LP - Series G  
Union Atlantic Electricity, Inc.  
Union of Concerned Scientists, Inc.  
Uniper Global Commodities North America  
United Illuminating Company, The  
Unitil Energy Systems, Inc.  
UNITIL Power Corp.  
University of Massachusetts at Amherst  
University System of New Hampshire  
Utility Services of Vermont LLC  
Valcour Wind Energy, LLC  
VECO Power Trading, LLC  
Verde Energy USA, Inc.  
Vermont Electric Cooperative  
Vermont Electric Power Company

**V**

**W**

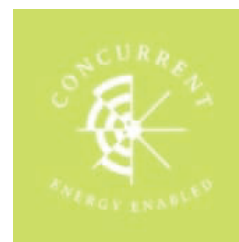
**X**

**Y**

**Z**

Vermont Energy Investment Corp.  
Vermont Public Power Supply Authority  
Vermont Transco LLC  
Vermont Wind  
Versant Power  
Village of Hyde Park (VT) Electric Dept  
Vineyard Reliability LLC  
Vineyard Wind LLC  
Vineyard Wind I LLC  
Viridity Energy Solutions, Inc.  
Vitol Inc.  
Voltus Inc.  
Wakefield Municipal Gas and Light Dept  
Walden Renewables Development LLC  
Wallingford, CT, Dept of Pub. Utils. Elec. Div.  
Waterbury Generation LLC  
Waterside Power, LLC  
WATTIFI INC.  
Weaver Wind, LLC  
Wellesley Municipal Light Plant  
West Boylston Municipal Light Plant  
West Medway II, LLC  
Westfield ESS LLC  
Westfield Gas & Electric Light Dept  
Wheelabrator North Andover Inc.  
Windham Energy Center LLC  
WM Renewable Energy, LLC  
Wolfeboro Municipal Electric Dept  
Wolverine Holdings, L.P.  
Woods Hill Solar, LLC  
WP&G Holdings, LLC  
XOOM Energy, LLC  
Yellow Jacket Energy, LLC  
Yes Energy, LLC  
Z-TECH LLC

# 34 New Participants in 2022



MFT Energy US 1 LLC  
(Supplier)

KCE CT 5, LLC; KCE CT 7, LLC;  
KCE CT 8, LLC; KCE CT 9, LLC  
(Provisional Members)

Concurrent LLC  
(Supplier)



Maven Energy, LLC  
(Supplier)



Derby Fuels Cell, LLC  
(AR)



Windham Energy Center  
(Provisional Member)



Leapfrog Power, Inc.  
(Provisional Member)



Sunnova Energy Corporation  
(AR)



Ebsen LLC and Umber LLC  
(Supplier)



Sheldon Energy LLC  
(Supplier)



EnPowered USA, Inc.  
(Supplier)



(End User Sector)





Tidal Energy Marketing (U.S.) LLC  
(Supplier)



RI Division of Public  
Utilities and Carriers  
(End User)



Altop Energy Trading, LLC  
(Supplier)



Emera Energy Services Sub. No.3 LLC  
(Supplier)



AMP Solar US Holdings Inc.  
(AR)



Octopus Energy LLC  
(Supplier)



Indra Power Business CT LLC  
Indra Power Business MA LLC  
(Supplier)

**Sam Mintz**

(End User)



Danske Commodities US LLC  
(Supplier)



Rhode Island Bioenergy, LLC  
(AR)



Nexamp Markets, LLC  
(Supplier)



NRG Kiosk LLC (d/b/a Power Kiosk)  
(Data-Only Participant)



Spotlight Power LLC  
(Supplier)



Leicester Street Solar, LLC  
Old Middleboro Road Solar, LLC  
(AR)



# NEPOOL Sectors

## Diversity in and Among Sectors

NEPOOL acts by vote of its Participants, and the 533 Participants (as of November 30) vote on matters by Sector. Each of NEPOOL's six Sectors have certain criteria that Participants must meet. A Participant and all of its related affiliates are entitled only to one vote in, and can only join one of, NEPOOL's six Sectors, regardless of how many Sectors for which they might qualify.

## NEPOOL Voting. Sector Members

NEPOOL's six Sectors generally have equal aggregate votes (Voting Shares). Within each Sector, individual voting members generally have an equal per capita vote. To qualify as an individual voting member, Participants must meet certain criteria and/or minimum thresholds. In certain circumstances, members may (and some must) be represented by a group voting member. Group voting members and members required to vote with their related affiliates are entitled to split their votes to reflect the diversity of those they represent.

## Non-Sector Members

NEPOOL also has opportunities for Entities that are interested in joining NEPOOL but are not eligible to participate in any Sector to join NEPOOL. For example, Entities that are in the early stage of developing resources in New England that would qualify them for Sector membership, including a show of interest in obtaining a capacity supply obligation, can join as Provisional Members. Those members, to the extent they are not affiliated with a voting member, can vote in a group seat, with the group having a total vote of one percent (or less if there are not at least five Provisional Members). Energy sector trade associations and gas industry participants can join as Associate Non-Voting Participants, with the opportunity to participate as a member in all NEPOOL meetings, though, as the name suggests, without a vote or its representatives designated to serve as a committee officer. Non-Sector members, including the Provisional Members and the non-voting Participants, are identified on page 41 of this Annual Report.

**Generation**  
VOTING  
PARTICIPANTS

12

**Transmission**  
VOTING  
PARTICIPANTS

6

**Supplier**  
VOTING  
PARTICIPANTS

142

**Publicly  
Owned Entity**  
VOTING  
PARTICIPANTS

59

**Alternative  
Resources**  
VOTING  
PARTICIPANTS

27

**End User**  
VOTING  
PARTICIPANTS

36

**Provisional  
Member  
Group Seat**  
VOTING  
PARTICIPANTS

14

# Alternative Resources Sector

Alternative Resources (AR) Sector members are providers of renewable generation, distributed generation, demand response or energy efficiency.

The AR Sector is subdivided into the following three separate Sub-Sectors:

- **Renewable Generation Sub-Sector** includes Participants who produce energy through the use of wind, solar, hydro, bio/refuse, or fuel cells.
- **Distributed Generation Sub-Sector** includes Participants who either produce electricity at the point of consumption or have grid-connected energy storage devices.
- **Load Response Sub-Sector** includes Participants that are paid through the wholesale power market for reducing or shifting loads on the bulk power system in ways that are designed to reduce energy needed from supply resources.

Within these Sub-Sectors, resources with at least 5 MWs located in the New England Control Area are assigned individual votes if they wish. All other members in the Sub-Sectors vote through a group seat in their Sub-Sector, with each group seat assigned a single vote that can be subdivided among those in the group.



## Alternative Resources Sector Members

### Renewable Generation Sub-Sector

#### Central Rivers Power MA, LLC

Central Rivers Power NH, LLC  
Pawtucket Power Holding Co.  
Waterbury Generation LLC

#### Covanta Energy Marketing, LLC

Cypress Creek Renewables, LLC

#### DFC ERG CT, LLC

Bridgeport Fuel Cell, LLC  
Derby Fuel Cell, LLC

#### ENGIE Energy Marketing NA, Inc.

ENGIE Resources LLC  
Genbright, LLC  
MATEP LLC

#### Great River Hydro, LLC

Generation Bridge Conn. Holdings  
Generation Bridge M&M Holdings  
GB II Connecticut LLC  
GB II New Haven LLC

#### Jericho Power, LLC

Enerwise Global Technologies  
d/b/a CPower  
LS Power Grid Northeast, LLC  
Stones DR, LLC

#### Onward Energy

Blue Sky West, LLC  
Evergreen Wind Power II, LLC  
Hancock Wind, LLC

#### Stored Solar J&WE, LLC

#### Wheelabrator North Andover, Inc.

Macquarie Energy, LLC  
Macquarie Energy Trading LLC

#### WM Renewable Energy, LLC

#### AR RG Large Group Member (26) \*

AES Renewable Holdings, LLC  
Valcour Wind Energy, LLC  
Athens Energy LLC  
Cianbro Energy, LLC  
DWW Solar II, LLC  
Fusion Solar Center, LLC  
Gravel Pit Solar, L.L.C.  
Gas Recovery Systems, LLC  
Generate Colchester Fuel Cells, LLC  
Georges River Energy, LLC  
Marie's Way Solar I, LLC  
Fisher Road Solar I LLC  
Syncarpha Billerica, LLC  
Syncarpha Bondsville, LLC  
Syncarpha Hancock Solar, LLC  
Syncarpha Lexington, LLC  
Syncarpha North Adams, LLC  
Messalonskee Stream Hydro, LLC  
Nautilus Solar Energy, LLC  
North Stonington Solar Center, LLC  
Power Supply Services, LLC  
RoxWind LLC  
Rhode Island Engine Genco, LLC  
Spruce Mountain Wind, LLC  
Three Corners Solar, LLC  
Weaver Wind, LLC



#### AR RG Small Group Member (17) \*

Community Eco Power, LLC  
Commonwealth Resource Management  
Dichotomy Collins Hydro LLC  
Gravity Renewables, Inc.  
Green Development, LLC  
d/b/a Wind Energy Development  
Green Power USA, LLC  
Hydroland, Inc.  
Industrial Power Services Corp.  
Manchester Methane, LLC  
McCallum Enterprises I LP  
Pioneer Hydro Electric Co.  
Putnam Hydropower, Inc.  
Rhode Island Bioenergy, LLC  
RI Bioenergy Facility, LLC  
Rocky Gorge Corp.  
SWEB Development USA, LLC

#### Distributed Generation Sub-Sector

#### Agilitas Energy Companies

Leicester Street Solar, LLC  
Madison BTM, LLC  
Madison ESS, LLC  
New England Battery Storage, LLC  
Old Middleboro Road Solar, LLC  
Ocean State BTM LLC  
Rumford ESS, LLC

#### AMP Solar US Holdings Inc.

#### CLEAResult Consulting Inc.

#### Energy Storage Resources, LLC

#### Sunnova Energy Corp.

#### Sunrun Inc.

#### SYSO LLC

#### AR DG Small Group Member (3) \*

Acushnet Company  
Sky View Ventures LLC  
SRECTrade, Inc.

#### Load Response Sub-Sector

#### Enel X North America, Inc.

Enel Trading North America, LLC  
Woods Hill Solar, LLC

#### Icetek Energy Services, Inc.

#### Maple Energy LLC

#### Palm Energy LLC

#### Vermont Energy Investment Corporation

#### Volatus Inc.

#### AR LR Small Group Member (3) \*

Ameresco CT LLC  
Tangent Energy Solutions, Inc.  
Viridity Energy Solutions Inc.

Key: ■ Voting Members  
■ Related Persons  
\* Group Member Totals





**Sarah Bresolin**  
Vice-Chair  
Alternative Resources Sector

### 2022 New England Energy Production through Nov. 13, 2022

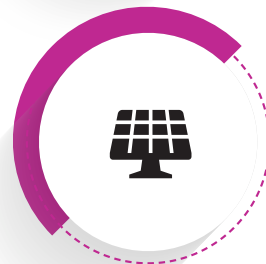
- ▶ 3,327 GWh Solar
- ▶ 3,240 GWh Wind
- ▶ 1,636 GWh Wood
- ▶ 2,909 GWh Refuse/Other
- ▶ 6,378 GWh Hydro
- ▶ 39 GWh PRD
- ▶ 17,578 GWh TOTAL

## Renewable Resources: Present and Future

**Wind**  
2022: 421 MW  
Proposed: 16,042 MW



**Solar**  
2022: 5,548 MW  
2031 Forecast:  
11,520 MW



**Energy Efficiency**  
2022 Summer Peak:  
134 MW  
Total 2022–2031:  
1,061 MW



**Hydro\***  
2022: 3,341 MW  
2025 CSO: 1,586 MW



**Active Demand  
Response**  
2022: 402 MW  
2026 CSO: 765 MW



**Electric Storage**  
2022\*\*: 1,831 MW  
Proposed\*: 9,333 MW



\* Omits Pumped Storage  
\*\* Includes Pumped Storage

### Alternative Resources Sector Notes



The AR Sector is the only Sector whose Voting Share is expressly allocated amongst specific business interests (or Sub-Sectors). As of November 30:

Sub-Sector	Participants	Voting Members	Share of AR Sector Vote
Renewable Generation	72	12	50%
Distributed Generation	16	8	25%
Load Response	11	7	25%

There over 250,000 solar power installations throughout New England totaling about 5,548 MW (nameplate), with most connected “behind the meter”.

Nearly 4,000 MW of active demand response (DR) and energy efficiency and other passive demand resources are registered in New England.

Approximately 64 MW (Summer Peak SCC) of battery storage projects have come on line since 2015.



# End User Sector

## End User Sector Members

**Acadia Center**  
**Assoc. Industries of Mass.**  
**Backyard Farms Energy, LLC**  
 Backyard Farms LLC  
**Bath Iron Works Corp.**  
 Longreach Energy, LLC  
**Cape Light Compact JPE**  
**Conn. Office of Consumer Counsel**  
**Conservation Law Foundation**  
**Durgin and Crowell Lumber Co.**  
**Elektrisola, Inc.**  
**Environmental Defense Fund**  
**Garland Manufacturing Co.**  
 Garland Power Co.  
**Green Berkshires, Inc.**  
**Hammond Lumber Company**  
 Hammond Belgrade Energy LLC  
**Hanover, NH**  
**Harvard Dedicated Energy Limited**  
 Longwood Medical Energy Collaborative  
**High Liner Foods (USA) Inc.**  
**Industrial Energy Consumer Group**  
**Maine Public Advocate Office**  
**Maine Skiing, Inc.**  
**Mass. Attorney General's Office**  
**Mass. Climate Action Network**  
**Mass. Div. of Capital Asset Mgmt.**  
**Mintz, Samuel J.**  
**Moore Company**  
 Moore Energy LLC  
**Natural Resources Defense Council**  
**New England Wire Technologies**  
**NH Office of Consumer Advocate**  
**Nylon Corporation of America**  
**PowerOptions, Inc.**  
**RI Division of Pub. Utils. and Carriers**  
**Saint Anselm College**  
**Shipyard Brewing Co., LLC**  
 Shipyard Energy LLC  
**The Energy Consortium**  
**Union of Concerned Scientists**  
**Univ. System of New Hampshire**  
**Z-TECH LLC**

Key: ■ Voting Members  
 ■ Related Persons

**End User Sector members are New England-based consumers that either purchase or generate electricity primarily for their own consumption.**



End User Sector members represent their consumer interests in the NEPOOL stakeholder process. Participants in the End User Sector also include New England-based municipalities or other governmental agencies that are not Publicly Owned Entities.

These members may buy electricity directly from the New England Markets or incidentally sell their excess electricity. Members of the End User Sector also include nonprofit groups, some representing environmental interests, and consumer advocates representing their constituents' interests in discussions of changes to markets or transmission arrangements.

## End User Sector Notes

15.2 Million Population

7.2 Million Retail Customers

89,477 GWh Total Real-Time Demand\*

\$96.02 MWh Average Yearly Wholesale Load Cost (All Hours)\*

18 Market Participant End Users (MPEUs)

5 State Consumer Advocates

12 End User Organizations

\* As of October 31, 2022



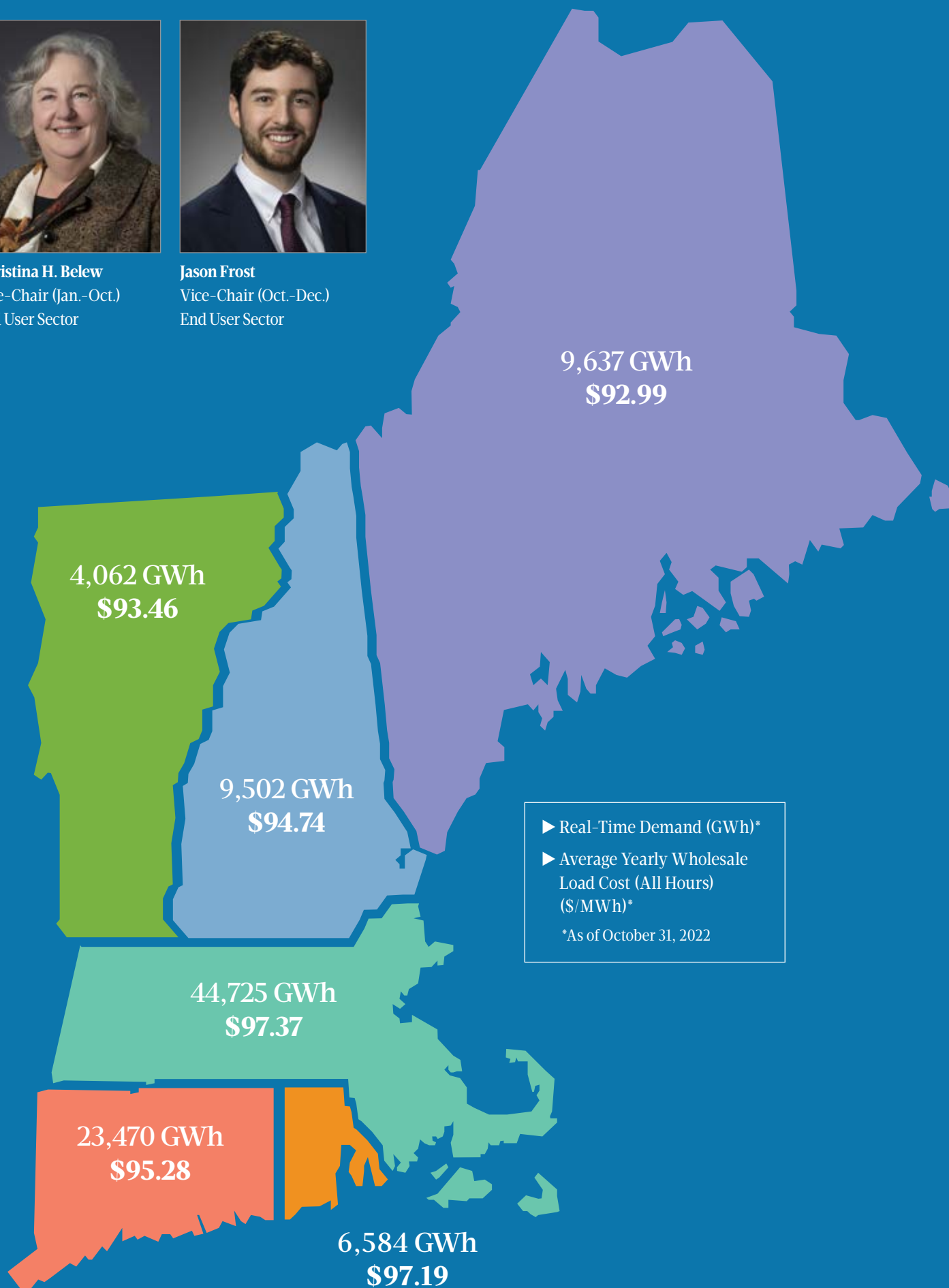




**Christina H. Belew**  
Vice-Chair (Jan.-Oct.)  
End User Sector

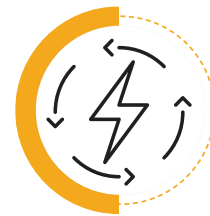


**Jason Frost**  
Vice-Chair (Oct.-Dec.)  
End User Sector



# Generation Sector

**Members in the Generation Sector 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 Forward Capacity Auction.**



Generation Sector members include independent power producers, exempt wholesale generators, and qualifying cogeneration and small power production facilities. Their facilities cover the gamut of electric generation technologies including natural gas, oil, coal, nuclear fuel and renewable resources. Unit types include combined cycle and combustion turbines, steam turbines, electric storage (e.g., pumped storage and lithium ion batteries) and renewable resources such as hydro, wind, solar, bio/refuse and fuel cells.

Each Participant in the Generation Sector that has at least 15 MW of New England-based generation is entitled to designate an individual voting member for each of the Principal Committees. Other Participants in the Generation Sector that do not elect to participate through, or otherwise do not qualify to designate, an individual voting member are represented through a group seat. At the end of 2022, the Generation Group Seat represented 15 Participants and more than 1,560 MW in aggregate. Approximately 12,314 MW are represented by the remaining 11 voting members in this Sector.

Because Participants must vote together with all their related affiliates and can join only a single Sector, there are owners of generation facilities that elect to participate in other Sectors given the other business interests of one or more of their affiliates. For the same reason, the business interests of Generation Sector members also include member companies that have significant power-marketing interests and retail load-serving interests.



## Generation Sector Notes

NEPOOL members own more than 350 generators in New England, with 31 GW of generating capability for summer and 34 GW for winter.

32,756 MW of new generation proposed for New England, including, among others, over 16,042 MW of wind power, about 6,389 MW of solar, 9,301 MW of storage, and 894 MW of natural gas power.

Over 99% of the region's electricity in 2022 was provided by natural gas, nuclear, imported electricity (mostly hydropower from Eastern Canada), renewables, and other low- or non-carbon-emitting resources.

From 2001 to 2020, New England generator annual emissions for sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon dioxide (CO<sub>2</sub>) declined by 99%, 78%, and 42%, respectively.





**Michelle C. Gardner**  
Vice-Chair  
Generation Sector

### Generation Sector Members

#### CPV Towantic, LLC

CPV Valley, LLC

#### Deepwater Wind Block Island

BSW ProjectCo LLC

North East Offshore, LLC

#### Dominion Energy Gen. Mktg

Dominion Energy Nuc. Conn.

#### FirstLight Power Management

#### Generation Group Member

Berlin Station, LLC

CS Berlin Ops, Inc.

Paper Birch Energy

Blackstone Hydro, Inc.

Bridgewater Power Co.

Brown Bear II Hydro, Inc.

Energy Management Inc.

Kendall Green Energy LLC

Millennium Power Co.

NTE Connecticut, LLC

Plainfield Renewable Energy

Record Hill Wind LLC

ReEnergy Stratton LLC

Vineyard Reliability LLC

Waterside Power, LLC

#### GSP Newington LLC

GSP Lost Nation LLC

GSP Merrimack LLC

GSP Schiller LLC

GSP White Lake LLC

#### Kleen Energy Systems, LLC

Seneca Energy II, LLC

#### Marco DM Holdings, L.L.C.

Manchester Street, L.L.C.

#### Nautilus Power, LLC

Acadia Renewable Energy

Essential Power Mass.

Essential Power Newington

RI State Energy Center

Revere Power, LLC

#### NextEra Energy Resources, LLC

ESI Northeast Energy GP

FPL Energy Mason LLC

FPL Energy Wyman IV LLC

FPL Energy Wyman LLC

Granite Reliable Power, LLC

New Hampshire Trans.

NextEra Energy Maine, LLC

NextEra Energy Marketing

NextEra Energy Seabrook

NEPM II, LLC

#### Pixelle Energy Services LLC

#### Walden Renewables Development

Key: ■ Voting Members

■ Related Persons

### 2022 NEW ENGLAND GENERATION MIX

#### Natural Gas

17,342 MW

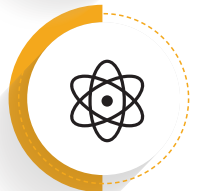
46,151 GWh



#### Nuclear

3,344 MW

22,469 GWh



#### Hydro

3,341 MW

6,142 GWh



#### Refuse/Other

445 MW

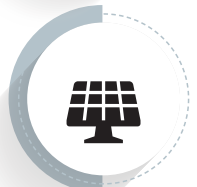
2,738 GWh



#### Solar

974 MW

3,221 GWh



#### Wind

421 MW

3,048 GWh



#### Wood

446 MW

1,578 GWh



#### Oil

6,427 MW

1,352 GWh



#### Coal

487 MW

289 GWh



**MW**=Capacity (Winter Seasonal Claimed Capability) **GWh**=Net Energy for Load through October 31, 2022



# Publicly Owned Entity Sector

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



**David A. Cavanaugh**  
NPC Chair; Elected Officer from the  
Publicly Owned Entity Sector

## Publicly Owned Entity Sector Members

**Ashburnham Mun. Light Dept**  
**Belmont Mun. Light Dept**  
**Block Island Utility District**  
**Boylston Mun. Light Dept**  
**Braintree Electric Light Dept**  
Energy New England LLC  
Utility Services of Vermont LLC  
**Burlington Electric Dept**  
**Chester Mun. Electric Light Dept**  
**Chicopee Mun. Lighting Plant**  
**Concord Mun. Light Plant**  
Energy New England LLC  
Utility Services of Vermont LLC  
**Conn. Materials Innovations and  
Recycling Authority**  
**Conn. Mun. Electric Energy Coop.**  
Conn. Transmission Mun.  
Elec. Energy Coop. d/b/a The  
Transmission Authority  
**Danvers Electric Division**  
**Georgetown Mun. Light Dept**  
**Groton Electric Light Dept**  
**Groveland Electric Light Dept**  
**Hingham Mun. Lighting Plant**  
Energy New England LLC  
Utility Services of Vermont LLC  
**Holden Mun. Light Dept**

**Holyoke Gas & Electric Dept**  
**Hudson Light and Power Dept**  
**Hull Mun. Lighting Plant**  
**Hyde Park (VT) Electric Dept**  
**Ipswich Mun. Light Dept**  
**Littleton (MA) Electric Light Dept**  
**Littleton (NH) Water and Light Dept**  
**Madison Electric Works**  
**Mansfield Mun. Electric Dept**  
**Marblehead Mun. Light Dept**  
**Mass. Bay Transportation Authority**  
**Mass. Development Finance Agency**  
**Mass. Mun. Wholesale Elec. Co.**  
**Mass. Port Authority**  
**Merrimac Mun. Light Dept**  
**Middleborough Gas & Electric Dept**  
**Middleton Mun. Light Dept**  
**New Hampshire Electric Coop.**  
**North Attleborough Electric Dept**  
**Norwood Mun. Light Dept**  
**Pascoag Utility District**  
**Paxton Mun. Light Dept**  
**Peabody Mun. Light Plant**  
**Princeton Mun. Light Dept**  
**Reading Mun. Light Dept**  
**Rowley Mun. Lighting Plant**  
**Russell Mun. Light Dept**  
**Shrewsbury Electric & Cable Ops.**  
**South Hadley Electric Light Dept**  
**Sterling Mun. Electric Light Dept**

**Stowe (VT) Electric Dept**  
**Taunton Mun. Lighting Plant**  
Energy New England LLC  
Utility Services of Vermont LLC  
**Templeton Mun. Lighting Plant**  
**University of Mass. at Amherst**  
**Vermont Electric Cooperative**  
**Vermont Public Power Supply  
Authority**  
**Wakefield Mun. Gas and Light Dept**  
**Wallingford, Town of**  
**Wellesley Mun. Light Plant**  
**West Boylston Mun. Lighting Plant**  
**Westfield Gas & Electric Light Dept**  
**Wolfeboro Mun. Electric Dept**

Key: ■ Voting Members  
■ Related Persons



## Publicly Owned Entity Sector Notes

722,869 Meters Served

11,774,951 MWh Sales

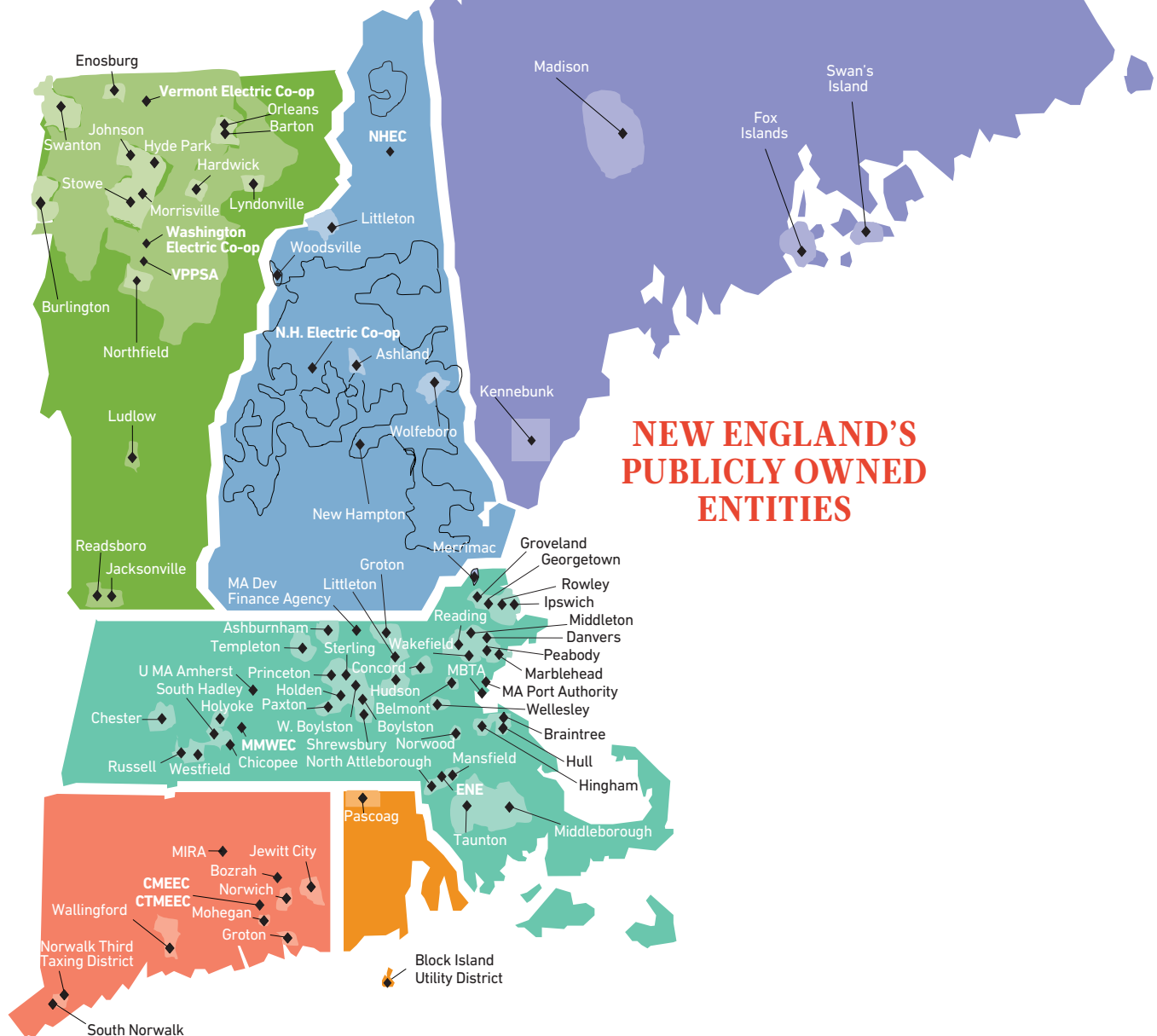
78 Public Power Systems

62 NEPOOL Participants

Approximately 2 million retail customers served

Publicly Owned Entities own 68 miles of Pool Transmission Facilities (PTF)

In 2022, Publicly Owned Entities represented 1,169 MW (winter claimed capability) of the region's generating capacity



# Supplier Sector

**Supplier  
Sector  
members  
are engaged or  
are 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 merchant transmission  
providers.**

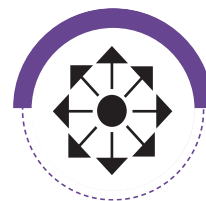
Some current members qualify for membership in the Generation, Supplier and Alternative Resources Sectors but, due to governance rules requiring membership of all related affiliates in a single Sector, have elected membership in the Supplier Sector. The Supplier Sector is by far NEPOOL's most populous Sector.

## Supplier Sector Members

**Actual Energy Inc.**  
**Aesir Power, LLC**  
**Algonquin Energy Services Inc.**  
 Liberty Utilities (Granite State Elec.)  
**Alpha Gas and Electric, LLC**  
**Alphataraxia Nickel LLC**  
**Altop Energy Trading LLC**  
**AM Trading Solutions, LLC**  
**American Power & Gas of MA, LLC**  
**American PowerNet Management, LP**  
**Ampersand Energy Partners LLC**  
**Appian Way Energy Partners East, LLC**  
**Archer Energy, LLC**  
**Astral Energy LLC**  
**Atlantic Energy MA LLC**  
**Axpo U.S. LLC**  
**Boston Energy Trading and Mktg**  
 Nexamp Markets, LLC

**BP Energy Company**  
 BP Retail Energy LLC  
**Brookfield Renewable Trading and Mktg**  
 Bear Swamp Power Co.  
 Black Bear Hydro Partners, LLC  
 Brookfield Energy Mktg LP  
 Brookfield Renew. Energy Mktg. US  
 Brookfield White Pine Hydro LLC  
 Salem Harbor Power Development  
 Hartree Partners, LP  
 TerraForm  
 Stetson Holdings, LLC  
 Blue Sky East, LLC  
 Canandaigua Power Partners, LLC  
 Evergreen Wind Power III, LLC  
 MA Operating Holdings, LLC  
 Mass Solar 1, LLC  
 Niagara Wind Power, LLC  
 Stetson Wind II, LLC  
 Vermont Wind, LLC  
**Bruce Power, Inc.**  
**C.N. Brown Electricity, LLC**  
**Cassadaga Wind LLC**  
**Castleton Comm. Merchant Trading**  
 Rensselaer Generating, LLC  
 Roseton Generating, LLC  
**Catalyst Power & Gas, LLC**  
**Celtic Power Analytics LLC**  
**Centre Lane Trading Ltd.**  
**Choice Energy LLC**  
**Citigroup Energy Inc.**  
**CleanChoice Energy, Inc.**  
**Clearview Electric Inc.**  
**Clearway Power Mktg LLC**  
 GenConn Energy LLC  
 Astral Infrastructure Holdings  
**Competitive Energy Services, LLC**  
**Connecticut Central Energy, LLC**  
**Consolidated Edison Energy, Inc.**  
 Consolidated Edison Dev.  
 Consolidated Edison Solutions  
 Consolidated Edison Co. of NY  
**Constellation Energy Generation, LLC**  
 Constellation NewEnergy, Inc.  
 West Medway II, LLC  
**Cross-Sound Cable Company, LLC**  
**CWP Energy**  
**Danske Commodities US LLC**  
**Darby Energy, LLC**  
 Protor Energy, LLC  
**David Energy Supply, LLC**  
**DC Energy, LLC**  
 VECO Power Trading, LLC  
**Devonshire Energy LLC**  
**Discount Power, Inc.**  
**DTE Energy Trading, Inc.**  
**Dynasty Power Inc.**  
**Dynegy Mktg and Trade, LLC**  
**Ebsen LLC**  
 Umber LLC  
**ECP Companies**  
 Calpine Energy Services, LP  
 Champion Energy Mktg, LLC

Calpine Energy Solutions, LLC  
 New Leaf Energy  
 North American Power and Gas  
**EDF Trading North America, LLC**  
 EDF Energy Services, LLC  
**eKapital Investments LLC**  
**Eligo Energy, LLC**  
**Emera Energy Services Sub. No. 15**  
 Emera Energy Servs. Sub. No. 1  
 Emera Energy Servs. Sub. No. 2  
 Emera Energy Servs. Sub. No. 3  
 Emera Energy Servs. Sub. No. 4  
 Emera Energy Servs. Sub. No. 6  
 Emera Energy Servs. Sub. No. 12  
 Bear Swamp Power Co.  
 NS Power Energy Mktg  
**Energy Harbor LLC**  
**Engelhart CTP (US) LLC**  
**EnPowered USA Inc.**  
**ETC Endure Energy, L.L.C.**  
**First Point Power, LLC**  
**Freepoint Commodities LLC**  
**Galt Power Inc.**  
**GBE Power Inc.**  
**Great American Gas & Electric, LLC**  
**Grid Power Direct, LLC**  
**Gridmatic Isotria LLC**  
**Group628, LLC**  
**H.Q. Energy Services (U.S.) Inc.**  
**Hampshire Power Corporation**  
**Harborside Energy of Massachusetts**  
**Howard Wind LLC**  
**IDT Energy, Inc.**  
 Residents Energy, LLC  
 Town Square Energy, LLC  
**In Commodities US LLC**  
**InBalance, Inc.**  
**Interstate Gas Supply, Inc.**  
**Invenenergy Energy Management LLC**  
 Sheldon Energy LLC  
 Invenia Technical Computing Corp  
**J. Aron & Company LLC**  
**J.P. Morgan Ventures Energy Corporation**  
**Josco Energy MA LLC**  
**Just Energy (U.S.) Corp.**  
 Hudson Energy Services, LLC  
**Kimberly-Clark Corporation**  
**Long Island Lighting Company d/b/a LIPA**  
**MAG Energy Solutions, Inc.**  
**Maine Power, LLC**  
**Marble River, LLC**  
 EDP Renewables North America  
 Number Nine Wind Farm  
 Sustaining Power Solutions  
**Maven Energy, LLC**  
**Mercuria Energy America, LLC**  
**Messer Energy Services, Inc.**  
**MFT Energy US 1 LLC**  
**MidAmerican Energy Services, LLC**  
 Merrill Lynch Commodities  
**Morgan Stanley Capital Group, Inc.**  
**MPower Energy LLC**  
**Nalcor Energy Mktg Corporation**





**NDC Partners LLC**  
**New Brunswick Energy Mktg**  
**Nexus Energy Inc.**  
**NN8, LLC**  
**Nordic Energy Services, LLC**  
**Northern States Power Company**  
**NRG Power Mktg LLC**  
 Norwalk Power LLC  
 Somerset Power LLC  
 Direct Energy Business  
 Direct Energy Business Mktg  
 Energy Plus Holdings LLC  
 Green Mountain Energy Co.  
 Independence Energy Group  
 Reliant Energy Northeast  
 NRG Curtailment Solutions  
 XOOM Energy, LLC  
**Octopus Energy LLC**  
**Ontario Power Generation Inc.**  
 Ontario Power Generation Energy  
 Trading, Inc.  
**Pacific Summit Energy LLC**  
**Palmco Power MA d/b/a Indra Energy**  
 Indra Power Business CT LLC  
 Indra Power Business MA LLC  
**Plant-E Corp.**  
**PSEG Energy Resources & Trade**  
**Rainbow Energy Mktg Corp.**  
**Renaissance Power & Gas, Inc.**  
**Rivercrest Power-SOUTH, LLC**  
**Roctop Investments Inc.**

**RPA Energy Inc.**  
**d/b/a Green Choice Energy**  
**Saracen Energy East LP**  
 Saracen Power LP  
**SFE Massachusetts, Inc.**  
**Shell Energy North America (US)**  
 Inspire Energy Holdings, Inc.  
 MP2 Energy LLC  
 MP2 Energy NE LLC  
**SmartEnergy Holdings LLC**  
**SmartestEnergy US LLC**  
**SociVolta Inc.**  
**Spark Energy, LLC**  
 Electricity Maine, LLC  
 Electricity N.H. (d/b/a E.N.H. Power)  
 Major Energy Electric Services  
 National Gas & Electric, LLC  
 Provider Power Mass, LLC  
 Verde Energy USA, Inc.  
**Spotlight Power LLC**  
**Starion Energy Inc.**  
**Stonepeak Kestrel Energy Mktg**  
 Bucksport Generation LLC  
**Summer Energy Northeast, LLC**  
**Talen Energy Mktg, LLC**  
 Dartmouth Power Associates  
 TrailStone Energy Mktg, LLC  
**TEC Energy, Inc.**  
**Tenaska Power Services Co.**  
 Tenaska Power Management, LLC  
 Berkshire Power Company, LLC

**Texas Retail Energy, LLC**  
**Thordin ApS**  
**Tidal Energy Mktg (U.S.) L.L.C.**  
 Algonquin Gas Transmission  
**Titan Gas, LLC d/b/a**  
**CleanSky Energy**  
**Trafigura Trading LLC**  
**TransAlta Energy Mktg (U.S.)**  
 Antrim Wind Energy LLC  
**Transgrid Midwest LLC**  
**Triolith Energy Fund, LP**  
**TrueLight Commodities, LLC**  
**Tyr Energy, LLC**  
**Uncia Energy, LP - Series G**  
 Peninsula Power, LLC  
**Union Atlantic Electricity**  
**Uniper Global Commodities North America**  
**Unitil Energy Systems, Inc.**  
 Fitchburg Gas and Electric Light  
 UNITIL Power Corp.  
**Vitol Inc.**  
**WATTIFI INC.**  
**Wolverine Holdings, L.P.**  
**WP&G Holdings, LLC**  
**Yellow Jacket Energy, LLC**

Key: ■ Voting Members  
 ■ Related Persons



**Aleks Mitreski**  
 Vice-Chair  
 Supplier Sector

## Supplier Sector Notes



The Supplier Sector has grown from 35 voting members at its formation in 1999 to 142 voting members in 2022 (through Nov. 30).

Over 84% of the Sector members have FERC market-based rate authority; more than 9% trade exclusively in virtuals (Increment Offers and/or Decrement Bids); and the remaining 7% of the Sector members are load aggregators who sell energy only to retail customers in New England.

30,551 MW annual FTRs awarded; 352,600 MW monthly FTRs awarded.

More than 8.9 million MW cleared virtual transactions in 2022 (projected).



# Transmission Sector

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

A Participant in the Transmission Sector can have an individual voting member if it owns PTF with an original capital investment of at least \$30 million. While Participants must meet this requirement to vote in the Transmission Sector, their related affiliates also include members that have significant non-transmission facilities in New England. Those Participants include companies with generation and power-marketing interests that operate in New England independently of their affiliated company that owns PTF.

There are also Participant affiliates 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 but are nevertheless required and/or interested in becoming Participants before meeting those requirements in order to participate in FERC Order 1000 transmission development efforts or the Forward Capacity Market (FCM).

## Transmission Sector Notes

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Over 9,000 miles of high voltage transmission lines.

---

13 transmission interconnections to New York and Canadian electricity systems.

---

16% of region's energy needs met by imports over transmission interconnections with neighboring regions in 2021.

---

Approximately \$11.7 billion in transmission investments since 2002 through 2021 with over another \$1 billion of planned future investments through 2025.

---

Over 6 million electric customers served by Transmission Sector members.

---

850 project components placed in service since 2002; with over 42 planned, proposed or under construction as of October 2022.

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5 Elective Transmission Upgrades proposed to help deliver more than 10,000 MW of clean energy to New England customers.

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Transmission infrastructure will be essential to integrate the resources necessary to meet state requirements for a clean energy future for New England, including over 16,000 MW of wind in the ISO-NE interconnection queue and potential additional hydroelectricity from Canada.

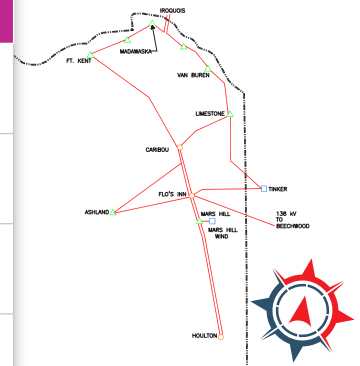
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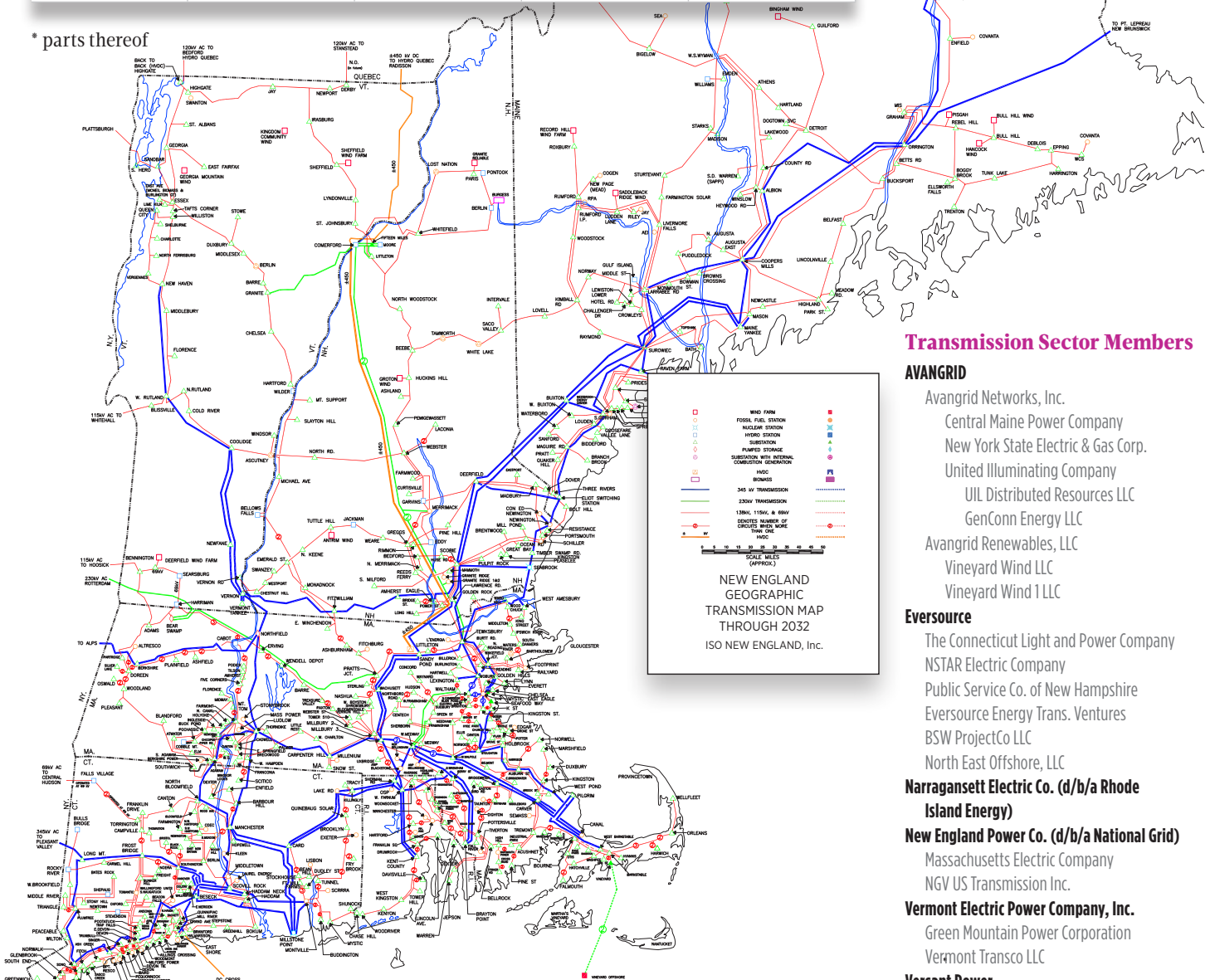
**Francis J. Ettori, Jr.**  
Vice-Chair  
Transmission Sector



	Service Territory	Electric Customers	Transmission Lines (miles)	Distribution Lines (miles)
	ME*, CT*	996,098	3,057	27,339
	NH, CT*, MA*	3,261,518	4,401	58,565
	MA*	1,339,387	2,577	18,476
	RI	501,236	361	6,279
	VT	380,209	722	N/A
	ME*	165,000	1,267	6,243



\* parts thereof



## Transmission Sector Members

### AVANGRID

Avangrid Networks, Inc.  
 Central Maine Power Company  
 New York State Electric & Gas Corp.  
 United Illuminating Company  
 UIL Distributed Resources LLC  
 GenConn Energy LLC  
 Avangrid Renewables, LLC  
 Vineyard Wind LLC  
 Vineyard Wind 1 LLC

### Eversource

The Connecticut Light and Power Company  
 NSTAR Electric Company  
 Public Service Co. of New Hampshire  
 Eversource Energy Trans. Ventures  
 BSW ProjectCo LLC  
 North East Offshore, LLC

### Narragansett Electric Co. (d/b/a Rhode Island Energy)

### New England Power Co. (d/b/a National Grid)

Massachusetts Electric Company  
 NGV US Transmission Inc.

### Vermont Electric Power Company, Inc.

Green Mountain Power Corporation  
 Vermont Transco LLC

### Versant Power

Key: ■ Voting Members

■ Related Persons

(As of 08.29.22; ISO-New England Public)



# NEPOOL Committees

## Committee Meetings

Active and informed participation at NEPOOL meetings is strongly encouraged. Principal Committees meet regularly, with a 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 and draft resolutions, in advance of the meeting. NEPOOL committees follow normal parliamentary procedures, allowing any individual member participating in the meeting to comment on a matter up for discussion and to advocate as appropriate. Participation may be in person or by phone, with meetings convened in person unless anticipated discussion or attendance warrant a virtual meeting. Votes may be cast by members or alternates in attendance or pursuant to a written designation or proxy. Guests routinely attend/participate and are welcome to do so, subject to approval by the Committee Chair or Vice-Chair.

## Committee Votes

NEPOOL takes actions through supermajority voting in the Principal Committees. Voting shares are allocated across the six Sectors, with votes within each Sector vote generally allocated on a per capita basis among those members present and casting a vote for or against the pending motion. For changes to Market Rules, the Information Policy and Installed Capacity Requirements (ICR), the supermajority vote for NEPOOL support 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 supermajority vote is 70 percent. For all other actions, the requisite vote is a two-thirds majority. Final votes are recorded and reported at the meeting and posted publicly in a notice of actions and minutes after the meeting.

**Participants  
COMMITTEE**  
◆ 15 \* 62



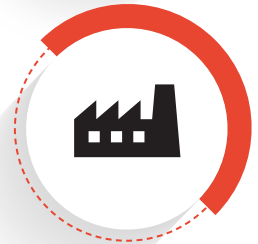
**Markets  
COMMITTEE**  
◆ 24 \* 35



**Joint Markets /  
Reliability  
COMMITTEE**  
◆ 9 \* 0



**Reliability  
COMMITTEE**  
◆ 14 \* 130



**Transmission  
COMMITTEE**  
◆ 11 \* 16



**Budget & Finance  
SUBCOMMITTEE**  
◆ 11 \* N/A



**Membership  
SUBCOMMITTEE**  
◆ 13 \* N/A



◆ Total 2022 Meeting Days \* Votes (through November 30, 2022)





# Participants Committee

**The Participants Committee is the highest level Committee authorized to act on behalf of the members. Members determine the action of NEPOOL by super-majority, Sector-weighted voting or by delegating authority to other committees, subcommittees or working groups. Each Sector elects an officer from its voting members, and those elected officers are vested with authority to carry out NEPOOL's actions, with assistance from NEPOOL counsel and consultants when appropriate. The authority of this Committee includes, among other things, votes on the following:**

- ▶ changes to the ISO-NE Tariff, including the Market Rules, Financial Assurance and Billing Policies, and other procedures impacting the operation of the New England grid and New England's wholesale electric markets;
- ▶ changes to New England's Generation Information System (GIS) arrangements;
- ▶ slates of nominees for the ISO-NE Board;
- ▶ budgets for ISO-NE, NESCOE, and NEPOOL; and
- ▶ changes to its own arrangements with ISO-NE and among its members.

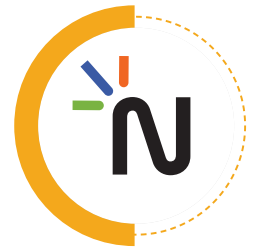
Any matter placed before the Participants Committee for a vote at a meeting must be preceded by the circulation at least one week before the meeting to all members of (1) an agenda that provides notice of all actions planned for consideration at the meeting, (2) comprehensive background materials, and (3) draft resolution(s). In addition, except for confidential materials, all materials that are circulated to voting members and alternates are posted publicly (<https://nepool.com/meetings/>). Following each Participants Committee meeting, all actions by the Committee at that meeting are reported publicly through posted and distributed notices of actions, and later in detailed minutes of each meeting that are approved by the Committee and posted publicly.

The Participants Committee meetings, like all NEPOOL meetings, are open to all voting members and other representatives of Participants. Numerous guests, policy makers and regulators also routinely

attend Participants Committee meetings, including New England State regulators, staff and other state officials and representatives, numerous ISO-NE representatives, a representative of the Northeast Power Coordinating Council (the regional entity responsible for promoting and enhancing the reliability of the international, interconnected bulk power system in Northeastern North America), and representatives of the FERC. Other guests wishing to attend a Participants Committee meeting must seek, and routinely receive, approval from the NEPOOL Chair for such attendance. The Participants Committee held 11 regularly scheduled meetings in 2022, generally one each month except for July, with the summer meeting scheduled over three days in late June, this year on the Maine seacoast. As society opened up following the many months of COVID isolation, and members were more willing to attend in-person meetings, the Participants Committee returned to in-person meetings beginning in October of 2021. So long as there were sufficient matters for discussion, Participants Committee meetings in 2022 were conducted in-person, with members individually able to participate virtually instead if they preferred. In 2022, virtual meetings were held in March, August and September, with the other eight meetings in-person.

In addition to the regularly-scheduled Committee meetings, the Committee held two Future Pathways working sessions, the last of which occurred on April 26 to review the ISO-NE's final report, Pathways Study: Evaluation of Pathways to a Future Grid, which is posted on NEPOOL's and ISO-NE's websites. The Future Pathways discussion was described more fully in the 2021 Annual Report and on page 45 of this Annual Report.

The Participants Committee, as it does every year, voted on whether to endorse a slate of nominees to the ISO-NE Board. The ISO-NE Board has nine members, plus the CEO of ISO-NE, and members are voted for three-year terms. The Board election votes were structured by design to include a vote each year on a three-member slate in order to enhance the stability of the Board membership. As reported in the 2021 Annual Report, the Participants Committee endorsed a four-person slate in 2021 (one person who was elected for a four-year rather than three-year term),





with the understanding that the 2022 slate would only include two members. Per that understanding, the Participants Committee considered and endorsed a two-person slate in May 2022 that included incumbent member Cheryl LeFleur for her second three-year term and new member Melvin G. Williams, Jr. The endorsed slate was then formally elected by the ISO-NE Board for terms that began October 1, 2022 and will conclude at the end of September 2025.

Also, as it does each year, the Committee again met by Sector with ISO-NE Board members two times, once during the summer meeting in Maine and the second time in person preceding the November Committee meeting which was in Providence, Rhode Island. In addition, each Sector met individually during the summer meeting with both FERC and State regulators, officials and representatives.



**David A. Cavanaugh**  
Chair



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



**Sebastian M. Lombardi**  
Asst. Secretary, Counsel



# Markets Committee

The NEPOOL Markets Committee (MC) is New England's principal stakeholder forum for exploring and providing advisory input to ISO-NE and the Participants Committee on any changes to the design and operation of the region's energy, capacity, and ancillary services markets.

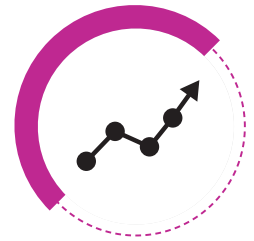
The MC is where New England stakeholders, including any State officials, are provided notice of and details on any market reforms or changes that are proposed by ISO-NE, the States (through NESCOE), or any one of NEPOOL's over 530 members. At MC meetings, regional stakeholders can initiate consideration of new market designs, gain education, ask questions, provide feedback, and offer refinements or alternatives to market reform proposals by ISO-NE or other stakeholders. It is through robust, candid discussion and debate, with the feedback provided reflecting the diverse perspectives, experiences, and interests in the marketplace, that the region refines and improves market proposals and resolves or narrows issues of controversy or concern. This important work ultimately helps to better define, reduce, and/or eliminate issues that would otherwise need to be litigated before the FERC and leads to better solutions for the region.

Like in past years, the MC remained busy in 2022. Meeting on 13 occasions over 24 days (through December), the MC took 35 actions on agenda items. This year began with the MC's consideration and action on ISO-NE's proposal that fundamentally reforms the region's buyer-side market mitigation rules in the Forward Capacity Market, which is discussed in depth on page 36 of this Annual Report.

## Resource Capacity Accreditation Efforts

Beginning in May, the MC turned its attention to the complicated and resource-intensive project that intends to improve the current resource capacity accreditation processes (referred to as the **Resource Capacity Accreditation (RCA) project**). Since then, ISO-NE, the States, and NEPOOL Participants have engaged in a comprehensive process to evaluate potential new capacity accreditation approaches and ISO-NE, working with stakeholders at the MC, is developing new Market Rules intended to improve

the determination of how much value each type of resources contributes to meeting the region's reliability needs through the FCM. ISO-NE has committed to filing its RCA proposal (as well as any alternative approach, if such a proposal is approved by NEPOOL) by late 2023, with the goal of implementing the accreditation reforms in time for the nineteenth FCA that is scheduled to occur in early 2025.



## MC-Recommended Market Reforms

In addition to the MOPR and RCA initiatives, the MC considered and made recommendations to the NPC on the following Market Rule reforms in 2022:

- ▶ ISO-NE's proposal to permit energy storage devices to participate as transmission-only assets, operating under conditions to avoid or mitigate load-shedding when market actions have been exhausted.
- ▶ A Participant-sponsored proposal to allow resources to decrease the initial retirement or permanent de-list bid by up to 25 percent during the Static De-List Bid finalization window.
- ▶ ISO-NE's proposal to defer for two years the next recalculation of the Cost of New Entry (CONE), Net CONE, and the Performance Payment Rate and the proposal to modify the FCA activities schedule to ensure that FCA18 can be conducted as initially scheduled on February 5, 2024.
- ▶ A Participant-sponsored proposal to change the financial assurance requirements for non-commercial capacity resources in the FCM.
- ▶ Tariff revisions to comply with the FERC's directive to modify the list of eligible resources able to participate in the Inventoried Energy Program, which goes into effect beginning in Winter 2023–2024 and provides supplemental compensation for eligible assets to maintain up to three days' worth of potential energy on-site that can be converted into electricity at ISO-NE's direction.
- ▶ Modifications to the Information Policy allowing ISO-NE to share confidential information if a cybersecurity event occurs.
- ▶ A proposal to allow storage facilities incapable of consuming electricity from the grid to participate as Continuous Storage Facilities.
- ▶ Changes to extend the Do-Not-Exceed dispatch to front-of-meter solar resources.





**Mariah E. Winkler**  
Chair, ISO-NE-  
Appointed



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



**Rosendo Garza**  
NEPOOL Counsel

- ▶ Settlement-related revisions to convert a majority of the credits and charges associated with the FCM from a monthly settlement to a daily settlement.
- ▶ Proposed changes to clarify the allocation of Pool-Planned Unit Capacity Transfer Rights (CTRs) to municipal entitlement holders and the settlement calculation for specifically allowed CTRs for Pool-Planned Units.

## Day-Ahead Ancillary Service

The MC also considered and debated merits of potential solutions to the region's winter reliability risks, and reviewed the ongoing effectiveness of ISO-NE's Pay-for-Performance design.

Consistent with the region's Work Plan, the MC began its discussion of a project to refine the markets for ancillary services in the region—the **Day-Ahead Ancillary Service initiative**. This project is intended to improve ISO-NE's ability to meet crucial reliability standards through market procurement of newly defined Day-Ahead Ancillary Services products. DASI is expected to make major changes to the Ancillary Services that are bought and sold in the region and will likely be explored and refined through the stakeholder process well into 2023.

## Other Deliberations

Beyond Market Rule changes, the MC also considered and recommended clarifications to GIS Operating Rules (see pages 42–43 of this Annual Report) and provided feedback to the IMM on its FCM reviews and other issues identified by the IMM in its Annual and Quarterly Markets Reports.

## N.E. Markets Overall

- Approximately \$8.4 billion in wholesale market transactions in 2021.
- Nearly 490 Market Participants.

## Energy Markets—\$6.1 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—\$2.2 Billion

- **Forward Capacity Market**  
Pays 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— About \$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.



# Moving Beyond the MOPR

New England's MOPR, or the minimum offer price rule, which has been in effect for nearly a decade, has caused a lot of disagreements among the region's stakeholders. Some have historically viewed the MOPR as an essential mechanism to prevent price suppression. Others strongly oppose it because they believe that the MOPR obstructs the States' clean energy and decarbonization policies by preventing state-sponsored resources from clearing in the Forward Capacity Market. After years of debate and litigation, New England is poised to move past the MOPR.

## NEPOOL Supports Elimination and Replacement of the MOPR

After many months of discussion and considerable debate and effort, a supermajority of NEPOOL coalesced around a proposal to eliminate the current MOPR (with five of the six New England States not opposing). In March 2022, ISO-NE filed a proposal, joined by NEPOOL, to implement a transition mechanism that will eliminate the application of the current MOPR to an agreed amount of state-sponsored resources during the next two Forward Capacity Auctions (FCAs 17 and 18). Further, for FCA19, which is planned to occur in 2025, the filing proposed to replace the current MOPR in its entirety with reformed market protection rules, referred to as the MOPR Reforms.

## Measured Elimination

The transition mechanism, worked out through negotiations, eliminates the application of the MOPR

for up to 300 MW of new state-sponsored renewable resources to clear in FCA17 and 400 MW to clear in FCA18. If any of the 300 MW do not clear in FCA17, they roll over into FCA18 to increase the amount of state-sponsored renewable energy that will be able to participate and clear in the capacity auction without any MOPR restriction.

## A New Approach to Evaluate the Potential Exercise of Buyer-Side Market Power

In time for FCA19, New England's current MOPR rules will be eliminated and replaced with a reformed and much more limited buyer-side market power mitigation construct. Under these new rules, ISO-NE will divide new capacity resources into three tranches: (1) de minimis resources (with a qualified capacity of 5 MW or less) and passive demand-response resources; (2) new merchant resources and state-sponsored resources; and (3) all other new resources. Importantly, no state-sponsored policy resources will be subject to these new buyer-side market mitigation rules. Only resources in the third tranche would be subject to a buyer-side market power review and possible offer mitigation. With implementation of this new construct, the Competitive Auctions with Sponsored Policy Resources, or CASPR, mechanism would be removed from the FCM rules.

## FERC Approval

In May, the Commission accepted the jointly filed proposal without modification or condition.



# NEPOOL and ISO-NE Jointly File a Proposal to Comply with Order 2222

In approving *Order 2222*, FERC explained that it was seeking to ensure that distributed energy resources (DERs) could participate through aggregations (known as DERAs) in wholesale energy markets alongside traditional resources. To do so, the *Order 2222* requires RTOs/ISOs to revise their tariffs to satisfy 11 directives that establish DER aggregators as a type of market participant that can register and participate in organized power markets. After more than a year's work through NEPOOL's three Technical Committees, including developing and vetting various stakeholder amendments to ISO-NE's proposals, ISO-NE, joined by NEPOOL, filed its *Order 2222* compliance proposal on 2/2/22. As of the date of the printing of this Annual Report, the FERC has yet to issue an order on the joint *Order 2222* compliance proposal and that filing remains pending in FERC Docket No. ER22-938.

## Summary of New England's *Order 2222* Compliance Proposal

At the highest level, New England's compliance proposal, if approved as filed, will permit DERAs accepted through the proposed registration process to participate in New England's wholesale markets. The proposal includes seven participation models that allow DERs to aggregate across loads served through different pricing nodes to broaden the opportunities for DERAs.

## Participant-Sponsored Amendments Sought But Not Included in the Compliance Proposal

In the NEPOOL stakeholder process considering the proposed changes to comply with *Order 2222*, some Participants offered various amendments that ultimately were not supported by ISO-NE or NEPOOL. Each of those amendments sought to

expand the opportunities for DERs to participate in the wholesale power markets. The discussions of these various proposals emphasized differences of opinion on whether the amendments were needed to comply with *Order 2222* and whether the amendments could add implementation complexity and impact the timing for the broader changes that were included in the underlying proposal. In the end, the votes by the Committees highlighted differences of opinions on what the FERC did or should have required in *Order 2222*. Discussions revealed broad agreement that the proposal that was ultimately approved improved the opportunities for DERs to participate in the wholesale power markets. Some members, however, concluded that the proposal simply did not go far enough to unlock the full potential value of DERs and that the FERC should require the changes sought by the amendments.

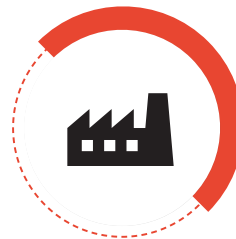
The FERC, following the robust NEPOOL stakeholder process, was presented with a well-supported, joint proposal by ISO-NE and NEPOOL, and well-developed arguments and proposed amendments to consider when ruling on that compliance filing. The FERC received numerous comments and pleadings on the compliance filing, including comments from four U.S. Senators. The region eagerly awaits FERC's determination as to whether the jointly-filed compliance proposal complies fully with the requirements set forth in *Order 2222*.





# Reliability Committee

The NEPOOL Reliability Committee (RC) is the Technical Committee that reviews all applications presented to ISO-NE for electric system infrastructure changes that could impact the reliability of New England's bulk power grid.



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

To meet that responsibility, the RC reviews and provides to ISO-NE an advisory vote regarding infrastructure changes to add or retire generation or otherwise change the region's transmission topology would adversely affect the bulk power system. The RC reviews and provides advisory votes to ISO-NE on the appropriateness of including costs for specific transmission upgrades in regional rates. The RC also reviews and votes on whether to recommend to the NEPOOL Participants Committee changes to reliability-related rules and procedures, ICR and related values, FCM Capacity Zones and other reliability-related matters.

In 2022, the RC held 21 days of meetings, 9 of which were joint meetings with the Markets Committee regarding Resource Capacity Accreditation in the FCM. At its meetings, the RC took over 50 votes on Proposed Plan Applications (several of which were for solar cluster studies with many individual associated Proposed Plan applications), and approximately 15 sets of proposed changes to Operating Procedures and Planning Procedures. The Reliability Committee also provided advisory votes on the appropriate cost allocation for over \$600 million of transmission upgrades. As it does each year, the RC considered and voted on key inputs and criteria to be used in establishing ICR-related values and FCM Capacity Zones for the upcoming Forward Capacity and Annual Reconfiguration Auctions.

In 2022, in addition to its usual matters, the RC reviewed ISO-NE's study of operational impacts of extreme weather events, and participated in several joint meetings with the Markets Committee, one to help successfully finalize Phase 1 of the Future Grid Reliability Study project, and several others to consider RCA in the FCM. The RCA project is continuing into 2023.



**Emily Laine**  
Chair  
ISO-NE-Appointed  
Reliability Committee and  
Transmission Committee





# Transmission Committee

**The NEPOOL Transmission Committee is the Technical Committee (TC) that considers and makes recommendations to the Participants Committee on any changes to ISO-NE's general Tariff provisions or the Open Access Transmission Tariff (OATT).**



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

In 2022, the Committee met 11 times and discussed and voted to recommend Participants Committee support for several sets of proposed changes to the ISO-NE Tariff and OATT, including the following:

- ▶ OATT revisions regarding interconnection of distributed energy resources;
- ▶ Tariff revisions regarding compliance with FERC Order 881 on transmission line ratings;
- ▶ OATT and Transmission Operating Agreement revisions on storage as a transmission-only asset (SATO); and
- ▶ OATT revisions regarding improvements to the Economic Study process.

The TC continues to monitor relevant transmission-related matters at the FERC, including: (i) the Notice of Proposed Rulemaking (NOPR) on “Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection” in RM21-17; and (ii) the NOPR on interconnection reforms in RM22-14. For both of these NOPRs, the TC helped in the development of NEPOOL Comments.



**Eric K. Runge**  
NEPOOL Counsel  
Reliability Committee and  
Transmission Committee

## Transmission Committee Activities Related to Reliability and the Clean Energy Transition:

In 2022, the TC reviewed and recommended changes to the Tariff that will help implement the clean energy transition and contribute to reliability in operations and planning. These changes included revisions to provide clarity and certainty regarding interconnection of distributed energy resources, revisions to allow storage to contribute to reliability as a non-market, transmission-only asset, and revisions to improve the Economic Study process, including long-range reliability analysis under Attachment K of the OATT to better prepare for the future grid. Additionally, the TC has been involved in monitoring and considering potential major new developments in transmission planning, cost allocation and generator interconnection rules that could result from the FERC's two NOPR proceedings in Docket No. RM21-17 and RM22-14, both of which are likely to result in final rules in 2023 that will impact the future grid.



# Budget & Finance Subcommittee

The NEPOOL Budget & Finance Subcommittee (B&FS) is a non-voting body whose members review, monitor and provide input on ISO-NE and NEPOOL budgets, on the NESCOE budget, and on stakeholder and ISO-NE changes to credit and financial assurance requirements for participation in New England's wholesale electric markets. B&FS also reviews audits performed by or for ISO-NE.






Thomas W. Kaslow  
Chair



Paul N. Belval  
NEPOOL Counsel

Consistent with its charter, B&FS monitored the ISO-NE financial performance in 2022 relative to its budgets and the spending on behalf of Participants under the NEPOOL arrangements. As it does each year, at the end of 2022, the B&FS fully discussed, analyzed, and considered the 2023 budgets for ISO-NE, for NESCOE (since those costs flow to Participants under the ISO-NE Tariff), and for NEPOOL. In addition, the B&FS also reviewed and considered, as provided for in the MOU among NEPOOL, ISO-NE and NESCOE, NESCOE's fourth five-year pro forma budget that will serve as the framework for NESCOE's annual budgets for its operations in years 2023 through 2027. The 2023 budgets are as follows (with the 2022 budgets listed for comparison):

	(\$000's)	2023 Proposed		2022 Budget
	ISO-NE			
	Operating Budget	\$209,200		\$189,100
	Capital Budget	\$33,500		\$32,000
	NESCOE			
	Operating Budget	\$2,692		\$2,485
	NEPOOL <sup>1</sup>			
	Operating Expenses	\$7,149		\$6,587
	Revenue	\$4,121		\$3,727
	Net Participant Expenses	\$3,028		\$2,860

The B&FS was also busy in 2022 reviewing, considering and providing input on proposed changes to the ISO-NE Financial Assurance and Billing Policies (the Policies). Those changes included a Participant proposal to increase the level of financial assurance required from new capacity receiving a Capacity Supply Obligation in the Forward Capacity Market. B&FS also considered with ISO-NE the response to the FERC's order seeking further justification for the lack of volumetric minimum collateral requirements for participants in the Financial Transmission Rights market. The B&FS also reviewed changes to the Policies to establish financial assurance requirements for Market Participants in the Inventoried Energy Program and to detail how the charges associated with the IEP would be billed, respectively.

1: ISO-NE is pursuing less expensive alternatives for credit insurance as of the finalization of this Annual Report.

# Membership Subcommittee

The Membership Subcommittee is tasked by the Participants Committee to consider all applications for membership in, and terminations of membership from, NEPOOL.



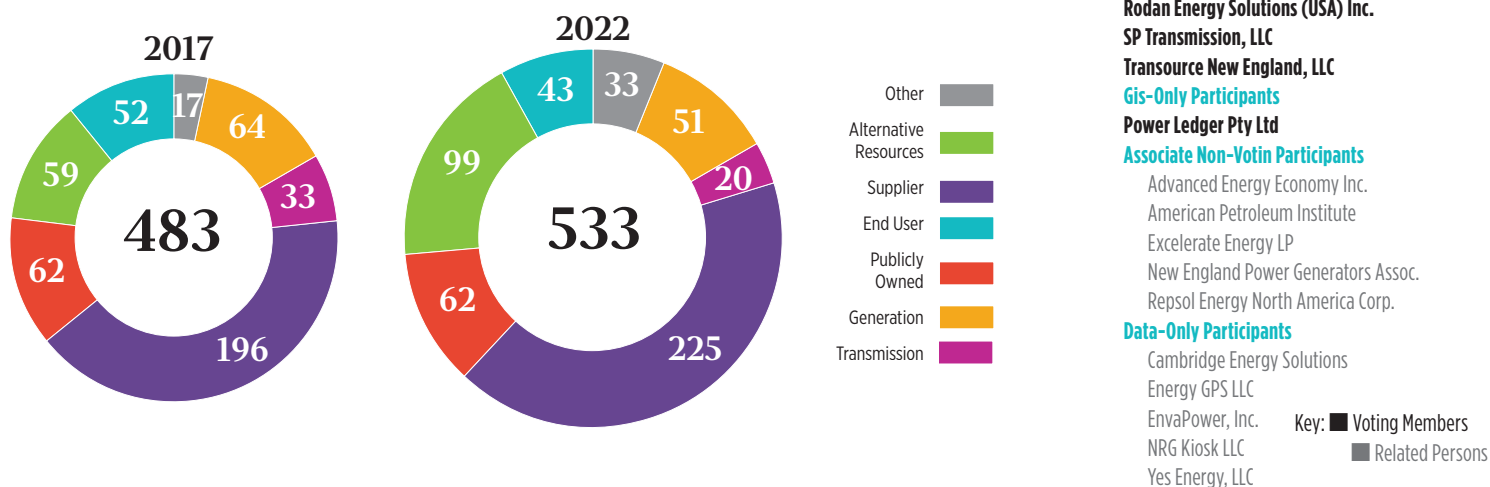
The Participants Committee delegated authority to the Subcommittee to

approve membership applications and terminations so long as there is agreement among the Subcommittee members and standard provisions relating to those actions that

were previously approved by the Participants Committee apply to the new members. This Committee is chaired by a representative of a voting member that has been appointed by the Participants Committee Chair, and was led for another year by Sarah Bresolin.

The work of the Subcommittee has been steady over the past several years, with NEPOOL membership growing modestly each year. The Subcommittee met 13 times in 2022, considering more than 38 applications for membership and 22 requests for termination of membership. Actions by the Subcommittee and all FERC membership filings are posted on the NEPOOL website at <https://nepool.com/meetings/membership-subcommittee/>. The NEPOOL website also provides instructions for becoming a member, changing a Participant name and terminating a membership.

In 2022 (through November 30), 34 Participants joined NEPOOL while 28 Participants left the Pool. The new Participants predominantly joined either the Supplier Sector or the AR Sector, although there were six new Provisional Members, three new Governance Only End Users and one new Data-Only Participant. Those leaving the Pool generally did so because of changes in their New England business or organization. One-half of those leaving the Pool were Supplier Sector members; the other half of the departing members were divided nearly equally between the AR and End User Sectors. During 2022, another 20 Participants either changed Sectors or voting status as a result of corporate mergers or acquisitions. The chart on page 10 of this Annual Report shows the changes in Participant membership over the past decade. The graphs below illustrate the changes in Participant composition over the past 5-year period.



**Sarah Bresolin**  
Chair



**Patrick M. Gerity**  
NEPOOL Counsel

# NEPOOL Working Groups

## NEPOOL GIS

### The NEPOOL Generation

**Information System is the means for tracking and trading renewable energy and other attribute certificates (Certificates)**

**needed in New England to**

**demonstrate compliance with state**

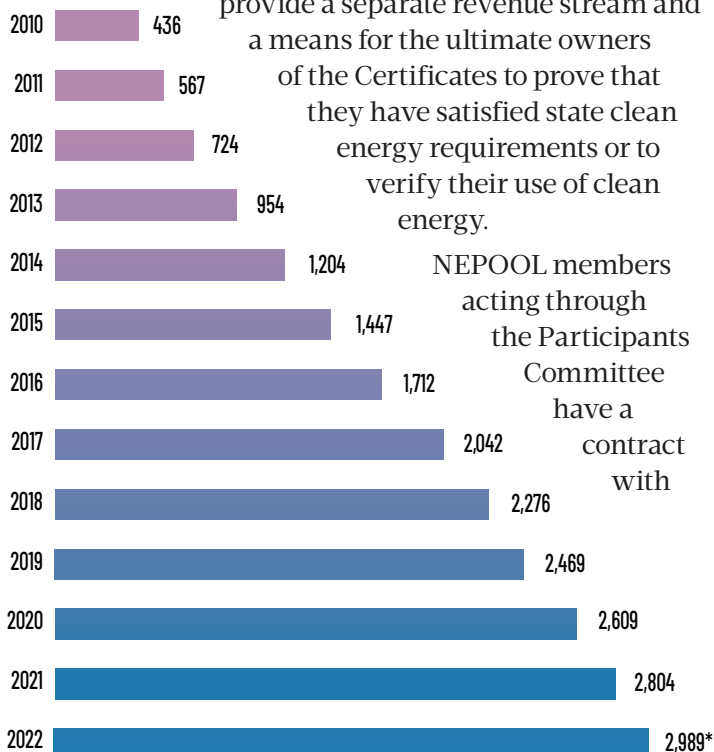
**mandates for generation attributes and to**

**support green energy usage claims. The GIS creates and tracks Certificates that identify the fuel source, emissions and other attributes of each MWh used to serve load in New England including energy from the following resources:**

- ▶ renewable generators clearing in the ISO-NE market settlement system;
- ▶ behind-the-meter renewable generators not visible in the ISO-NE market settlement system;
- ▶ demand response resources that are not settled regionally;
- ▶ certain renewable generators importing power into New England; and
- ▶ output of certain thermal resources not generating electricity.

These Certificates can be purchased and traded to provide a separate revenue stream and a means for the ultimate owners of the Certificates to prove that they have satisfied state clean energy requirements or to verify their use of clean energy.

Total GIS Account Holders



\*Through October 31, 2022

APX, Inc. (APX) to operate the GIS (GIS Agreement).

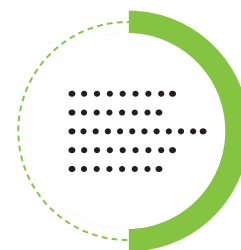
## GIS Usability Group

Under the GIS Agreement, a GIS Usability Group convenes quarterly (Usability Group). Through this Usability Group, both NEPOOL Participants and non-Participants who use the GIS are able to propose changes to the system, which are then presented to the Markets Committee and reviewed by the NEPOOL GIS Operating Rules Working Group (Working Group).

Changes to the GIS may be proposed by the Usability Group, by individual NEPOOL Participants or non-Participants who use the GIS, by state agencies or by APX. Proposals to change the GIS can be proposed directly to the Markets Committee, to the Working Group or to the Usability Group. Regardless of where changes are initially proposed, the Markets Committee reviews all of the changes, but only after they have been considered by the Working Group for recommendations, even if those changes were proposed by the Usability Group. The Markets Committee approves changes to the GIS Operating Rules through authority delegated to it by the Participants Committee, but that authority does not extend to major changes to the GIS or the GIS Operating Rules. Major changes must be approved by the Participants Committee, typically after the Markets Committee has decided by vote on whether to recommend the Participants Committee approve those major changes.

While there were no major changes to the GIS or the GIS Operating Rules in 2022, the Markets Committee did approve the following changes to the GIS and the GIS Operating Rules:

- ▶ Changes made to more fully address the treatment of energy storage facilities in the GIS.
- ▶ Changes relating to accounting for solar

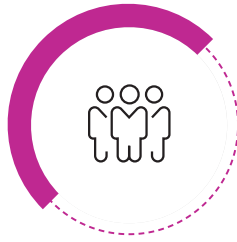


Year	GIS-Registered Generators
2010	986
2011	1,605
2012	3,526
2013	6,180
2014	12,329
2015	18,527
2016	47,233
2017	61,659
2018	72,764
2019	77,854
2020	78,856
2021	80,524
2022	88,719

Total Generators Registered in NEPOOL GIS



generators participating in the Connecticut Residential Solar Investment Program that were impacted by the phase-out of 3G technology used for telemetering those generators.



- ▶ Enhancements to the GIS to minimize confusion and provide additional confirmation details for the account holder when submitting and/or updating fuel output and emissions entries within the GIS.
- ▶ The addition of new public reports in the GIS on (i) nameplate capacity by type, location and fuel type, and (ii) hourly energy imports for each importing region, subdivided by fuel type.
- ▶ Enhancements to the GIS usability in sorting and filtering data in the GIS.

In addition, while it has not yet presented to the Markets Committee for approval, the Markets Committee has referred to the Working Group for consideration modifications to the GIS to accommodate the match of generation to load in the GIS on an hourly basis and to permit alternative means of reporting energy imported into New England from other areas.

As of October 31, there were 2,989 active accounts in the GIS, with 185 of those accounts added in 2022. Generator registrations now number 88,719 with 8,195 of those registrations from new generators joining in 2022. The GIS created and managed 137,268,728 Certificates from the third quarter of 2021 through the second quarter of 2022.

### **Meter Reading Working Group**

The Meter Reader Working Group (MRWG), which reports to the Markets Committee, offers a forum for NEPOOL members who are Assigned Meter Readers to discuss challenges and solutions regarding data gathering and reconciliation, as well as evaluating implementation issues concerning market designs. This year the MRWG reviewed, among other topics, the settlement treatment for storage as transmission-only assets and discussed the issues concerning interconnection requests at distribution facilities and registration efforts for co-located/direct current generator facilities.

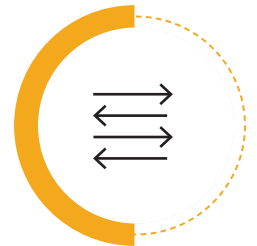


### **Demand Resources Working Group/Variable Resources Working Group**

In 2022, the Demand Resources Working Group (DRWG), which provided specialized feedback on demand-response policies and rules, and the Variable Resource Working Group (VRWG), which provided input on issues and topics related to variable resources, were replaced by a new standing working group – the Emerging Technologies Working Group (ETWG). The DRWG did not meet in 2022 ahead of the ETWG formation, while the VRWG met once to receive an update on ISO-NE's wind forecast accuracy and undelivered energy.

### **Emerging Technologies Working Group**

At its June meeting, the MC approved the ETWG charter. Under its charter, the ETWG provides the forum for stakeholders and ISO-NE to exchange information and ideas on technical issues concerning emerging technologies' integration into the regional bulk power system and participation in the wholesale electricity markets. This standing working group reports to all three NEPOOL Technical Committees. The ETWG may provide input and advice on current, approved, or proposed Tariff provisions, manuals, operating and planning procedures, or implementation mechanisms associated with changes in those documents. This year, the ETWG met twice and received presentations regarding the meter issue flag for demand response assets, FERC-approved changes regarding Continuous Storage Facilities (CSF) that cannot charge from the grid, and instructions to register aggregated residential rooftop solar as non-dispatchable assets.



## Supporting New England's Clean Energy Transition



# Assessing Pathways to Support the Clean Energy Transition

Once again this year, NEPOOL members focused much attention discussing how best to prepare for and support New England's clean energy transition. These efforts have been, and will continue to be, informed and influenced by the policy preferences and priorities of the six New England States.

## Advancement of the Future Grid Initiative

Reflecting the priorities of the States and the broader stakeholder community, NEPOOL continued its work this year with ISO-NE and the States to advance the region's *Future Grid Initiative*. As explained in previous NEPOOL Annual Reports, the focus of this *Initiative* is two-fold: (1) to define and assess the future state of New England's regional power system (i.e., the *Future Grid Reliability Study* effort); and (2) to explore and evaluate potential market frameworks that could be pursued to help advance the clean energy transition (i.e., the Pathways process).

## Completion of Phase 1 of the FGRS

As noted on the Reliability Committee page of this Annual Report, ISO-NE and stakeholders successfully completed Phase 1 of the NEPOOL Future Grid Reliability Study (FGRS) in 2022. NEPOOL submitted Phase 1 of its requested study to ISO-NE as an Economic Study request under Attachment K of the ISO-NE OATT. Throughout this analysis phase of the FGRS, ISO-NE staff consulted with NEPOOL through MC/RC joint meetings on key decision points regarding how to fine tune the study and its focus. Phase 1 included a production cost analysis, an ancillary services simulation, a resource adequacy screen analysis and a probabilistic resource adequacy analysis. The [Phase I results](#), as well as other relevant studies being conducted by ISO-NE, will be taken into account by NEPOOL, ISO-NE and the States to help inform next steps on an anticipated Phase 2 effort of the FGRS.

The Phase I results, as well as other relevant studies being conducted by ISO-NE, will be taken into account by NEPOOL, ISO-NE and the States to help inform next steps on an anticipated FGRS Phase 2 effort.

## Finalizing the Pathways Study

Through a dedicated process conducted at the Participants Committee, ISO-NE, with leading assistance of its consultant, the Analysis Group, and in consultation with

stakeholders, completed its work in 2022 to model and quantitatively evaluate four potential pathways (including alternative market frameworks) that may help to evolve the power grid to reflect New England State policies. Throughout the process, the Analysis Group worked collaboratively with NEPOOL stakeholders and State officials to develop assumptions and scenarios to inform the modeling work. At highest level, the Pathways Study provides analyses of the tradeoffs in economic and regulatory considerations between each of these approaches/pathways.

The four pathways assessed were:

- **Status Quo** – continuing current individual state policies/mandates that incent the development of new clean energy resources through long-term power purchase contracts outside of the region's centralized wholesale power markets.
- **Forward Clean Energy Market (FCEM)** – creating a centralized, regional forward market that would incent clean energy resources by compensating them for their clean energy attributes.
- **Net Carbon Pricing (NCP)** – establishing prices for carbon emissions from emitting generators and returning carbon price revenues received to New England electricity consumers.
- **Hybrid Framework/Pathway** – combining some form of carbon price with an FCEM.

The Analysis Group published and presented to stakeholders the [final results of its Pathways Study](#) in April, which was followed by the submission of written comments/feedback from various interested stakeholders. Then at the NPC Summer Meeting in late June, NEPOOL's Chairman facilitated a productive panel discussion where representatives from each of the six New England States shared their perspectives on future grid pathways.

The Future Grid-related assessments conducted and completed in 2022 provide stakeholders, the States, and ISO-NE with important data and analysis to inform the continued work ahead as the region seeks consensus on a preferred pathway forward.



# On the Road to Tomorrow





# NEPOOL's 2023 Priority Items

## NEPOOL's 2023 Priorities

NEPOOL leaders successfully engaged members on a new process this year to identify NEPOOL's highest business priorities for 2023-24 to be included in ISO-NE's work plan. That work plan provides a road-map to address evolving grid challenges and to enhance the region's markets. Fully recognizing that NEPOOL members represent many diverse, varied and at times competing business interests and priorities, the business planning effort this year was to identify NEPOOL-wide priority items. Importantly, the priorities were considered in parallel with NEPOOL's and the States' review and consideration of the 2023 ISO-NE budgets, permitting ISO-NE to take into account NEPOOL-identified priorities in its proposed allocation of resources for the next calendar year.

From among the many issues identified to the Chair and Vice-Chairs of the Participants Committee by members of their respective Sector, the Officers collectively identified the following NEPOOL business priorities (provided below in no particular order) as the highest priorities for the members:

### Energy Adequacy/Security Challenge

**Overall objective for this high-priority item is to achieve better understanding and greater consensus among regional stakeholders, the States and ISO-NE of the region's energy adequacy challenges (particularly during the winter months) and to explore market-based solution(s) to address such challenge(s).**

In furtherance of this shared objective, NEPOOL members identified as critically important that the region continue to advance together the discussions and assessments of the winter energy challenges facing the region. Consistent with the stated objectives for the September 8 FERC-hosted New England Gas-Electric Winter Forum, members included in this priority the identification of any steps or analysis/information that may be needed to better understand and define the reliability challenge. Collective agreement on a problem statement is key to successfully moving forward as a region.

With a better common understanding of its energy security/adequacy challenges, the region will then be better

positioned to explore and consider together an effective long-term market-based solution(s).

### FCM Entry-Related Improvements

**This priority item requested that, as part of the 2023 Work Plan, ISO-NE work with stakeholders to review and adopt and/or develop proposed reforms to establish a better balancing of incentives for new entry in the FCM.**

- ▶ **3-Year Capacity Time Out** – Request for ISO-NE to work with stakeholders to review/evaluate current rules and consider elimination or modification of the 3-year time out rule while continuing to address the queue blocking issues that the time out rule was intended to mitigate.
- ▶ **FCM Financial Assurance Policy** – Request for ISO-NE to review/assess the current FCM FA requirements and implement reforms to address identified efficiencies/gaps (such as ISO-NE adopting the CPV-sponsored proposal or something similar).

More detail on these priorities, as well as a more comprehensive list of priority items identified within and among the various NEPOOL Sectors, can be found at: More detail on these priorities, as well as a more comprehensive list of priority items identified within and among the various NEPOOL Sectors, can be found at: [https://nepool.com/wp-content/uploads/2022/08/NEPOOL-Priorities\\_2023-24-Work-Plan.pdf](https://nepool.com/wp-content/uploads/2022/08/NEPOOL-Priorities_2023-24-Work-Plan.pdf).

Some of the other priority items listed in the "NEPOOL Priorities" document are already part of, or related to, ongoing regional efforts/projects. Other priorities were identified by member representatives within one or more Sectors but did not achieve consensus among the Sector Officers as items of the highest priority. Finally, a few other items were identified as topics or issues that would benefit from additional assessment and discussion before considering further within the NEPOOL process.

In early August, NEPOOL shared these priorities with ISO-NE, NESCOE and NECPUC leadership. Following further discussions among the NEPOOL Officers and representatives of NESCOE and NECPUC of a preliminary ISO-NE work plan for 2023, in October, ISO-NE presented a refined and updated 2023-24 work plan to stakeholder at the NEPOOL Participants Committee.



## 2022 Federal and State Energy Legislation

# Federal Legislative Summary 2022

## Federal Inflation Reduction Act (IRA)

On August 16, 2022, President Biden signed the IRA, which included significant changes related to clean energy and energy infrastructure. Highlights of the IRA related to the energy sector include:

**Tax Credits and Incentives:** The IRA made changes to existing tax credits available to qualifying energy projects, and created several new investment and production credits for qualifying clean energy projects. These new and expanded credits include the Clean Hydrogen Production Tax Credit, Advanced Manufacturing Production Tax Credit, Nuclear Power Production Tax Credit, Clean Electricity Production Tax Credit, Clean Electricity Investment Tax Credit, and the Advanced Energy Project Investment Tax Credit. The IRA also significantly changes the way tax credits may be paid out. Now, project owners may opt to receive the credits as direct payments and/or monetize the credits through transfers to other entities.

**Funding for Energy Projects:** The IRA increases Department of Energy (DOE) loan authority, appropriating approximately \$11.7 billion to the DOE Loan Programs Office for projects that focus on clean energy, advanced technology vehicle production, or for energy projects undertaken by a federally recognized tribe or tribal organization. The IRA also appropriates \$5 billion, and authorizes up to \$250 billion in loans, for a new Energy Infrastructure Reinvestment (EIR) financing program. The EIR is open to projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operation, as well as projects that enable existing energy infrastructure to avoid, reduce, utilize, or sequester greenhouse gas emissions.

**Funding Related to Transmission Planning and Expansion:** To spur transmission infrastructure growth and boost grid reliability, the IRA contains several provisions that provide for funding to facilitate development of the bulk power system. The IRA appropriates \$2 billion for the DOE to provide loans for the construction or modification of electric transmission facilities. To facilitate the siting process, the IRA appropriates \$760 million to DOE for grants to state, local, and tribal government siting authorities



to fund studies, participate in regulatory proceedings, and other measures and actions that shorten the time, or increase the chance of approval for transmission projects. The IRA also earmarks an additional \$100 million for expenses associated with planning, modeling, and analysis concerning the transmission of electricity generated by offshore wind.

**Development of Offshore Wind:** The IRA contains provisions specifically aimed at increasing or supporting the development of offshore wind generation. First, the planning studies discussed above must specifically take into account the local, regional, and national economic, reliability, resilience, security, public policy and environmental benefits of transmission of electricity generated by offshore wind. Second, the IRA provides funding to allow for greater state participation in transmission siting proceedings, including proceedings for offshore electricity transmission lines. This means that state, local or tribal government siting authorities have access to grants to examine alternative siting corridors for offshore wind, to participate in offshore wind regulatory proceedings in another jurisdiction, and to make improvements to expedite the time required for approval by the siting authority for the offshore wind transmission project. Third and finally, the IRA makes changes to substantially expand the physical areas authorized for offshore wind leasing.

# State Legislative Summary

Some of the more noteworthy New England state energy-related laws (each an Act) enacted in 2022 are highlighted below:

## CONNECTICUT

**An Act Concerning Clean Energy Tariff Programs (Pub. Act No. 22-14)** increases the aggregate caps on capacity of two previously enacted solar tariff programs, the Non-Residential Energy Solutions and Shared Clean Energy Facility (SCEF) programs, from 85 MW to 160 MW in years two through six of the tariff programs. For SCEF, the Act also increases the percentage of capacity that must benefit low and moderate-income customers and service organizations.

**An Act Concerning Climate Change Mitigation (Pub. Act No. 22-5)** codifies Connecticut's commitment to net zero greenhouse gas (GHG) emissions from electricity supplied to electric customers in the state by no later than January 1, 2040.

**An Act Establishing a Task Force to Study Hydrogen Power (Pub. Act No. 22-8)** establishes a task force to study hydrogen-fueled energy in Connecticut's economy and energy infrastructure and directs the Task Force to submit its findings to the General Assembly by January 15, 2023. The study will include, among others, a review of regulations and legislation needed to guide the development and achievement of economies of scale of the hydrogen ecosystem in the state, an examination of incentives and programs created by the federal Infrastructure Investments and Jobs Act and other funding sources, and an examination of the potential sources of clean hydrogen and end-uses of hydrogen-fueled energy.

## MAINE

**An Act to Ensure Transmission and Distribution Utility Accountability (ME S. 697, LD 1959)** requires the Maine Public Utilities Commission (MPUC) to adopt rules for Maine utilities with over 50,000 customers that would govern the evaluation of transmission and distribution utility service. The Act grants the MPUC authority to initiate adjudicatory

proceedings to determine whether divestiture of an investor-owned transmission and distribution utility is warranted if the utility consistently fails to meet service standards. The Act also requires Maine utilities to undergo transparent "integrated grid planning" in order to facilitate the development of a distribution grid in the state that supports the cost-effective and reliable transition to renewable energy. The Maine utilities must link their grid plans to the climate and clean energy goals identified in the Maine Won't Wait Climate Action Plan.

**An Act Concerning Equity in Renewable Energy Projects and Workforce Development (ME H. 1464, LD 1969)** establishes minimum wage and benefits requirements and apprenticeship requirements for projects that bid into Maine's renewable energy solicitations and have a nameplate capacity greater than 2 MW. This Act allows the State to put in place available and appropriate penalties such as fines and sanctions for failure to comply with the requirements.

## MASSACHUSETTS

**An Act Driving Clean Energy and Offshore Wind (St. 2022 c. 179)** impacts nearly all areas of the energy industry, from offshore wind, solar and battery to the electrification of the building and transportation sectors. The Act is a major step forward towards Massachusetts meeting its GHG emissions reduction goal of net zero by 2050 and contains numerous provisions aimed at GHG emissions reductions through electrification of vehicles and heating and development of clean energy from offshore wind. Highlights include: (i) codification in law of the procurement target of 5,600 MW of offshore wind generation no later than June 30, 2027; (ii) removal of the price cap requirement for project developers responding to solicitations for offshore wind generation; (iii) adoption of tax incentives for offshore wind companies, energy storage entities, "agri-solar" developers, and electric vehicle users; (iv) recognition of the need for development of the regional electric grid to accommodate energy from offshore wind by authorizing the solicitation of offshore wind transmission and requiring electric distribution companies (EDCs) to proactively prepare for the grid of the future; (v) authorization for Massachusetts agencies to coordinate with other New England states on generation and transmission planning and procurement for the region; (vi) imposition of a requirement that the EDCs develop tariffs to interconnect energy storage systems to the



distribution system for participation in wholesale energy markets; and (vii) establishment of a requirement that nearly all public vehicles be entirely electric by 2040.

## NEW HAMPSHIRE

### **An Act Relative to the Office of Offshore Wind Industry Development (SB. 440)**

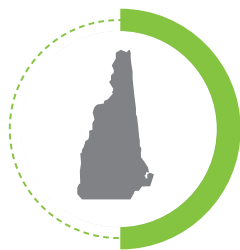
increases the state's role in planning offshore wind development and directs the Office of Offshore Wind Industry Development to report and make recommendations on the criteria for evaluating power purchase agreements for energy procured from offshore wind, actions necessary to mitigate the impact on the state's coast, and utilities' use of renewable energy credits accrued through contracts for offshore wind energy. Relatedly, the New Hampshire General Court also passed **An Act Relative to the Approval of Power Purchase Agreements for Offshore Wind Energy Resources from the Gulf of Maine (SB. 268)** which directs the New Hampshire Public Utilities Commission to ensure that certain requirements relative to impact and use studies are met prior to approving power purchase agreements for energy derived from the Gulf of Maine.

**An Act Relative to Customer Generators of Electric Energy (SB. 262)** allows net metering group host customers to include political subdivisions and hydroelectric customer-generators. The Act also requires electric utilities to publish hosting capacity maps on their websites and requires the New Hampshire Department of Energy to investigate and report on customer-generator interconnection procedures.

## RHODE ISLAND

### **An Act Relating to Public Utilities and Carriers—Renewable Energy (H. 7277, S. 2274)**

increases Rhode Island's yearly Renewable Energy Standard (RES) to achieve the goal that 100 percent of Rhode Island's electricity demand is from renewable energy by 2033. RI's current statute established the 2022 RES at 19%, with annual increases of 1.5%, to reach a goal of 38.5% renewables by 2035. With the new Act, the RES target in Rhode Island will increase by 4% in 2023, 5% in 2024, 6% in 2025, 7% in 2026 and 2027, 7.5% in 2028, 8% in 2029, 8.5% in 2030, 9% in 2031 and 9.5% in 2032 and 2033, in order to achieve the target of having 100% renewable energy.



## 2022 Affordable Clean Energy Security Act Amendment

**(S. 2583)** authorizes the procurement of at least 600 MW and no more than 1,000 MW of offshore wind capacity. Rhode Island Energy issued an RFP and the deadline for submission is March 23, 2023. The **Affordable Clean Energy Security Act** was originally passed in 2014 to enhance system reliability and energy security in the state. The Act, which amends the 2014 Act, will also lower remuneration and incentives provided to the utilities pursuant to long-term offshore wind contracts from 2.75% to up to 1.0% of the actual annual payments made under the contracts through December 31, 2026. For those contracts approved on or after January 1, 2027, the Act provides no financial remuneration or incentives to the utility, unless otherwise granted by the Rhode Island Public Utilities Commission.

## VERMONT

### **An Act Relating to Environmental Justice in Vermont (S. 154)**

codifies the definition of environmental justice and requires numerous Vermont state agencies, including energy-related agencies, to consider cumulative environmental burdens and access to environmental benefits when promulgating their rules, procedures, and policies. The Act establishes the Interagency Environmental Justice and Environmental Justice Council to advise and guide the state's agencies in implementing the environmental justice policy. The Act also charges the Agency of Natural Resources to create an environmental justice mapping tool to identify environmental justice focus populations and to assist the Environmental Justice Advisory Counsel in community outreach program.



# Legal Proceedings & Appeals

Before any changes of significance can be made to the New England markets or transmission arrangements the FERC must first have the opportunity to approve or accept those changes as meeting the requirements of federal law. That review typically begins with ISO-NE filing with the FERC the proposed changes along with an explanation of the changes and supporting materials. Under the agreement between ISO-NE and NEPOOL, virtually all those changes need first to be considered and voted by NEPOOL. When NEPOOL supports the proposed Tariff changes, it usually joins in ISO-NE's filing with the FERC.



ISO-NE and NEPOOL work through most changes before filing and the FERC often addresses proposed changes solely by reference to the initial materials and comments submitted. Some filings prompt protests or present disputes among the region's diverse business interests, the States, or between NEPOOL and ISO-NE that, while potentially narrowed during the stakeholder process, have not been fully resolved. The FERC can also act on its own initiative or in response to a complaint by a third party seeking to prove that the current arrangements are no longer lawful. As seen in the many rulemaking and administrative proceedings initiated by or before the FERC in 2022, the FERC also opens proceedings to inquire about areas of interest to it or to consider changes to its rules and regulations.

Parties aggrieved by FERC actions can challenge them through appeal to the federal courts.

In 2022, there was a continued high level of activity before the FERC and the federal courts involving New England matters, with over 279 proceedings initiated or ongoing during the year. Before the FERC, significant proceedings related primarily to: (i) the elimination of MOPR over a two-year period (as discussed on page 36 above); (ii) continued litigation over the costs of, and arrangements related to, the Cost-of-Service Agreement (COS Agreement) among Constellation Mystic Power (Mystic), Constellation Energy Generation, LLC (Constellation) and ISO-NE; (iii) the resolution of the eligibility of the Killingly Energy Center project to participate in the sixteenth FCA following delays in that project and the market impacts related thereto; and (iv) Tariff changes designed to address participation in New England's Markets by Distributed Energy Resource Aggregations (as discussed on page 37 above), behind-the-meter generation, and storage facilities incapable of consuming electricity from the grid. The FERC also approved settlement agreements resolving Office

of Enforcement investigations into violations of the ISO-NE Tariff and FERC market behavior rules, including settlements with CPower (related to energy market offer obligations), and with both Salem Harbor and ISO-NE (related to Tariff obligations surrounding the capacity award for Footprint's new Salem Harbor Generating Station project).

There was a notable uptick in the number of FERC administrative and rule-making proceedings in 2022, many of which were focused nationally on the path to a cleaner energy future. Technical conferences this past year at the FERC included such topics as: defining the New England region's electric and natural gas system challenges (held in Burlington Vermont on September 8), improving generating units' winter readiness, resource adequacy, bulk power system reliability, and transmission planning and cost management. In addition, the FERC considered changes to address cybersecurity investment, transmission planning performance requirements for extreme weather, interconnection reforms, the sharing of credit information by ISOs and RTOs, and broader requirements for candor in communications with the FERC or other specified organizations on FERC-jurisdictional matters.

Numerous appeals to the federal courts, particularly the U.S. Court of Appeals for the D.C. Circuit (DC Circuit), that were pending at the beginning of the year, were concluded in 2022. Appeals to the federal courts that were remanded to the FERC for more work included proceedings addressing ISO-NE's interim proposal to pay for inventoried energy during the June 2023 through May 2025 period (the Inventoried Energy Program or IEP), the arrangements under the Mystic cost-of-service agreement, and the methodology for setting the ROE that electric utilities are entitled to earn on electric transmission investments. Appeals



that were dismissed included challenges to the FERC's acceptance of ISO-NE's implementation of competitive bidding for transmission

upgrades, the FERC's orders allowing for recovery of expenditures to comply with NERC CIP-IROL requirements, the FERC's final orders on the 2013/2014 Winter Reliability Program, the orders setting the ROE for the Mystic COS agreement, and the orders challenging the FERC's acceptance of the termination of the Killingly Energy Center's Capacity Supply Obligation. Still being held in abeyance were appellate proceedings related to Competitive Auctions with Sponsored Policy Resources (CASPR), the transmission owners' efforts to reinstate rates that a FERC order had found to be unjust and unreasonable but was later vacated by the DC Circuit in Emera Maine, and certain challenges to the Mystic COS arrangements.

Legal proceedings in 2022 continue to highlight that complex and important issues shaping New England's clean energy future are best resolved where possible through the NEPOOL stakeholder process, rather than through litigation at the FERC and in the federal courts. While the stakeholder process certainly does not resolve all disagreements, the outcome is often agreement between NEPOOL and ISO-NE, with unresolved issues and potential solutions far narrower and better understood.

NEPOOL maintains on its website a current listing of legal developments relevant to the region and NEPOOL Counsel prepares and posts a monthly summary of those legal proceedings. Current developments and the monthly litigation reports are publicly available in the NEPOOL website's library at <https://nepool.com/library/litigation-updates-reports/>. A full listing of the proceedings that were active in 2022 before the FERC or the federal courts is included in the next five pages of this Annual Report.





# FERC Proceedings



## COVID-19

<b>EL20-37</b>	Blanket Waiver of ISO/RTO Tariff In-Person Meeting & Notarization Requirements
<b>AD20-11</b>	Extension of Filing Deadlines
<b>AD20-12</b>	Remote ALJ Hearings

## FCA Filings

<b>ER22-355</b>	CSO Termination: Killingly Energy Center
<b>ER18-2364</b>	FCA15 Fuel Security Reliability Review Info Filing
<b>ER22-1053</b>	FCA16 Exigent Circumstances Filing Changes to Info. Publication Deadline
<b>ER22-1060</b>	FCA16 ISO-NE Waiver of Info. Publication Deadline
<b>ER22-391</b>	FCA16 Qualification Informational Filing
<b>ER22-1417</b>	FCA16 Results Filing
<b>ER22-2651</b>	FCA17 De-List Bids Filing
<b>ER23-50</b>	FCA18 Schedule Modifications

## Market Rule Changes

<b>ER22-2546</b>	CSF Revisions
<b>ER23-74</b>	FCM Parameters Recalculation Schedule Modification
<b>ER19-1428-005</b>	IEP Remand
<b>ER22-2366</b>	Information Policy Cyber Security Incident Info. Sharing Changes
<b>ER22-1528</b>	MOPR Elimination Filing
<b>ER22-983</b>	New England's Order 2222 Compliance Filing

## Waiver Requests

<b>ER22-174</b>	Andro Hydro: FCA16 Qualification
<b>ER23-370</b>	New England Power: Attachment F
<b>ER22-864</b>	ConnectGen South Wrentham: Queue Position Modifications

## ICR, HQICC and Demand Curve Values

<b>ER23-405</b>	2026-27 (FCA17) Capacity Commit. Period
<b>ER22-556</b>	Annual Reconfiguration Auctions

## OATT Amendments

<b>ER22-2021</b>	Attachment F Corrections & Updates
<b>ER23-197</b>	Attachment F Depreciation Normalization Requirement Revisions
<b>ER23-299</b>	Attachment F Revisions Reflecting RIE Addition as PTO
<b>ER22-2953-001</b>	Attachment F, Appendix D-PSNH: Depreciation Rate for Accounts 357 & 358
<b>ER22-727</b>	Attachment K Planning Changes
<b>ER22-400</b>	Attachment K Resource Assumption Changes
<b>ER21-2337</b>	BTM Generation Proposal
<b>ER22-2226</b>	Process Modifications - DER Interconnection/Interconnection Study Coordination
<b>ER22-733</b>	Tariff Changes Associated with Order 1000 Lessons Learned

## Rate Filings

<b>ER09-1532 et al.</b>	2022-2023 Transmission Rate Annual Update/Info. Filing
<b>ER23-94</b>	2023 ISO-NE Administrative Costs and Capital Budgets
<b>ER23-100</b>	2023 NESCOE Budget
<b>ER22-2812</b>	2023-2027 NESCOE 5-year Pro Forma Budget

## Rulemaking Compliance Filings

<b>ER21-2509</b>	<i>Order 676-I: CSC-Sched. 18 - Attachment Z</i>
<b>ER21-941</b>	<i>Order 676-I: ISO-NE/NEPOOL - Sched. 24</i>
<b>ER21-2529</b>	<i>Order 676-I: TOS - Sched. 20/21-Common</i>
<b>ER21-2498</b>	<i>Order 676-I: Versant Power MPD OATT</i>
<b>RM05-5</b>	<i>Order 676-J: Incorpor. of NAESB WEQ Standards v. 003.3 into FERC Regs</i>
<b>ER22-1168</b>	<i>Order 676-J: (Part I) CSC-Sched. 18 - Attachment Z</i>
<b>ER22-1150</b>	<i>Order 676-J: (Part I) ISO-NE - Sched. 24</i>
<b>ER22-1161</b>	<i>Order 676-J: (Part I) TOS-Sched. 20/21-Common</i>
<b>ER22-1142</b>	<i>Order 676-J: (Part I) Versant MPD OATT</i>
<b>various</b>	<i>Orders 864/864-A: New England Public Util. Trans. ADIT Rate Changes</i>
<b>ER22-2357</b>	<i>Order 881: New England</i>
<b>ER22-2468 et al.</b>	<i>Order 881: Phase I/II HVDC-TF - 20-A Common Att. M and HVDC TOA</i>
<b>ER22-2358</b>	<i>Order 881: Versant Power MPD OATT</i>



Complaints/Section 206 Proceedings	
<b>EL22-63</b>	206: FTR Collateral Show Cause Order
<b>EL21-94</b>	206: ISO-NE Tariff Schedule 25 and Section I.3.10
<b>EL11-66 et al.</b>	Base ROE Complaints I-IV
<b>EL21-47</b>	Green Development DAF Charges Complaint Against National Grid
<b>EL21-6</b>	NECEC/Avangrid Complaint Against NextEra/Seabrook
<b>EL21-3</b>	NECEC Elective Upgrade Costs Dispute Complaint
<b>EL22-31</b>	NMISA Complaint Against PTO AC (Reciprocal TOUT Discount)
<b>EL22-42</b>	RENEW/ACPA Resource Capac. Accreditation & Operating Reserve Designat'n Complaint
CIP IROL Cost Recovery Proceedings	
<b>ER21-2334</b>	Cross-Sound Cable (Pre-Jun 1, 2021 Cost Recovery)
<b>ER22-2469</b>	Essential Power Newington (Cost Recovery)
<b>ER22-2876</b>	FirstLight (Schedule)
<b>ER22-2367</b>	GenConn Middletown (Schedule)
Mystic 8/9 Proceedings	
<b>ER18-1639</b>	Cost of Service Agreement (COSA)
<b>EL23-4</b>	ENECOS COSA Complaint (Firm Pipeline Trans. Costs Pass-Through)
<b>ER22-1192</b>	Spin Transaction Updates
Financial Assurance/Billing Policy Amendments	
<b>ER22-213</b>	Removal of FAP Notarization Requirements
<b>ER22-1167</b>	FCM Billing Acceleration and RBA Changes
<b>ER22-863</b>	Non-Commercial Capacity Trading FA Changes
Schedule 20/21/22/23 Updates	
<b>ER22-2398</b>	Sched. 20A Reassignment Agreement: NEP/Brookfield/HQUS
<b>ER22-2431 et al.</b>	Sched. 20A Reassignment Agreements: CMP & UI/ BRTM/ HQUS
<b>ER22-707</b>	Sched. 21-NEP: 2nd Revised Narragansett LSA
<b>ER22-927</b>	Sched. 21-NEP: 3rd Revised RI LSAs
<b>ER22-2732</b>	Sched. 21-NEP: Narragansett/Pawtucket Power Decommissioning CRA
<b>ER22-2175</b>	Sched. 21-NEP: NEP/NSTAR Civil Work & Construction Agreement
<b>ER23-165</b>	Sched. 21-NEP: Narragansett References Removed; NGrid LCC References Updated
<b>ER22-1918</b>	Sched. 21-NEP: Revised RI LSAs Compliance Filing
<b>ER22-97</b>	Sched. 21-NEP: Sterling Municipal LSA
<b>ER23-16</b>	Sched. 21-RIE
<b>ER15-1434-005</b>	Sched. 21-VP: 2020 Annual Update Settlement Agreement
<b>ER20-2119-001</b>	Sched. 21-VP: 2021 Annual Update Settlement Agreement
<b>ER15-1434-001</b>	Sched. 21-VP: Bangor Hydro/Maine Public Service Merger-Related Costs Recovery
<b>ER22-1115</b>	Sched. 21-VP: Sched. 21 Name Update
<b>ER22-720</b>	Sched. 23: NSTAR/Berkshire Wind/ISO-NE SGIA
Regional Reports	
<b>ER22-125</b>	Capital Projects Report - 2021 Q3
<b>ER22-1041</b>	Capital Projects Report - 2021 Q4
<b>ER22-1880</b>	Capital Projects Report - 2022 Q1
<b>ER22-2667</b>	Capital Projects Report - 2022 Q2
<b>ER23-114</b>	Capital Projects Report - 2022 Q3
<b>Z22-4</b>	IMM Annual Markets Report (2021)
<b>Z22-4</b>	IMM Quarterly Markets Reports
<b>ER19-1951</b>	Interconnection Study Metrics Processing Time Exceedance Reports
<b>not docketed</b>	ISO-NE FERC Form 582
<b>not docketed</b>	ISO-NE FERC Form 714
<b>not docketed</b>	ISO-NE FERC Form 715
<b>not docketed</b>	ISO-NE FERC Forms 3Q
<b>ER07-476</b>	LFTR Implementation Quarterly Status Rpts
<b>EL11-66</b>	Opinion 531 Refund Reports
<b>RM18-9</b>	<i>Order 2222</i> Stakeholder Process Status Update; Tech Conf Request
<b>ER06-613</b>	Reserve Market Compl. Semi-Annual Rpts
<b>ER13-193</b>	Transmission Projects Annual Info. Filing
<b>RM18-9</b>	Voltus Petition for a FERC Tech. Conf. on <i>Order 2222</i>
Membership Filings	
<b>ER22-502</b>	December 2021
<b>ER22-747</b>	January 2022
<b>ER22-945</b>	February 2022
<b>ER22-1131</b>	March 2022

# FERC Proceedings

<b>ER22-1531</b>	April 2022
<b>ER22-1738</b>	May 2022
<b>ER22-1991</b>	June 2022
<b>ER22-2260</b>	July 2022
<b>ER22-2568</b>	Aug 2022
<b>ER22-2982</b>	Oct 2022
<b>ER23-310</b>	Nov 2022 I
<b>ER23-402</b>	Nov 2022 II
<b>ER22-1039</b>	Sunwave Holdings USA Inc. Involuntary Termination

## Market Participant Suspension Notices

<b>not docketed</b>	Howard Wind, LLC
<b>not docketed</b>	Manchester Methane, LLC
<b>not docketed</b>	NTE Connecticut, LLC
<b>not docketed</b>	Pilot Power Group, LLC
<b>not docketed</b>	Sunwave USA Holdings Inc.

## ERO Rules, Filings; Reliability Standards

<b>RR22-4</b>	2023 NERC/NPCC Business Plans and Budgets
<b>RC11-6-014</b>	NERC Annual Report on FFT & Compliance Exception Programs
<b>RM20-8</b>	NOI: Virtualization and Cloud Computing Services in BES Operations
<b>NP22-33</b>	Notice of Penalty: National Grid
<b>RR22-2</b>	NPCC Bylaws Changes
<b>RM19-17/16</b>	Order 873: Retirement of Rel. Standard Reqs. (Standards Efficiency Review)
<b>RR21-5</b>	Report of Comparisons of 2020 Budgeted to Actual Costs for NERC/Regional Entities
<b>not docketed</b>	Report on Feb 2021 Cold Weather Outages in Texas and the South Central US
<b>not docketed</b>	Report on Protection System Commissioning Program Review
<b>not docketed</b>	Report on Real Time Assessments
<b>RD22-3</b>	Revised Reliability Standard (CIP-014 Compliance Section)

<b>RD22-2</b>	Revised Reliability Standards (System Operating Limits Changes)
<b>RR21-10</b>	Rules of Procedure Changes (CMEP Risk-Based Approach Enhancements)
<b>RR21-8</b>	Rules of Procedure Changes (Reliability Standards Development Revisions)
<b>not docketed</b>	SolarWinds and Related Supply Chain Compromise White Paper
<b>RD20-2</b>	Virtualization and Cloud Computing Services Projects Info. Filing

## Mergers & Acquisitions

<b>EC22-7</b>	Castleton Comm./Atlas Power (GSP cos.)
<b>EC23-22</b>	Central Rivers Power/LSPower
<b>EC22-90</b>	Centrica/CPower
<b>EC22-84</b>	Clearway/TotalEnergies
<b>EC23-17</b>	ConEd/RWE
<b>EC21-113</b>	Covanta/EQT
<b>EC22-122</b>	EDF Energy/BP Retail
<b>EC21-57</b>	Exelon Generation
<b>EC23-16</b>	Great River Hydro/HQI US
<b>EC22-13</b>	Howard Wind/Greenbacker Wind
<b>EC22-3</b>	Hull Street/CMEEC
<b>EC21-74</b>	NRG/Generation Bridge (ArcLight)
<b>EC22-49</b>	Pixelle/Spectrum
<b>EC21-87</b>	PPL/Narragansett
<b>EC21-125</b>	PSEG/Generation Bridge II (ArcLight)
<b>EC22-117</b>	Salem Harbor/Lenders
<b>EC23-18</b>	Seneca Energy II/BP
<b>EC22-71</b>	Stonepeak/JERA Americas
<b>EC21-114</b>	Valcour Wind Energy/AES
<b>EC22-79</b>	Waterside Power/KKR

## Regional Interest

<b>ER22-2807</b>	A&R E&P Agreement: Seabrook/NECEC Transmission
<b>ER22-1548</b>	CL&P Att. F App. D Depreciation Rate Change
<b>ER22-817</b>	Cost Reimbursement Agreement (CRA): Narragansett/BIPCO
<b>ER23-396</b>	CRA: NEP/Holden
<b>ER22-612</b>	CRA Cancellation: Narragansett/CV South Street Landing
<b>ER22-129</b>	CRA Cancellation: National Grid/GRS
<b>ER22-2830</b>	D&E Agreement: CL&P/NY Transco
<b>ER22-599</b>	D&E Agreement Cancellation: CL&P/NGR Middletown

<b>ER22-912</b>	D&E Agreement Cancellation: CL&P/UConn
<b>ER22-214</b>	D&E Agreement Cancellation: NSTAR/Cranberry Storage
<b>ER22-911</b>	D&E Agreement Cancellation: NSTAR/Ocean State
<b>ER22-2039/2038</b>	IAS: NEP / Narragansett
<b>ER21-2860</b>	IA Termination: CL&P/Sterling Property
<b>ER22-1862</b>	LGIA: CL&P / EIP Investment (New Britain, CT Fuel Cell)
<b>ER22-1290</b>	Maine Power Link Application for Negotiated Rate Authority
<b>ER23-345</b>	MPD OATT: Changes to CIS Costs and Expenses Treatment
<b>ER23-348</b>	NEP Tariff No. 1 Revisions
<b>ER22-697</b>	Related Facilities Agreement: CL&P/Revolution Wind
<b>ER22-1675</b>	Related Facilities Agreement: NSTAR/Ocean State Power
<b>ER23-144</b>	Service Agreement Cancellation: NEP/Pawtucket
<b>ER22-1013</b>	Service Agreement Cancellation: NSTAR/Servistar
<b>ER22-1247</b>	TSA: NSTAR/Park City Wind
<b>ER22-2189</b>	VTransco Shared Structure Participation Agreements

### Rulemaking and Policy Statement Proceedings

<b>RM21-17</b>	ANOPR: Transmission Planning and Allocation and Generator Interconnection
<b>RM16-17</b>	<i>Order 860/860-A: Data Collection for Analytics &amp; Surveillance and MBR Purposes</i>
<b>RM20-16</b>	<i>Order 881: Managing Transmission Line Ratings</i>
<b>RM22-6</b>	<i>Order 882: 2022 Civil Monetary Penalty Inflation Adjustments</i>
<b>RM22-2</b>	NOI: Reactive Power Capability Compensation
<b>RM21-14</b>	NOI: Removing the DR Opt-Out in ISO/RTO Markets
<b>RM21-11</b>	NOPR: Accounting and Reporting Treatment of Certain Renewable Energy Assets
<b>RM22-19</b>	NOPR: Advanced Cybersecurity Investment
<b>RM21-3</b>	NOPR: Cybersecurity Incentives
<b>RM22-20</b>	NOPR: Duty of Candor
<b>RM20-10</b>	NOPR: Electric Transmission Incentives Policy
<b>RM22-16</b>	NOPR: Extreme Weather Vulnerability Assessments
<b>RM22-14</b>	NOPR: Interconnection Reforms
<b>RM22-3</b>	NOPR: Internal Network Security Monitoring
<b>RM22-13</b>	NOPR: ISO/RTO Credit Information Sharing
<b>RM21-17</b>	NOPR: Transmission Planning and Allocation and Generator Interconnection
<b>RM22-10</b>	NOPR: Transmission System Planning Performance Requirements for Extreme Weather
<b>RM18-9</b>	Voltus Petition for a FERC Technical Conference on Order 2222

### Misc: Administrative & Rulemaking Proceedings

<b>AD21-13</b>	Climate Change, Extreme Weather, and Electric Sys. Reliability
<b>AD20-9</b>	Hybrid Resources Tech. Conf.
<b>AD22-4</b>	Improving Gen. Units Winter Readiness
<b>AD10-12</b>	Increasing Market and Planning Efficiency Through Improved Software Tech. Conf.
<b>AD22-13</b>	Interregional HVDC Merchant Transmission
<b>AD21-15</b>	Joint Fed.-State Task Force on Electric Transmission
<b>AD21-10</b>	Modernizing Electricity Mkt Design - Energy and Ancillary Service Markets
<b>AD21-10</b>	Modernizing Electricity Mkt Design - Resource Adequacy
<b>AD22-9</b>	New England Gas-Electric Forum
<b>AD22-5</b>	NOI: Dynamic Line Ratings
<b>RM22-5</b>	NOI: Industry Assoc. Dues & Expenses Rate Recovery, Reporting, and Accounting Treatment
<b>AD21-9</b>	Office of Public Participation
<b>AD22-10</b>	Reliability Tech. Conf.
<b>AD22-8</b>	Transmission Planning and Cost Management Tech. Conf.

### FERC Enforcement Proceedings

<b>IN13-15</b>	BP Initial Decision
<b>IN16-4</b>	Coaltrain Energy
<b>IN22-4</b>	Constellation New Energy
<b>IN22-7</b>	CPower
<b>IN22-3</b>	Dynegy Marketing and Trade
<b>IN18-9</b>	GreenHat
<b>IN18-8</b>	ISO-NE (Salem Harbor)
<b>IN21-6</b>	PacifiCorp
<b>IN17-4</b>	Rover and ETP (Tuscarawas River HDD Show Cause Order)
<b>IN19-4</b>	Rover Pipeline, LLC and Energy Transfer Partners, L.P. (CPCN Show Cause Order)
<b>IN18-8</b>	Salem Harbor
<b>IN12-17</b>	Total Gas & Power North America, Inc.

### Natural Gas Proceedings

<b>CP16-9</b>	Atlantic Bridge
<b>CP20-48</b>	Iroquois ExC Project
<b>CP15-115</b>	Northern Access Project

# Federal Court Appeals



US Court of Appeals for the DC Circuit (unless otherwise noted)

16-1325	<b>Opinion 569/569-A: FERC's Base ROE Methodology</b> (EL14-12; EL15-45). Challenge to the FERC's establishment of a new methodology for setting the ROE that electric utilities are entitled to earn on electric transmission investments. Decision issued August 9. Underlying FERC orders vacated and cases remanded to the FERC to reopen the proceedings.	20-1329	<b>Opinion 531-A Compliance Filing Undo</b> (ER15-414). Given Allegheny, TOs appeal of the FERC's October 6, 2017 order rejecting the TOs' filing that sought to reinstate their transmission rates to those in place prior to the FERC's orders later vacated by Emera Maine. Being held in abeyance.
18-1128	<b>PennEast Project</b> (CP15-558). Challenge to FERC orders granting certificates of public convenience and necessity to PennEast Pipeline Company for the construction and operation of the PennEast Project. The cases were dismissed on February 8 because PennEast has "ceased all further development of the Project." Reporting concluded.	20-1333	<b>CASPR</b> (ER18-619). Given Allegheny, Sierra Club, NRDC, RENEW Northeast, and CLF sought review of the FERC's March 9, 2018 CASPR Order. Being held in abeyance until March 1, 2024.
19-1224	<b>ISO-NE's Inventoried Energy Program Proposal</b> (ER19-1428). Review of the FERC's June 18, 2020 IEP Remand Order. Decision issued on June 17 leaving intact the FERC's June 2020 IEP Remand Order except for the inclusion of nuclear, biomass, coal, and hydroelectric generators in IEP. Remanded to the FERC for further proceedings (see ER19-1428).	20-1343	<b>Mystic I</b> (ER18-1639). Mystic, NESCOE, MA AG, and CT Parties separately petitioned the Court for review of the FERC's orders addressing the COS Agreement among Mystic, Constellation and ISO-NE. State Petitioners petitions for cost allocation review granted, claw-back and delay provisions vacated. Remanded to FERC.
20-1289	<b>2013/14 Winter Reliability Program Remand Proceeding</b> (ER13-2266). TransCanada appeal of April 1, 2020 2013/24 Winter Reliability Program Order on Remand and Compliance. Petition for Review denied.	20-1389	<b>CIP IROL Cost Recovery Rules</b> (ER20-739). Cogentrix and Vistra challenge the FERC's orders allowing for recovery of expenditures to comply with NERC IROL-CIP requirements, but only those costs incurred on or after the effective date of the relevant individual FPA section 205 filing, including undepreciated costs of any such past capital expenditures to comply with the IROL-CIP requirements. Decision issued January 28. Petition for review denied.



# Federal Court Appeals



20-1422	<b>ISO-NE Implementation of Order 1000 Exemptions for Immediate Need Rel. Projects</b> (EL19-90). LS Power challenged the FERC's June 18, 2020 order finding insufficient evidence to conclude that ISO-NE's implementation of the exemption for immediate need reliability projects is unjust, unreasonable, or unduly discriminatory or preferential. Decision issued March 22, 2022. Petition for review denied.	21-1198	<b>Mystic II (ROE &amp; True-Up)</b> (EL18-1639-010, -011). Mystic challenges the FERC's order setting the base ROE for the Mystic COS Agreement at 9.33%. Case challenging ROE decision voluntarily dismissed. Remaining challenges to COS Agreement's True-up provisions being held in abeyance.
20-72788 (9th Cir.)	<b>Order 872</b> (RM19-15). Solar Energy Industries Association challenges Order 872 (Pricing and Eligibility Changes to PURPA Regulations). Oral argument held March 8, 2022. Pending.	22-1011	<b>NTE CT Petition to Stay FERC Order Accepting Killingly CSO Termination.</b> NTE CT petitioned the DC Circuit for Writ of Mandamus staying the Killingly CSO Termination Order. Initially granted on February 4, the Stay was lifted on March 2, 2022, allowing the results of FCA16 to be finalized.
21-1115	<b>Algonquin Atlantic Bridge Project</b> (CP16-9-012). Algonquin Gas Transmission challenged the FERC's February 18, 2021 order soliciting briefing regarding the operation of the Weymouth, MA Compressor Station (authorized to commence service on September 24, 2020). Being held in abeyance pending outcome of 21-1146 immediately below.	22-1027	<b>Killingly CSO Termination Orders</b> (ER22-355). NTE CT challenges the FERC order accepting the termination of the Killingly Energy Center's CSO. Case dismissed on May 10.
22-1146	<b>Algonquin Atlantic Bridge Project</b> (CP16-9-009). Fore River Residents Against the Compressor Station, among others, challenged the FERC's order extending by two years the deadline to complete construction of the proposed compressor station. Pending	22-1108	<b>2nd Revised Narragansett LSA Orders</b> (ER22-707). Green Development challenges the assessment of Direct Assignment Facilities Charges related to its four new solar projects. Briefing underway.

## Appendices



# Operative Documents



**Second Restated NEPOOL Agreement (2d RNA)**  
<https://nepool.com/library/operative-documents/>



**Participants Agreement (PA)**  
<https://nepool.com/library/operative-documents/>



**Market Participant Service Agreement (MPSA)**  
<https://nepool.com/library/operative-documents/>



**Memorandum of Understanding Among ISO-NE, NEPOOL and NESCOE (MOU)**  
[https://nepool.com/uploads/MOU\\_Final.pdf](https://nepool.com/uploads/MOU_Final.pdf)



**ISO-NE Tariff (Tariff)**  
<https://www.iso-ne.com/regulatory/tariff/index.html>



**Manuals**  
<https://iso-ne.com/participate/rules-procedures/manuals>



**Operating Procedures (OPs)**  
<https://www.iso-ne.com/participate/rules-procedures/operating-procedures/>



**Planning Procedures (PPs)**  
<https://iso-ne.com/participate/rules-procedures/planning-procedures>



**Participants Committee Bylaws**  
<https://nepool.com/meetings/>



**Technical Committee Bylaws**  
<https://nepool.com/library/operative-documents/>



**Protocols for In-Person Attendance**  
<https://nepool.com/meetings/>



**Generation Information System Operating Rules**  
<https://www.nepoolgis.com/documents/>



**Transmission Owners Agreement (TOA)**  
<https://www.iso-ne.com/participate/governing-agreements/transmission-operating-agreements>



**Asset Owners Agreement (AOA)**  
<https://www.iso-ne.com/participate/governing-agreements/interconnection-operating-asset-owners>



**Interconnection Operators Agreement (IOA)**  
<https://www.iso-ne.com/participate/governing-agreements/interconnection-operating-asset-owners>



**Phase I/II HVDC Transmission Operating Agreement (HVDC TOA)**  
<https://www.iso-ne.com/participate/governing-agreements/transmission-operating-agreements>



**Phase I/II HVDC-TF Transmission Service Administration Agreement (TSAA)**  
<https://www.iso-ne.com/participate/governing-agreements/transmission-operating-agreements>



**Highgate Interconnection Operators Agreement**  
<https://www.iso-ne.com/participate/governing-agreements/interconnection-operating-asset-owners>



**New Brunswick and NYISO Coordination Agreements**  
[https://www.iso-ne.com/static-assets/documents/regulatory/tariff/attach\\_f/attach\\_f.pdf](https://www.iso-ne.com/static-assets/documents/regulatory/tariff/attach_f/attach_f.pdf)

# Acronyms and Abbreviations

Abbreviation	Meaning
<b>2d RNA</b>	Second Restated NEPOOL Agreement
<b>ADIT</b>	Accumulated Deferred Income Taxes
<b>ANOPR</b>	Advanced Notice of Proposed Rulemaking
<b>AOA</b>	Asset Owners Agreement
<b>APX</b>	APX, Inc., GIS Administrator
<b>AR</b>	Alternative Resources
<b>Assoc.</b>	Association
<b>B&amp;FS</b>	Budget & Finance Subcommittee
<b>BTM</b>	Behind-the-Meter
<b>CASPR</b>	Competitive Auctions with Sponsored Policy Resources
<b>CIP</b>	Critical Infrastructure Protection Rel. Standards
<b>CL&amp;P</b>	Connecticut Light & Power
<b>CLF</b>	Conservation Law Foundation
<b>CMEEC</b>	Connecticut Municipal Electric Energy Cooperative
<b>CTMEEC</b>	Conn. Trans. Mun. Elec. Coop
<b>CMEP</b>	Compliance Monitoring & Enforcement Program
<b>CMP</b>	Central Maine Power
<b>Co</b>	Company
<b>CO2</b>	Carbon Dioxide
<b>Commission</b>	Federal Energy Regulatory Commission
<b>Commod.</b>	Commodities
<b>Commit.</b>	Commitment
<b>CONE</b>	Cost of New Entry
<b>Coop.</b>	Cooperative
<b>COS</b>	Cost-of-Service
<b>COSA</b>	Cost-of-Service Agreement

<b>CRA</b>	Cost Reimbursement Agreement
<b>CSC</b>	Cross-Sound Cable
<b>CSF</b>	Continuous Storage Facilities
<b>CSO</b>	Capacity Supply Obligation
<b>CT or Conn.</b>	Connecticut
<b>CTRs</b>	Capacity Transfer Rights
<b>D&amp;E</b>	Design & Engineering
<b>DASI</b>	Day-Ahead Ancillary Services Initiative
<b>d/b/a</b>	Doing business as
<b>DC</b>	District of Columbia
<b>DC Circuit</b>	US Court of Appeals for the DC Circuit
<b>Dept</b>	Department
<b>DER</b>	Distributed Energy Resources
<b>DERA</b>	Distributed Energy Resource Aggregations
<b>Div.</b>	Division
<b>DOE</b>	US Department of Energy
<b>DR</b>	Demand Response
<b>DRWG</b>	Demand Response Working Group
<b>EDC</b>	Electric Distribution Company
<b>EE</b>	Energy Efficiency
<b>EIR</b>	Energy Infrastructure Reinvestment Act
<b>ENE</b>	Energy New England
<b>EMM</b>	ISO-NE External Market Monitor
<b>ENECOS</b>	Eastern New England Consumer-Owned Systems
<b>ETU</b>	Elective Transmission Upgrades
<b>FAP</b>	ISO-NE Financial Assurance Policy
<b>FCA</b>	Forward Capacity Auction
<b>FCEM</b>	Forward Clean Energy Market
<b>FCM</b>	Forward Capacity Market
<b>FERC</b>	Federal Energy Regulatory Commission
<b>FGRS</b>	Future Grid Reliability Study
<b>FPA</b>	Federal Power Act
<b>FTRs</b>	Financial Transmission Rights
<b>GHG</b>	Greenhouse Gas

<b>GIS</b>	NEPOOL's Generation Information System
<b>GP</b>	General Partnership
<b>GW</b>	Gigawatts
<b>GWh</b>	Gigawatt hour
<b>HQ US</b>	HQ Energy Services (US) Inc., a subsidiary of Hydro-Québec
<b>HVDC-TF</b>	High Voltage Direct Current Transmission Facilities
<b>IA</b>	Interconnection Agreement
<b>ICR</b>	Installed Capacity Requirements
<b>IEP</b>	ISO-NE Inventoried Energy Program
<b>IMM</b>	ISO-NE Internal Market Monitor
<b>Inc.</b>	Incorporated
<b>Info.</b>	Informational
<b>IOA</b>	Interconnection Operators Agreement
<b>IRA</b>	2022 Inflation Reduction Act
<b>IROL</b>	Interconnection Reliability Operating Limit
<b>ISO</b>	Independent System Operator
<b>ISO-NE</b>	ISO New England Inc.
<b>JPE</b>	Joint Powers Entity
<b>kV</b>	Kilovolt
<b>kW</b>	Kilowatt
<b>LCC</b>	Local Control Center
<b>LD</b>	Legislative Document
<b>LFTR</b>	Long-Term Financial Transmission Right
<b>LGIA</b>	Large Generator Interconnection Agreement
<b>LLC</b>	Limited Liability Company
<b>LMP</b>	Locational Marginal Price
<b>LNG</b>	Liquefied natural gas
<b>LNS</b>	Local Network Service
<b>LP or L.P.</b>	Limited Partnership
<b>LSA</b>	Local Service Agreement
<b>Ltd.</b>	Limited
<b>MA or Mass.</b>	Massachusetts
<b>MA AG</b>	Massachusetts Attorney General (or her office)
<b>MBR</b>	Market-Based Rate Authorization



<b>MBTA</b>	Mass. Bay Transportation Authority
<b>MC</b>	Markets Committee
<b>ME</b>	Maine
<b>MIRA</b>	Conn. Materials Innovations and Recycling Authority
<b>Mktg</b>	Marketing
<b>MMWEC</b>	Massachusetts Municipal Wholesale Electric Company
<b>MOPR</b>	Minimum Offer Price Rule
<b>MOU</b>	Memorandum of Understanding
<b>MPD</b>	Maine Public District
<b>MPSA</b>	Market Participant Service Agreement
<b>MPUC</b>	Maine Public Utilities Commission
<b>MRWG</b>	Meter Reader Working Group
<b>Mun.</b>	Municipal
<b>MW</b>	Megawatts
<b>MWh</b>	Megawatt hours
<b>NA</b>	North America
<b>NAESB</b>	North American Electric Standards Board
<b>NCP</b>	Net Carbon Pricing
<b>NECEC</b>	New England Clean Energy Connect
<b>NHEC</b>	New Hampshire Electric Cooperative
<b>NECPUC</b>	New England Conference of Public Utilities Commissioners
<b>NEP</b>	New England Power
<b>NEPGA</b>	New England Power Generators Association
<b>NEPOOL</b>	New England Power Pool
<b>NERC</b>	North American Electric Reliability Corporation
<b>NESCOE</b>	New England States Committee on Electricity
<b>NH</b>	New Hampshire
<b>NHEC</b>	New Hampshire Electric Cooperative
<b>NH PUC</b>	New Hampshire Public Utilities Commission
<b>No.</b>	Number
<b>NOI</b>	Notice of Inquiry

<b>NOPR</b>	Notice of Proposed Rulemaking
<b>NOx</b>	Nitrogen Oxide
<b>NPCC</b>	Northeast Power Coordinating Council, Inc.
<b>NYISO</b>	New York Independent System Operator
<b>OATT</b>	Open Access Transmission Tariff
<b>OP</b>	ISO-NE Operating Procedure
<b>Ops.</b>	Operations
<b>PA</b>	Participants Agreement
<b>PAC</b>	Planning Advisory Committee
<b>PP</b>	ISO-NE Planning Procedure
<b>PRD</b>	Price-Responsive Demand
<b>PSNH</b>	Public Service of New Hampshire
<b>PTF</b>	Pool Transmission Facilities
<b>PTO</b>	Participating Transmission Owner (TOA signatory)
<b>Q1</b>	First quarter
<b>Q2</b>	Second quarter
<b>Q3</b>	Third quarter
<b>Q4</b>	Fourth quarter
<b>RC</b>	Reliability Committee
<b>RCA</b>	Resource Capacity Accreditation
<b>RES</b>	Renewable Energy Standard
<b>RFP</b>	Request for Proposal
<b>RI</b>	Rhode Island
<b>ROE</b>	Return on equity
<b>RPS</b>	Renewable Portfolio Standard
<b>RTO</b>	Regional Transmission Organization
<b>SA</b>	Service Agreement
<b>SCC</b>	Seasonal Claimed Capability
<b>SCEF</b>	Shared Clean Energy Facility
<b>Sched.</b>	Schedule
<b>SGIA</b>	Small Generator Interconnection Agreement
<b>SO2</b>	Sulfur Dioxide
<b>Sub.</b>	Subsidiary
<b>Tariff</b>	ISO-NE Transmission, Markets and Services Tariff
<b>TOA</b>	Transmission Owners' Agreement

<b>TOs</b>	Transmission Owners
<b>TOUT</b>	Through-and-Out
<b>Trans.</b>	Transmission
<b>TSA</b>	Transmission Service Agreement
<b>US</b>	United States
<b>Utils.</b>	Utilities
<b>VP</b>	Versant Power
<b>VRWG</b>	Variable Resource Working Group
<b>VT</b>	Vermont
<b>WEQ</b>	Wholesale Electric Quadrant
<b>SA</b>	Service Agreement
<b>SATOA</b>	Storage as a Transmission-Only Asset
<b>Sched.</b>	Schedule
<b>SGIA</b>	Small Generator Interconnection Agreement
<b>SMD</b>	Standard Market Design
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>Tariff</b>	ISO-NE Transmission, Markets and Services Tariff
<b>TC</b>	Transmission Committee
<b>TOA</b>	Transmission Owners' Agreement
<b>TOP</b>	Transmission Operations Rel. Standards
<b>TOs</b>	Transmission Owners
<b>TPL</b>	Transmission Planning Rel. Standards
<b>TSA</b>	Transmission Service Agreement
<b>TSAA</b>	Transmission Service Admin. Agreement
<b>UI</b>	United Illuminating Company
<b>US</b>	United States
<b>VEC</b>	Vermont Electric Cooperative
<b>VP</b>	Versant Power
<b>VPPSA</b>	Vermont Public Power Supply Authority
<b>VRWG</b>	Variable Resource Working Group
<b>VT</b>	Vermont
<b>VTPUC</b>	Vermont Public Utility Commission
<b>WEQ</b>	Wholesale Electric Quadrant

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# Dave Doot





**NEPOOL's 2022 Annual  
Report is Dedicated to  
Dave Doot**

No Better Friend.  
No Better Mentor.  
No Better Counsel.



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