

REPORT TO THE NEW ENGLAND GOVERNORS



TABLE OF CONTENTS

Section I. Governance & Management	Page 2
Section II. Staff & Consultants	Page 6
Section III. Coordination with Regional Entities	Page 8
Section IV. 2019 Activities, Focus Areas, Accomplishments	Page 9
Section V. Priorities 2020 & 2021	Page 17
Section VI. Spending 2019	Page 22
Section VII. Budget 2020 & 2021 (preliminary)	Page 23



Wholesale Competitive Markets & The Requirements of State Laws

In 2019, Energy Security again dominated regional discussion. Overlapping work on immediate, interim, and long-term energy security-related solutions—work that is unfinished—largely consumed ISO New England's and stakeholders' capacities over the course of the year. This included continued activity in connection with a first-in-the-nation, ratepayer-funded "energy security cost-of-service contract" to retain a resource outside of the competitive wholesale markets.

Throughout 2019, several states entered ratepayer-supported contracts to fund development of renewable and/or no- or low-carbon energy resources pursuant to the requirements of state energy and environmental laws. A state also concluded that an existing no-carbon resource was a retirement risk and, after a competitive solicitation, entered into a ten-year contract with that resource.

The New England states have for years signaled that for ISO New England's system planning and wholesale competitive markets to be sustainable, they must reasonably account for and harmonize with the requirements of state energy and environmental laws. The challenges to doing so are fundamental. They include complex jurisdictional questions, ensuring that consumers pay the cost of their own state's laws and not others', and achieving state law compliance at the lowest possible cost to consumers.

ISO New England's "substitution auction," implemented in 2017, offers the potential to accommodate some state laws - those in place prior to January 2018 - *if and to the extent* other resources choose to retire. Experience to date keeps alive questions about whether its function will live up to its theory.

In mid-2019, NESCOE asked ISO New England to dedicate market development and planning resources in 2020 to support states and stakeholders in analyzing and discussing potential future market frameworks that contemplate and are compatible with state energy and environmental laws. At issue is how to continue to have market dynamics rather than regulatory orders set prices for wholesale generation in order to meet consumers' electricity needs, as they do now, at the lowest reasonable cost over the long-term and to place the risks of generators' business decisions on investors.

Conversation about the wholesale markets and state laws - and what we are asking of the markets - is imperative and timely. We are hopeful that on this challenge, in 2020 and 2021, New England will define its own course and avoid the need to develop solutions driven by emergent issues or on an externally imposed calendar. Our collective efforts should match the issue's significance to consumers and New England's diverse market participants alike.

SECTION I: GOVERNANCE

A Board of Directors representing the six New England states directs NESCOE's affairs and engagement in regional issues. Each Governor appoints the state's NESCOE Manager. Regardless of the number of individuals each Governor appoints as a NESCOE Manager, each New England state has one undivided vote in arriving at NESCOE determinations.

The vast majority of NESCOE determinations have been unanimous, reflecting the commonality of interests across the region and New England states' efforts to achieve consensus on regional electricity matters. In circumstances where there is not consensus, NESCOE makes determinations with a majority vote (i.e., a numerical majority of the states) and a majority weighted to reflect relative electric load of each state within the region's overall load.

2020 NESCOE Managers

State of Connecticut Katie S. Dykes Commissioner, Department of Energy and Environmental Protection



Katie Scharf Dykes is the Commissioner of Connecticut's Department of Energy & Environmental Protection (DEEP). She was nominated by Governor Ned Lamont to serve as the Commissioner of DEEP and was confirmed on February 20, 2019. Katie previously served as Chair of the Connecticut Public Utilities Regulatory Authority and (PURA) from 2015-2018, as Deputy Commissioner for Energy at Connecticut DEEP from 2012-2015. Katie also served as the Chair of the Board of Directors of the Regional Greenhouse Gas

Initiative, Inc. (RGGI) from 2014 to 2017. RGGI is a multi-state effort focused on reducing carbon emissions from electric generating facilities. Katie joined CT DEEP in March 2012 after prior service as Deputy General Counsel for the White House Council on Environmental Quality and as a Legal Advisor to the General Counsel for the U.S. Department of Energy. She is a graduate of Yale College and the Yale Law School.

State of Maine Chairman, Public Utilities Commission Philip L. Bartlett II



Philip L. Bartlett II, J.D., was appointed to the Maine Public Utilities Commission in June 2019 by Governor Janet Mills. Prior to his appointment, he practiced law with Scaccia, Bartlett & Chabot. He also served in the Maine Senate from 2004 to 2012 and was elected by his peers to serve as Senate Majority Leader from 2008 to 2010. Bartlett chaired the Energy, Utilities and Technology Committee as well as the Joint Select Committee on Maine's Energy Future and he served on the Government Oversight Committee, Natural Resources Committee and Labor Committee. He taught micro and macroeconomics at the collegiate level. Chairman Bartlett holds a juris doctorate degree from Harvard Law School. He completed his undergraduate work at Tufts University, where he graduated Summa Cum Laude majoring in Economics and

Political Science. His term expires in March 2025.

Commonwealth of Massachusetts Chairman, Department of Public Utilities Matthew Nelson



Matthew Nelson was appointed Chair of the Department of Public Utilities in February 2019. Nelson began his energy career at the Department in 2007 in the Natural Division. Subsequently, Nelson served Gas as the Supervisor of Regulatory, Policy, and Planning for Eversource Energy as part of the nationally recognized Mass Save program. Returning to the Department, Nelson became the Director of Electric Power, and Regional and Federal Affairs. During Nelson's time at the Department, he has investigated a wide range of utility issues, including grid modernization investments, general solar and rate case issues, renewable energy development, energy efficiency, climate strategies, competitive supply, and storm restoration issues. Nelson's work at the Department and elsewhere has focused on

reducing costs to ratepayers while improving reliability and continuing to drive down greenhouse gas emissions. Nelson is a graduate of Stonehill College and he holds a Master's degree in economics from Tufts University.

Commissioner, Massachusetts Department of Energy Resources Patrick Woodcock



Patrick Woodcock was named DOER Commissioner in February 2020. Formerly, the Executive Office of Energy and Environmental Affairs' Undersecretary of Energy, Commissioner Woodcock was named Acting Commissioner in December 2019 and served in this role until his current appointment.

Woodcock joined the Baker-Polito Administration in 2017 and served as the Undersecretary of Energy in the Executive Office of Energy and Environmental Affairs for over two years. In that position, Woodcock oversaw the Department of Energy Resources and the Department of Public Utilities. Woodcock serves on

the Massachusetts Clean Energy Center Board and Investment Committee, represents Massachusetts on the Boards of the Regional Greenhouse Gas Initiative Inc. and National Association of State Energy Officials, and is a member of the Energy Facilities Siting Board.

Prior to his time in the administration, Woodcock was Director of the Maine State Energy Office, a position he held from 2013 through 2016. Previously, Woodcock worked for United States Senator Olympia Snowe in her Washington, D.C. office. Woodcock graduated from Bowdoin College and holds a Bachelor of Arts degree in Government.

State of New Hampshire Kathryn Bailey Commissioner, Public Utilities Commission



Kate Bailey was appointed to serve a six-year term on the New Hampshire Public Utilities Commission in July 2015. She serves on New Hampshire's Site Evaluation Committee and Enhanced 911 Commission, as well as on the NARUC Committee on Electricity. She was appointed NESCOE manager in July 2017. Commissioner Bailey joined the New Hampshire commission staff in 1989, where she held various positions, including Director of Telecommunications and Chief Engineer. Prior to her time at the PUC, Commissioner Bailey was commissioned in the Air Force where she served as a communications officer. After an honorable discharge from active duty, she was hired as a contractor to the federal government and worked on a microwave communications project

throughout central Europe. Commissioner Bailey holds a Bachelor of Science degree from Union College in electrical engineering and she is a licensed professional engineer.

State Of Rhode Island Nicholas Ucci Commissioner, Office of Energy Resources



Nicholas S. Ucci serves as Commissioner of the Rhode Island Office of Energy Resources (OER), the state's lead agency on energy policy and programs. OER works closely with private and public stakeholders to foster clean, affordable, and reliable energy solutions for all consumers, while spurring economic and job growth opportunities across Rhode Island's burgeoning clean energy economy.

During his time at OER, Commissioner Ucci

has helped expand the state's clean energy portfolio nearly ten-fold, while supporting Rhode Island's standing as a national leader in energy efficiency innovation. He has played a significant role in major renewable energy procurements, including selection of the 400 MW Revolution Wind (offshore) project, and is leading efforts to ensure that 100% of the state's electricity demand is met with renewables by 2030 – a nation-leading effort. Nick has also been instrumental in guiding the state's Heating Sector Transformation (HST) initiative and helping to double EV charging infrastructure across Rhode Island roadways.

Nick serves as Executive Director of the Rhode Island Energy Efficiency & Resource Management Council (EERMC) and Distributed Generation (DG) Board, as well as Vice Chairman of the state's Executive Climate Change Council (EC4). He is also a recipient of the Environmental Merit Award (Government) from the U.S. Environmental Protection Agency (EPA).

A lifelong resident of the Ocean State, Nick is a proud graduate of the University of Rhode Island (URI), where he earned a Master of Arts degree in Political Science, with a concentration in Public Policy and a Graduate Certificate in Labor Relations. He also holds Bachelor of Arts degrees, with Highest Distinction, in Political Science and Economics from URI. A devoted father of two young children, Nick was elected by his peers to the Bishop's Committee of St. Francis Episcopal Church (Coventry, RI) and coaches little league baseball.

STATE OF VERMONT June Tierney Commissioner, Department of Public Service



Commissioner June E. Tierney was sworn in as the Commissioner of the Vermont Department of Public Service by Governor Phil Scott on January 5, 2017. Prior to her appointment, Commissioner Tierney served as general counsel to the Vermont Public Service Board (2012-2016). Before then, she was a Board hearing officer (2008-2012), as well as a staff attorney at the Vermont Department of Public Service (2001-2008). A 1986 graduate of Boston University and a 1993 graduate of Vermont Law School, Commissioner Tierney began her legal career with a clerkship at the Vermont Supreme Court, followed by three years as an associate at Davis Polk

& Wardwell in New York City, where she specialized in securities fraud litigation, white collar crime defense and corporate internal compliance investigations. Before her admission to the bar, Commissioner Tierney enjoyed the privilege of serving on active duty (1986-1990) as a commissioned officer in the United States Army.

Ed McNamara Director, Energy Policy and Planning Department of Public Service



Ed McNamara is Director of Energy Policy and Planning for the Vermont Department of Public Service. In this role, he is responsible for developing and implementing statewide energy policy, including energy efficiency and demand resource management programs, renewable energy policy, and electric utility planning. In addition, Ed is the lead staff for developing Vermont's positions on federal energy issues, including wholesale electricity market rules and transmission planning processes. Prior to working at the Department of Public Service, Ed worked as a Hearing Officer and Staff Attorney for the Public Service Board.

SECTION II: STAFF & CONSULTANTS

The NESCOE staff team has diverse academic and professional backgrounds, including economics, accounting, engineering, and law and a cross section of private and public sector experience in New England. NESCOE's staff and technical consultants bring comprehensive

and deep experience to analysis and filings with the FERC, other federal agencies, federal courts, and ISO New England.



From left, Ben D'Antonio, Dorothy Capra, Heather Hunt, Jeff Bentz, Jason Marshall

Jeff Bentz Director of Analysis

Jeff Bentz, CPA was named NESCOE's Director of Analysis in 2011. Previously, Jeff was with a New England generating facility, MASSPOWER, for nearly twenty years. Jeff served in progressive positions with MASSPOWER and was ultimately its General Manager. Earlier in his career Jeff was with Arthur Andersen and Company. Jeff has a Bachelor of Science degree in Accounting from Central Connecticut State University.

Dorothy Capra Director of Regulatory Services

In 2011, Dorothy Capra was named NESCOE's Director of Regulatory Services. Since 2000, Dorothy was International Power's Director of Regulatory Affairs for NEPOOL and more recently for PJM. In that capacity, she coordinated regulated activities in New England and PJM and related activities at the FERC. Dorothy was elected Vice Chair of the New England Power Pool's (NEPOOL) Transmission Committee and has served in the past as Vice Chair of its Reliability Committee. Before that, Dorothy was with New England Electric System (National Grid) for ten years in a variety of positions, including in transmission and rates. She began her career at BP Oil, Inc. Dorothy has an MBA from the Amos Tuck School at Dartmouth and a BS in Chemical Engineering from Washington University in St. Louis.

Ben D'Antonio Senior Counsel & Analyst

Ben D'Antonio joined NESCOE in 2012 as Counsel and Analyst. Before that, Ben worked in the Regional and Federal Affairs Division of the Massachusetts DPU as an Economist and Legal Counsel, with a focus on wholesale electricity market and transmission planning issues. Previously, Ben was a Regulatory Assistance Project Energy and Environment Fellow, where he provided support to state utility commissions on clean energy policies. Earlier, Ben worked in

financial services. Ben has a Juris Doctor, with honors, and Masters of Environmental Law, with honors, from Vermont Law School and a Bachelor of Arts in Economics from the University of Vermont.

Heather Hunt Executive Director

Heather Hunt joined NESCOE as Executive Director in 2009. Previously, Heather had a regulatory law practice for six years, was Director, State Government Affairs, United Technologies Corporation and Group Director, then Vice President, Regulatory at Southern Connecticut Gas. Earlier, she was a Public Utility Commissioner in Maine and Connecticut and was on the legal staff of a Connecticut Governor. Heather has a Bachelor of Arts in Politics from Fairfield University and a Juris Doctor from Western New England College School of Law. Heather is the Chair of the Living Donor Committee of the United Network for Organ Sharing and serves on the Board of Directors of the SJW Group.

Jason Marshall General Counsel

Jason Marshall joined NESCOE in 2012 as Senior Counsel and was named General Counsel in 2014. Previously, he was Counsel with the Regional and Federal Affairs Division of the Massachusetts DPU. Before that, Jason was Legal Counsel to a Massachusetts State Senator. Earlier, Jason was an associate at Brown Rudnick LLP and was a Law Clerk to the Chief Justice of the Massachusetts Appeals Court. Jason has a Bachelor of Arts, with honors, from Boston College and a Juris Doctor, with honors, from the University of Connecticut School of Law.

Technical Consultants and Support

NESCOE retains consultants to provide technical analysis in the areas of system planning and expansion and resource adequacy. NESCOE also retains consultants to conduct specific analysis to inform policymakers' consideration of current issues. In 2019, NESCOE worked with consultants such as **Wilson Energy Economics**, Peter Flynn LLC, and NewGen Strategies and Solutions, LLC.

NESCOE does not use litigation as a primary means to accomplish its objectives, and when it needs to, NESCOE staff produces the vast majority of legal pleadings. NESCOE legal activity focuses on consumer interests in litigated proceedings at FERC. In 2019, NESCOE continued to participate actively before FERC in complex and accelerated cost-of-service litigation with material consumer implications and in proceedings involving regional energy security and electric transmission rates. When NESCOE required outside counsel in 2019, it worked primarily with **McCarter & English, LLP** in Washington D.C.

SECTION III: COORDINATION WITH REGIONAL STATE ENTITIES

NESCOE communicates with state entities in the New England region such as the New England Conference of Public Utility Commissioners (NECPUC) on a regular basis, and the Coalition of Northeastern Governors (CONEG) as needed, to share information about regional matters on which it is working and to avoid duplication of efforts. Throughout 2019, NESCOE

participated in NECPUC calls with ISO New England and in meetings between state officials and ISO New England's Board of Directors.

In addition, as issues warrant, NESCOE facilitates dialogue with subject matter experts from state governments to enhance coordination and leverage the technical expertise that exists within state agencies on issues with regional electric system implications.

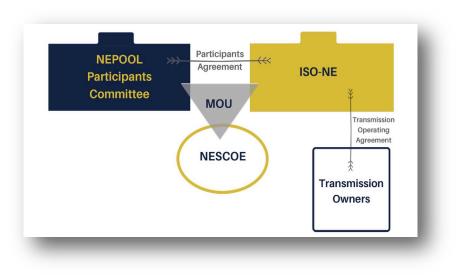
SECTION IV: 2019 ACTIVITY, FOCUS AREAS & ACCOMPLISHMENTS

Advocating for Consumer Interests in Regional Stakeholder Forums

New England consumers fund the region's wholesale electricity markets and high-voltage transmission system. The annual costs of the wholesale electricity markets have ranged over the past decade from a low of \$5.3 billion in 2016 to a high of \$13.6 billion in 2008. These costs include the energy, capacity, and ancillary services markets.

The plans and rules that determine the level and type of consumer investments in these markets are largley developed as part of a regional stakeholder process. Most proposals must ultimately be presented to the FERC for its deliberation. Participating in these activities and the subsequent regulatory proceedings is resource intensive but imperative: even "minor" revisions to market rules or planning approaches can mean significant changes and have material consumer cost implications.

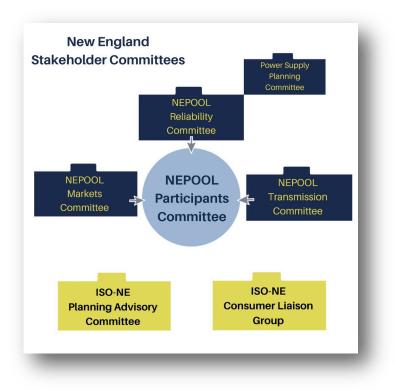
After FERC approved NESCOE as New England's Regional State Committee, NESCOE commenced activity in 2009. consistent with a Memorandum of Understanding among NESCOE, ISO New England, and NEPOOL submitted to FERC. The operative relationships are governed as follows:



FERC reviews ISO New England's filings to determine whether market rules and other proposals are "just and reasonable" under the Federal Power Act. Provided there is a certain super-majority level of stakeholder support for an alternative proposal, ISO-NE must include with its proposed market rule filing the alternative rule that NEPOOL supports, and the NEPOOL alternative is considered by FERC on equal legal footing with ISO New England's

proposed rule. New England's owners transmission have legal authority to make filings with FERC in connection with transmission rates and cost allocation, and FERC also reviews these filings under the Federal Power Act's "just and reasonable" standard. Like market participants and stakeholders, NESCOE expresses its perspective to FERC on these various filings, which FERC will generally accept or reject.

Further, from time to time market participants and others will seek federal court review of FERC decisions. These cases underscore the importance to consumers of NESCOE's informed, active, and timely engagement in regional stakeholder conversations leading to



FERC filings and, as needed, vigorous advocacy before FERC and in federal court.

Throughout 2019, NESCOE represented the collective views of the New England states and regularly played an important role in substantive New England regional stakeholder forums. This included NESCOE's regular participation in NEPOOL's Participants, Reliability, Transmission, and Markets Committee meetings. NESCOE also offered proposals in connection with planning and market rule changes to advance consumer interests and states' shared energy objectives as appropriate.

Additionally, NESCOE participated in ISO New England's Planning Advisory Committee (PAC) and Power Supply Planning Committee and followed the Consumer Liaison Group activities.

NESCOE also participated in various working groups and *ad hoc* subject matter forums, such as the Energy Efficiency Forecast Working Group, the Distributed Generation Forecast Working Group, and the Environmental Advisory Group. These groups and activities provide an opportunity to communicate about data that drive investment decisions.

NESCOE continued to monitor from a New England consumer point of view the Eastern Interconnection States Planning Council (EISPC), National Council on Energy Policy (NCEP), and the Eastern Interconnection Planning Collaborative (EIPC) meetings relating to interregional coordination and resource and infrastructure planning studies.

Presenting Consumer Interests and Implications in Filings with Federal Agencies

In 2019, NESCOE participated in ISO New England forums and federal-jurisdictional matters concerning resource adequacy and system planning-related issues with significant implications for New England consumers. NESCOE's substantive filings in 2019 were, as in years' past, diverse but had in common New England consumer interests and shared state objectives.

ENERGY SECURITY

ISO New England's concern about energy security risks dominated regional discussions again 2019. This focus followed intense energy security activity in 2018, which began with ISO New England's Operational Fuel Security Analysis.

The new term "energy security" emerged on the heels of temporary Winter Reliability Programs and the Pay for Performance market design within the Forward Capacity Market. NESCOE actively participated in all of these discussions and proceedings, which have substantial implications for consumer dollars and the region's resource mix.

New England's energy security discussion progressed in a series of "chapters," which continued to be written through 2019.

Chapter 1: Exelon's Retirement Announcement for Mystic Units and ISO New England's Request to FERC for Energy Security Cost-of-Service Agreement Authority

In conjunction with the cost-of-service agreement between Exelon Corporation and ISO New England, ISO New England sought a waiver from FERC to allow it to retain two generating units at risk of retiring. FERC rejected that request. Instead, FERC preliminarily found that ISO-NE's tariff failed to address regional fuel security concerns and instituted a proceeding under section 206 of the Federal Power Act requiring ISO New England either to show cause why no tariff changes would be needed or to make two subsequent filings relating to short-term (Chapter 2) and long-term (Chapter 3) changes.

In 2019, NESCOE continued to dedicate resources to representing consumer interests in response to Exelon's request to FERC for cost-of-service compensation outside of the ISO New England wholesale markets. Exelon and ISO New England entered into a cost-of-service agreement to compensate Exelon outside of the market over a two-year period, from 2022 to 2024. This agreement and an associated arrangement with the liquefied natural gas (LNG) facility became the subject of complex, fact-tracked litigation at FERC in 2018. NESCOE challenged Exelon's initial request to FERC for contract approval and was an active participant at trial. FERC directed material changes to the cost-of-service agreement, including adopting a number of NESCOE positions. NESCOE filed a request for clarification or rehearing to ensure that mandated consumer payments for repairs or capital expenditures related to the LNG facility would be "clawed back" if the facility continues to operate beyond the cost-of-service period. NESCOE also filed a protest in response to Exelon's compliance filing, with a focus on correcting errors that could expose consumers to unjustified costs.

While the cost impact of the Exelon agreement is not known with certainty, the changes that FERC mandated early on translated to a level approaching one hundred million dollars in consumer savings.

Chapter 2B: "Interim Compensation" for Energy Security Resources

In March 2019, ISO-NE filed its "interim compensation" program with FERC. ISO New England indicated that the intent of this two-year program was to provide similar compensation for similar services and reduce the likelihood that (otherwise economic) resources will seek to retire due to not being fully compensated for winter energy security attributes in the wholesale markets. Due to a lack of quorum at FERC to act on the filing, the program went into effect "by operation of law" under a recently amended provision of the Federal Power Act. NESCOE challenged the legality of this outcome in a rehearing request filed with FERC, which subject matter became the subject of consolidated appeals before the U.S. Court of Appeals for the D.C. Circuit.

Chapter 3: Long-term Market-Based Energy Security Reforms

During the resource intense litigation described above, ISO New England began discussions with stakeholders regarding longterm, market-based changes to address energy security concerns.

Throughout 2019, NESCOE participated actively to understand the precise problem to be solved. NESCOE engaged with ISO New England on its qualitative and quantitative analysis of the proposed energy security market reforms. The objective was to ensure that it would provide states and stakeholders with an adequate level of information to determine potential impacts of the proposed solutions to address regional fuel security risks.



FERC's deadline to ISO New England to file a long-term market solution moved from July 1, 2019, to October 15, 2019 in reply to an ISO New England request. ISO New England, NEPOOL and NESCOE together requested a public meeting with FERC, held on July 15, 2019, to discuss regional efforts to develop long-term market design changes. NESCOE participated actively in that public meeting.

As the October 15, 2019 deadline grew near, NESCOE remained acutely concerned that many key details, analyses, and core consumer protections remained under development or were simply being deferred. NESCOE requested and FERC granted additional time for ISO New England's proposal to be filed, to April 15, 2020. This afforded states and stakeholders the opportunity to continue to analyze market design issues and to better understand how the design was expected to perform, along with its expected impact on reliability and consumer costs. It also allowed further discussion of fundamental issues, such as the exercise of market power and consumer cost exposure. Throughout 2019, NESCOE worked – and often with stakeholders that shared its core concerns – on long-term energy security solutions with an eye toward tailoring the solution, and its costs, to the asserted problem. NESCOE developed some amendments to address certain identified problems.

Transmission Planning, Cost Discipline and Transparency

New England consumers have long valued the benefits of electric transmission, and in 2019, NESCOE continued to advocate for cost discipline and transparency in planning for it. ISO New England has identified New England's significant investments in electric transmission over the last twenty years as leading to reduced risk of blackouts, lower wholesale energy costs, and less air pollution, while positioning the system to become greener and more flexible.

Since 2002, New England consumers have funded more than \$10 billion in transmission to promote electric system reliability. Another \$1.6 billion in transmission investments is planned through 2022. For most New England residential retail electric customers,

transmission costs account for between 11% to 18% of total retail rates. Over the last decade, transmission charges have risen dramatically, increasing almost every year since 2008 and growing from roughly \$869 million that year to \$2.25 billion in 2018.

The absolute and relative level of transmission costs underscore the importance of ISO New England transmission planning approaches to New England consumers. Even with the expected forward-looking decline in reliability-based transmission



infrastructure investment, these costs warrant continuing scrutiny. Transparency is critical – in both planning and cost recovery. Furthermore, to assess transmission investment compared to other potential means to meet power system needs, consumers require accurate transmission project cost estimates and controls to keep actual costs in line with estimates.

Transmission Cost Containment and Promoting Competition

In 2019, New England saw movement toward controlling consumer costs for transmission investments. NESCOE has advocated for reforms in these areas over multiple years.

- Cost Controls in Competitive Transmission Procurements: In 2019, ISO-NE filed and FERC accepted proposed changes regarding the Order 1000 competitive transmission process. Among these revisions are changes to ISO-NE's criteria for evaluating project bids, which will now include consideration of cost containment mechanisms such as cost caps. Since the inception of Order 1000 planning rules, NESCOE has identified the need for cost containment features as part of the project selection process to help guard against cost overruns and promote greater cost discipline. NESCOE long advocated for the changes that ISO-NE adopted in 2019 to ensure that cost containment provisions are explicitly considered in evaluating competitive bids for new transmission.
- Overreliance on Immediate Need Exception: Although FERC directed Regional ٠ Transmission Organizations (RTOs) like ISO New England to open the transmission planning process to competition under Order 1000, it allowed for a limited exemption for "immediate need reliability projects" after balancing the need to remove barriers to competition for transmission development against potential delays that could create reliability risks. NESCOE supported such an exemption, provided that it was an actual exception and not the rule. Shortly after ISO New England began implementing its Order 1000 changes, NESCOE identified the potential overreliance on immediate need projects as an emerging issue requiring the FERC's attention. Over the last several years, NESCOE continued to express strong concerns that ISO-NE's practice of solving for immediate need projects, rather than administering a competitive process, could cause consumers to lose the benefit that competition can provide in disciplining costs and promoting cost control proposals. In October 2019, FERC found that ISO New England and some other RTOs "may be implementing the exemption in a manner that is inconsistent with what [FERC] directed, and therefore may be unjust and unreasonable, unduly preferential and discriminatory." FERC required ISO New England and these other RTOs to explain their practices and invited parties such as NESCOE to weigh in.
- Transmission Incentives: In December 2018, NESCOE issued a letter to FERC expressing its concern about escalating transmission costs in New England and supporting an Organization of MISO States' request that FERC initiate a process to review its policies for awarding transmission rate incentives. NESCOE stated that "[l]ike any economic incentive ... transmission incentives should not be assumed to be necessary in perpetuity. Consistent with its statutory obligation to ensure a just and reasonable rate, it is appropriate for FERC to assess from time to time which if any incentives are required to deliver tangible consumer benefits." In 2019, FERC issued a Notice of Inquiry to

reevaluate its transmission incentives policies. NESCOE was an active participant in that docket, providing a consumer counterpoint to the many transmission developers advocating for greater revenue opportunities and automatic incentives that shift the burden to regulatory authorities and consumers to police costs.

Increasing Transparency in the Transmission Formula Rates Consumers Pay

Several years ago, NESCOE joined consumer representatives from across the region to discuss with New England Transmission Owners the development of "formula rate protocols." The objective was to increase transparency and accessibility of information regarding transmission rate recovery since FERC had not historically subjected this category of costs to traditional, contested regulatory scrutiny before passing the costs through to consumers. In late 2015, FERC opened a proceeding on New England's "formula rates," consistent with FERC-approved approaches in other regions and instituted a settlement process. In 2018, after two-and-one-half years of settlement discussions on complex and far-ranging issues, most active parties reached a settlement.

Working with other consumer-interested parties across the region, NESCOE proposed and advocated for central features of the settlement that strengthen consumer protections and enhance transparency.

In 2019, FERC issued an order finding that the settlement filing lacked the detail necessary for it to evaluate approval of what became a contested settlement. Through the balance of 2019, NESCOE and other parties began preparations for a possible hearing, which was held in abeyance pending work on a new settlement.

Local Resources Offsetting Regional Resource Needs

New England consumers increasingly invest in technologies such as solar photovoltaics (PV) and energy efficiency in connection with state laws and programs that encourage resources located close to where consumers use power. The level of investment is so significant that it is reversing New England's growth in wholesale electric energy demand and slowing the growth in peak demand. This reduces the level of resources and infrastructure consumers need to plan and ultimately pay for, such as transmission or central power plants. Achieving these savings depends on ISO New England properly accounting for local resources in regional planning. NESCOE continues work to this end.

Distributed Generation Forecast: Earlier in time, NESCOE requested that ISO New England produce a Distributed Generation (DG) Forecast to account for the dramatic increase of distributed resources expected to interconnect to the power system in the next ten years. NESCOE worked with ISO New England and stakeholders to develop the forecast to be applied to the Installed Capacity Requirement. NESCOE continued to contribute to forecast adjustments and to protect against those that would have the effect of negating consumer investments in energy efficiency and distributed generation resources.

• *Energy Efficiency Forecast:* The sustained prior effort by the New England states and NESCOE to obtain from ISO New England greater integration of energy efficiency savings in the regional load forecast and in system planning process has achieved continuing results for consumers through ISO New England's Energy Efficiency Forecast. The forecast reflects projected annual reductions in electric energy use, including peak demand, related to the New England states' investments in energy efficiency measures. Implementation of the Energy Efficiency Forecast has translated into hundreds of millions of dollars of savings for consumers in the form of transmission project deferrals. NESCOE continued to advocate for regional planning and markets to appropriately account for these investments.

Power System Reliability and Associated Market Matters

For over a decade, New England's wholesale competitive markets have been designed to serve consumers in a way that is fuel neutral and at the lowest cost. The New England states have demonstrated continuing support for competitive wholesale markets through, for example, endorsing reforms that would improve the efficiency and operation of those markets - even when it did not mean the lowest possible immediate prices for consumers but would provide consumers expected optimal market-driven results and prices over the longer-term.

ISO New England, states, market participants, and stakeholders regularly explore marketbased solutions to emerging risks to the New England power system. Some proposed solutions follow years of analysis and discussion. Others emerge in reaction to more immediate circumstances.

As noted, ISO New England's proposed energy security improvement proposals dominated 2019. NESCOE also contributed to the development of other market mechanisms related to the region's diverse challenges. A representative sample of 2019 market matters are as follows:

NESCOE continued to monitor the functionality of ISO New England's substitution auction proposal, referred to as *Competitive Auctions and Sponsored Policy Resources* or CASPR. CASPR is ISO New England's mechanism through which to accommodate resources required by state laws adopted before January 2018. The CASPR substitution auction works if and to the extent other existing resources wish to retire. To date, the level of megawatts clearing in the CASPR auctions is relatively marginal.

A 2018 Labor Day scarcity event identified a settlement shortfall under the ISO-NE's Pay for Performance design. Energy efficiency resources and other capacity supply resources were required to fund the shortfall. Various stakeholders offered proposals to allocate the shortfall in different ways. Those did not get support, and the matter was referred to the Demand Resources Working Group for technical review. It identified five options to estimating energy efficiencv resource performance in all hours. In late 2019, NESCOE brought forward one option for consideration.



In 2019, questions arose about how ISO-NE treated capacity resources that elected the *Renewable Technology Resource Exemption* during the forward capacity auction. NESCOE worked to understand issues around whether the Renewable Technology Resource Exemption would be fully utilized due to the allocation procedure and auction timing and software issues, or whether an unintended consequence of a 2017 change as part of the Competitive Auctions and Sponsored Policy Resources tariff would frustrate its intent.

Economic Study: Integrating Off-Shore Wind

In April 2019, NESCOE requested that ISO-New England conduct, as one of its annual Economic Studies, an Offshore Wind Integration NESCOE requested study of both Study. transmission system and wholesale market impacts related to increasing penetration of offshore incremental wind resources. Specifically, NESCOE sought analysis of several scenarios for the integration of offshore wind energy by 2030 and 2035 and to (1) leverage existing scenarios of 1,000 MW and 2,000 MW by 2030 from the 2015 Economic Study Evaluation of Offshore Wind



Deployment, (2) develop a 4,000 MW scenario by 2030, and (3) consider additional scenarios beyond 2030 for 5,000 to 7,000 MW of offshore wind by 2035.

SECTION V: PRIORITIES 2020 AND 2021

NESCOE carries into 2020 several priority matters that require significant attention, including Energy Security and exploring means to ensure harmony between wholesale markets and the requirements of state energy and environmental laws.

At the direction of Managers, NESCOE will continue to identify areas for proactive engagement related to resource adequacy and system planning and expansion.

Where needed, NESCOE will conduct independent technical analyses to inform Managers' decisions.

In 2020 and 2021, NESCOE will continue to participate actively in NEPOOL stakeholder forums, exchange ideas with ISO New England and market participants, and represent the collective interests of New England states at FERC and, where appropriate, before other federal agencies and the courts.

In addition to addressing emerging issues as they arise, NESCOE anticipates focus on the following areas in 2020 and 2021:

- New England States' Energy and Environmental Laws and Regional ٠ Wholesale Markets: In furtherance of NESCOE's mid-2019 request to ISO New England to dedicate market development and planning resources in 2020 to support states and stakeholders in analyzing and discussing potential future market frameworks that contemplate and are compatible with state energy and environmental laws, continue to seek regional dialogue about New England's path forward; continue to assess, develop and/or provide analysis about mechanisms designed to reasonably harmonize as needed the regional electricity market and the energy and environmental requirements in some New England states' laws; provide analysis on potential mechanisms that value the attributes of resources implicated by such state laws, while ensuring consumers in any one state do not fund the public policy requirements mandated by another state's laws. This includes, but is not limited to, policies and/or programs related to carbon dioxide emissions reduction, energy storage, and distributed generation. Continue conversations about the design of the future grid and associated market rules, including, for example, the relative size and proper form of the ancillary service markets, other possible mechanisms to harmonize state laws and markets in a way that satisfies states' threshold objectives.
- Assess the Functionality of ISO New England's Competitive Auctions and Sponsored Policy Resources (CASPR). Continue to assess whether CASPR, ISO New England's mechanism through which to accommodate resources required by state laws adopted before January 2018 into the markets over the long-term, appears likely to operate according to its theory.
- Order 1000 Public Policy Process: Participate, consistent with tariff requirements, in New England's 2020 Order 1000 public policy study process of transmission needs that may be driven by state and federal Public Policy Requirements, i.e., a requirement reflected in a statute enacted by, or a regulation promulgated by, the federal government or a state government. Assess whether the tariff provision could benefit from adjustment.

- **Energy Security:** Participate actively in ongoing discussions about ISO New England's Energy Security Improvement proposal, including but not limited to market mitigation concerns, and related market-based mechanisms that value the contribution that existing nuclear generation resources make to regional energy security and winter reliability; provide analysis as needed to support state evaluations, proposals, and/or amendments; ensure that consumer interests are chief among the metrics by which proposals are evaluated and that all potential solutions are illuminated by cost-effectiveness analysis to enable assessment of whether the consumer costs of proposed solutions have a reasonable relationship to asserted risks.
- Additional Energy Security Cost-of-Service Contracts: Advocate for consumer interests in the cost, terms and conditions of any additional energy security cost-of-service contract ISO New England may seek to enter.
- **Transmission Planning for Reliability:** Review and provide input on ISO New England's plans and planning processes, including but not limited to Regional System Plans, forecasting, and certain transmission needs assessments and solution studies; provide feedback on ISO New England's planning assumptions and continued incorporation of probabilities in planning; continue to explore opportunities to comment on major NERC policy activities when they have the potential for significant cost implications for New England electricity consumers and urge NERC to consider cost-effectiveness in its reliability standard development.
- Order 1000 Competitive Process to Satisfy Reliability Needs: In response to ISO-NE's December 2019 Order 1000 competitive solicitation for transmission to satisfy reliability needs, monitor the process, outcome, and participate in any ex post review of lessons learned. Participate in discussions that commenced in 2019 about what resource types might appropriately qualify to bid into Order 1000 transmission solicitations, and under what circumstances (i.e., operational control, market interactions, etc.). Participate in the FERC proceeding, initiated in late 2019, associated with exemptions from competitive processes for needs ISO-NE defines as "near-term".
- **Transmission Cost Estimation and Tracking:** Continue to track transmission project costs and monitor cost overruns. To the extent tracking reveals cost overruns, which, among other issues, suggests alternative means would have been a better choice for consumers to satisfy the identified need, work with ISO New England and transmission companies to modify cost estimating practices and/or mitigate cost escalation.
- **Transmission Incentives:** Continue to advocate for transmission incentives that are just and reasonable where they are currently necessary to cause specific actions that would not otherwise happen, and where, as designed, they deliver recognizable value for electricity customers consistent with Energy Policy Act of 2005 objectives.

- Resource Reliability (Installed Capacity) Requirements: Provide input on ISO New England's recommended ICR and associated assumptions, with particular attention to ensuring that the ICR appropriately reflects New England consumers' investment in local distributed generation and other clean energy resources and the improved generator performance driven through ISO New England's Pay-for-Performance modifications to the Forward Capacity Market.
- **Energy Efficiency in All Hours:** Continue to analyze and advocate for appropriate accounting of energy efficiency resources during capacity scarcity events in all hours.
- **Distributed Generation Forecast:** So that consumers receive the full benefit of state policies and consumer investments in all forms of local power generation technologies, continue work to ensure that ISO New England's plans and resource determinations appropriately capture in the load forecast the increased penetration of solar PV and other distributed energy resources, and to ensure the application of this forecast to the transmission planning process and resource adequacy determinations.
- Resource Adequacy and Reliability Over the Long-Term: Work with stakeholders and ISO New England to ensure that any proposed modifications to the Forward Capacity Market or other market rules provide consumers with reliable service at the lowest possible cost over the long-term while maintaining environmental quality. To inform consideration of proposed solutions, provide analyses where appropriate to confirm the nature of identified risks, and to understand the range of potential cost-effective solutions, including whether the costs of proposed solutions have a reasonable relationship to asserted risks. In any proposed modifications, seek to have consumer impacts weighed appropriately among other objectives, such as an interest in theoretical market purity (e.g., minimal application of adjustments or use of judgment).
- Interconnection of Distributed Resources: As increasing levels of distributed resources connect to distribution systems throughout the region and effect the transmission system, continue to assess jurisdictional and procedural issues associated with the increased penetration.
- Critical Infrastructure Protection Interconnection Reliability Operating Limits: Participate in the FERC proceeding on ISO-NE's filing of a first-time schedule and process that will allow market resources ISO-NE deems critical to Interconnection Reliability Operating Limits to recover Critical Infrastructure Protection-related costs (incurred as a result of the designation) through the transmission tariff.
- Advocate on behalf of Consumer Interests in Litigation Advanced by New England Market Participants: Continue to advocate as appropriate in litigation implicating the interests of New England's electricity consumers and, where necessary to safeguard consumer and states' interests, intervene or bring matters to courts as needed.

- State Input into and Perspectives on ISO New England's Economic Studies: Monitor ISO New England's Economic Studies and, as appropriate, provide inputs into studies, particularly with respect to assumptions about state laws and policies and offer the states' observations about outcomes for context.
- Reasonable Decision-Making Processes and Metrics that Enable Full and Fair Consideration of Economic Implications on Consumers: Advocate for decision-making processes that provide reasonable notice and opportunity to consider fully the consumer implications of proposed rule changes and an opportunity for states and ISO New England to explore the lowest cost means to achieve identified objectives; when appropriate, advance states' perspectives on objectives and on the metrics by which ISO New England and others should evaluate potential solutions (e.g., the balance between market pricing and consumer cost implications).
- **ISO New England "Major Initiatives" Assessments:** Advance consumer interests in connection with ISO New England's execution of the required quantitative and qualitative analysis of major market initiatives; ensure the consumer cost implications of proposed initiatives, and any alternatives, are understood and considered in decision-making.
- **Eastern Interconnection Planning Collaborative** As needed, monitor and analyze interconnection-wide study activities conducted by EIPC to ensure that New England consumers' interests are appropriately represented and that system planning determinations that have economic implications for New England ratepayers remain a function of regional decision-making; and work to ensure that any customer-supported interconnection-wide studies provide value to New England customers.

VI. 2019 EXPENDITURES

NESCOE operations are funded by a FERC-approved charge collected through Schedule 5 of Section IV.A of ISO New England's tariff. In 2019, an independent audit of NESCOE's books for the year-end December 31, 2019, was completed and presented to the NESCOE Managers. The independent auditor opined that the organization's books conform to generally accepted accounting principles and issued an unqualified opinion letter. A 2019 Statement of Spending is as follows:

NESCOE

Statement of Spending December 31, 2019

Expenses	
Direct Expenses, Consulting	54.000
Legal (FERC) Services	51,326
Technical Consulting	103,715
Total Direct Expenses, Consulting	155,041
Employment and Benefits	
Disability	9,477
Employee Health Insurance	42,008
Life Insurance	908
Payroll Taxes	55,148
Pension Contributions	31,219
Salaries & Wages	852,824
Total Employment and Benefits	991,583
General and Administrative	
Dues and Subscriptions	6,657
Depreciation	2,604
Insurance	6,064
Office Expenses	3,003
Professional Services	21,707
Rent, Parking & Utilities	25,035
Telephone & Communications	8,965
Travel and Meetings	38,851
Total General and Administrative	112,887
Total Expenses	1,259,511

VII. BUDGET 2020 & PRELIMINARY BUDGET 2021

NESCOE's 2020 budget, which is consistent with the current five-year *pro-forma* approved by NEPOOL and accepted by FERC, was presented to and affirmed by NEPOOL in October 2019. The 2020 NESCOE budget was submitted to the FERC and accepted in December 2019. The 2020 and preliminary 2021 budgets are as follows:

NESCOE Pro Forma Budget 2020 and Preliminary 2021

Selected and Warner	2020	2021
Salaries and Wages Salaries	1,042,886	1,074,173
Payroll Taxes	1042,886	107,418
Health and Other Benefits	87,524	90,150
Retirement §401(k)	41,716	42,967
	41,710	42,007
Total, Salaries and Wages	1,276,415	1,314,708
Direct Expenses - Consulting		
Technical Analysis	341,285	351,524
Legal (FERC)	341,286	351,525
Total, Direct Expenses, Consulting	682,571	703,049
General and Administrative		
Rent	28,644	29,503
Utilities	5,628	5,797
Office and Administrative Expenses	46,146	47,530
Professional Services	58,350	60,101
Travel/Lodging/Meetings	95,481	98,345
Total General and Administrative	234,249	241,276
Capital Expend. & Contingencies		
Computer Equipment	7,957	8,196
Contingencies	220,119	226,723
Capital Expend. & Contingencies	228,076	234,919
TOTAL EXPENSES	2,421,311	2,493,952
BUDGET	2,467,379	2,541,400