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THE STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION
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December 1, 2017

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

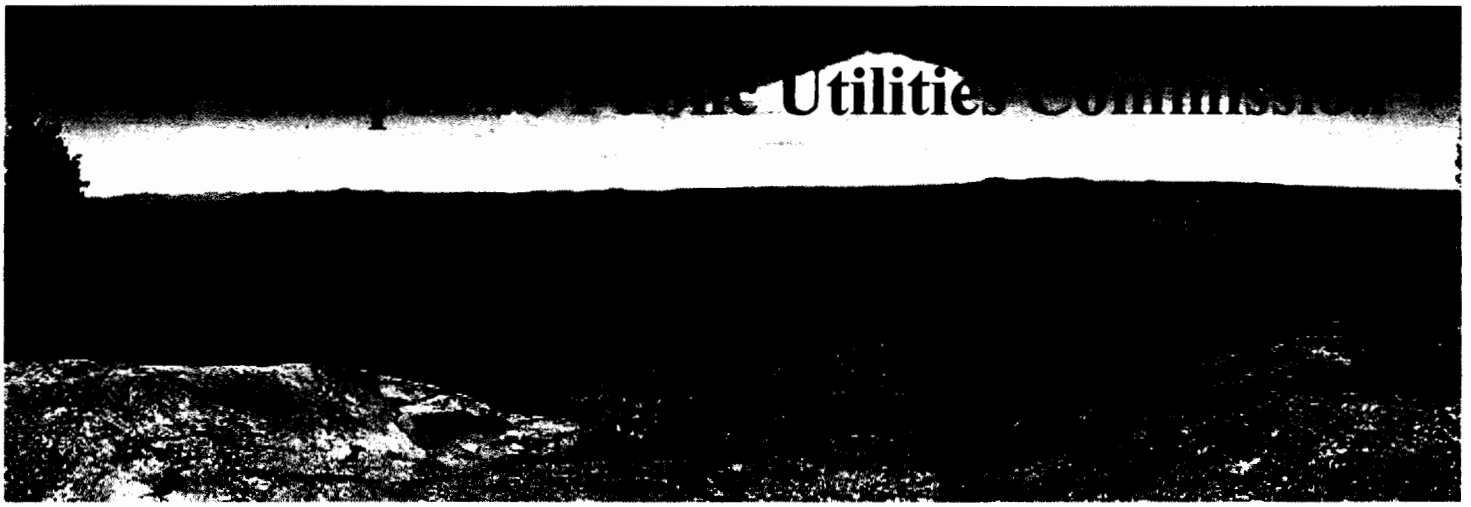
Your Excellency and Honorable Councilors:

The Biennial Report for Fiscal Years 2016 and 2017 is file pursuant to RSA 363:24, which requires that the commission shall publish and file with the Governor and Council, a report not later than December 1 of each odd-numbered year. This report contains, among other things, an account of the New Hampshire Public Utilities Commission proceedings for the previous biennium.

Sincerely,

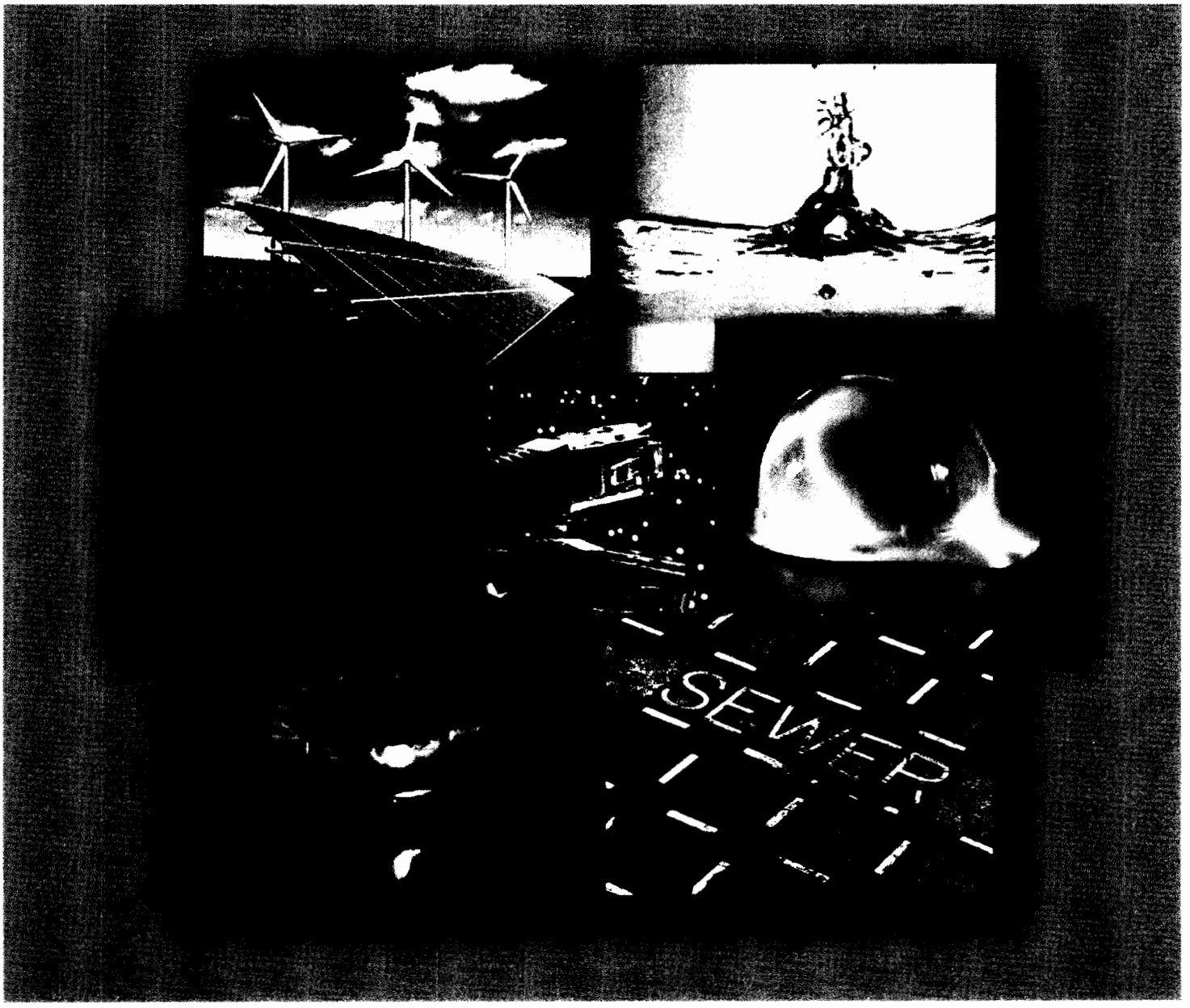
Martin P. Honigberg
Chairman

Attachment



BIENNIAL REPORT

July 1, 2015 – June 30, 2017



Christopher Sununu
Governor

Joseph D. Kenney
Executive Councilor
District 1

Andru Volinsky
Executive Councilor
District 2

Russell E. Prescott
Executive Councilor
District 3

Christopher C. Pappas
Executive Councilor
District 4

David K. Wheeler
Executive Councilor
District 5

His Excellency, Governor Christopher Sununu
And The Honorable Executive Council:

Pursuant to RSA 363:24, we are pleased to submit the biennial report for the New Hampshire Public Utilities Commission for fiscal years 2016 and 2017.

Martin P. Honigberg
Chairman

Kathryn M. Bailey
Commissioner

Michael S. Giaimo
Commissioner

December 1, 2017

MISSION

To ensure that customers of regulated utilities receive safe, adequate and reliable service at just and reasonable rates.
To foster competition where appropriate.
To provide necessary customer protection.
To provide a thorough but efficient regulatory process that is fair, open and innovative.
To perform our responsibilities ethically and professionally in a challenging and supportive work environment.

Contents

HISTORY

The New Hampshire Public Utilities Commission has its origins in an 1838 statute that provided for appointment of commissioners with limited powers regarding railroads in each New Hampshire County. This was the first attempt by any state to regulate transportation. The County boards were consolidated into the State Board of Railroad Commissioners in 1844, the first such board in the nation.

In 1911, the New Hampshire Legislature enacted comprehensive legislation that instituted a new system for the establishment and regulation of public utilities and railroads in the state. As a result, the Public Service Commission was created as a state tribunal and given broad supervisory and regulatory powers over public utilities. The name Public Service Commission was changed in 1951 to Public Utilities Commission. In 1979, the Legislature made the commissioners full-time and generally amended the structure and guidelines of the Commission.

In 1985, the Department of Transportation (DOT) was established and took over the Commission's transportation-related functions. Various amendments to RSA 363 in the 1980s removed the Office of the Consumer Advocate (OCA) from the direct control of the Commission and administratively attached it to the Commission such that it is independent except for shared use of business office and support functions.

The Commission established a Sustainable Energy Division in 2008 to administer the rebate and competitive grant programs established pursuant to the State's renewable portfolio standards statute. The Sustainable Energy Division also certifies new solar, wind and other renewable resource generators to produce and trade Renewable Energy Credits and oversees other aspects of New Hampshire's renewable portfolio standards statute.

An Energy Efficiency & Sustainable Energy Board was established pursuant to RSA 125-O:5-a, effective October 1, 2008, "to promote and coordinate energy efficiency, demand response, and sustainable energy programs in the state." Like the OCA, the EESE Board is administratively attached to the Commission.

In 2014, the legislature modified RSA 162-H to restructure the membership and duties of the Site Evaluation Committee (SEC). Among other things, the legislation made the Chair of the Commission the Chair of the SEC and administratively attached the SEC to the Commission.

The offices of the Commission have been in many locations over the years. In 2004, the Commission moved to its current office space in the newly-renovated Walker Building on the Governor Hugh J. Gallen State Office Park South campus.

CHANGING FOCUS WITH TIME

Commission cases traditionally have focused on rates, financings, and franchises, with tariffs governing nearly all aspects of utility service. The granting of exclusive franchises to public utilities effectively results in monopoly power over customers. Regulation serves as a substitute for market forces to constrain that power.

In 1996, the Legislature enacted RSA 374-F, which initiated the restructuring of the electric utility industry in New Hampshire. The goal of restructuring was to reduce costs and harness the power of competitive markets by introducing customer choice to the generation segment of the electric industry. The pending sale of the last of the utility owned generation plants marks the completion of the transition from vertically integrated electric utilities to distribution only

utilities and electric utility restructuring in New Hampshire. The development of renewable energy resources and the introduction of competitive suppliers and aggregators in New Hampshire's energy market have expanded the scope of the Commission's regulatory purview from its traditional focus on rates, financings and franchises.

Competition in the telephone industry has also significantly changed the New Hampshire market, first with competitive toll providers, followed by competitive local exchange providers. With the advance of competition into traditional telecommunications services, the work of the Commission has assumed a greater focus on wholesale relationships between providers and managing the interactions of incumbents and new players entering the field. Legislative action in 2012 and 2013 removed regulatory oversight over Voice over Internet Protocol (VoIP) providers and services, and in other ways reduced regulation over telecommunications.

The Commission now plays a leading role in the state's Advisory Council on Emergency Preparedness and Security, created in the aftermath of 9/11. In addition, the Commission provides support to the Governor and the Department of Safety's Division of Homeland Security and Emergency Management during major storms and other events that disrupt utility service. Utility infrastructure safety, emergency response, and cyber security have become critical issues on the Commission's agenda in state, regional, and federal forums.

Increasingly, the Commission has been occupied with issues in the regional energy markets. Often a decision made at the federal or regional level will have significant financial effects on New Hampshire ratepayers. By advocating for New Hampshire's interests at the regional and national level, we have been able to avoid millions of dollars that certain policy and market initiatives would have imposed on New Hampshire ratepayers.

COMMISSIONERS

The three New Hampshire Public Utilities Commissioners are appointed for six-year terms by the Governor, subject to Executive Council approval. The Commissioners' terms are staggered so that one term expires every odd-numbered year. The Governor, with Executive Council approval, appoints one of the Commissioners as Chair. One Commissioner must be an attorney and at least one of the remaining Commissioners must have experience in engineering, economics, accounting or finance.

MARTIN P. HONIGBERG

Chair, December 2013 to present

Martin P. Honigberg was appointed Commissioner in December 2013 and confirmed as the Chair in December 2014. His term ends June 30, 2019. In addition to his duties as Chair, he serves as Chair of the Site Evaluation Committee and as a member of the Nuclear Decommissioning Finance Committee. In 2016 and 2017, Chairman Honigberg served as President of the New England Conference of Public Utilities Commissioners.

Chairman Honigberg graduated from Amherst College with a Bachelor of Arts in Economic and holds a Juris Doctor Degree from Vanderbilt University. Chairman Honigberg served as Senior Assistant Attorney General and as Special Counsel to Governor Shaheen. Chairman Honigberg spent more than twenty years practicing law, most recently spending eleven years at Sulloway & Hollis, PLLC in Concord. He has considerable experience in administrative law and litigation.

KATHRYN M. BAILEY

Commissioner, July 2015 to present

Kathryn M. Bailey was appointed Commissioner in July 2015. Her term ends June 30, 2021. Prior to her appointment, Commissioner Bailey served as Director of Regulatory Innovation and Strategy, Director of Telecommunications, and Chief Engineer for the Public Utilities Commission. Commissioner Bailey is a member of the National Association of Regulatory Utility Commissioners (NARUC) Committee on Electricity and the State 911 Commission and is also the New Hampshire Manager of the New England States Committee on Electricity (NESCOE).

Commissioner Bailey graduated from Union College with a Bachelor of Science in Electrical Engineering. Before joining the Public Utilities Commission staff, Commissioner Bailey served in the United States Air Force as a communications officer (1983-1987). She has been a licensed professional engineer in New Hampshire since 1991.

MICHAEL S. GIAIMO

Commissioner, August 2017 to present

Michael S. Giaimo was appointed Commissioner in August 2017. His term ends June 30, 2023. He is one of two New Hampshire representatives to the Regional Greenhouse Gas Initiative (RGGI) and serves on the RGGI, Inc. Board of Directors.

Commissioner Giaimo graduated from the University of Massachusetts with Bachelor of Arts in History and holds a Juris Doctor Degree from Suffolk University Law School. Prior to his appointment, Commissioner Giaimo worked in the External Affairs Department for ISO-NE (ISO), supporting ISO-NE's outreach plans for regional system planning, wholesale electricity markets, and power system emergencies, managing relationships with legislators, regulators, and policymakers. Before joining

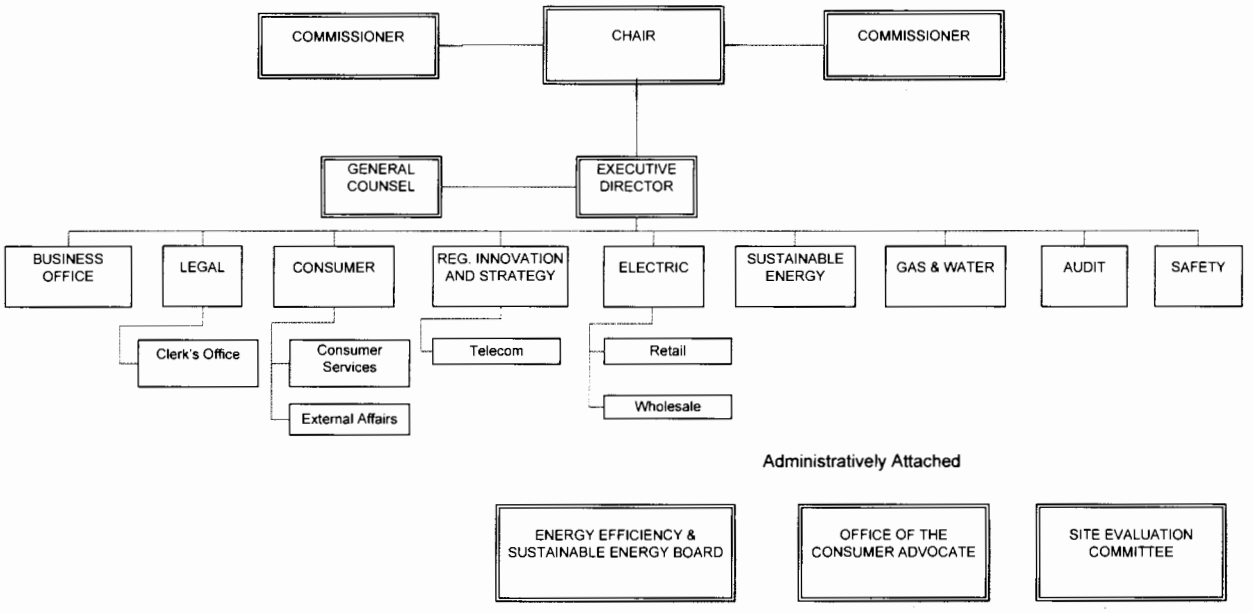
ISO-NE in 2007, Commissioner Giaimo spent 8 years as Vice President of the Business & Industry Association of New Hampshire and was responsible for energy and environmental affairs.

ROBERT R. SCOTT

Commissioner, March 2012 to June 2017

Robert R. Scott was appointed Commissioner in March 2012. His term ended June 30, 2017. He was the New Hampshire Manager of the New England States Committee on Electricity (NESCOE) and a co-chair of the New England Conference of Public Utilities Commissioners (NECPUC) subcommittee on cyber security. Commissioner Scott was on the Board of Directors of the National Association of Regulatory Utility Commissioners (NARUC) and served on the Committee on Critical Infrastructure as well as the Committee on Energy Resources and the Environment. He was one of two New Hampshire representatives to the Regional Greenhouse Gas Initiative (RGGI) and served on the RGGI, Inc. Board of Directors. Additionally, he served as co-chair of the Northeast Energy Efficiency Partnerships (NEEP) Evaluation, Measurement and Verification Forum Steering Committee.

ORGANIZATIONAL CHART



Office of the Commission	**Debra A. Howland**, *Executive Director*
General Counsel	**F. Anne Ross, Esq.**, *General Counsel*
Business Office	**Eunice A. Landry**, *Business Administrator*
Legal Division	**David J. Shulock, Esq.**, *Director*
Consumer Services and External Affairs	**Amanda O. Noonan**, *Director* **Rorie E. Patterson,** *Assistant Director*
Safety Division	**Randall S. Knepper, P.E.,** *Director* **Robert B. Wyatt**, *Assistant Director*
Regulatory Innovation and Strategy Division	**Michael C. Ladam**, *Director*
Electric Division	**Thomas C. Frantz**, *Director* **Leszek Stachow**, *Assistant Director* **George McCluskey**, *Assistant Director*
Sustainable Energy Division	**Karen P. Cramton**, *Director*
Gas & Water Division	**Mark A. Naylor**, *Director* **Stephen P. Frink**, *Assistant Director*
Audit Division	**Karen J. Moran, C.B.A.**, *Chief Auditor*

COMMITTEES

Created by the New Hampshire General Court on which Commission members serve.

ADVISORY COUNCIL ON EMERGENCY PREPAREDNESS AND SECURITY

Under RSA 21-P:48, the Chairman or designee is a member of the Advisory Council on Emergency Preparedness and Security. The Director of Safety has been designated to represent the Commission. The Council advises the Governor on issues relating to the state's ability to respond to natural and man-made disasters, and the preparation and maintenance of a state disaster plan.

ENERGY EFFICIENCY AND SUSTAINABLE ENERGY BOARD

The Chairman or designee is a member of the Energy Efficiency & Sustainable Energy (EESE) Board established pursuant to RSA 125-O:5-a. The Director of the Commission's Sustainable Energy Division has been so designated. The EESE Board was created by the legislature to promote and coordinate energy efficiency, demand response, and sustainable energy programs in the state. The EESE Board is administratively attached to the Commission. The Chairman appoints 3 voting Board members representing the non-profit sector and several nonvoting members who represent each utility energy efficiency program and particular business sectors, namely energy efficiency companies, sustainable or renewable energy sales and installation, and the investment community.

ENHANCED 911 COMMISSION

The Chairman or designee is a member of the Enhanced 911 (E911) Commission created by RSA 106-H:3. Commissioner Bailey has been designated. The E911 Commission maintains a coordinated state-wide enhanced 911 system to improve emergency communications and response time to emergency calls for law enforcement, fire, medical, rescue and other emergency services.

NUCLEAR DECOMMISSIONING FINANCING COMMITTEE

The Chairman serves on the Nuclear Decommissioning Financing Committee (NDFC) pursuant to RSA 162-F. The NDFC determines the projected costs of decommissioning the Seabrook nuclear power plant and assures the adequacy of the fund to meet those costs.

SITE EVALUATION COMMITTEE

The Commissioners are member of the Site Evaluation Committee (SEC). The SEC evaluates petitions for certification to construct and operate energy facilities.

TELECOMMUNICATIONS PLANNING AND DEVELOPMENT ADVISORY COMMITTEE

The Chairman or designee is a member of the Telecommunications Planning and Development Advisory Committee created under RSA 12-A:46. The Director of the Regulatory Innovation and Strategy division has been designated. The Advisory Committee works with other state agencies, telecommunications providers and users, to develop a state-wide plan for telecommunications service.

OTHER COMMITTEES

Commissioners and Staff participate in a number of national and regional organizations with committees that address a variety of issue within the Commission's purview. Those organizations (with their associated committees) include the New England States Committee on Electricity (NESCOE), the New England Conference of Public Utilities Commissioners (NECPUC), the National Association of Regulatory Utility Commissioners (NARUC), the National Association of Pipeline Safety Representatives (NAPSR), and the Eastern Interconnection States' Planning Council (EISPC).

LEGISLATIVE COMMITTEE ASSISTANCE

The Commission provides information, when asked, to the State's Legislators, primarily through the House Science, Technology and Energy Committee, the Senate Energy and Natural Resources Committee, and relevant joint legislative oversight committees. In addition, the Commission, when asked, participates in legislative studies related to areas within its purview.

COMMISSION FINANCES

For each fiscal year of the period of this biennial report (July 1, 2015 to June 30, 2017), the activities of the Commission and the Office of the Consumer Advocate were funded primarily through assessments on the utilities the Commission regulates as well as on non-utility providers who fall within the Commission's registration and enforcement responsibilities. These assessments are made pursuant to RSA Chapter 362 – Definition of Terms, Utilities Exempted, and RSA 363-A – Expenses of Public Utilities Commission against Certain Utilities. Some assessments were based on revenue earned, some were a set dollar amount (direct assessments), and others were a specified minimum amount (minimum assessments). In addition to funds collected through the assessments, the Commission receives approximately 70% of the funding for its Safety Division, which is responsible for enforcing pipeline safety, from the federal government.

The Commission administers both the Energy Efficiency Fund (formerly the Greenhouse Gas Emissions Reduction Fund) and the Renewable Energy Fund and receives monies for its administrative costs from those funds. Both funds are non-lapsing, special funds. The Energy Efficiency Fund supports the Core energy efficiency programs offered by the electric and gas utilities, and provides rebates to energy service electric ratepayers. The Renewable Energy Fund supports renewable energy initiatives in New Hampshire through competitive grants and rebates.

In FY 2017, the Commission exercised varying degrees of oversight over more than 300 utility and non-utility providers with gross revenues of approximately $2.6 billion. The Commission is authorized 74 full-time employees including the commissioners. The Office of Consumer Advocate is authorized five full-time employees and one part time employee.

The Site Evaluation Committee (SEC), administratively attached to the Commission, is funded by the Site Evaluation Committee Fund to cover the expenses to process and administer applications for the siting and monitoring of energy facilities. The fund was initially established pursuant to SB 245-FN, effective July 1, 2014 (codified as RSA 162-H:21). SB 245-FN also provided for funding the SEC through a one-time grant of $500,000 from the Renewable Energy Fund (REF). Amendments to RSA 162-H:21 passed in 2015, created various application and other filing fees. The REF grant was to be used to cover operating costs in the event that the application and other filing fees were insufficient to cover the SEC operating costs. RSA 162-H:8-a, III, requires the SEC to review and evaluate the application and filing fees at least once per year, and the SEC held a public meeting to conduct its review on January 12, 2017.

COMMISSION EXPENDITURES

Salaries	10	4,441,921	4,825,729
Current Expense	20	48,276	46,116
Rent & Lease – Other	22	8,527	8,388
Maintenance – Other	24	977	1,000
Organizational Dues	26	57,048	67,102
Transfers to OIT	27	509,063	471,455
Transfers to General Services	28	324,974	372,577
Intra-Agency Transfers	29	513,243	543,485
Equipment	30	4,663	53,559
Telecommunications	39	50,002	54,003
Indirect Costs	40	48,399	40,941
Audit Fund Set-Aside	41	239	489
Consultants	46	8,331	13,918
Trans. to Other Agencies	49 [2]	442,505	462,573
Other Personnel Services	50 [3]	47,249	30,932
Westlaw	57	42,922	47,773
Benefits	60	2,109,661	2,290,042
Retirees Health Insurance	64	254,657	263,692
Educational Training	66	4,214	21,510
Travel (In State)	70	9,003	17,027
Grants - Non-Federal	73 [4]	31,150,525	17,999,887
Travel (Out of State)	80	65,254	56,860

Notes:

[1] Source of Information - NH First FY 2016 Closing Report dated July 23, 2016 & FY 2017 Closing Report dated July 22, 2017. It does not include any Special Assessment Expenses.

[2] The major expenses include funds transferred to the Department of Environmental Services for costs associated with administering the RGGI cap and trade program and funds transferred to support the Attorney General's office.

[3] This includes the salary expense for support of the federal Damage Prevention and One Call grants.

[4] This is the amount of grants awarded and rebates paid by the Sustainable Energy Division and the distribution of the RGGI auction proceeds.

COMMISSION PROCEEDINGS

NUMBER OF DOCKETS		
	FY 2016	**FY 2017**
Electric	122	117
Natural Gas	**43**	**41**
Rulemaking	1	1
Sewer	**0**	**0**
Steam	4	4
Telecommunications	**26**	**19**
Water	15	19
Sustainable Energy	**10**	**12**
Total	**221**	**213**

NUMBER OF DECISIONS		
	FY 2016	**FY 2017**
Electric	40	17
Natural Gas	**18**	**13**
Rulemaking	1	0
Sewer	**0**	**0**
Steam	3	4
Telecommunications	**19**	**6**
Water	14	13
Sustainable Energy	**15**	**19**
Total	**110**	**72**

NUMBER OF OFFICIAL PROCEEDINGS		
	FY 2016	**FY 2017**
Pre-Hearing Conferences	30	18
Hearings	**54**	**52**
Rulemaking Hearings	0	0
Pub. Statement Hearings	**6**	**4**
Commission Meetings	2	4
Total	**92**	**78**

REHEARINGS AND APPEALS

			APPEALS TO THE NEW HAMPSHIRE SUPREME COURT				
Year	**Final Orders Issued**	**Orders on Motions for Rehearing**	**Appeals**	**Upheld**	**Affirmed in Part, Denied in Part**	**Remanded**	**Reversed**
2016	106	9	1	0	0	0	0
2015	**84**	**10**	**0**	**0**	**0**	**0**	**0**
2014	131	1	1	1	0	0	0
2013	**167**	**11**	**1**	**1**	**0**	**0**	**0**
2012	134	4	1	1	1	0	0
2011	**125**	**9**	**1**	**1**	**1**	**0**	**0**
2010	128	3	3	2	0	1	0
Total	**875**	**47**	**7**	**6**	**2**	**1**	**0**

PERFORMANCE MEASURES

DAYS TO ISSUE AN ORDER

Year	# Of Orders	Avg. # Of Days To Issue
CY 2014	107	35
CY 2015	121	50
CY 2016	99	38

COMPETITIVE NATURAL GAS SUPPLIER REGISTRATIONS

APPLICATION PROCESSING STATISTICS

	CY 2015		CY 2016	
# days	Count	%	Count	%
<=30	0	0%	1	50%
<=60	0	0%	1	50%
<=90	0	0%	0	0%
>90	1	100%	0	0%
Total	**1**	**100%**	**2**	**100%**

COMPETITIVE NATURAL GAS AGGREGATOR REGISTRATIONS

APPLICATION PROCESSING STATISTICS

	CY 2015		CY 2016	
# days	Count	%	Count	%
<=30	8	57%	4	20%
<=60	5	36%	13	65%
<=90	1	7%	2	10%
>90	0	0%	1	5%
Total	**14**	**100%**	**20**	**100%**

COMPETITIVE ELECTRIC SUPPLIER REGISTRATIONS

APPLICATION PROCESSING STATISTICS

	CY 2015		CY 2016	
# days	Count	%	Count	%
<=30	4	29%	8	53%
<=60	5	36%	5	33%
<=90	0	0%	2	13%
>90	5	36%	0	0%
Total	**14**	**100%**	**15**	**100%**

COMPETITIVE ELECTRIC AGGREGATOR REGISTRATIONS

APPLICATION PROCESSING STATISTICS

	CY 2015		CY 2016	
# days	Count	%	Count	%
<=30	31	97%	42	88%
<=60	1	3%	4	8%
<=90	0	0%	2	4%
>90	0	0%	0	0%
Total	**32**	**100%**	**48**	**100%**

ENERGY CODE APPLICATIONS
FISCAL YEARS 2016 – 2017

Number of Code Applications Approved		Benchmark	Actual %
FY 2016	**1,473**		
	Within 2 Days	80%	93.4%
	Within 7 Days	**90%**	**99.5%**
	Within 15 Days	100%	100%
FY 2017	**1,706**		
	Within 2 Days	80%	86.3%
	Within 7 Days	**90%**	**99.6%**
	Within 15 Days	100%	100%

GROUP NET METERING APPLICATIONS

	Applications Received	Applications Approved	Average Number of Days to Complete Review of Completed Applications
FY 2016	**77***	**77**	**4**
<= 10 days		67	
<= 20 days		**10**	
<= 30 days		0	
> 30 days		**0**	
FY 2017	**69***	**69**	**2**
<= 10 days		**64**	
<= 20 days		3	
<= 30 days		**2**	
> 30 days		0	

* Excludes applications that were withdrawn or never completed.

AUDIT DIVISION

The Commission's Audit Division consists of a Chief Auditor and four Examiners. Audits are conducted at regulated utilities, as well as state agencies and non-profit organizations, to ensure compliance with Commission orders, accounting standards, and regulatory mandates. The Audit Division completed 49 audits during FY 2016 and 69 audits during FY 2017.

Financial audits are conducted using pivot tables, system queries, and data filters to sort data provided by the utility or organization being audited. Reviews of internal controls over processes and authorizations are part of each audit. Information technology systems are reviewed and analysis of the technological mapping among different systems at a utility is critical to ensuring that the data on which the Commission relies is accurate.

ANNUAL REPORT AUDITS AND CALCULATIONS OF RATES OF RETURN, RETURN ON EQUITY, AND COST OF CAPITAL

In the current biennium, 41 audits of the Annual Reports filed with the Commission, from steam, gas, water and sewer companies were conducted. These audits consists primarily of comparing the current report of a company to that company's previously filed report, ensuring compliance with applicable accounting standards, ensuring compliance with Commission orders, and verifying that supporting schedules are complete. The audits resulted in the revision to or additional information required of 32 of the 41 reports, or 78%.

ANNUAL ELECTRIC ASSISTANCE PROGRAM AUDIT AND CORE ENERGY EFFICIENCY AUDITS

The system benefits charge per kWh, assessed on the four electric utilities' customers, is split between the EAP and the Core, in accordance with statute and Commission orders. The two gas companies' customers pay for the energy efficiency programs through the LDAC, set annually by the Commission.

The Audit Staff reviews the financial details of the EAP each program fiscal year, for compliance with the Commission orders, EAP Advisory Board approved procedure manuals for the Program Administrator, Utilities, Community Action Agencies, Office of Energy and Planning, and NH Treasury. Because of the cash nature of the program, a review of the processes at a variety of the agencies is conducted. Overall, the Audit Division reviews eight specific participants each year: the Commission, the Office of Strategic Initiatives (formerly the Office of Energy and Planning), the State Treasury, the lead Community Action Agency, and the four participating electric utilities.

Audit conducts financial and compliance audits annually of the demand side management and Core and at the two gas utilities as well as the four participating electric utilities, including a review for compliance with state statutes regarding the usage of the proceeds from the quarterly Regional Greenhouse Gas Initiative auctions. Audits focus on compliance with the annual budgets approved by the Commission as well as terms and conditions approved in prior orders, and state regulations. Verification of reported efficiency programs' costs, savings, and participation are made to the financial records of the companies as well as to individual program participant source documents. Audit reviews the

distribution to the municipalities for compliance with Commission Order and state statute.

REGIONAL GREENHOUSE GAS INITIATIVE

Audits of the controls in place at the Commission regarding the Greenhouse Gas Emissions Reduction Fund, as established by RSA 125-O:23, were conducted for the years 2010 through 2014, 2015, and 2016. The results of the audits were communicated to Commission management.

RENEWABLE ENERGY FUND AUDITS

The Renewable Energy Fund, established by RSA 362-F:10 was audited for the years 2014 and 2015, with the results communicated to Commission management.

ANNUAL ENVIRONMENTAL REMEDIATION AUDITS OF GAS UTILITIES

Audits of the annual environmental remediation costs incurred by the two gas companies were conducted. Audits consist of reviewing reported expenses and recoveries as well as verifying all costs and revenues to supporting documentation and appropriate accounting treatment.

STORM FUND

Three major storm fund audits were conducted, focused on verifying the reported storm costs to the company's financial records and supporting documentation, and ensuring compliance with Commission orders.

ANNUAL SUMMER AND WINTER COST OF GAS

Audits conducted at the two natural gas utilities, one propane air utility, and Concord Steam were conducted to ensure that the seasonal rates to be assessed to consumers were established based on accurate reporting of actual revenues and expenses. For the natural gas utilities and propane air utility, the audits looked at the costs incurred by the gas companies during the peak winter season and the off-peak summer season. Accuracy of accounting treatment, verification to supporting documentation and IT systems, and tariff compliance were also part of each audit.

CONCORD STEAM CORPORATION

A full rate case audit of the Concord Steam Corporation was conducted in conjunction with docket DG 16-294 for a test year ended 12/31/2015. Specific issues identified during the audit impacted base rates.

Subsequent quarterly reviews of revenues and cost of energy filings were conducted as the utility wound down operations. One quarterly review identified an error, which resulted in an adjustment to the proposed cost of energy from an increase to a refund to customers.

RATE CASE AUDITS

Rate case audits are conducted by the Audit Division at the request of the director of gas, water, or electric division of the Commission, when a company files for a change in base rates. Rate case audits involve full financial audits of the company's test year, a review of activity since the prior rate case, and specific testing to source documents for changes to plant in service, operational expenses, tax returns, among others. Full rate case audits typically require the entire Audit Division to complete. In FY 2016, the Audit staff conducted full rate case audits of the books and records of one water utility and one combined water/sewer utility. Two electric utilities and one water utility rate case audits were conducted during FY 2017.

RATE CASE EXPENSES

Rate case expense audits are conducted after conclusion of a company's rate case and upon receipt of a statement of the costs incurred by the company to file and participate in the rate case proceeding. Audits of expenses incurred by utilities when rate cases are filed are reviewed for prudency, accuracy of accounting, and compliance with the NH Code of Administrative Rules Chapter Puc 1900. During this biennium, two rate case expense audits were completed.

STEP ADJUSTMENT

Step adjustments are increases to a utility's revenue that occur after an approved rate increase and which provide an adjustment for known capital expenditures that are not incurred until after the conclusion of a rate case. A step adjustment audit is a focused audit of capital costs contemplated for recovery after the test year in a filed rate case. Audit reviewed one company's step adjustment projects for compliance with the settlement agreement in the rate case.

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT (WICA)

Audits of two water utilities' Water Infrastructure and Conservation Adjustment (WICA) projects were conducted, to ensure that the projects met the scope and budgets approved in the previous year, that the accounting was accurate, and that the assets were supported by continuing property records and documentation substantiating all costs.

CAST IRON/BARE STEEL REPLACEMENT (CIBS)

Audit reviews the actual costs submitted to the Commission staff and reviews the expenses for assets contemplated to be recovered through the CIBS annual mechanism.

CYCLE AUDIT

A cycle audit is similar to a full financial and compliance rate case audit, although the audit work is not associated with the company filing a rate case. During FY 2016, two cycle audits were conducted at two small water companies.

ANNUAL AUDITS

	FY 2016	FY 2017
Rate Case/Expense Audits	3	4
Step Adjustment Audits	0	1
Storm Fund Review	2	1
Core Energy Efficiency Audits	6	6
Electric Assistance Program Audits	8	8
Cost of Gas/Environmental Cost Audits	9	8
Water-Sewer-Gas Desk Audits	16	25
Concord Steam Wind-down	0	5
RGGI	1	6
Renewable Energy Fund	0	1
WICA	2	2
Cycle	2	0
Cast Iron-Bare Steel	0	2
Total	**49**	**69**

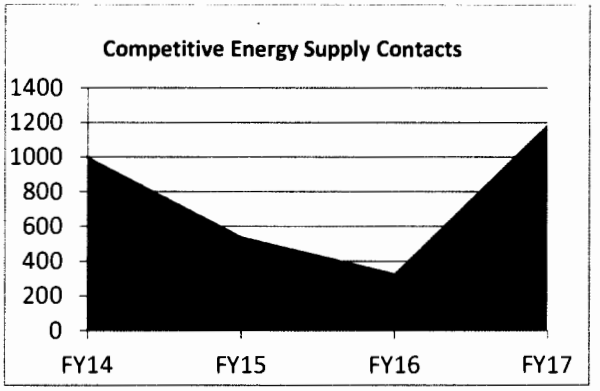
CONSUMER SERVICES AND EXTERNAL AFFAIRS

CONSUMER SERVICES

Consumer Services assists consumers in the resolution of informal complaints and provides information to help consumers understand their rights and responsibilities as customers of regulated utilities and competitive energy providers. The Division tracks consumer calls, letters and e-mails, watching for trends in complaints that may indicate service quality, regulatory compliance, or consumer protection issues that require Commission attention. Consumer Services also educates consumers and other public interest groups in an effort to reduce disputes and to promote the public's understanding of utility services and practices, thereby assisting them in making informed choices about utility service.

CONSUMER INQUIRIES

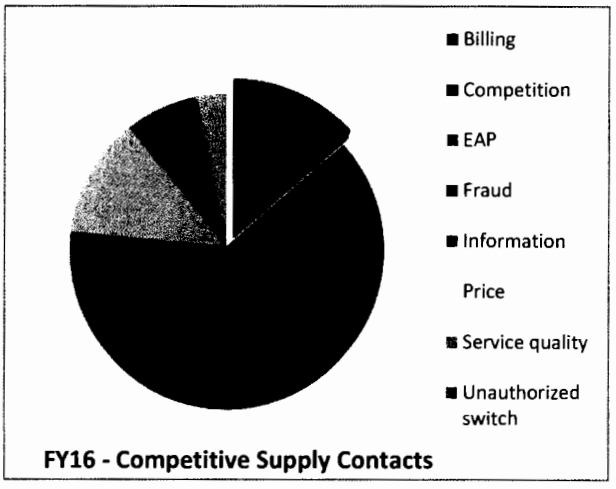
Residential choice for electric energy supply has continued to drive calls to Consumer Services. There are twenty-three competitive energy suppliers offering service to residential customers in New Hampshire. During the last biennium, the Commission introduced a new section on its website designed to help residential and small commercial customers better understand how the competitive energy supply market works and what to ask when considering choosing a competitive energy supplier. During this biennium, the Commission added a comparison shopping page, where residential and small commercial customers can compare the energy product offerings of competitive suppliers actively marketing in New Hampshire to one another and to utility energy supply service.



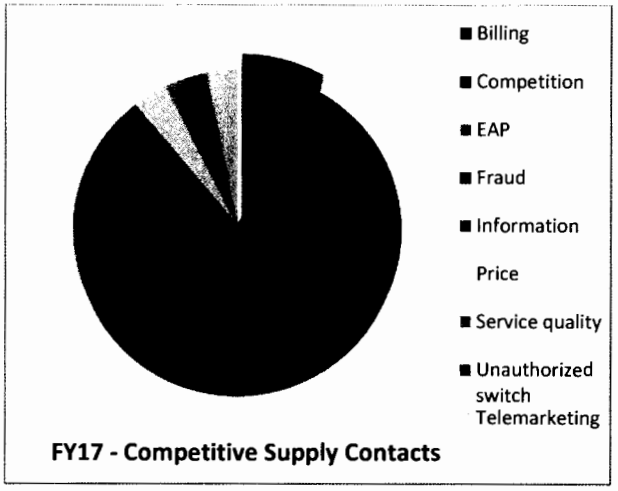
Customer calls to Consumer Services about competitive energy supply are most likely to be general questions about how the competitive energy market works. Customer confusion regarding the competitive energy market and competitive energy supply products often prompts calls and questions once customers receive their first bill from a competitive supplier. During the past biennium, several competitive energy suppliers began door to door marketing campaigns, resulting in a high volume of calls to the Commission. Prompted by calls from customers alleging, among other things, deceptive and misleading sales practices, Consumer Services began an investigation into the door to door sales practices of one particular supplier, Clearview Electric. The Commission opened a docket based on a Consumer Services staff report which concluded with the acceptance and approval of a settlement agreement between, Staff, the Office of Consumer Advocate and Clearview Electric. Under the terms of the settlement agreement, Clearview ceased all marketing to and enrollment of New Hampshire residents for a period of 24 months. Clearview was permitted to continue serving those customers already enrolled, but was prohibited from assessing an early termination fees to those customers who chose to discontinue energy supply service with Clearview. Further,

Clearview was required to make payments to remedy the loss of the Electric Assistance Program (EAP) discount to those customers who left Clearview's energy supply or discontinued energy supply service with Clearview based on the loss of the EAP discount.

N.H. Code of Administrative Rules, Chapter Puc 2000, the Commission's rules which govern registration requirements for and consumer protection obligations of competitive electric power suppliers and aggregators, was re-promulgated during the past biennium. Among other changes, a number of additional consumer protections were adopted, including additional requirements for competitive energy suppliers who intend to undertake door to door marketing. The most frequent reasons customers contact Consumer Services for matters related to competitive energy supply are shown below.

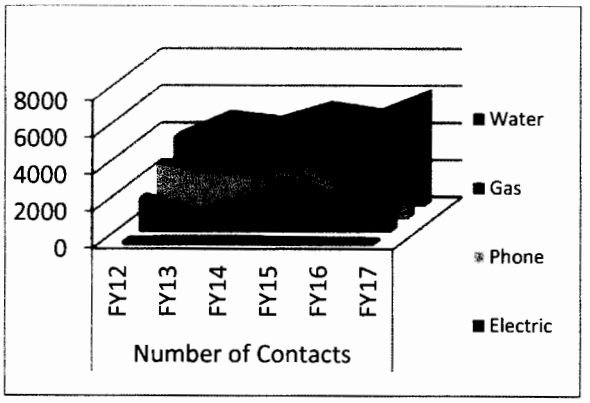


FY16 - Competitive Supply Contacts



FY17 - Competitive Supply Contacts

Consumer Services receives, on average, approximately 9,000 contacts each year. As shown below, calls to Consumer Services related to electricity continue to trend up. Consumer calls about water utility service experienced little change while gas related calls fluctuate somewhat from year to year.



Legislation passed in 2012 significantly reduced the Commission's regulation of telecommunications service. That, in conjunction with a decreasing number of landlines in the state, has resulted in a decreased in the calls received regarding telecommunications service.

The number of requests for authorization to disconnect service to electric and gas accounts where the customer has been identified as having a medical condition continues to grow. In FY 14 and FY 15, the number of requests for authorization to disconnect service to accounts where there is a certified medical condition was 20 and 256, respectively. In FY 2016, 820 requests were received, an increase of 220% over the prior fiscal year; and in FY 17, 1010 requests were received, 18% more than the number of requests received in FY 16 and 295% more than in FY 15. Consumer Services staff devotes a considerable amount of time to the review of these requests, working with the customers affected to help them understand the need to take responsibility for their utility service bill and connecting them to the various financial resources available to assist them.

ELECTRIC ASSISTANCE PROGRAM

Consumer Services oversees the administration of the EAP, a low income electric bill assistance program funded through the system benefits charge authorized under RSA 374-F:4, VIII (c). Customers of Eversource, Liberty Utilities, New Hampshire Electric Cooperative and Unitil support the program through a 1.5 mill, or $0.0015, per kWh charge on electric bills.

During the past biennium, a total of $27,940,659 in benefits was received by income eligible households participating in the EAP. On average, 32,240 households participated in the EAP each month.

CONSUMER EDUCATION

Educating consumers about their utility services and their rights and responsibilities as utility customers is an ongoing effort of the Commission. The Commission makes use of press releases and interaction with consumer groups and individual consumers to help consumers become better informed about their utility services. Consumer Services participates in a series of statewide workshops each fall with social service agencies to share information about utility service changes and how those changes can affect their clients. It also establishes contacts between the social service agencies and the Consumer Services staff that allows everyone to better assist consumers. While those agency meetings have historically been tailored to electric utility issues, natural gas utilities are now included in the discussion.

SAFETY & SECURITY

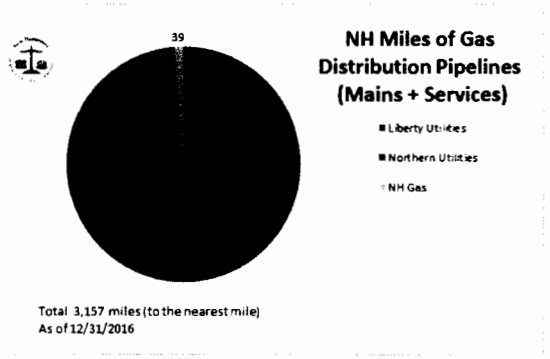
The Safety Division has responsibilities for six general areas of oversight. The Division primarily provides support to other divisions within the Commission and externally to other State agencies in subject matters of:

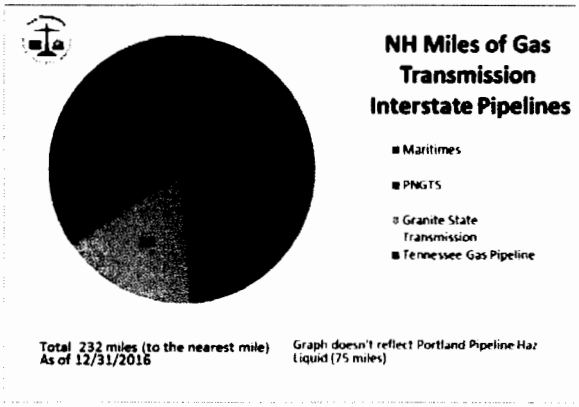
- underground damage prevention
- pipeline safety
- electrical safety & reliability
- emergency preparedness & emergency response
- physical & cyber security
- engineering, geographic information systems, technical and analytical expertise

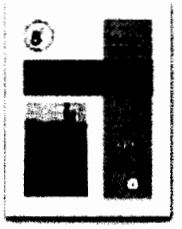
PIPELINE SAFETY

The Safety Division oversees more than 3,100 miles of intrastate pipelines delivering gas to more than 127,500 customers within 53 communities in New Hampshire. Two natural gas utilities, two transmission operators, over 21 liquid propane gas operators, one propane-air distribution company, one master meter operator, and two methane operators are inspected at least once per biennium, although most are inspected annually. The Division utilizes 30 natural gas inspection modules, many of which include customized versions of federal inspection forms. The modules are designed to provide guidelines for pipeline safety inspectors to conduct thorough inspections of gas operators using a risk based methodology.

In 2017, New Hampshire expects to complete approximately 200 scheduled inspections that will include a sampling of nearly 1,915 miles of distribution mains feeding 1,212 miles of distribution services supplying approximately 127,500 metered customers. In addition, there are approximately 20 miles of intrastate transmission pipelines within New Hampshire. Areas served include 53 communities with a total population base of approximately 800,000. These figures do not include pipelines served by jurisdictional propane systems.

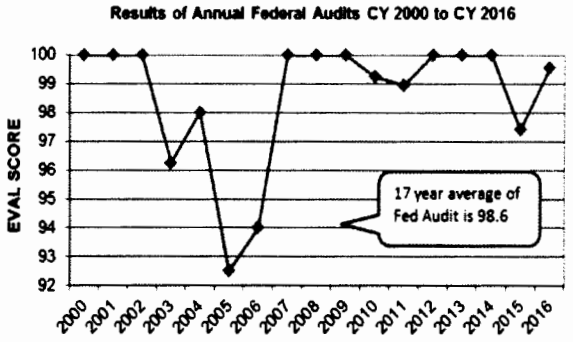






The second edition of the comprehensive *Compendium of State Pipeline Safety Requirements and Initiatives Providing Increased Public Safety Levels compared to Code of Federal Regulations* is edited and published by the Safety Division staff. This publication has become a national technical resource and is a compilation of best practices and initiatives implemented by safety agencies across the nation. Work is underway for a third edition to be released soon.

The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration's (PHMSA's) Office of Pipeline Safety audits the Division's Safety Program each year and consistently awards the Division high scores. The Safety Program received a 99.7 during the latest evaluation for calendar year 2016. Maintaining a highly qualified and knowledgeable inspection staff is a critical element for a high rating.



In December 2006, the U.S. Congress authorized an increase in the federal share of funding for pipeline safety programs, from the current maximum of 50/50 federal/state cost sharing to a maximum of 80/20 federal/state cost sharing. 2014 marked the first year New Hampshire had attained reimbursements at the maximum permissible level without requiring suspension funding. Federal projections indicate that New Hampshire will continue to receive federal funds to cover approximately 70% of the program's cost. The Safety Division is allowed reimbursements for all direct expenditures related to pipeline safety as well as certain indirect costs. The Safety Division's grants are based on a federal fee assessed to interstate pipelines that is approved by Federal Energy Regulatory Commission (FERC) in rates and subsequently collected from the local distribution companies as an allowable cost within cost of gas dockets.

In June 2014, RSA 363:22 was amended directing the Commission to petition the federal government to seek certification to perform interstate pipeline inspections for the lone hazardous liquid pipeline and the four interstate natural gas transmission pipelines in New Hampshire. In 2014, 2015, 2016 and 2017, the Commission submitted requests for interstate certification but was denied by PHMSA each year. Each fall the Safety Division provides an updated Annual Report to the New Hampshire House Science, Technology and Energy Committee regarding inspections of interstate transmission pipelines.

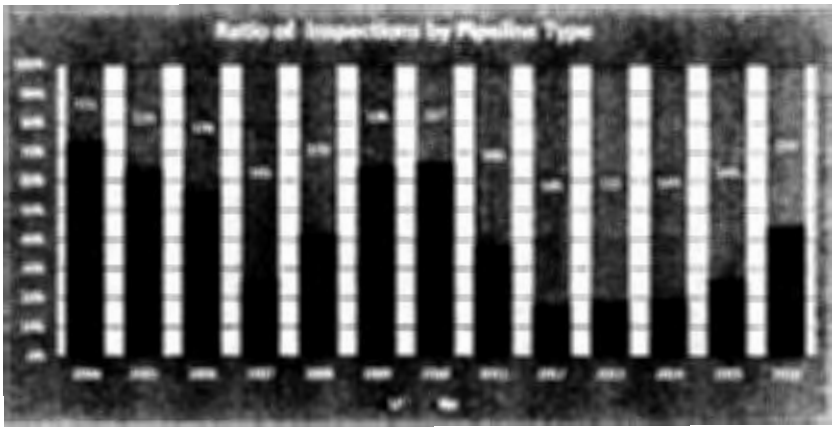
The "Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016", Public Law No. 114-183 was signed into law June 22, 2016. Section 60106 (b) (4) and Section 60106 (f) require PHMSA to apprise the Commission of its intentions for interstate inspection activity in New Hampshire starting in calendar year 2017, which will allow the Safety Division to attend coordinated "joint inspections."

The incident history of gas distribution pipelines reveals infrequent pipeline incidents. Since 1989, six incidents have occurred in New Hampshire. No fatalities or bodily injuries have resulted from these pipeline safety incidents.

PIPELINE INSPECTIONS

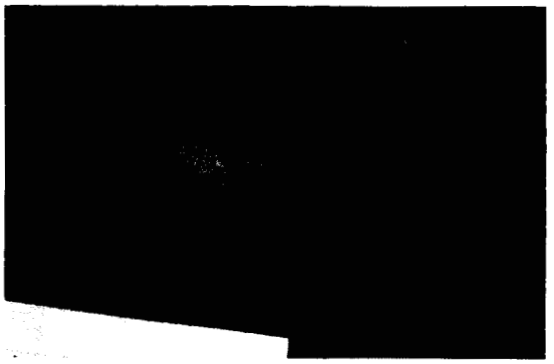
The Safety Division is responsible for monitoring and inspecting construction, operations, maintenance, and safety practices for over 800 jurisdictional New Hampshire gas and liquid petroleum (LP) systems. In addition, three liquefied natural gas facilities are inspected annually. Approximately 218 inspections of liquid propane facilities and 299 inspections of natural gas operators involving compliance with the federal Natural Gas Pipeline Safety Act were conducted during the biennium.

Comprehensive training is required of all inspectors, with a minimum requirement of 12 weeks per inspector regarding distribution and transmission safety practices, investigative techniques, and simulated exercises of potential field situations. The Safety Division staff completed safety training related to transmission and distribution pipelines including: Liquefied Petroleum Gas, Corrosion Control, Welding and Welding Inspection, Failure Investigations, Distribution Integrity Management, Control Room Management, SCADA Inspections, Inline Inspection Techniques, Gas Pipeline Safety Evaluations and Root Cause Analysis. The Safety Division also conducts training sessions for natural gas operators and LP operators, and provides technical assistance to the State Fire Marshall's office upon request.



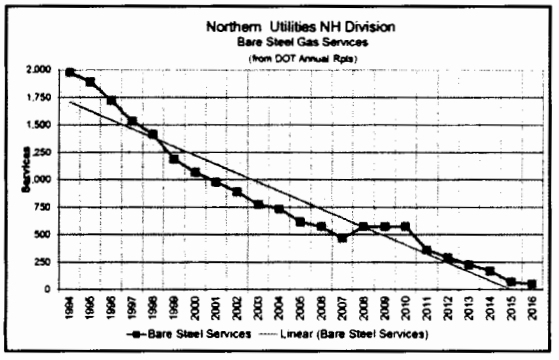
ACCELERATED PIPELINE REPLACEMENT

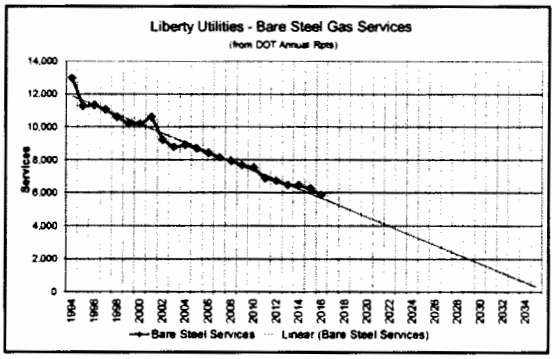
New Hampshire's pipeline infrastructure contains a limited amount of aged, worn and leak prone pipelines, comprised primarily of bare steel and cast iron. In 1990, when the Commission recognized that leak prone pipes required formal, systematic replacement, the Commission ordered an accelerated bare steel replacement program for one of its gas operators. Since that time, the Commission has undertaken numerous safety related directives. Presently, five gas operator inspection units have either cast iron, bare steel or a combination of both remaining within their distribution systems.



In 1994, 353 miles, or 27% of New Hampshire's distribution pipelines, contained cast iron or bare steel. Through enhanced recovery mechanisms authorized by the Commission, that inventory has been trimmed by approximately two-thirds, to less than 113 miles, with one operator projected to remove all bare steel by the end of 2017 and another operator projected to remove all cast iron and bare steel by 2024. Presently, worn pipelines and leak prone pipelines represent only 5.8 % of the distribution mains in New Hampshire. More importantly, significant quantities of bare steel services that are directly connected to customers' homes and businesses have been steadily replaced with the latest polyethylene pipelines. The Commission's Safety Division has been extensively involved with developing customized approaches applicable to New Hampshire gas distribution systems for determining which pipelines are subject to the highest pipeline safety risks. This requires, among other things, reviewing operators' data integrity methodologies and algorithms used for weighting worn pipelines and determining priorities, requiring submission of physical samples, reporting on selected candidates for verification purposes, tracking associated expenses and incorporating replacements into inspection monitoring schedules.

To address this potential safety risk, the Commission has implemented customized initiatives to spur replacement of aged infrastructure. There are two programs in place for two of the three operators that are similar but structurally different.





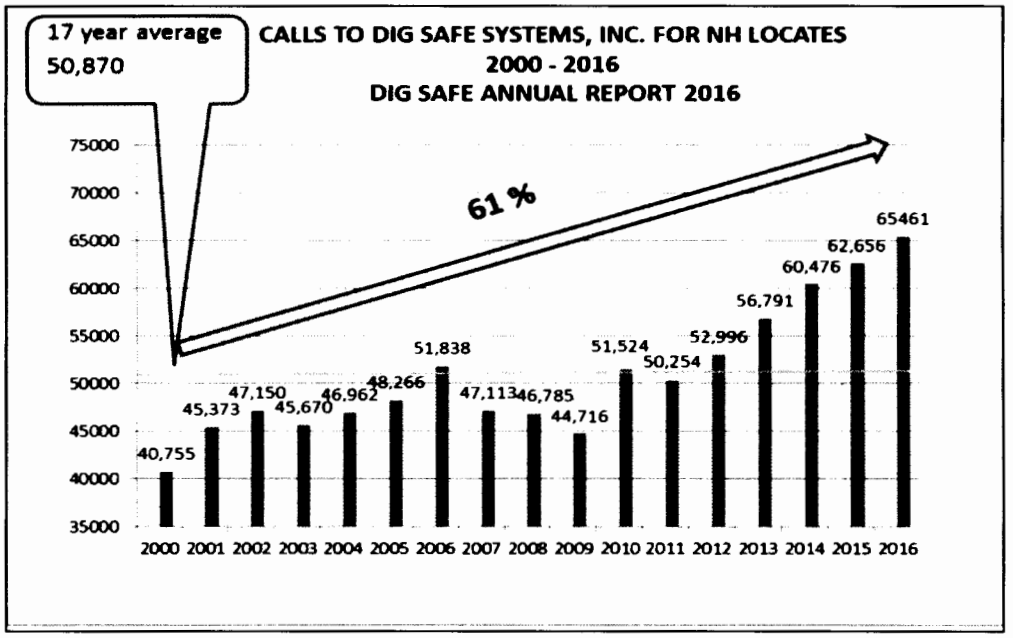
UNDERGROUND DAMAGE PREVENTION

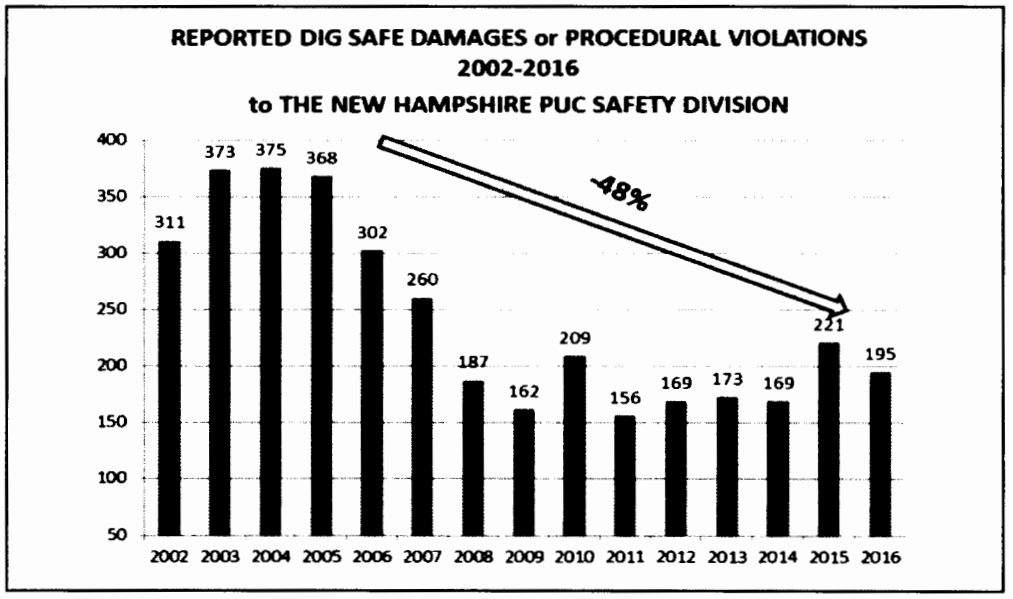
The Underground Utility Damage Prevention Program, also known as DigSafe, is administered by the Safety Division to ensure public safety and minimize damage to underground facilities. Third party excavation continues to be the number one cause of damages to underground facilities in New Hampshire and nationally. New Hampshire generated a historic record of nearly 65,500 calls into the Dig Safe call center in 2016. Over the last 14 years (2002 to 2016), New Hampshire experienced a 39% increase in calls into the Dig Safe call center, reflecting strong construction activity, greater public awareness of excavation dangers, including awareness of 811 notification system, and an increase in the amount of utility underground infrastructure. During the same time period, New Hampshire has experienced a 41% decrease in the number of reported damages and other probable violations. This is indicative of continued enforcement, ongoing Safety Division training, increased advertising and other public outreach efforts by all utilities and stakeholders.

In February 2017, the latest revision to the N.H. Code of Administrative Rules, Chapter Puc 800, Underground Utility Damage Prevention Program (DigSafe) took effect.

The Safety Division inspects construction sites for damage prevention compliance, investigates reported damage, and issues citations when probable violations are identified. In 2016, the Division processed 194 reports of damage to

underground facilities. In processing these reports, 6 informal conferences involving contractor and utility disputes were conducted. This represents an 86% decrease in the number of informal conferences conducted since 2013. Additionally, other matters were resolved without the need of conferences.



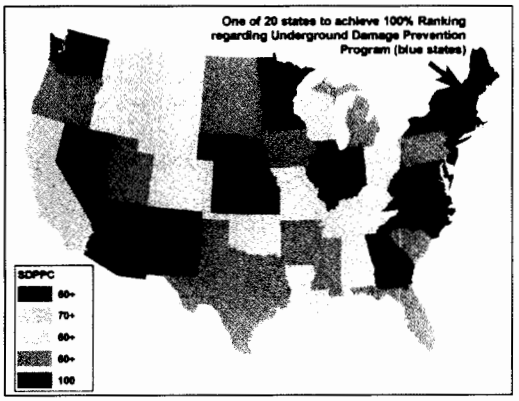


Annually each spring, the Safety Division co-sponsors with Managing Underground Safety Training (MUST) at least three Dig Safe® damage prevention seminars state-wide with over 500 participants in attendance. Three types of training were offered during the past biennium:

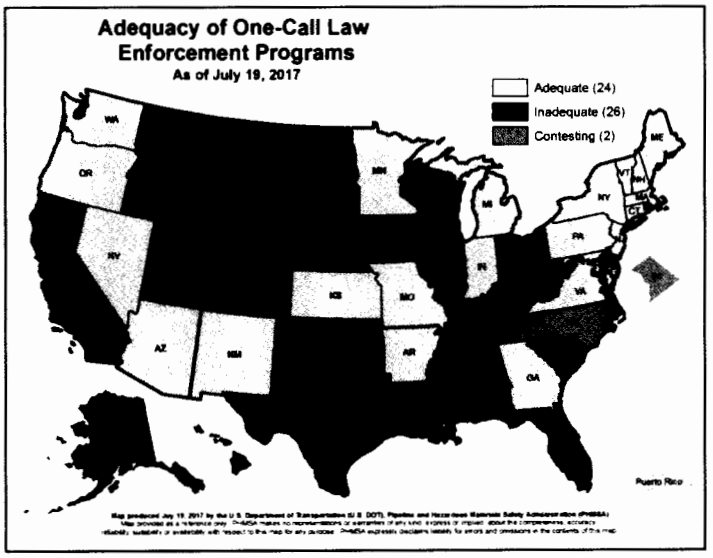
- Seminars geared toward general contractors, presented in conjunction with utilities;
- Trainings conducted at company headquarters upon request; and
- Trainings conducted at Commission offices to address with civil penalties and specific contractor violations.

The Safety Division was recognized by PHMSA in its 2014 assessment as one of twenty states to achieve a perfect score for its Underground Utility Damage Prevention Program for nine basic elements, including enhanced communication between operators and excavators, partnership in public and employee education and training, and fair and consistent enforcement of the law.

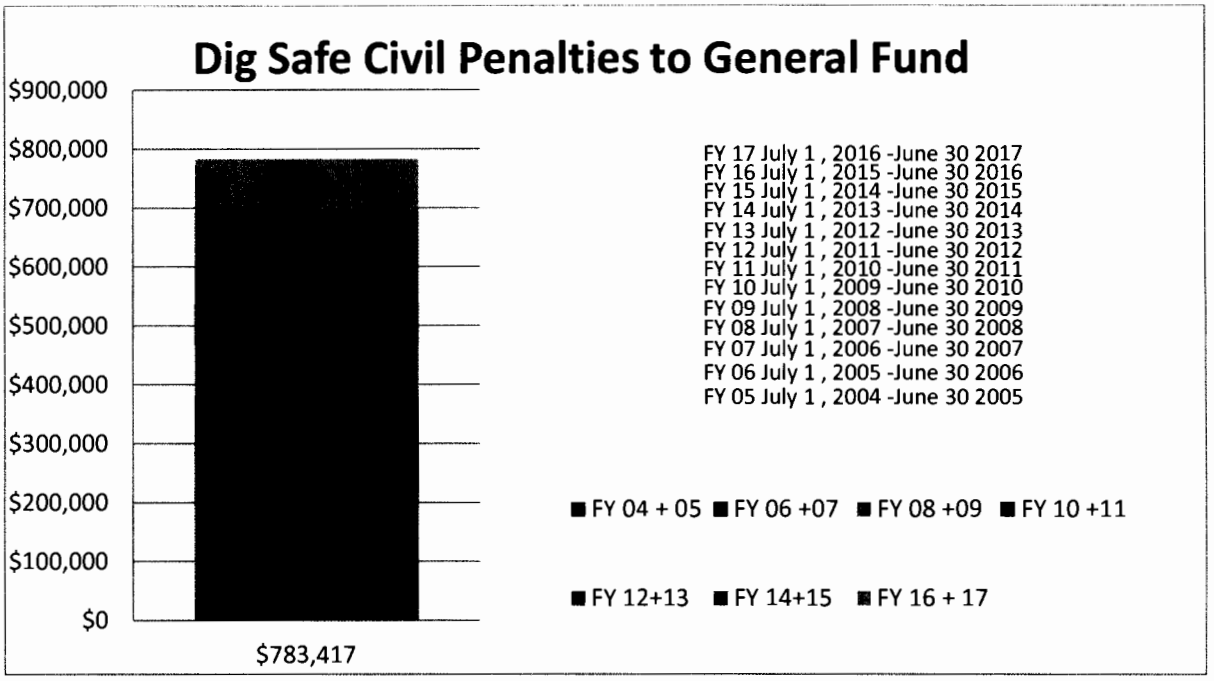
The Safety Division was also recognized by PHMSA's 2016 assessment as one of twenty four states to achieve an "Adequate" rating for its Underground Utility Damage Prevention Program as part of a new CFR Part 198 evaluation. This initial evaluation resulted in a perfect score 248/248 surpassing the 181 points considered to be "Adequate." The most recent evaluation was performed in 2017, and the Safety Division is awaiting PHMSA's written determination.



The Nine Elements of Effective Damage Prevention Programs:	
Element 1	Enhanced Communication between Operators and Excavators
Element 2	Fostering Support and Partnership of all Stakeholders
Element 3	Operator's Use of Performance Measures for Locators
Element 4	Partnership in Employee Training
Element 5	Partnership in Public Education
Element 6	Enforcement Agencies' Role to Help Resolve Issues
Element 7	Fair and Consistent Enforcement of the Law
Element 8	Use of Technology to Improve the Locating Process
Element 9	Data Analysis to Continually Improve Program Effectiveness



Enforcement of the Underground Utility Damage Prevention Program remains a high priority for the Safety Division. Civil penalties totaling nearly $90,000 were received over the two year period, all of which were applied to the State's General Fund. Educational training for contractors is also conducted by staff in lieu of civil penalties, totaling an equivalent value of $20,000 during the same period. Since 2004, over $700,000 has been collected in civil penalties.



ENGINEERING AND SAFETY REVIEWS

The Safety Division reviewed 19 petitions from utilities to install facility crossings over public waters and State-owned land during the biennium. This equated to 92 crossings. The reviews were conducted by the Safety Division staff rather than by Commission-contracted consultants, reducing costs for the petitioners as well as ratepayers. The Division's reviews identified potential negative impacts upon the public and assisted the Commission in determining whether such crossings were necessary to meet reasonable requirements of service to the public and whether they conformed to applicable safety codes.

The Safety Division continues to update and develop numerous GIS databases for various industry sectors. The Commission has been active in the Department of Safety's GIS effort to support NH VIEW, and partners with the Division of Emergency Services in sharing GIS layers, common symbology, maps and databases used throughout the Commission and by other state agencies. To date, GIS maps have been completed for natural gas, propane, electric, telecommunications, and cable TV. Recent initiatives include mapping of motor fuel locations depicting associated capacities coupled with corresponding electric infrastructure. Petroleum bulk storage locations have also been developed with corresponding storage capacities. These efforts provide a complete energy overview of critical infrastructure of both regulated and unregulated industries. The mapping capabilities are particularly helpful in monitoring and assessing weather related utility outages and providing up to date facility information, increasing situational awareness efforts.

PHYSICAL AND CYBER SECURITY

The Safety Division participates in a critical infrastructure task force for identifying critical utility facilities within New Hampshire. The critical infrastructure task force is part of the Governor's Advisory Committee on Emergency Preparedness and Security. This is a continual effort that evaluates interdependencies among and vulnerabilities in eighteen identified sectors. A nineteenth sector, Cyber Security, is being contemplated by the Department of Safety and Homeland Security and Emergency Management of New Hampshire, and the Public Utilities Commission has been considered one of the key stakeholders.

The Safety Division represents the Commission on the Department of Information Technology (DoIT) Cyber Security Advisory Committee and coordinates the Commission's annual cyber security awareness training program. RSA 21-R established the Department of Information Technology (DoIT). Per HB 1593, DoIT was given the responsibility to develop and implement a strategy to address cyber security risks to the State's data, information assets and Technology Resources. RSA 21-R:7 permits DoIT to establish technical committees to advise on various technology–related areas of focus, including the Cyber Security Advisory Committee (CAC). The Commission is a charter member of CAC. The Safety Division is the representative CAC member designated as the Information Security Officer (ISO) of the Commission. As mandated by the State's annual requirement for cyber security awareness training, the statewide training program for all employees has been completed for each of the past two years. The training program at the Commission has been coordinated by the designated ISO.

The Safety Division inspects physical plant of energy providers to see if it meets industry standards. These inspections require a review of physical security systems employed by both gas and electric utilities. Facility perimeters, controlled spaces, production spaces, and restricted spaces are reviewed for physical deterrence implementation methods, types of security systems employed, threat level assessments and risk mitigation responses. Topical areas such as lighting, hardware, control systems, access systems, and entry points are evaluated. The Safety Division has begun a review of its inspection protocols for evaluating completeness and application of up to date techniques.

Cyber Security, more appropriately referred to as Cyber Safety, is the most recent area assigned to the Safety Division. The Safety Division monitors cyber security plans developed by the electric and gas utilities for completeness and best practices. Current standards are evolving, both nationally and sector specific, regarding cyber intrusion, detection, prevention and response. The Safety Division participates in national and regional educational and drill opportunities. Program initiatives include:

- sharing of best practices amongst states,
- collaborating with other agencies, and
- piloting projects involving detection sharing techniques of classified information between government entities and private utilities.

The Safety Division has worked extensively with the Federal Energy Regulatory Commission (FERC) Office of Energy Infrastructure Security in sharing of strategic frameworks and assessment techniques.

Continued progress regarding cybersecurity has been a focal point of the Safety Division for many years. Efforts have been made in attending national conferences, maintaining contacts with federal partners, participating in drills and briefings as methods to stay at the forefront of this rapidly evolving area.

- In 2012, the Commission assigned the monitoring of utility cyber security efforts to the Safety Division.
- In 2013, the Safety Division participated in dockets that require gas, electric and regulated telecom companies to file physical security and cybersecurity plans. Also in 2013, New Hampshire hosted the six New England states in an initial meeting to begin the process of

identifying cyber security practices of utilities.

- In 2014, the Commission shared with other New England states the services of a consultant hired by the New England Conference of Public Utilities Commissioners to begin preliminary reviews of industry practices.
- In 2015, preliminary reviews of filed written utility plans began and continued into 2016. Three of four of the electrical suppliers' cybersecurity plans were initially reviewed by the Safety Division.
- In 2016, the Safety Division organized plan reviews and conducted voluntary review sessions led by FERC's Office of Energy Infrastructure Security with certain utilities within New Hampshire
- In December 2016, the Safety Division attended US Department of Energy's "Liberty Eclipse" training in Rhode Island. This is the first available DOE training on the east coast involving cyber incident scenarios and energy assurance plans.
- In 2016 and continuing into 2017, the Safety Division participated in proof of concept and planning of a proposed regional information center for the region's largest utilities. This included assisting with appropriate contacts for security clearances for specific individuals of electric utilities within New Hampshire and the New England Region. These efforts are based upon establishing partnerships with utilities and those of the intelligence community.
- In March of 2017 and again in October 2017, the Safety Division participated in the Naval Post Graduate School Center for Homeland Defense and Security education seminars conducted in New Hampshire.
- In April 2017, Commissioner Scott led an effort to have New Hampshire and other New England Commissioners participate in classified briefings held in Washington DC.
- In May 2017, the Safety Division working in conjunction with FERC's Office of Energy Infrastructure Security team participated in the development and publication of a Cyber Response Checklist. This was later shared among the six New England states to use as framework for communicating with utilities and stakeholders if a cyber incident were to occur.
- In June 2017, Commissioner Scott testified at a FERC Reliability Technical Conference regarding the importance of partnerships and regional initiatives.

EMERGENCY PREPAREDNESS AND STORM RESPONSE

An Emergency Preparedness and Security Team, headed by the Director of the Safety Division, participates in planning and coordination with the Department of Safety's Homeland Security and Emergency Management of New Hampshire. In accordance with the State Emergency Operations Plan, the Commission is the lead agency for Energy Support Functions and Co-Lead for Emergency Communications Support functions. As such, the Safety Division regularly participates in annual drills and attends monthly coordination meetings for Emergency Response with other state agencies.

The Safety Division is instrumental in around-the-clock emergency response efforts coordinated by the State of New Hampshire for local municipalities.

In March 2017, Snowstorm "Stella" resulted in approximately 50,000 outages state wide and the Safety Division assisted the State Emergency Operations Center coordinating energy related requests.

On October 30, 2017, New Hampshire experienced its 4th worst historical storm with widespread electrical outages (estimated at greater than 277,000 coincidental outages affecting nearly 480,000 people including severe flooding in the northern most counties of New Hampshire). Outages ranged from 6% of customer base to 50% of customer base for one

or more electric suppliers. The major electric utilities have preliminarily reported over $40 million in damages to infrastructure and restoration costs for this single event.

ELECTRICAL SAFETY

In September 2015, the Safety Division issued a report in the investigation into the April 19, 2014, death of a Keene State College employee who was electrocuted while investigating a report of a low hanging electrical wire was completed. The wire, owned by Public Service Company of New Hampshire, now doing business as Eversource Energy, had detached from the cross-arm of a pole and sagged close to the ground. A Commission order in this matter was issued in October 2015. This resulted in a civil penalty being applied to Eversource and requiring the Safety Division to conduct a second phase investigation of Eversource's operations and maintenance procedures to determine if systemic issues were present. In 2016, the second phase of the investigation was completed. No systemic deficiencies were found, but seven recommendations regarding improvement opportunities for Eversource's policies and procedures were included in the investigative report.

The Safety Division completed an investigation of an August 10, 2015, electrical contact and fatality with a New England Power/ National Grid 230 kV Transmission Line in Benton, NH. A logger accidently came into contact with a high tension transmission supply conductor while operating logging equipment within a transmission right of way. The area of contact was located in a remote area and the fatality occurred en route to the nearest hospital before medical services could be provided. The Safety Division's report outlined three recommendations for minimizing recurrences and improving notifications and reporting by National Grid.

During the biennium, electric and telecommunication utilities reported ten fatalities involving motor vehicles and utility poles.

TELECOMMUNICATIONS INDUSTRY

INTRODUCTION

New Hampshire relies upon competition in the telecommunications industry to promote reliable service and low prices for consumers. The state does not regulate cellular telephone service, cable television or cable Internet service, other types of Internet service, or telephone service that uses Voice over Internet Protocol (VoIP). Rates for non-VoIP retail telephone service are not regulated, with a single exception discussed below. Retail service quality, for example, the number of days a customer waits for a telephone service order to be completed, is not regulated by the Commission.

This reliance on competition makes it especially important to ensure that current competitors can participate in, and new competitors can enter, the telecommunications market in New Hampshire. State law also requires the Commission to promote conservation of telephone numbers, keeping New Hampshire a single-area-code state for as long as practicable. The Commission has established rules and registration processes intended to achieve these objectives.

THE SPECIAL ROLE OF "INCUMBENT" TELEPHONE COMPANIES

Both federal and state laws recognize a special role for Incumbent Local Exchange Carriers or ILECs. These are the companies that were already offering local telephone service in 1996, when a fundamental change in federal law for telecommunications providers took effect. The ILECs generally own or co-own the utility poles that hold their wires or fibers, and enjoy a substantial historical market share advantage in the areas where they once held legally-enforced monopolies. There are eleven ILECs in New Hampshire. The largest is FairPoint Communications, which is also a Regional Bell Operating Company or RBOC under federal law, a status which brings additional obligations.

Under federal law, ILECs must share certain facilities with their competitors, such as making space available on the poles they own in full or in part. The Federal Communications Commission (FCC) has concluded that ILECs are uniquely well-positioned to deploy new broadband Internet service in geographically remote areas, and has effectively given the ILECs a right of first refusal to receive partial subsidies for such deployments. Under both federal and state law, ILECs also have an obligation to serve as the carrier of last resort, that is, the ILEC must provide service to any residential or business customer in its area willing to pay for it. If providing such service is logistically or financially burdensome, then the ILEC can ask the Commission for an exception.

Under state law, the sale or closure of an ILEC requires Commission review and approval. That requirement was preserved when the state deregulated many other aspects of telephone service in 2012.

THE SALE OF FAIRPOINT

FairPoint Communications, a relatively small telephone company based in North Carolina, acquired the landline telephone network assets of Verizon in New Hampshire, Maine, and Vermont in 2008. At the time, both the company and regulators in the three states recognized that replacing Verizon's back office systems with new FairPoint processes and software would be one of the most critical challenges in the transition. That challenge proved to be even greater than anticipated, and the costs and service disruptions that occurred during the transition were major factors in FairPoint's filing for Chapter 11 bankruptcy reorganization in 2009.

FairPoint emerged from bankruptcy with a debt structure and corporate organization that appeared to anticipate another change in company ownership. In late 2016, Consolidated Communications announced that it had reached an agreement to acquire FairPoint. Consolidated, based in Illinois, sought to acquire the entire company rather than only certain state operations. Under New Hampshire law, as revised in 2012, a transfer of an ILEC is not allowed unless the Commission finds that the buyer is "financially, managerially, and technically capable" of meeting the regulatory obligations of the ILEC being acquired.

In FairPoint's case, those obligations include delivery of basic local service at capped monthly rates, maintaining its network so as to ensure public safety, and meeting obligations to its competitors as specified in federal law and in agreements negotiated with those competitors under the Commission's oversight. State law does not include a general obligation for the sale of an ILEC to be in the public good. As a result, the Commission was restricted in its consideration of potential workforce reductions or Internet access in conducting its evaluation of the proposed transfer.

Consolidated expressed a strong interest in concluding the transfer by June 30, 2017. The Commission engaged a consulting firm to assist Staff in assessing Consolidated's capabilities. The consultant and Staff conducted an in-depth examination of Consolidated's history and its plans for New Hampshire, where those plans were available. Potential concerns arose regarding wholesale operations (that is, the company's ability to continue providing appropriate service to competitors) and network maintenance. Consolidated addressed these concerns in a settlement agreement with Staff, and both Staff and the consultant testified during a public hearing that, with that settlement agreement, the company satisfied the standards of New Hampshire law and the Commission should therefore allow the sale to proceed. The Commission made the required findings and approved the sale, subject to the terms of the settlement agreement, on May 31, 2017.

As noted, state law does not allow the Commission to consider the effect of the sale on Internet access for the public. For example, if a buyer intended to drop residential broadband service entirely and concentrate on higher-priced commercial broadband offerings, the effect of that strategy on New Hampshire would not have been a factor in review of the sale. Fortunately for broadband Internet consumers, Consolidated has publicly announced that its business strategy for Northern New England includes a substantial investment in increasing Internet speeds in many areas, and the company will continue FairPoint's expansion of broadband into more rural areas under the FCC's Connect America initiative.

TELECOMMUNICATIONS RELAY SERVICE

Federal and state law mandate the provision of interpretative telecommunications services for our neighbors whose hearing or vision is impaired. These are provided through the Telecommunications Relay Service (TRS), which is funded by a monthly assessment against each landline telephone provider (including cable operators and VoIP providers), based on the number of lines the provider has in service. The Commission adjusts the per-line rate when necessary to ensure that the TRS Fund can meet its obligations.

In recent years, the usage of TRS has declined, perhaps because alternatives such as cell phones and Internet-based communications are convenient substitutes in some situations. The number of landlines in services has also declined. The Commission monitors both these trends and takes steps to ensure the stability of the TRS Fund when appropriate. In August 2017, the Commission re-directed payments made to a separate, no longer active fund, to the TRS Fund.

AREA CODE CONSERVATION

New Hampshire has a population of over 1.3 million people and a single area code. All telephone numbers in the state, whether served by traditional carriers, cable operators, cellular phone companies, or other competitive

providers, draw numbers from this same 603 area code.

A numbering plan administrator engaged by the FCC oversees telephone number allocations, and, over the years, it has warned New Hampshire several times that the state was about to exhaust the numbers available in the 603 area code. State law directs the Commission to conserve telephone numbers to the greatest extent allowed by federal law. This is, in part, because adding a second area code to the state's pool of numbers would almost certainly result in neighbors being in different area codes and a requirement to use ten-digit dialing for all calls, even those made across town.

Commission Staff works diligently to ensure that numbers are not used in a wasteful manner. Each day, Staff reviews requests for new blocks of numbers and assesses whether the requesting provider has made a credible estimate of future demand for numbers. When unusual number demands occur, Staff works with the providers to meet those demands with minimal impact on number exhaustion. As new types of providers begin offering telephone service, Staff works with individual companies, in consultation with other states and federal agencies, to develop a review process that allows continuing vigilance over number allocation and usage.

In 2013, the federal numbering plan administrator projected that New Hampshire would run out of numbers in the 603 area code by 2018. In part because of the Staff efforts described above, the administrator reported in April 2017 that the expected exhaust date for New Hampshire code has been pushed back to early 2034.

UPCOMING: POLE ATTACHMENT RULES RENEWAL AND REVISION

Deployment of both telephone voice service and Internet service relies on provider access to utility poles along state highways and municipal streets. Both federal and state laws establish a right of telecommunications carriers to attach to these utility poles.

The terms and rates under which the pole owners – typically the local electric utility and the local ILEC – make space on their poles available to new attachers is complicated and may be controversial. Factors including public safety, contract rights of existing attachers and their customers, competitive advantage, and the need to ensure that maintenance costs are sufficiently supported, all come into play. Many different industry and public sectors are affected. The Commission adopted utility pole attachment rules in 2009 that balanced all these concerns. Under state law, these rules expire in December 2017 unless the Commission begins the process of renewing them prior to their expiration. The Commission has recently announced a proceeding to renew and potentially revise the utility pole attachment rules.

ELECTRIC INDUSTRY

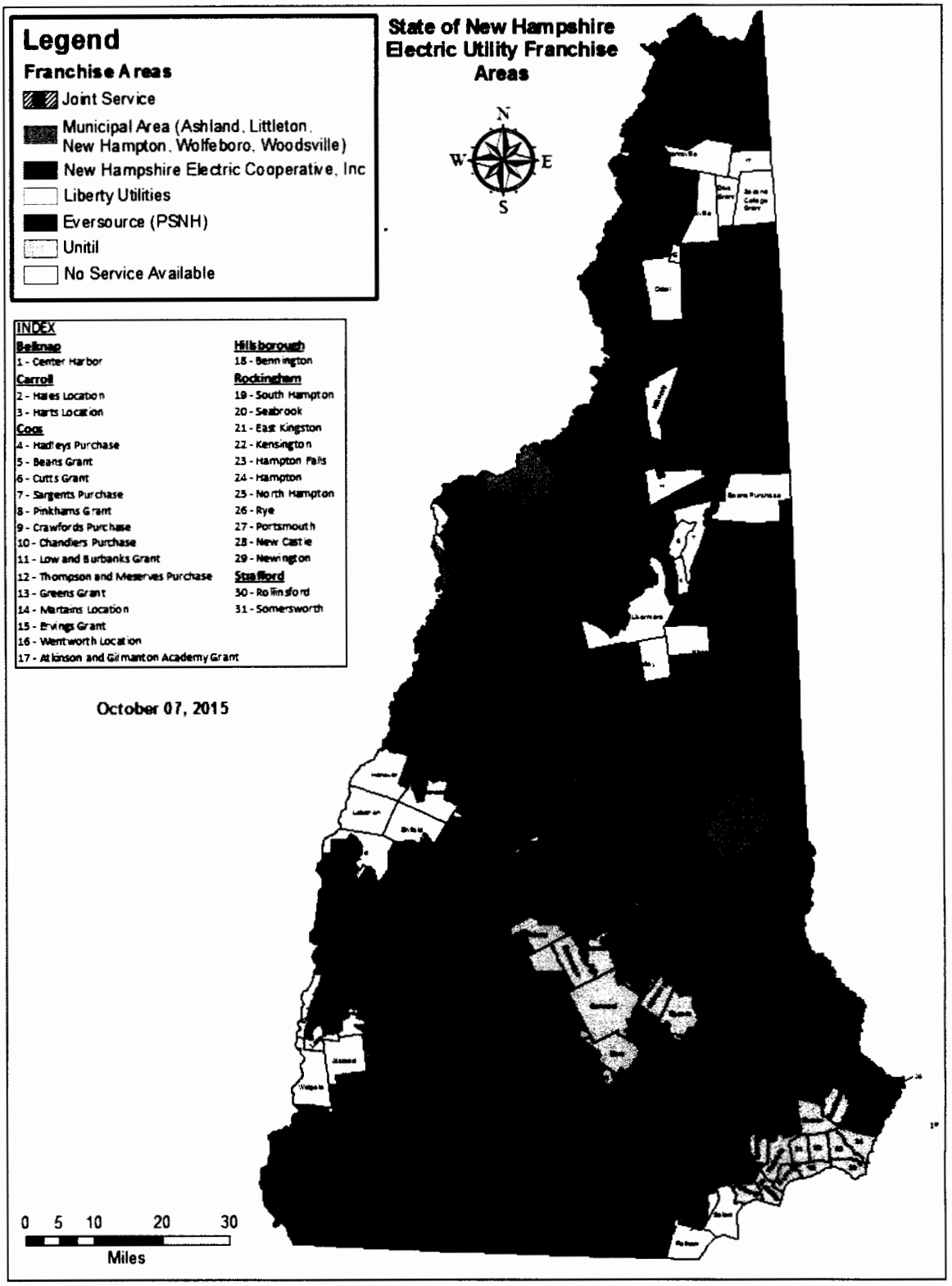
The Commission regulates four electric utilities: Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource[1]), which has approximately 508,000 customers; Unitil Energy Systems (UES), which has approximately 78,000 customers; Liberty Utilities (Liberty), which serves approximately 44,000 customers; and New Hampshire Electric Cooperative (NHEC), which serves approximately 80,000 members. The Commission's statutory authority over NHEC is limited as NHEC has opted for self-regulation pursuant to RSA 362:2, II. The table below provides an overview of New Hampshire's electric utilities and the map on the next page indicates where each company operates in the State as well as the location of New Hampshire's five municipal electric utilities.

Total Operating Revenues, Megawatt-hours Sold to Ultimate Retail Customers and Total Customers in New Hampshire by Franchise Distribution Area – 2016

	MWH Sold	***Operating Revenues***	***Avg. # of customers***	***Peak Load (MW)***	***Date***	***Hour Ending***
Eversource-PSNH	*7,859,749*	*$ 971,994,461*	*507,988*	*1660*	*8/12/2016*	*4:00 PM*
UES	*1,203,404*	*129,781,380*	*78,402*	*286*	*8/12/2016*	*4:00 PM*
Liberty-GSEC	*908,563*	*88,742,576*	*43,693*	*194*	*8/12/2016*	*4:00 PM*
NHEC*	*769,708*	*128,869,000*	*79,852*	*169*	*12/16/2016*	*8:00 PM*
NH Total	*10,741,424*	*$ 1,319,387,417*	*709,935*			

Sources: 2016 FERC Form 1 Annual Reports, 12/31/2016 NHPUC Form F-1
** 2016 Annual Report to Members and information submitted to PUC by NHEC*

[1] Public Service Company of New Hampshire began operating under the trade name, Eversource Energy, in February 2015.


Legend
Franchise Areas
Joint Service
Municipal Area (Ashland, Littleton, New Hampton, Wolfeboro, Woodsville)
New Hampshire Electric Cooperative, Inc
Liberty Utilities
Eversource (PSNH)
Unitil
No Service Available
State of New Hampshire Electric Utility Franchise Areas
N
W
E
S
INDEX
Belknap
1 - Center Harbor
Carroll
2 - Hales Location
3 - Harts Location
Coos
4 - Hadleys Purchase
5 - Beans Grant
6 - Cutts Grant
7 - Sargents Purchase
8 - Pinkhams Grant
9 - Crawfords Purchase
10 - Chandlers Purchase
11 - Low and Burbanks Grant
12 - Thompson and Meserves Purchase
13 - Greens Grant
14 - Martains Location
15 - Ervings Grant
16 - Wentworth Location
17 - Atkinson and Gilmanton Academy Grant
Hillsborough
18 - Bennington
Rockingham
19 - South Hampton
20 - Seabrook
21 - East Kingston
22 - Kensington
23 - Hampton Falls
24 - Hampton
25 - North Hampton
26 - Rye
27 - Portsmouth
28 - New Castle
29 - Newington
Strafford
30 - Rollinsford
31 - Somersworth
October 07, 2015
0 5 10 20 30
Miles

STATUS OF ELECTRIC INDUSTRY AND COMPETITION

The electric industry in New Hampshire continues to transition away from the vertically-integrated market structure of the 20th century and toward a more customer-focused, distributed energy model. Recent proceedings before the Commission over the past two years highlight this slow but steady evolution that began two decades ago when New Hampshire passed its electric restructuring legislation, RSA 374-F. Those proceedings, described in more detail below, include a proceeding that would complete divestiture of Eversource's generating assets, and one that focused on the future of the electric grid in New Hampshire.

Electric restructuring has enabled a competitive retail electric market to develop in New Hampshire. Electric customers have the ability to obtain their electric supply from an entity other than their electric distribution utility. Competitive electric service can be provided by competitive electric power suppliers (CEPS) or arranged through aggregators.

Numerous companies are now registered as competitive electric power suppliers and electricity aggregators. Though it varies by electric distribution utility, a significant number of residential customers now get their power from a competitive supplier and most of the commercial and industrial classes receive their energy service from competitive suppliers. For those customers who choose not to take service from one of New Hampshire's registered CEPS, the electric utilities offer "default service." Energy supply service, whether through default service or competitive suppliers, represents roughly one-half of a customer's bill, as depicted in Chart 1.[2] The default service rates that CEPS compete against are shown in Chart 2 for each of the New Hampshire electric distribution utilities.

The wholesale energy market also continues to undergo a transformation toward cleaner and more distributed energy resources. Energy efficiency and solar installations are increasing and having an impact on generation and transmission, though not to the same degree as low cost natural gas from hydro-fracturing, or fracking, of shale gas. The abundant supply of fracked gas used in electric generation has brought down the wholesale price of electricity nationally as well as in New England, though constraints on the pipeline, especially during the winter period, have led to winter price spikes and increased volatility. Chart 3 demonstrates the high correlation between natural gas prices and wholesale electricity prices in New England.

[2] The "other" category depicted in Chart 1 includes minor customer adjustment charges and applicable taxes.

Chart 1. Illustrative Residential Bill
650 kWh/Month
October 1, 2017

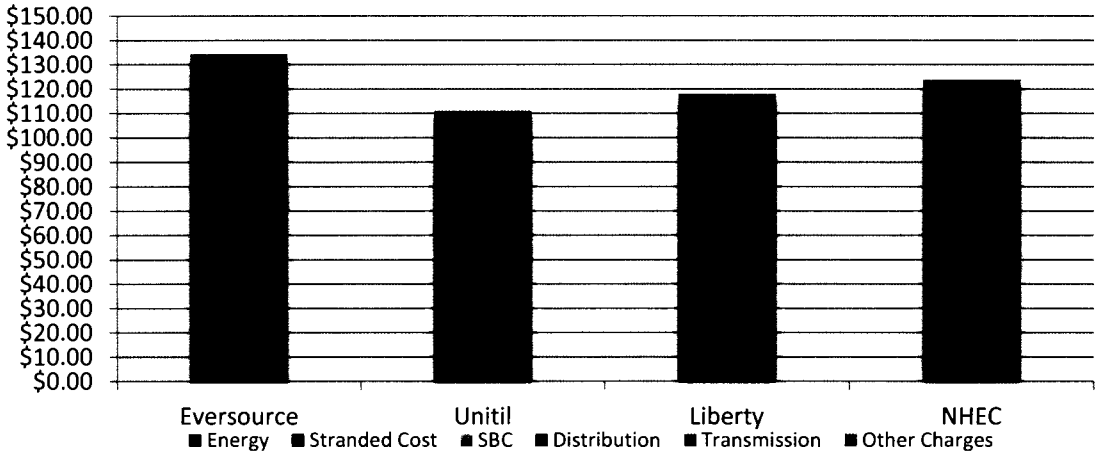


Chart 2. NH Default Service Rates
2007-2017

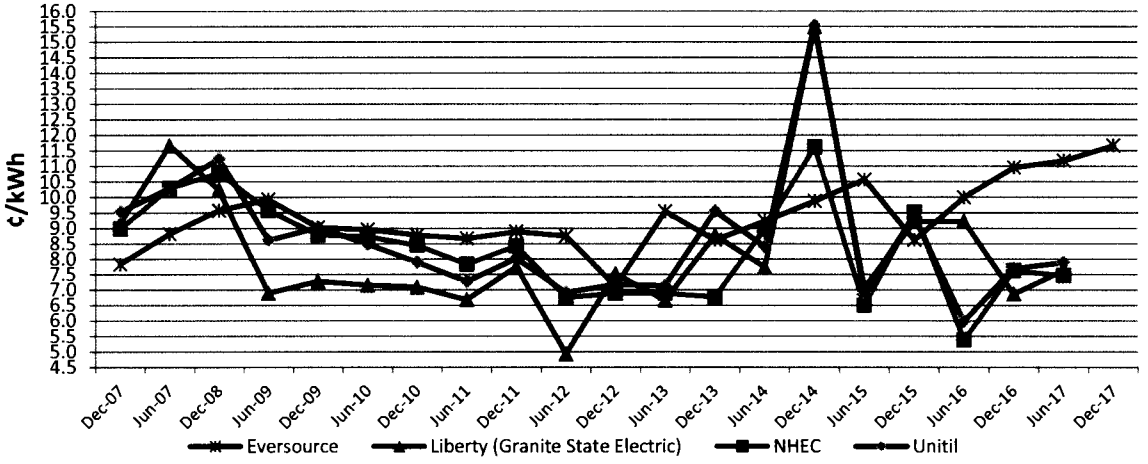
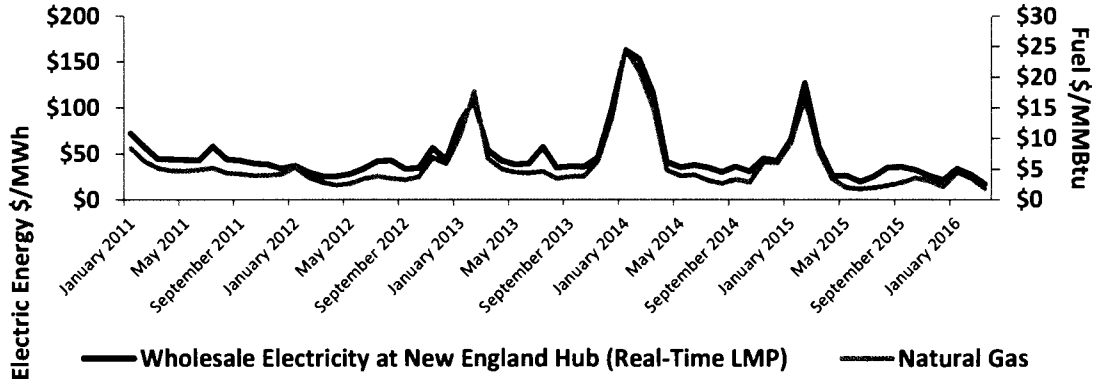


Chart 3. Monthly Average Natural Gas and Wholesale Electricity Prices in New England



KEY ELECTRIC PROCEEDINGS

2015 PSNH RESTRUCTURING AND RATE STABILIZATION AGREEMENT

In late December 2014, PSNH submitted a motion to stay various proceedings before the Commission, including the Commission's proceeding on the wet flue gas desulphurization system (Scrubber) that PSNH had installed at its Merrimack Station coal-fired electric generating facility. The Commission granted the motion which allowed PSNH and numerous parties to participate in negotiations related to the divestiture of PSNH's remaining electric generating assets. After many months of negotiations, on June 10, 2015, PSNH (now Eversource) filed its "2015 Restructuring and Rate Stabilization Agreement" (2015 Agreement). It was accompanied by a motion for expedited approval.

The 2015 Agreement, which was broadly supported, was intended to resolve numerous regulatory matters, but at its center was the divestiture of Eversource's remaining generating assets in a manner consistent with New Hampshire's restructuring statutes and policy.

Hearings on the merits were held in early 2016, and on July 1, 2016, the Commission issued Order No. 25,920 which approved the 2015 Agreement as originally filed and as amended on January 26, 2016. With approval of the 2015 Agreement, all issues associated with the scrubber proceeding were resolved. Order No. 25,920 allowed Eversource to proceed with divestiture of its fossil-hydro generating assets, and recover the costs, less $25 million, of its investment in the scrubber at Merrimack Station.

Order No. 25,920 provided the approval necessary for Eversource to proceed with the expedited divestiture of the assets in accordance with the 2015 Settlement Agreement and RSA Chapter 369-B. The Commission opened up a new docket, DE 17-124, to examine the sale of the assets and whether the sale met the goal of maximizing the total transaction value of the auction. In September 2016, the Commission hired JP Morgan to be the auction advisor. The results of the auction are currently before the Commission and a decision is expected in late 2017.

GRID MODERNIZATION

The Commission opened a docket in July 2015 to investigate grid modernization in New Hampshire. The investigation used a stakeholder process to explore the many challenges and possibilities associated with grid modernization and to better understand what short-term and long-term actions could be appropriate for New Hampshire.

To assist the stakeholders and staff, the Commission hired Jonathan Raab of Raab Associates to facilitate discussion of the numerous customer and utility issues. Synapse Energy Economics also worked on the project providing technical expertise. Raab issued a report in March 2017 that provided a number of recommendations to the Commission.

The overarching goals of the Commission for grid modernization included improving reliability, resiliency, and operational efficiency of the grid, as well as reducing costs, empowering customers to use electricity more efficiently, and facilitating integration of distributed energy resources (DERs) into the grid. Additional benefits were identified by the Working Group members, who met numerous times over the course of almost a year to discuss topics ranging from distribution/grid modernization planning, cost recovery and regulatory framework to customer education, rate design and issues associated with customer and utility data.

Though the stakeholders didn't agree on every issue, they did reach consensus on a number of important benefits of grid modernizations, including that modernizing the grid should: align the interests of consumers and producers of energy in order to optimize the system while enabling strategic electrification of buildings, homes and vehicles; ensure that all customers share in the benefits of a modern grid; keep New Hampshire technologically innovative and economically competitive; and reduce

environmental impacts and carbon emissions in the New Hampshire.

The Commission is considering the appropriate next steps to take in grid modernization based on the recommendations in the Report.

CORE ENERGY EFFICIENCY PROGRAMS AND EERS

Energy efficiency programs are a long-standing and important component of New Hampshire's energy landscape. The programs are funded by a portion of the system benefits charge (SBC), ISO-NE Forward Capacity Market (FCM) revenue and the Regional Greenhouse Gas Initiative (RGGI).

The Core programs began in June 2002. Over the past 15 years, the programs have helped electric customers save over 13 billion kilowatt-hours of electricity resulting in customer savings of $2.2 billion over the lifetime of the energy efficiency measures. The programs include residential as well as commercial and industrial (C&I) programs. A dedicated percentage of the program budget each year funds the Home Energy Assistance (HEA) program, a program that targets transforming low-income housing stock in order to make it more efficient, more comfortable and safer. In 2016, 15.5% of the overall budget was allocated to HEA, and it increased to 17% in 2017. The utilities also sponsor individual initiatives limited to their respective service territories. The main funding for the Core Energy Efficiency programs comes from the 0.18 cents per kWh portion of the SBC with additional funding from the FCM and RGGI. For 2016, the combined SBC, FCM, and RGGI funds produced a total budget of $26 million for the Core programs. Based on increased savings targets for 2017, the budget increased to $29.3 million.

In February 2015, the Commission received a report from the Commission Staff entitled "Energy Efficiency Resource Standard: A Straw Proposal for New Hampshire." Based on the Staff Report, the Commission opened IR 15-072 to investigate and receive comment on Staff's Report and the recommendations contained in the Report regarding implementation of an Energy Efficiency Resource Standard (EERS) for New Hampshire. The IR 15-072 proceeding examined the following: short-term and long-term implementation issues; whether an EERS would reduce market barriers to investments in energy efficiency; whether it would provide incentives for appropriate demand-side management while not reducing cost-effective energy efficiency; whether the SBC and RGGI funds could be used to support programs within the context of an EERS; whether an EERS would be consistent with the Commission's authority concerning just and reasonable rates; and whether an EERS is consistent with the Commission's authority to oversee the utilities' integrated resource plans and to consider energy efficiency as a first resource option for energy supply.

By Order dated August 2, 2016, the Commission approved the establishment of an Energy Efficiency Resource Standard that set long term energy savings targets for the state's utilities and a framework that would permit New Hampshire to achieve these goals. The targeted savings goals increase over the three-year EERS timeframe which begins in 2018. The savings targets are: 0.80% in 2018; 1.00% in 2019; and 1.30% in 2020. The savings are measured against a baseline of 2014 electric sales. The utilities made their EERS filing on September 1, 2017.

The program goals are shown in the table on the following page. A hearing on the EERS plan is scheduled for early December 2017.

Electric Programs	2018-2020
Cumulative Lifetime MWh Savings	4,038,590
Cumulative Annual MWh Savings	334,273
Cumulative Annual Savings as a % of 2104 Delivery Sales	3.1%
Cumulative Program Funding	$154,142,047
Program Cost per Lifetime kWh Savings	$0.038

Natural Gas Programs	2018-2020
Cumulative Lifetime MMBtu Savings	7,509,343
Cumulative Annual MMBtu Savings	525,575
Cumulative Annual Savings as a % of 2014 Delivery Sales	2.3%
Cumulative Program Funding	$31,396,650
Program Cost per Lifetime MMBTU Savings	$4.18

REGIONAL AND WHOLESALE MARKET ACTIVITY

New England's Independent System Operator (ISO-NE) has proposed a re-design of its capacity market to help states meet their public policy goals. In 2016, the New England Power Pool (NEPOOL) commenced the Integrating Markets and Public Policies (IMAPP) initiative to explore whether ISO-NE's regional capacity market could be re-designed to accommodate the clean energy mandates of New England states while maintaining a reliable electric power system.

The need to explore capacity market re-design has arisen because of the various state mandates and because the current market is designed to achieve power system reliability at the lowest cost. Non-cost attributes like low or zero carbon emissions are not taken into account when meeting this reliability objective. Clean energy resources that cannot compete on cost with conventional generation resources will not be selected to enter the capacity market and therefore will receive no capacity payments to offset their development costs. As a result, states like Massachusetts that are required by law to promote the development of clean energy resources will be forced to bear the full cost of those resources while also paying their share of capacity market costs.

To address capacity market issues, ISO-NE submitted its CASPR (Competitive Auctions with Sponsored Policy Resources) proposal to IMAPP stakeholders in early 2017. The basic premise of CASPR is that old and inefficient existing resources will be incented to retire early, making room for new subsidized resources required by state law to enter the market. ISO-NE's descriptive materials referred to CASPR as a "cash for clunkers" program. The key is to implement this idea in a way that maintains competitively-based capacity prices for both new non-subsidized resources and existing resources that continue to operate

economically. Maintaining competitive pricing reduces the risk that capacity revenues will fall to levels that could jeopardize new investment and continued operation of existing efficient resources.

CASPR achieves this objective by using a two-part auction instead of the existing single Forward Capacity Auction (FCA). The first part of the two-part auction – the primary auction (PA) – will operate under the existing FCA rules. The second part – the substitution auction (SA) – will serve the purpose of coordinating the entry of new subsidized resources that desire to purchase the rights to capacity market payments held by existing resources willing to sell those rights at market-based prices. New subsidized resources that purchase those rights must meet all of the capacity obligations of existing resources that retire. Importantly, the price paid to acquire the capacity rights of existing resources does not affect the capacity price set in the PA, which is paid by all regional customers. Stated differently, New Hampshire customers will pay none of the costs incurred by another state's subsidized resources to enter the capacity market. Absent this feature, New Hampshire would not have supported the CASPR proposal. NEPOOL expects to complete discussions and vote on the CASPR proposal in early December of 2017. If approved, ISO-NE intends to submit the proposal to FERC early 2018 with a request for approval in time for the new capacity market design to be implemented February 2019.

In addition to its work on CASPR, the Wholesale Markets unit of the Electric Division has spent time in 2017 advocating for changes in federal policies related to the development of reliability-based transmission projects in the New England region. The backdrop to this effort is the more than five hundred percent increase transmission costs paid by New Hampshire consumers over the twelve year period since 2005; an increase that kept New Hampshire's retail rates among the highest in the country and prevented them from falling as energy prices steadily declined over that time period.

The direct cause of the increase in transmission costs is the substantial new investment by New England transmission companies to integrate new transmission facilities and upgrade/replace aging facilities – $8.4 billion between 2003 and 2017. However, ISO-NE has acknowledged that during that time period it used a more conservative reliability standard than other Regional Transmission Organizations (RTOs) to determine the need for regional transmission system reinforcement, a practice that contributed to the increase in transmission investment and costs. The ISO-NE's planning conservatism partly explains why transmission rates paid by New England customers far exceed those paid by customers of other RTOs.

To lower the cost of reliability-based transmission in New England, the Wholesale Markets unit has advocated for a number of cost mitigation strategies including:

1) Replace ISO-NE's current reliability standard with a standard that is more in line with those used by other RTOs.
2) Require ISO-NE to use a competitive process when selecting transmission companies to develop and construct reliability-based transmission projects.
3) Continue to encourage FERC to approve lower transmission ROEs.

Regardless of whether such strategies are adopted and implemented, the Wholesale Markets unit has recommended that the PUC act to reduce transmission costs allocated to New Hampshire by approving cost effective DG, DR and EE programs that lower the coincident peak demands of New Hampshire utilities.

SUSTAINABLE ENERGY

The Sustainable Energy Division was created in 2008 to assist the Commission in implementing specific state legislative initiatives promoting renewable energy and energy efficiency and to advance the goals of energy sustainability, affordability and security. The Division administers the Renewable Portfolio Standard (RPS) law, manages the State's Renewable Energy Fund (REF), and reviews applications for statewide energy code compliance for residential and commercial buildings.

RENEWABLE PORTFOLIO STANDARD ACT

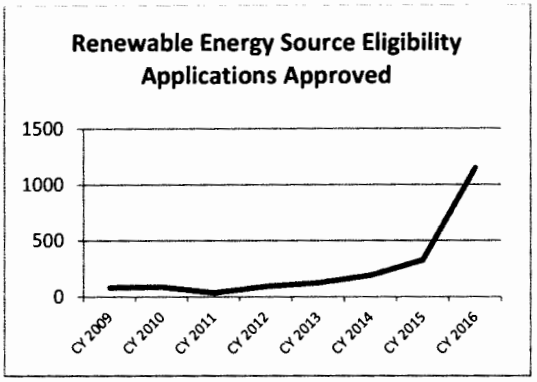
In 2007, Governor Lynch signed into law HB 873, requiring providers of electricity in New Hampshire to meet specific percentages of their customer load by producing or acquiring renewable energy certificates (RECs). Those requirements increase incrementally over time and are applied to four separate types, or classes, of renewable resources. The four classes of renewable resources are:

- **Class I** sources include generation facilities that began operation after January 1, 2006, and produce electricity from: wind energy; geothermal energy; hydrogen derived from biomass fuel or methane gas; ocean thermal, wave, current, or tidal energy; methane gas; or biomass. **Class I Thermal** is subcategory for useful thermal energy, pursuant RSA 362-F:3.
- **Class II** sources include generation facilities that produce electricity from solar technologies and began operation after January 1, 2006.
- **Class III** sources include generation facilities that began operation on or before January 1, 2006, and produce electricity from eligible biomass technologies having a gross nameplate capacity of 25 megawatts or less, or methane gas facilities.
- **Class IV** sources include hydroelectric generation facilities that began operation on or before January 1, 2006, and meet specified requirements.

For 2017, the total RPS obligation is 17.6 percent of total generation supplied to customers. The RPS requirement increases incrementally to 25.2 % for 2025.

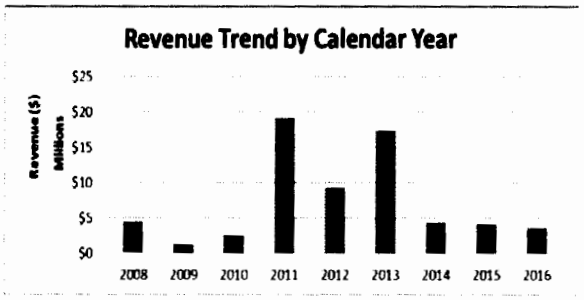
If electricity providers are not able to meet the RPS requirements by purchasing or acquiring RECs at a reasonable price, they must make alternative compliance payments (ACPs) to the State. Electricity suppliers are required to file an annual compliance report for the prior calendar year by July 1st, and make any required ACP payments at that time. Those payments are deposited into the Renewable Energy Fund, described below, pursuant to RSA 362-F:10.

The Commission is responsible for reviewing applications from renewable generators seeking certification as an eligible facility to produce and sell RECs in New Hampshire. Since 2007, the Commission has received, reviewed and approved 2,268 such applications. In 2015, 328 renewable energy source eligibility applications were received and approved, an increase of 70% when compared to 2014. The number of applications reviewed and approved continued to increase in 2016, with 1,064 applications reviewed and approved, an increase of 224% over 2015 and 451% over 2014.



RENEWABLE ENERGY FUND

The Renewable Energy Fund (REF) receives its funding in annual installments of alternative compliance payments (ACPs) from energy suppliers. The REF is a dedicated, non-lapsing fund whose purpose is to support electrical and thermal renewable energy initiatives pursuant to RSA 362-F:10. The REF is expected to fluctuate over time. The graph below shows the historical fluctuations.



Calendar years 2015 and 2016 continued to see relatively low ACPs due in part to a combination of the increased availability of Class I and Class II RECs, market and policy factors.

In FY 2016, REF appropriations were reduced by $741,021 for transfer to Homeland Security and Emergency Management. In July of 2016, $700,000 was repaid to the REF by Tri County Community Action Agency.

Pursuant to RSA 362-F:10, the REF funds six rebate and grant programs covering a range of thermal and electrical renewable technologies in both the residential and non-residential sectors. During the biennium, 2,571 rebate program applications were received, and 2,421 rebates were paid. A description of the rebate programs can be found in Table 1. Table 2 summarizes applications received, rebates paid and rebate dollars awarded by program during the biennium.

Table 1 – Summary of Renewable Energy Rebate Programs

Rebate Program	Eligible Technologies and Capacity Limits	Incentive Levels (Rebate)	Authority, Date of Inception
Residential Electrical Renewable Energy Rebate (PV and Wind)	Solar electric (PV) and wind turbines systems up to and including 10 kilowatts (kW) DC in capacity	$0.50 per watt up to a maximum of $2,500, or 30% of the total cost of the facility, whichever is less	RSA 362-F:10, V July 2009
Residential Solar Water Heating Rebate	Solar water heating systems with annual production capacity of 5.5 MMBtus or greater	$1,500, $1,700, or $1,900 depending on system capacity	RSA 362-F:10, VIII April 2010

Rebate Program	Eligible Technologies and Capacity Limits	Incentive Levels (Rebate)	Authority, Date of Inception
Residential Wood Pellet Boiler/Furnace Rebate[3]	High efficiency, bulk-fed wood pellet central furnaces/boilers	40% of the eligible system cost and installation, up to a maximum rebate of $10,000. The program also provides a supplemental adder of $100 per ton for fuel storage systems larger than the three ton minimum requirement, up to a maximum of $500. *(Beginning July 9, 2016)*	RSA 362-F:10, VIII April 2010 *Program was modified in July 2016 per Docket DE 16-614, Order No. 25, 921.*
Commercial & Industrial (C&I) Expanded Solar Technologies Rebate[4] Category 1 - PV and Thermal	PV systems and solar thermal systems less than or equal to 100 kW (AC) or thermal equivalent	$0.70 per watt (AC and DC) for new solar electric facilities with Step 1 application received prior to Sept. 1, 2016, and $0.65 with applications received after Sept. 1, 2016. $0.12/rated or modeled kBtu/year for solar thermal facilities 15 collectors in size or fewer, and $0.07/rated or modeled kBtu/year for solar thermal facilities greater than 15 collectors. Incentives are limited to 25% of the total project cost. Expansions to existing solar systems are not eligible.	RSA 362-F:10, VIII October 2010 *Program modified and opened through DE10-212 Order No. 25,764 on April 17, 2016.* *Program modified and opened on May 6, 2016, through Order DE10-212, Order No. 25,878.*
Category 2 - PV	PV systems greater than 100 kW (AC) and less than or equal to 500 kW (AC)	$0.55 per watt (AC) for new electric facilities. Expansions to existing solar systems are not eligible.	

[3] *Residential Wood Pellet program was modified in July 2016 per Docket DE 16-614, Order No. 25, 921 http://www.puc.nh.gov Regulatory Orders 2016orders 25921e.pdf.*

[4] *Program opened on May 6, 2016, through Order DE 10-212,* Order No. 25,878 *http://www.puc.nh.gov/Regulatory/CASEFILE 2010/10-212/ORDERS/10-212%202016-02-20%20ORDER%20NO%2025-764.PDF*

Rebate Program	Eligible Technologies and Capacity Limits	Incentive Levels (Rebate)	Authority, Date of Inception
Commercial and Industrial Wood Pellet Furnace/Boiler Rebate[5]	Non-residential bulk-fuel fed wood pellet boilers and furnaces rated 2.5 million Btus or less	40% of the eligible system cost and installation, up to a maximum rebate of $65,000. The program also provides supplemental adders for storage and metering. *(Began July 9, 2016)*	RSA 362-F:10, VIII December 2013 *Program was modified in July 2016 per Docket DE 13-298, Order No. 25,922.*

Table 2 – Summary of FY 2016 and FY 2017 REF Rebate Program Results

REF Programs	Number of Applications Received	Number of Rebates Awarded	Rebate Funds Dispersed	Average Rebate Award
Residential Electrical Renewable Energy (PV and Wind)	2,207	2,136	$ 6,196,548	$ 2,901
Residential Solar Water Heating	15	15	$ 24,400	$ 1,627
Residential Wood Pellet Furnace/Boiler	62	55	$ 431,640	$ 7,848
C & I Solar Technologies	265	192	$ 4,887,560	$ 25,456
C & I Wood Pellet Furnace/Boiler	24	23	$ 906,146	$ 39,398
Totals	**2,573**	**2,421**	**$12,446,294**	**n/a**

[5] *Commercial and Industrial Wood Pellet program was modified in July 2016 per Docket DE 13-298, Order No. 25,922* http://www.puc.nh.gov/Regulatory/Orders/2016orders/25922e.pdf

COMMERCIAL & INDUSTRIAL COMPETITIVE GRANT PROGRAM

RSA 362-F:10 requires the Commission to issue a Request for Proposals (RFP) annually for non-residential renewable energy projects that are not eligible to participate in incentive and rebate programs developed under RSA 362-F:10, V and RSA 362-F:10, VIII.

Accordingly, the Commission has issued RFPs for renewable energy projects for the past eight years. The RFP issued in calendar year 2015 resulted in four grants being awarded and approved by Governor and Executive Council in FY 16. The RFP issued in calendar year 2016 resulted in six grants awarded and approved by Governor and Executive Council in FY 17.

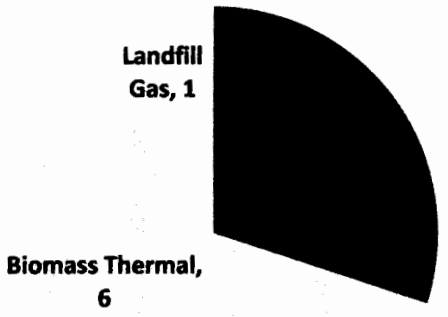
Below is a summary table of the grants awarded in fiscal years 2016 and 2017.

Year	Grantee	Technology	Project Description	Leveraged Funds	Grant Amount	Estimated Annual RECs
2015	Even Better Hydro	Hydro (415 kW)	Restore retired hydro facility to provide Even Better Eating with energy and create jobs	$400,000	$200,000	1,400 Class IV (or Class I)
2015	Froling LLC	Biomass Thermal (1000 kW)	Expansion of precision dry wood chip operation	$327,000	$300,000	3,186 Class I Thermal
2015	Pemi-Baker Cooperative School District	Biomass Thermal (733 kW)	Providing heat and energy for Plymouth High School	$775,000	$325,000	1,909 Class I Thermal
2015	University of New Hampshire	Landfill Gas (200 KW)	Steam turbine to provide energy for campus buildings	$400,000	$200,000	402 Class IV
2016	Sugar River Power, LLC	Hydro Electric	Reactivate and upgrade the Lower Village Hydro site in Claremont	$ 570,000	$ 169,425	5,418 Class IV or Class I
2016	University of New Hampshire	Biomass Thermal	Install a wood chip biomass boiler district heating system to serve buildings of UNH's	$ 960,000	$ 300,000	1,600 Class I Thermal

Year	Grantee	Technology	Project Description	Leveraged Funds	Grant Amount	Estimated Annual RECs
			Thompson School of Applied Science			
2016	Bantam Realty Trust, L.L.C.	Biomass Thermal	Install a wood chip biomass fired heating system at its manufacturing facility in Keene	$ 180,700	$ 150,000	756 Class I Thermal
2016	Jaffrey-Rindge Cooperative School District	Biomass Thermal	Install a wood chip biomass fired heating system at the Jaffrey Rindge High School	$ 520,000	$ 380,000	1,125 Class I Thermal
2016	Contoocook Hydro, LCC	Hydro Electric	Reactivate and upgrade the Bell Mill hydroelectric site in Peterborough	$ 86,250	$ 173,000	710 Class IV or Class I
2016	Merrimack County	Biomass Thermal	Install a wood chip biomass fired heating system at the Merrimack County Jail facility in Boscawen	$ 2,517,415	$ 200,000	2,784 Class I Thermal

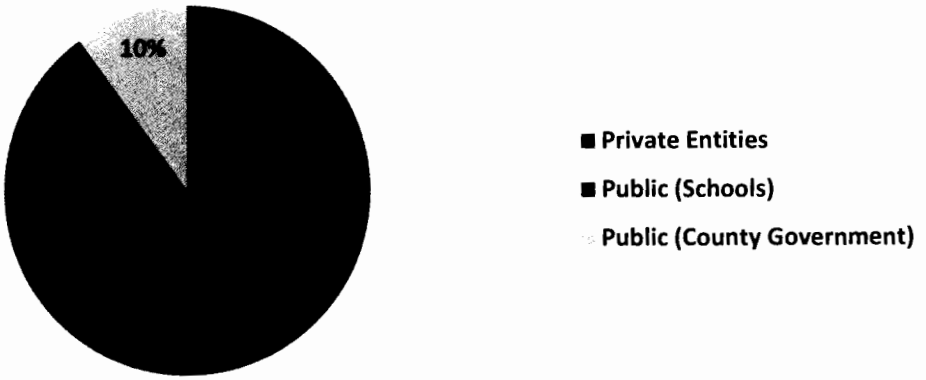
Grants by Technology

Electricity Generation in blues
Thermal Generation in orange



Grant Award Recipients

Private Entities in blue
Public Entities in oranges

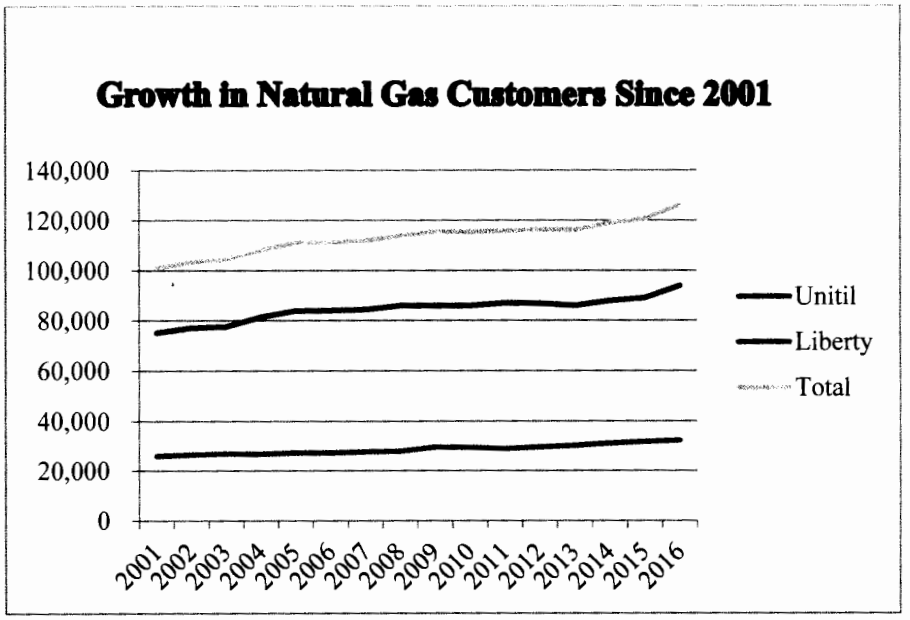


GAS & STEAM INDUSTRIES

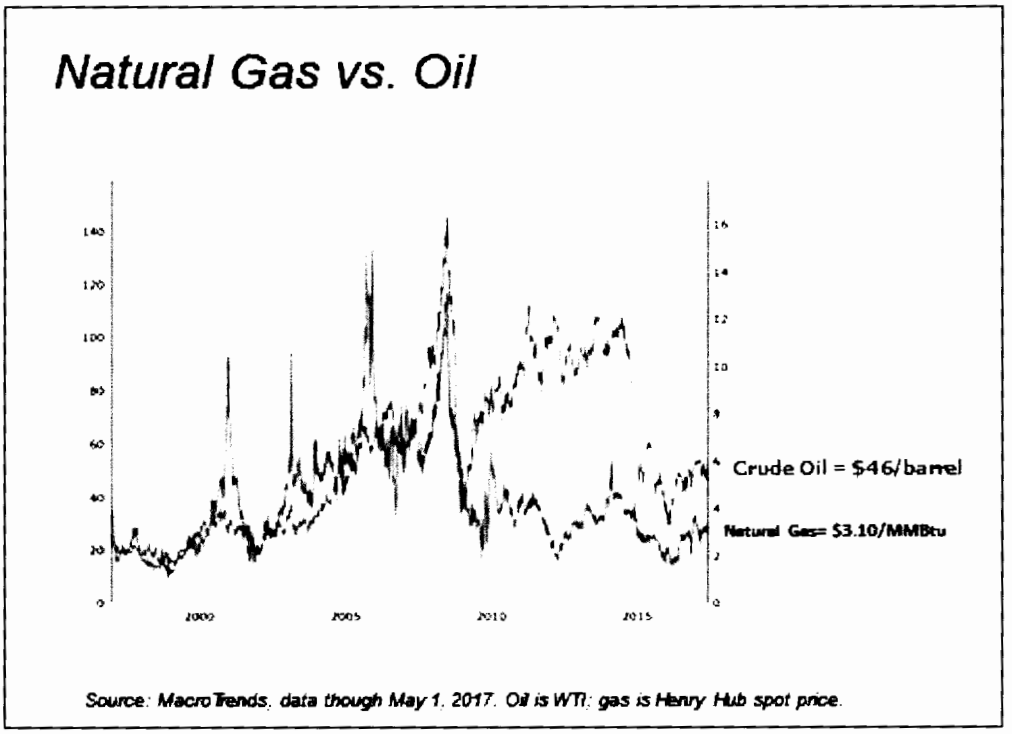
GAS

New Hampshire is served by two natural gas utilities, Liberty Utilities and Unitil. With 93,000 customers, Liberty Utilities serves the Interstate 93 corridor from Nashua to Laconia as well as portions of Berlin and Keene. Unitil has 32,000 customers and serves the seacoast area. New Hampshire's two gas utilities depend on the supply of gas through interstate pipelines to delivery points in the New England region in order to deliver gas to customers here, supplemented by trucked deliveries of Liquid Natural Gas and propane to meet winter peak demand.

The 2017 U.S. Energy Information Administration's (EIA) Annual Energy Outlook forecasts a U.S. national annual growth rate of 0.3% for natural gas usage through 2050, with New England natural gas consumption expected to grow 0.4% annually. Natural gas is the leading fuel source for electric generation in the United States and represents 49% of New England electric generation resources and is also the leading home heating fuel in New England (38.7%), with oil a close second (36.5%). In New Hampshire, only 20% of homes heat with natural gas and 50% heat with oil; however, both Liberty and Unitil have been experiencing record growth over the past three years. In the last 15 years, customers served by New Hampshire's natural gas utilities have increased from 101,000 to 126,000, with 10,000 of the 25,000 new customers having been added in 2014 through 2016.



Growth has been driven by low gas prices resulting from increased domestic gas production. In July 2008, natural gas reached $13.50 per MMBtu, whereas the average natural gas commodity price in 2016 was $2.50 per MMBtu. Growth has also been driven by the price advantage natural gas has had over oil since 2008 as seen in the chart below comparing the MMBtu price of gas and oil:



Although the price differential between natural gas and oil has narrowed in the last two years, the EIA's 2017 Annual Energy Outlook projects average natural gas prices for consumers falling well below oil prices in coming decades.

LIBERTY – KEENE

In 2014, Liberty acquired the NH Gas distribution system and utility operations that provide propane air to 1,200 customers in Keene. In its petition seeking Commission approval for the acquisition, Liberty testified that it was exploring converting customers from propane air service to natural gas service in an effort to reduce rates and add customers. The Commission approved the acquisition and required Liberty to continue operating and accounting for the former NH Gas (Keene) system on a stand-alone basis until Liberty filed a request, and obtained Commission approval, to do otherwise. In 2017, as part of a petition to increase rates paid by its natural gas customers, Liberty sought permission to consolidate the rates of its natural gas customers and its Keene customers and no longer account for Keene on a standalone basis. In its filing, Liberty testified that the Keene operations accounts for over $700,000 of the proposed increase and that Liberty intends to move forward with the conversion to natural gas. The filing provided very few details regarding the cost and timing of the conversion. The rate case is in the discovery process and hearings will be conducted in February and March 2018.

FRANCHISE REQUESTS

Customer growth from 2001 through 2013 took place in existing franchise areas, but since that time, there have been ten franchise expansion requests to serve nine new communities in response to the increased demand for natural gas. Liberty Utilities' franchise expansion requests to Pelham and Windham in 2016. A decision on Liberty's request to serve Hanover and Lebanon is expected in 2017.

Following the Kinder Morgan announcement that it would not proceed with the Northeast Energy Direct pipeline project, Liberty determined that there would be no economical way to provide natural gas service to Jaffrey, Rindge, or Winchester; however, Swanzey could be economically served through an extension of its existing and planned infrastructure in Keene, and Liberty asked to amend its franchise request accordingly. The Commission denied Liberty's

motion to amend its franchise request and dismissed the petition, finding that it was premature to consider a franchise in the Town of Swanzey until Liberty is able to provide details on how Swanzey could be economically served.

RATE CHANGES

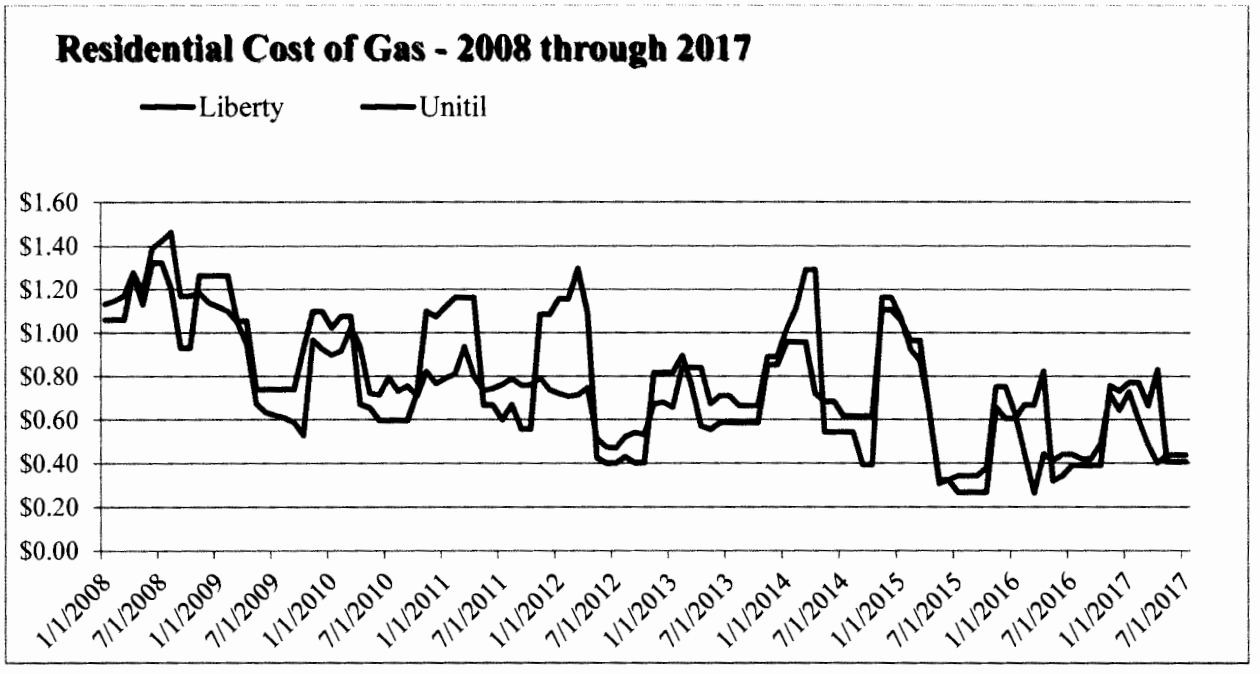
The gas utilities, including Keene, have filed 21 requests for rate changes since that start of 2015. Sixteen of the proposed rate changes related to supply costs, three related to a Liberty program to replace leak prone pipe and three were general rate cases covering all rate related items such as rate base, operating and maintenance expenses and rate of return.

SUPPLY RATES

The cost of gas (COG) adjustment mechanism was implemented in 1974 during an era of rapidly changing prices to provide a way to immediately pass on to customers any price increases and decreases in supply costs without having to go through an extended proceeding to change delivery rates. Supply costs consist primarily of commodity prices (gas and propane) and the transportation costs. Those costs are passed through to customers on a dollar for dollar basis and do not generate a profit for the utility.

The gas utilities are required to file proposed COG rates for the summer (off-peak) and winter (peak) periods based on actual gas costs and revenues from the prior year and projected gas costs and revenues for the upcoming seasons. In setting COG rates, the prior year costs and revenues are reviewed and reconciled, and the over or under recovery of gas costs are applied against the projected costs for the upcoming period. In addition to reviewing the costs and revenues, the Commission also considers the utility's supply planning and gas dispatch decisions to ensure only actual and prudently incurred costs are recovered from ratepayers. Monthly adjustments to the approved rates are allowed, if necessary, to reflect changes in commodity prices. Normally the winter period supply rates, beginning on November 1st, are noticeably higher than the summer period rates because it requires more costly investments in resources to meet winter demand.

The following chart of the natural gas utilities monthly per therm rates since 2008 show the seasonal nature and rate volatility of gas costs as well as the overall decline in natural gas prices over that period.



BASE RATE ANNUAL ADJUSTMENTS

The gas utilities are required to retire cast iron and bare steel services and mains, leak prone pipes that have been in service for many years. As an incentive to accelerate and fund the removal/replacement of those pipes, the Commission has allowed for recovery through annual rate increases when appropriate. The annual rate increases require a rate filing and Commission approval, following a review of the company's program plans and costs.

Northern's accelerated replacement program with annual rate increases was approved in 1990, with annual rate adjustments discontinued in 2000 when the Commission found that active corrosion and leaks had been minimized and the risk to public safety substantially reduced. Although no longer allowed to recover the cost through annual rate adjustments, the Northern pipe replacement program has continued and is expected to be completed in 2018 when all cast iron and bare steel pipes on Northern's distribution system will have been retired.

Liberty's accelerated replacement program with annual rate increases was approved in 2007. Under the accelerated replacement program, Liberty expects to retire all cast iron and bare steel pipes by 2024.

BASE RATE GENERAL RATE CASES

In 2015, Liberty Utilities requested an increase in its annual revenues of approximately $13.5 million and a step adjustment, which was expected to increase revenues by an additional $2.6 million dollars. The Commission approved a revenue increase of $10.5 million, an increase of seven percent, and a step adjustment increase of $1.9 million. The Commission also required that an independent audit of Liberty be undertaken with a focus on Liberty's financial processes and customer service.

In 2017, Liberty Utilities requested an increase in its annual revenues of approximately $13.75 million and a step adjustment, which was expected to increase revenues by an additional $6.1 million dollars. Liberty requested a temporary rate increase of $7.8 million, and, on June 30, 2017, the Commission approved a temporary rate increase of $6.75 million for effect on July 1, 2017, pending the Commission's final determination on the Company's request. The Company that conducted the independent audit in the prior rate case will report, in this pending rate case, the progress made by Liberty in addressing the concerns raised in the audit report.

In 2017, Unitil requested a revenue increase of $4.7 million and annual step adjustments for years 2018 through 2020, expected to increase revenues by $2 million per year. Northern requested a temporary rate increase of $2 million, and, on July 31, 2017, the Commission approved a temporary rate increase of $1.6 million, effective August 1, 2017, pending the Commission's final determination on the Company's request.

FINANCING REQUESTS

In 2017, Unitil filed for, and received, approval to issue up to $75 million of long term debt to retire short term debt incurred to pay for normal utility operations and capital improvements to its system. Northern ultimately offered $50 million of long term debt to investors and expects to complete the financing in November 2017.

In 2017, Liberty filed for approval to refinance $18.2 million of existing debt that is maturing in December 2017 and to issue $69.6 million of new debt to pay off short term debt that was used to fund capital projects such distribution system growth and upgrades. The filing is under review, and a final order expected before December 2017.

STEAM

After nearly 80 years of service, Concord Steam ceased utility operations on May 31, 2017. Prior to terminating service, approximately 100 commercial and industrial customers and two residential customers were using steam provided by the utility to heat their businesses and homes.

In 2008, Concord Steam requested, and received, Commission approval to build a new steam plant that would lead to a 30% rate

reduction when it went into operation. It was expected the lower rates would be competitive with natural gas prices and allow Concord Steam to arrest, or even reverse, a trend of declining sales and customer losses. Concord Steam was unable to procure financing to build the approved plant and began exploring other options to replace the existing plant and lower steam rates.

In early 2016, Concord Steam petitioned the Commission for approval to enter into a ten year special contract with the Concord School District, to increase short term borrowing and to increase usage rates. Also in early 2016, the Commission opened an investigation into Concord Steam's physical plant after learning of ongoing violations of fire and life safety codes that were communicated by the State Fire Marshal's Office to Concord Steam.

In July 2016, Concord Steam petitioned the Commission for approval to implement emergency rates and terminate service, citing an ongoing decline in customer counts, declining steam load and chronic revenue shortfalls as reasons. Concord Steam also filed a petition, with Liberty as a joint petitioner, for approval to sell certain assets to Liberty.

In September 2016, the Commission approved emergency rates on an interim basis so that Concord Steam could generate sufficient revenue to continue operations through the winter. In November 2016, the Commission approved emergency rates, termination of utility service and the sale of certain assets to Liberty. The approved rates, combined with the revenue from the sale of assets, were set at a level that would fund winter operations and decommissioning costs.

A number of Concord Steam customers and State Senator Feltes petitioned the Commission for approval to establish a grant program to help non-governmental customers of Concord Steam with the cost of converting from steam to natural gas, with the grants to be funded by Liberty and recovered from Liberty rate payers. The Commission denied the request, but approved on-bill financing for non-profit and residential customers whose conversion costs exceeded five years of expected energy savings. The on-bill financing provided for interest free loans to be paid back though a surcharge on monthly Liberty bills. Liberty requested and received Commission approved for two special contracts between Liberty and qualifying customers for on bill financing.

WATER & SEWER DIVISION

WATER

The Commission regulates 14 water utilities, two fewer than reported during the FY 13 – FY 15 biennial period. The reduction in companies regulated stems from the acquisition and consolidation of water systems. In 2016, the Commission approved the acquisition of Dockham Shores by Lakes Region Water Company, Inc. and Rosebrook Water Company, Inc. by Abenaki Water Company, Inc. These 14 water utilities represent over 100 separate systems and range in size from 38 customers to approximately 28,100.

REGULATED WATER SYSTEMS

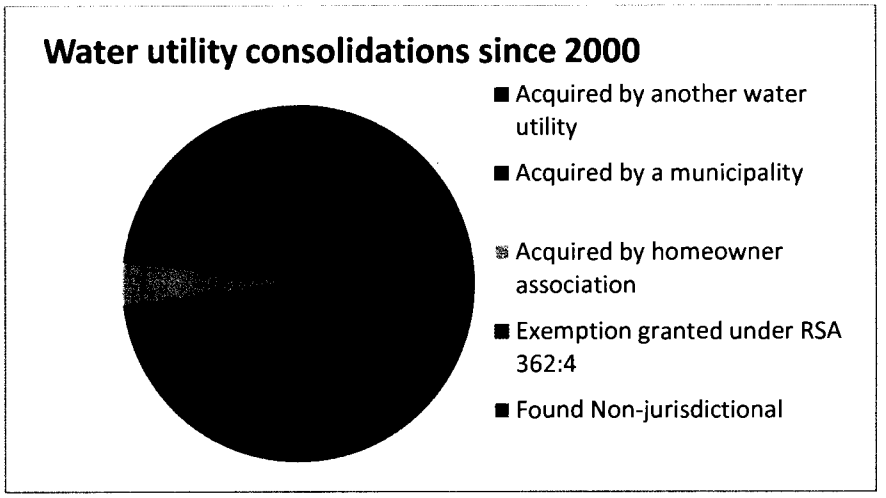
Company	No. of Customers	Area Served
Abenaki Water Company	663	Limited areas of Belmont, Bow, Carroll, Bethlehem and Crawford's Purchase
Aquarion Water Company	9,418	Towns of Hampton, North Hampton; limited area of Rye
Bow Lake Estates	41	Limited area of Strafford
Forest Edge	43	Limited area of Conway
Fryeburg Water – NH customers only	68	Limited area of Conway
Hampstead Area Water	3,578	Limited areas of Atkinson, Chester, Danville, East Kingston, Fremont, Hampstead, Kingston, Newton, Nottingham, Plaistow, Salem and Sandown
Lakes Region Water	1,690	Limited areas of Campton, Conway, Freedom, Gilford, Laconia, Moultonborough, Ossipee, Tamworth, Thornton, and Tuftonboro
Mill Brook Village Water System	38	Limited area of Thornton
Pennichuck Water Works	28,076	City of Nashua, Town of Amherst, limited areas of Bedford, Derry, Epping, Hollis, Merrimack, Milford, Newmarket, Newton, Plaistow, Salem and Tyngsborough MA
Pennichuck East Utility	7,473	Towns of Litchfield, Pelham, Windham, limited areas of Atkinson, Barnstead, Bow, Chester, Conway, Derry, Exeter, Hooksett, Lee, Londonderry, Middleton, Plaistow, Raymond, Sandown, Tilton and Weare
Pittsfield Aqueduct	637	Town of Pittsfield
Tioga River	60	Limited areas of Belmont and Gilford
West Swanzey Water Co.	84	Limited area of Swanzey
Wildwood Water	49	Limited area of Albany

INDUSTRY ISSUES

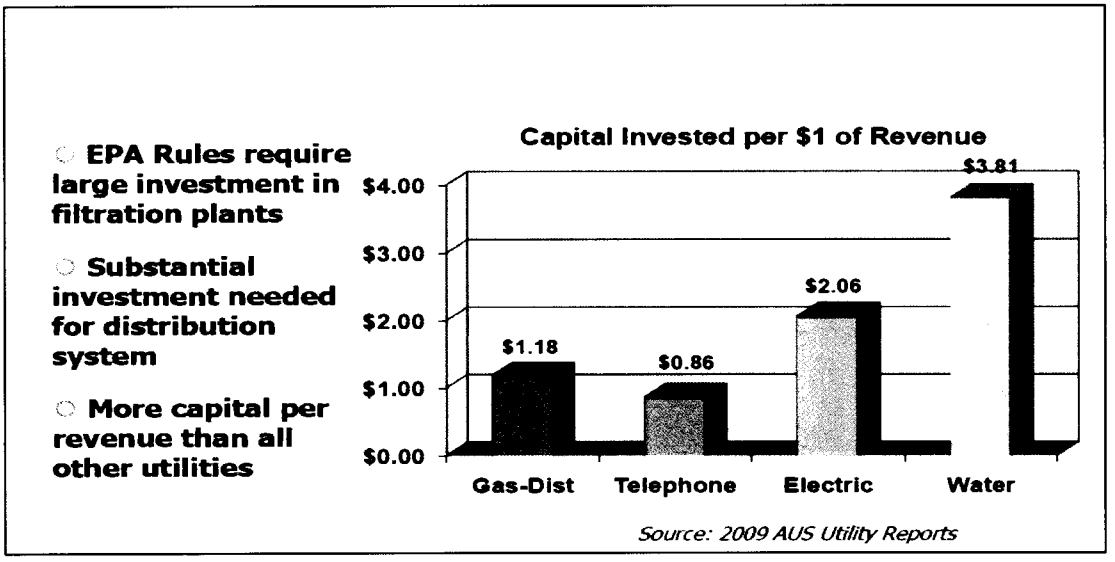
INDUSTRY CONSOLIDATION

Consolidation in the water industry continues a trend which began several years ago. Since January 2000, 15 water companies have been absorbed in to other water utilities, four were taken over by a municipality, one was taken over by a homeowner's association, five requested and received exemption from the Commission's jurisdiction as permitted by RSA 362:4, and one was found to be non-jurisdictional. The inherent challenges in operating water systems in the current era have resulted in this trend of consolidation. The costs of replacing aging

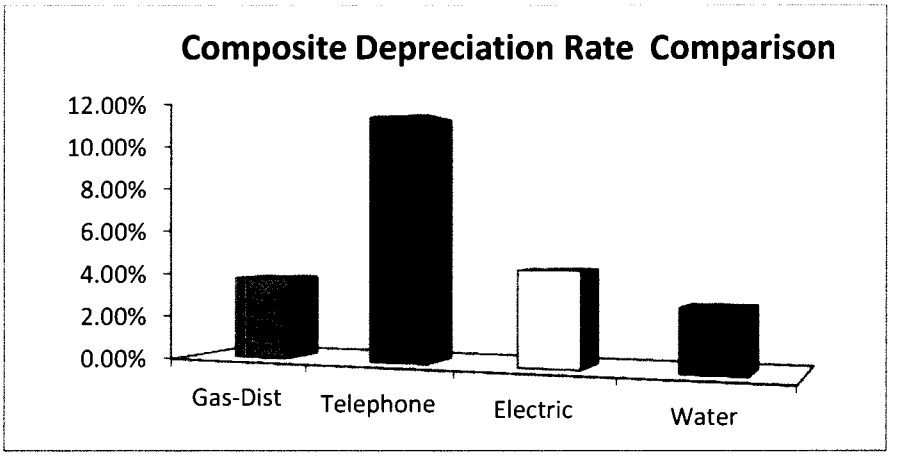
infrastructure, the need to acquire financing, and the increase in water testing and treatment requirements are a few of the reasons that make it more and more difficult for small systems to be operated as stand-alone entities. Regardless of the size of the facility or the number of customers served, all water companies are held to the same standards for quality service.



As shown below, water utilities require more capital invested per dollar of revenue than any other regulated industry.



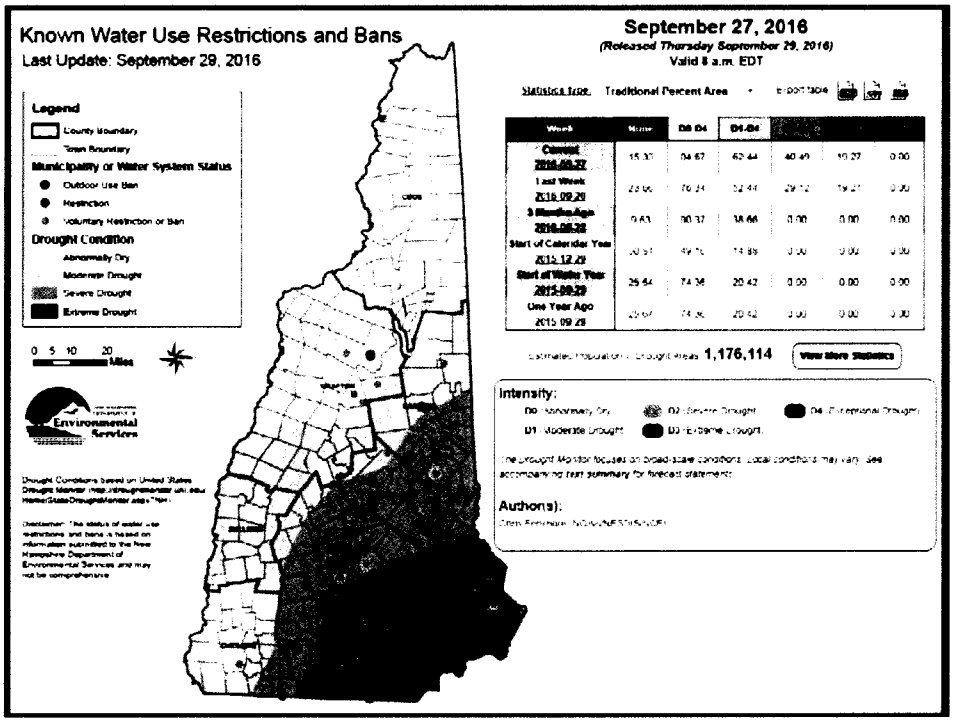
To complicate the economics further, thus making it more difficult to attract capital, the water industry has the lowest composite depreciation rate. These characteristics negatively influence the industry's ability to attract capital, because low composite depreciation rates (i.e. long asset recovery periods) are viewed negatively by capital market analysts.



Source: 2009 AUS Utility Reports

DROUGHT CRISIS IN NEW HAMPSHIRE

All portions of the State of New Hampshire experienced some range of drought conditions during this biennium. In some areas of the state, wells simply went dry. Many utilities were forced to impose outside water-use restrictions and, in some cases, complete watering bans, some for extended periods of time. Some utilities were fortunate enough to have the resources available to shuttle water between their community water systems or to sell water to neighboring communities, supplementing those water systems in desperate need of water. Those utilities or systems less fortunate worked with their customers to adhere to the water-use restrictions.



POLYFLUOROALKYL SUBSTANCES (PFAS) INVESTIGATION

Polyfluoroalkyl Substances (PFAS), often called Perfluorochemicals (PFCs), are a group of man-made chemicals used to manufacture household and commercial products that resist heat, oil, stains, grease and water. Two particular compounds, perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), have been found in both public and private water supplies throughout New Hampshire. Once the contaminant reaches ground water, it spreads easily and does not break down quickly. The concentration of PFOS or PFOA found in a water supply corresponds with whether the contamination site was used as, or is near to, an industrial facility, landfill or fire-fighting training area.

New Hampshire has established groundwater standards for PFOA and PFOS at the sum of 70 parts per trillion (ppt). This standard is based on the U.S. Environmental Protection Agency published drinking water Health Advisories, which recommend a level for PFOA and PFOS that is considered safe in drinking water without harming human health, even if a person were to consume water at those PFOA and/or PFOS levels over a lifetime. Active site testing results as of September 12, 2017, are shown below:

As of September 12, 2017

The most significant violation occurring this biennium and affecting a regulated utility began in March 2016 when Saint-Gobain Performance Plastics (Saint-Gobain) notified NHDES that PFOA was detected at 30ppt in samples taken from four water faucets within their Merrimack facility. The investigation expanded to include sampling of both public and private wells in Bedford, Litchfield, Londonderry, Manchester and Merrimack. In May 2016, Saint-Gobain agreed to fund design efforts for a potential extension of public water service into the Southern New Hampshire PFOA investigation area, primarily in Litchfield, while also examining affected residences in Bedford, Merrimack and Manchester. Pennichuck Corporation, Merrimack Village District Water Works, and Manchester Water Works, at the request of NHDES, agreed to work with Saint-Gobain, NHDES, the affected towns, and any additional potentially responsible parties identified in this effort to accelerate a long-term solution to deliver clean and safe drinking water to the affected area. In August 2016, Saint-Gobain arranged with Pennichuck Corporation to secure bids to extend Pennichuck's Litchfield

system to allow for the connection of up to 360 Litchfield homes and businesses currently on private wells. By October 2016, work began to connect Litchfield homes and businesses to the Pennichuck system. In April 2017, Saint-Gobain also agreed to work with Pennichuck Corporation to design a potential extension of public water service into Bedford to provide service to 61 properties. The agreement is in response to drinking water wells in the area containing PFOA above 70ppt. Additionally, in Bedford, water line connections to six properties along South River Road are being investigated.

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT (WICA) PROCEEDINGS

The Water Infrastructure and Conservation Adjustment (WICA) program involves planned periodic replacement of system infrastructure, subject to review and approval, for which the utility can request a surcharge on customer bills in between general rate increases. The WICA program is limited to main replacement or rehabilitation, meters, hydrants, services, and valve replacements. Each WICA filing illustrates the company's planned WICA construction budget for the following three year period.

The primary objectives of the WICA program are to provide an incentive to the utility to increase the rate of replacement of aging infrastructure, to mitigate rate shock to customers by permitting recovery of the capital once it is completed, and to enhance the reliability of the distribution system by reducing main breaks and by reducing lost and unaccounted for water.

AQUARION WATER COMPANY OF NEW HAMPSHIRE

Aquarion Water Company of New Hampshire (Aquarion), serving some 9,400 customers in Hampton and parts of North Hampton and Rye, was granted approval for a pilot program beginning in November of 2009. The program would be evaluated in the next full rate case. In Aquarion's 2012 rate case, the Commission agreed to continue the WICA as a pilot program for an additional rate case cycle, indicating that a single rate case cycle was not sufficient time to fully evaluate the program.

In October 2015, Aquarion filed a petition for its 2016 WICA surcharge based on the program years 2013-15 and approval of its proposed 2016-17 capital projects. Aquarion proposed a cost range of $763,000 to 1,044,000 for 2016 WICA-eligible capital projects, a proposed schedule of 2017 projects with a cost range of $624,000 to 983,000, and a schedule of its 2018 WICA projects for informational purposes only. The Commission approved a 3.99% surcharge and approved the company's proposed project budgets for 2017 and 2018.

In October 2016, Aquarion sought approval of its 2017 WICA surcharge based on the program years 2013-16 and capital budgets proposed for 2017-18. Aquarion provided a copy of its 2019 budget for informational purposes only. The Commission approved a 5.69% surcharge, a 2017 WICA budget in the range of $360,000 to $523,500 and a preliminary 2018 budget in the range of $340,000 to $503,500.

PENNICHUCK WATER WORKS

In 2011, Pennichuck Water Works (PWW), serving approximately 28,000 customers, was granted approval to implement a WICA pilot program with the condition that the program would be evaluated during the next full rate case. Similar to that of Aquarion, the Commission subsequently authorized the PWW WICA pilot program to continue beyond the company's 2013 rate case, in order to more fully evaluate it. Of significance in PWW's WICA proposals is the coordination with the City of Nashua in water main replacement where streets are being opened for either storm drain or sewer main work. Through this coordination, total costs of main replacement are lowered as a result of shared street opening and subsequent restoration costs.

In February 2016, PWW filed for approval of its 2016 WICA surcharge based on program years 2013-15 and for approval of its 2016-17

budgeted projects. The preliminary 2018 budget was submitted for informational purposes only. After review, Commission Staff recommended approval of a 3.03% surcharge, a proposed 2016 WICA budget of $5.02 million, and preliminary approval of PWW's proposed 2017 WICA budget of $5.31 million. The Commission approved Staff's recommendations.

In August 2016, PWW filed a full rate case. The company did not propose continuation of the WICA program but, alternatively, the Company proposed an annual step adjustment program to replace the WICA filing process. To reserve the right to collect a WICA surcharge if the step adjustment program was not approved in the rate case request, PWW submitted its 2017 WICA surcharge filing in January 2017. Shortly after the close of the biennium, in July 2017, a settlement agreement in PWW's rate case was presented at hearing. As part of the settlement agreement, the parties agreed that the 2016 capital projects upon which a proposed step adjustment was based were inclusive of the 2016 WICA eligible projects upon which the proposed increase in the WICA surcharge was based. It was also agreed that a new Qualifying Capital Project Adjustment Clause (QCPAC) mechanism should replace the WICA pilot program. The Commission subsequently approved the settlement agreement.

RATE PROCEEDINGS

ABENAKI WATER COMPANY

In July 2015, Abenaki Water Company, Inc. (Abenaki) filed a proposal designed to consolidate and increase rates for its Bow and Belmont water systems by 23.41%. The filing also contained the Abenaki's subsidiary sewer division filing and is discussed in the sewer division section of this report. The driving forces associated with this increase were recent capital improvements and related expenses. Abenaki also sought a return on equity of 10.75%, year-end treatment of its test year rate base, and recovery over a 12-year period of its costs to acquire Lakeland Management Company and White Rock Water Company. In its review, Commission Staff did not support single-tariff pricing at this time, since consolidating the rates of the two systems would create a significant subsidy to Bow customers at the expense of the Belmont customers. This could be seen by comparing the company's proposed rate increase on a combined basis with that which would result from calculating cost of service on an individual system basis. Belmont water customers would have seen an average rate increase on a stand-alone basis of a proposed 8.63%, but an average increase of a proposed 23.41% with consolidated rates. Staff and participating parties ultimately submitted a settlement agreement in May 2016. The settlement agreement was subsequently approved by the Commission in June 2016. The Bow system was granted a 32.71% increase based on the 2014 test year with a step adjustment increase of an additional 6.22% based on 2015 additions. Belmont rates were decreased by 2.27% based on the 2014 test year, with a step adjustment increase of 5.22% based on 2015 additions. The Commission also approved a return on equity of 9.4%, the use of a non-traditional year-end rate base for test year assets, and a conditional "stay out" provision stating that Abenaki's next rate case can be filed no sooner than one reflecting a 2018 historical test-year. Also approved was the recovery of acquisition costs over a 21 year period, and the adoption of a rate design which moves the residential volumetric charges of both systems closer together.

LAKES REGION WATER COMPANY

In August 2015, Lakes Region Water Company, Inc. (Lakes) filed a request to increase permanent rates charged to its general metered and unmetered customers by 38.18%. In September, Lakes filed a petition requesting approval of long-term financing as well as the transfer of land owned by an affiliate through the company's proposed acquisition of the Mt. Roberts property from its shareholder. This land is used for water supply and was proposed to be transferred to Lakes to comply with NH DES requirements. The two dockets were combined. A settlement agreement was filed on October 7, 2016, which resolved all issues. The settlement agreement split the permanent rate increase into an initial increase of 9.94% and a step

adjustment of 5.49% equaling a total increase of 15.43%. The driving forces of the initial increase were primarily operational capital additions and the inclusion of the Mt. Roberts property and related expenses. The driving forces of the step adjustment were capital improvements made at the Company's Indian Mound system, new accounting software and related expenses. The Settlement Agreement was approved by the Commission in November 2016.

PENNICHUCK WATER WORKS, INC.

Pennichuck Water Works, Inc. (PWW) filed its request for a permanent rate adjustment of 17.21% in August 2016. PWW also sought approval for certain modifications to the rate making protocols established and approved in Docket No. DW 11-026, the acquisition of Pennichuck Corporation by the City of Nashua. Shortly after the close of the biennium, in July 2017, the Staff, OCA and PWW submitted a settlement agreement. The settlement agreement recognizes that PWW, despite continuing to be regulated by this Commission, is more of a municipal model in that the utility has no equity capital and is no longer profit-based. The settlement agreement therefore proposes a new rate making structure that is designed to match cash flows for debt service coverage as well as for company operating expenses. Additionally, the rate making structure modifications are anticipated to increase PWW's access to credit markets at enhanced credit ratings, giving PWW access to lower cost debt, to the benefit of its customers. The settlement agreement provides for a 3.12% increase in rates, calculated using a proposed modified rate making structure based on a pro-forma test year of 2015, as well as a step increase of 7.69%, based on certain plant additions made in 2016 and 2017.

NEW FRANCHISES

During the biennium, the Commission approved two requests for service expansion into new franchise areas for Hampstead Area Water Company (HAWC). These franchise expansions were to serve new housing developments in Kingston and Sandown.

FINANCINGS

During the biennium the Commission issued 8 orders related to financings, refinancings, and waivers of short term debt limits. Of significance to water utilities is the availability of funds through the Drinking Water State Revolving Loan Fund (SRF), established to assist both public and privately-owned water systems in financing the costs of improvements needed to achieve compliance with federal Safe Drinking Water Act requirements and to protect the public health objectives. The SRF program is administered by the NHDES and provides low interest rate financing for 5, 10, 15 or 20-year periods as well as the potential for partial principal forgiveness for less affluent populations. A water utility submits an application to NHDES to seek funds for a particular project, and all projects are ranked by DES in a competitive process. If successful, the utility must request approval from the Commission under RSA 369 to borrow funds from the SRF program. During the biennium, three regulated water companies received Commission approval for capital projects under this program. These include loans to Pennichuck East Utility totaling $4,865,000 that included $1,650,000 to replace mains in its Locke Lake system in Barnstead and $3,215,000 to replace mains in its Maple Hills system in Derry, as well as for the replacement of mains in its Litchfield system, the installation of interconnect pipelines under the Merrimack River, and the installation of a 1.5 million gallon pumping facility; a loan to Pennichuck Water Works totaling $1,400,000 for main replacements; and one to Pittsfield Aqueduct Company, $440,000 for the replacement of mains.

During this biennium three utilities took advantage of the steadily low interest rates to refinance existing debt. The Commission approved a refinancing for Pennichuck Water Works totaling $25,500,000, for Hampstead Area Water Company in the amount of $2,125,930 and for Fryeburg Water Company for $875,000.

Commission approval was granted to Pennichuck East Utility as part of the SRF financing detailed above to borrow $2,200,000 from CoBank to be used for capital work not eligible for SRF financing. Lakes Region Water Company was approved for a CoBank loan of $265,000 to be used for capital projects. Hampstead Area Water Company and Lakes Region Water Company were approved for smaller financings as they had taken advantage of the low interest rates to purchase new vehicles totaling $39,674 and $41,730, respectively.

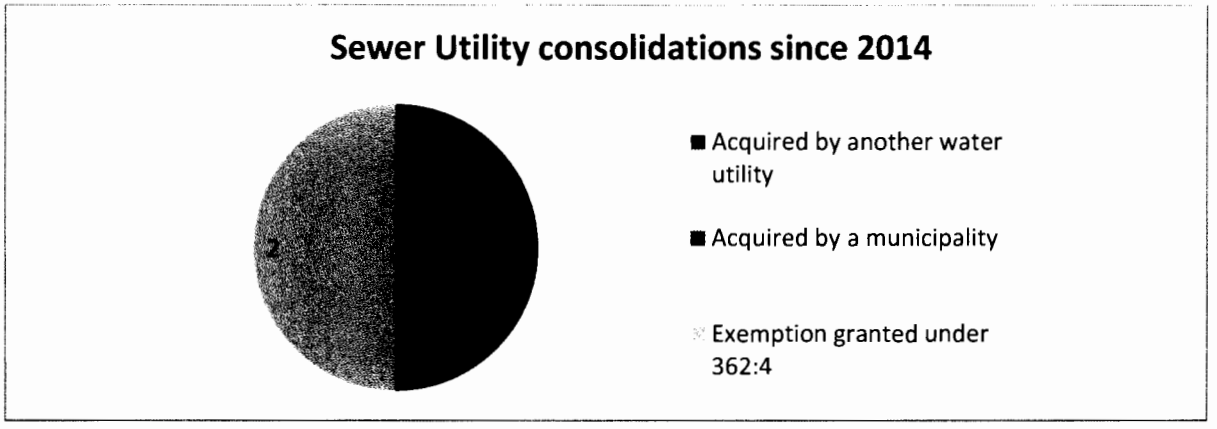
SEWER

The Commission regulates five sewer utilities in Southern New Hampshire. These five sewer utilities range in size from 1 customer to approximately 550 customers.

REGULATED SEWER SYSTEMS

Company	No. of Customers	Area Served
Abenaki Water Company	156	Limited area of Belmont
Atkinson Area Waste Water Recycling	1	Limited area of Atkinson
Bedford Waste Services Corp	78	Limited areas of Bedford
Bodwell Waste Services Corp	539	Limited areas of Manchester and Londonderry
Lorden Commons Sewer Co.	40	Limited area of Londonderry

Similar to the water industry, consolidation is also prevalent in the sewer industry. Although New Hampshire saw only one of its regulated sewer companies absorbed into another utility and one absorbed by a municipality, two were granted exemption under RSA 362:4. Consolidation is common within the sewer industry. The reason for this trend is the same as the water industry; the inherent challenges of operating sewer systems in the current era. The costs of new infrastructure, the ability to acquire financing and the increase in sewer testing requirements are a few of the reasons that make it more and more difficult for small systems to be operated as stand-alone entities.



RATE PROCEEDINGS

ABENAKI SEWER COMPANY

In July 2015, Abenaki filed a proposal to increase sewer rates by 50.11%. This filing was combined with the Company's subsidiary water division filings of Belmont and Bow. The Company also requested Commission approval for a periodic cost adjustment in order to pass through future fee increases from the City of Laconia for sewage discharge, as well as to recover over a 12-month period deferred sewage discharge costs based on the most current increase from the City of Laconia. Additionally, Abenaki's filing sought a return on equity of 10.75%, year-end treatment of its test year rate base, and recovery over a 12-year period of its costs to acquire Lakeland Management Company and White Rock Water Company. Staff and participating parties submitted a settlement agreement in May 2016. The settlement agreement was subsequently approved by the Commission in June 2016. Belmont Sewer was granted a 41.11% increase based on the 2014 test year. The Commission also approved a return on equity of 9.4%, the use of a non-traditional year-end rate base for test year assets with a conditional "stay out" provision stating that Abenaki's next rate case can be filed no sooner than one reflecting a 2018 historical test-year, the recovery of acquisition costs over a 21 year period, and the adoption of a new rate design.

LEGISLATION

The Commission provides assistance to the General Court on subjects within the Commission's jurisdiction and expertise. The agency monitors developments in the industries it regulates and, when appropriate, recommends legislation that will advance the policy objectives of lawmakers interested in these subjects. The Commission focuses principally on assisting the House Science, Technology and Energy Committee and the Senate Committee on Energy and Natural Resources. Such assistance typically comes in the form of research, technical advice, drafting language, and public testimony. Summarized here are significant enactments relevant to the work of the Commission from the 2016 and 2017 legislative sessions.

2016 LEGISLATIVE SESSION

HB 1116 relative to net metering; effective 5/2/2016. This bill increases the cap on net energy metering tariffs available to eligible customer-generators from 50 megawatts of generating capacity to 100 megawatts. This bill also requires the Commission to initiate a proceeding to develop alternative net energy metering tariffs.

HB 1148 relative to the establishment of a committee to review stranded costs associated with pipeline capacity contracts; effective 6/3/2016. This bill establishes a committee to review potential statutory revisions to constrain possible stranded costs associated with pipeline capacity contracts. The committee shall report its findings and any recommendations for proposed legislation on or before November 1, 2017.

HB 1198 relative to the valuation of poles and conduits owned by telephone utilities; effective 9/1/2016. This bill establishes the valuation for purposes of the property tax assessment of wooden poles and conduits employed in the transmission of telecommunication owned in whole or in part by telephone utilities.

HB 1428 relative to the appropriation of funds; effective 7/1/2016. Amends RSA 362-F:10 to appropriate $520,000 from the Renewable Energy Fund in fiscal year 2016 to fund the Division of Homeland Security and Emergency Management for the purpose of disaster and emergency response preparedness and coordination to help minimize utility and other disruptions resulting from natural or manmade disasters.

SB 386 relative to the addition of biodiesel to electric renewable energy sources; effective 7/19/2016. This bill adds biodiesel to electric renewable energy classes. This bill mandates that the Commission "[e]stablish procedures for the metering, verification, and reporting of useful thermal energy output for producers of biodiesel no later than December 31, 2017."

SB 406 relative to classification of certain state employee positions; effective 6/15/2016. The pertinent portion of this bill adds the position of the administrator of the site evaluation committee to the unclassified salary schedule.

SB 489 authorizes a demonstration project using a Stirling engine system; effective 6/6/2016. This bill authorizes the Department of Administrative Services (DAS) to undertake a 5-year demonstration project for the use of a Stirling engine system to provide electricity and/or heat to a state building it determines is a suitable candidate. The DAS shall prepare an annual report (to the Governor, Senate President, Speaker of the House, and PUC Chair) presenting the results of the demonstration project on or before July 1 of each year of the project and a final report no later than six months after the end of the project that includes recommendations regarding future use of Stirling engine technology.

2017 LEGISLATIVE SESSION

HB 85 relative to installation requirements for arc-fault circuit interrupters; effective 6/28/2017. This bill permits an arc-fault circuit interrupter (AFCI) device to be replaced with a device without AFCI protection in certain circumstances.

SB 51 relative to establishing a committee to review subsidies for energy projects provided by the renewable portfolio standard; effective 6/2/2017. This bill establishes a Legislative committee to study subsidies for energy projects provided by the renewable portfolio standard. The committee is to monitor Commission dockets related to subsidies to energy projects and report its findings and recommendations by November 1, 2017.

SB 116 relative to requiring notice to affected municipalities of energy facility siting; effective 8/14/2017. This bill requires applicants for an energy facility certificate to give notice to affected "municipalities." The bill then requires notice to such affected municipalities 30 days prior to filing an application and 14 days before any public information sessions and hearings. The Site Evaluation Committee must allow public comment by any affected municipality.

SB 125 relative to establishing a committee to study transmission, distribution, generation, and other costs in the state's electricity system; effective 6/2/2017. This bill establishes a Legislative committee to study transmission, distribution, generation and other costs of electricity in New Hampshire. The committee is to study ways of mitigating costs and issue a report of findings and recommendations by November 1, 2017.

SB 129 relative to the renewable energy fund; effective without signature on 7/11/2017. This bill requires a portion of the funds in the renewable energy fund to benefit low-moderate income residential customers, makes changes to renewable energy portfolio requirements for classes I and II, raises the alternative compliance rate for biomass, limits eligible methane gas facilities to 10 MW capacity, and provides a period of exemption from increases in annual purchase percentages under the minimum electric renewable portfolio standard for certain electrical supply contracts.

PRIMARY STATUTORY AUTHORITY

RSA 38	Commission authority over certain municipal utility operations and disputes between municipalities and public utilities.
RSA 125-O:23	Commission authority over use of the Greenhouse Gas Emissions Reduction Fund.
RSA 362:1-4-d	Scope of jurisdiction over public utilities - electric, telephone, water, sewer, gas and pipelines.
RSA 362-A	Authority of Commission regarding limited energy producers and qualifying co-generators, purchase of electric output under Commission approved rate orders, procedures for buy-down, buy-out or renegotiation of rate orders, and net energy metering.
RSA 362-E	Authority for Commission to administer telecommunications equipment assistance program and to collect funds for operation of telecommunications relay service.
RSA 362-F	Authority for Commission to implement New Hampshire's Renewable Portfolio Standards for providers of electricity, including utilities and competitive suppliers, and authority over use of the Renewable Energy Fund.
RSA 363:1-21, 27	Enabling statute for the Commission, providing for appointment, removal, compensation, etc. of Commissioners, structure and composition of staff; procedural and ethical guidelines for the operation of the Commission and authority to contract for power.
RSA 363:22-23	The Commission's jurisdiction to investigate interstate rates, fares, and charges and authority to petition any federal government department for relief.
RSA 363:28-28-a	Establishing the Office of Consumer Advocate and Residential Ratepayers Advisory Board.
RSA 363:30-36	Procedures to designate advocacy and advisory staff and assess costs if necessary.
RSA 363-A	Authority for the Commission to assess expenses of the Commission against certain utilities.
RSA 363-B	Procedures for termination of certain utility services.
RSA 364	Jurisdiction of the Commission in certain circumstances to investigate the public need for a municipality to acquire an existing public utility, construct a public utility or expand an existing municipal utility and to determine the feasibility of such plans.
RSA 365:1- 21, 23, 25 -28, 37-38, 41-44	Procedures governing complaints against public utilities; investigations of public utilities; proceedings before the Commission; fees and costs as well as penalties and other sanctions for noncompliance.
RSA 365:29-30, 34-35	Authority of Commission to order reparations for up to two years of illegal or unjustly discriminatory rates.

RSA 365:38-a	Authority of Commission to allow recovery of costs associated with Commission proceedings, including authority to grant compensation to certain intervenors for cost of participation.
RSA 366	Authority of the Commission over contracts between utilities and affiliates, sale of utility securities to or by employees, and information to be disclosed regarding control of utilities and affiliates.
RSA 369	Commission authority over public utilities and their financings, including securities, mortgages, short- and long-term debt, and limited role over certain mergers and reorganizations.
RSA 369-A	Standards for electric rate reduction financing, a significant component of electric industry restructuring.
RSA 369-B	Detailed standards for electric rate reduction bonds, a component of electric industry restructuring, and terms under which PSNH may divest generation assets.
RSA 370:1-9	Authority of the Commission regarding service equipment of public utilities, including the determination of units of service, standards for meter accuracy and related enforcement procedures.
RSA 371	Authority of the Commission over public utility condemnation proceedings, Commission approval authority for utility crossing over public waters and State-owned land.
RSA 374	General regulations governing the Commission, including general supervision of public utilities, franchising requirements, and certain provisions specific to telecommunications services, including the mandate to ensure affordable basic telephone service.
RSA 374:3-a, RSA 374:3-b	Commission authority to use alternate forms of utility regulation, and regulatory standards for small incumbent local exchange providers.
RSA 374:48-56	Commission authority to administer the Underground Facility Damage Prevention System.
RSA 374-F	Authority and procedures for the Commission to promote competition in retail electric service, restructuring principles, transition and default electric service, stranded costs, collection and uses of system benefits charge, registration for competitive electricity suppliers.
RSA 374-G	Commission authority to allow rate recovery for utility investments in distributed energy resources.
RSA 378	Authority of the Commission and procedures, including time limits, regarding public utility rates, fares, charges and prices; establishment of local calling areas and reduction in access charges; standards for special contracts for electric and telecommunications services; confidentiality provisions specific to telecommunications services; prohibition against construction work in progress in rates; requirement for electric utilities to file biennial least cost plans; and regulation of certain billing practices by utility companies.
RSA 674:30	Authority of the Commission to exempt structures used by a public utility from municipal regulation.

OFFICE OF CONSUMER ADVOCATE

REPRESENTING RATEPAYER INTERESTS

To do their job effectively, utility regulators must balance the interests of utility customers with those of utility shareholders. Therefore, New Hampshire is among the 40 states that have created an office to represent the interests of customers before its state utility regulator. Although some states assign ratepayer advocacy to an executive branch agency, the attorney general, or to a division of the utility regulator itself, in New Hampshire this work is the responsibility of the Office of the Consumer Advocate (OCA), an independent and nonpartisan state agency.

The OCA is administratively attached to the Commission, which means the Commission provides business services to the OCA but is not responsible for oversight or guidance. The OCA is funded through an assessment on New Hampshire's regulated utilities and non-utility energy suppliers.

Designated by statute as the representative of residential customers, the OCA does not advocate on behalf of commercial or industrial customers, nor does it ever represent the interests of individual consumers. When the OCA receives an inquiry from an individual consumer, it typically refers the inquiry to the Consumer Services Division of the Commission – but it monitors such inquiries to determine whether they reflect any trends or other concerns that require action on behalf of all residential ratepayers.

Most but not all of the OCA's work involves advocacy before the Commission. The OCA also serves as a resource to the Legislature when it needs information about the possible effects of policy initiatives on consumers. Increasingly, the OCA participates in regional and national matters as larger geographic markets influence New Hampshire's residential rates. At all times, the OCA works to educate consumers about utility rates and related concerns.

To assure the independence of the OCA, in 1999 the Legislature created the Residential Ratepayers Advisory Board and tasked it with screening candidates to serve as Consumer Advocate. When the position is vacant, the Advisory Board is charged with recommending three candidates to the Governor. When an incumbent Consumer Advocate wishes to seek reappointment, the Advisory Board must decide whether to recommend a subsequent four-year term or to declare a vacancy and recruit a new slate of three candidates.

OCA STAFF

The Consumer Advocate is an unclassified state employee appointed for a four-year term by the Governor and approved by the Executive Council. The Consumer Advocate leads a staff of four full-time classified state employees: an Assistant Consumer Advocate, a Staff Attorney, a Director of Finance, and a legal assistant. The OCA also has a part-time clerk position.

Attorney D. Maurice ("Don") Kreis has served as Consumer Advocate since February 2016. He has previously served as general counsel of the Commission, a hearing officer with the Vermont Public Utility Commission and a professor at Vermont Law School.

Assistant Consumer Advocate Pradip Chattopadhyay is a PhD economist who has previously served as a utility analyst with the Commission. Director of Finance James Brennan holds an MBA and has a special interest in utility data management and grid modernization. Staff Attorney Brian Buckley came to the OCA in 2017 after several years with the Northeast Energy Efficiency Partnerships. Legal aide Jamie Breen keeps everything organized.

ADVOCACY AND OUTREACH

By statute, the Consumer Advocate is responsible for furthering consumer knowledge and education. The OCA strives to accomplish this goal through a web site (www.oca.nh.gov), a social media presence, a regular column with a statewide web-based news organization, press releases, media interviews, and participation in public forums on residential rate-related concerns. The OCA Advisory Board meetings are open to the public and include speakers on utility issues.

The OCA's website contains retail energy supplier data, summaries of OCA cases, OCA press releases, useful links, and information on the Residential Ratepayers Advisory Board. It also includes instructions on how to read utility bills, how and where to file a complaint about a public utility, how to become involved in a Commission docket, information on energy efficiency resources, and financial assistance programs for utility customers.

Subject to the rules of professional conduct for attorneys, it is the policy of the OCA to assist when possible the efforts of individual citizens and grassroots organizations to participate in Commission proceedings. The OCA believes that the interests of residential utility customers, and the public interest generally, are well-served when citizens have meaningful access to Commission proceedings despite their complexity.

THE OCA AT THE PUBLIC UTILITIES COMMISSION

When a utility files a request with the Commission to increase rates, the OCA scrutinizes each component of the detailed filing the utility must submit. The OCA's objective is to assure that rates remain as low as possible without sacrificing safe and reliable service, subject to the utility's constitutionally protected right to the opportunity to earn a reasonable return on shareholder investment.

In 2016 and 2017, the OCA participated actively in rate cases concerning the electric service provided by Unitil and Liberty Utilities, the natural gas service provided by each company, as well as cases involving Pennichuck Water Works and Lakes Region Water Company. The OCA submitted prefiled written testimony in response to the written testimony of utilities, conducted discovery and participated in settlement negotiations. In the Liberty Utilities natural gas rate case, the utility proposed a "revenue decoupling" plan (the purpose of which is to eliminate the utility's disincentive to help customers consume less energy) after the OCA successfully urged electric and natural gas utilities to agree to propose such plans in rate cases over the next several years.

In the view of the OCA, technological evolution and regulatory changes provide extraordinary opportunities for electric consumers in particular to save money and assert more control over their use of energy. Therefore, the OCA participated actively in the Commission's Grid Modernization Working Group and will likewise play a vigorous role in upcoming grid modernization proceedings. It is the firmly held view of the OCA that reforming the electric grid so that it becomes an open and technologically advanced platform, on which consumers and utilities and third-party providers alike can build creatively, is critical to maximizing the benefits residential utility customers will get from the grid of the future.

The OCA has been a persistent voice on the subject of energy efficiency, participating actively in efforts to develop and to deploy the state's new Energy Efficiency Resource Standard (EERS). An EERS commits the state to "all cost effective energy efficiency." When it comes to acquiring the next unit of work from electricity or natural gas, energy efficiency is the cheapest available resource – which makes it the most cost-effective deal for residential utility customers.

The OCA continues to play a pivotal role in the net metering proceeding (Docket No. DE 16-576) the Commission has been conducting at the Legislature's directive in H.B. 1116 as adopted in 2016. The objective pursuant to H.B. 1116 was to come up with fair and reasonable terms on which small-scale customer-generators could

receive payment from utilities for their surplus generation, so as to make the previous cap on such customer-generation unnecessary. The OCA hired an outside expert to assist with the development of suitable proposals and ultimately entered into a settlement agreement with the electric utilities, other ratepayer advocates and the Governor's energy office. Largely because the solar industry in New Hampshire is relatively undeveloped, there was very little data available to assist the Commission in developing an appropriate net metering program. Therefore, terms and conditions ultimately adopted by the Commission reflect an interim solution; the Commission convened working groups on 'value of solar' determinations, time-of-use rates, community solar initiatives for low- and moderate-income customers, and the use of distributed generation as an alternative to new investments in distribution and transmission facilities.

THE OCA IN COURT

By statute, the OCA's authority to represent the interests of residential ratepayers is not limited to advocacy at the PUC but, rather, includes appearing before "any board, commission, agency, court, or regulatory body in which the interests of residential utility customers are involved." RSA 363:28, II. Thus, while most agencies in state government are represented in court by the Department of Justice, because the OCA does not appear on behalf of the state, the OCA's attorneys have historically participated directly in judicial proceedings.

In September 2017, the OCA had the opportunity for the first time in 12 years to argue before the New Hampshire Supreme Court. At issue was the Commission's determination in Docket No. DE 16-241 that it was inconsistent with the Electric Industry Restructuring Act, adopted in 1996, for Public Service Company of New Hampshire (doing business as Eversource Energy) to invest in natural gas pipeline capacity and then include the costs in nonbypassable electric distribution rates.

The OCA argued that when the Legislature initiated the restructuring process in 1996, its intent was to relieve ratepayers of the risks associated with investments in generation facilities – including the risks associated with acquiring an adequate fuel supply. The OCA also noted that, to the extent that fuel supply constraints are a challenge for the region's natural gas generators during extremely cold winters (e.g., those of 2013 and 2014), state and federal restructuring initiatives effectively transferred the responsibility for addressing such problems to the federally regulated regional transmission organization ISO New England, which oversees the region's wholesale energy markets.

In the fall of 2017, the OCA negotiated an important settlement agreement with Liberty Utilities concerning its proposal to obtain a natural gas franchise to serve Lebanon and Hanover. The settlement protects existing customers of the utility in the event that not enough new customers in those communities sign up to make the expansion project pay for itself. The OCA believes this sets an important precedent at a time when Liberty is moving aggressively to expand its footprint in New Hampshire, but the economics and public policy implications of such expansion are uncertain.

THE OCA AT THE LEGISLATURE

Serving as a resource to legislators who need information about the effects of their initiatives on residential utility customers is the primary objective of the legislative outreach conducted by the OCA. The OCA endeavors to advance the interests of residential utility customers through offering forthright testimony and maintaining effective partnerships with lawmakers in both caucuses.

In the preceding biennium, the OCA helped draft and gain passage of a measure that strengthened privacy protections for data collected by utilities about their customers. The OCA also worked with the sponsors of a Senate bill that would allow utilities to make certain investments that are presently beyond their authority, the focus of the OCA being on

strengthening protections to consumers to reduce their vulnerability to stranded costs.

Additionally, the OCA supported the legislation that led to the Commission's net metering inquiry and sought to protect the Commission's authority to implement the new Energy Efficiency Resource Standard.

Due to the complexity of issues related to regulated utilities and our daily immersion in the application of law to utilities and consumers, the OCA is uniquely situated to assist policymakers while advocating for the interests of residential customers. The OCA participates in the Legislative Electric Restructuring Oversight Committee meetings advocating for legislative changes to support residential ratepayers.

COLLABORATING WITH OTHER STAKEHOLDERS

The OCA participates collaboratively with other interest groups before the Commission and at the legislature. We are a resource to any customer or interested party who seeks information about a utility case, utility rates or practices, or about Commission processes.

We strive in every adjudicative proceeding to find common ground with other parties, including utilities and Commission Staff, to maximize our efficiency through collaborative resolution of issues when appropriate. The OCA resolves cases through settlement when to do so is the better means of protecting residential ratepayers.

The OCA is a member of the Electric Assistance Program (EAP) Advisory Board, and the Energy Efficiency and Sustainable Energy (EESE) Board. In 2017, the Consumer Advocate became the chair of the EESE Board's Energy Efficiency Resource Standard Committee and thereby led a summer-long effort to reach understandings collaboratively among utilities and stakeholders in advance of adjudicative proceedings conducted in the fall of 2017.

In these roles, the OCA collaborates with various state agencies, legislators, and other public and private stakeholders. The OCA works with the Commission, the Office of Strategic Initiatives, formerly the Office of Energy and Planning, and the Department of Environmental Services on a wide range of projects to ensure that the interests of residential utility consumers are represented in environmental and long term state planning initiatives.

THE OCA AT THE REGIONAL AND NATIONAL LEVELS

The OCA is a founding member of the Consumer Advocates of New England (CANE) which is a group of counterpart agencies from New Hampshire, Maine, Massachusetts, Rhode Island, Vermont and Connecticut that collaborate on regional issues. To advocate for New Hampshire electric ratepayers before the regional transmission organization ISO New England (which operates the region's transmission grid and oversees wholesale markets), the OCA uses in-house staff and an outside consultant as needed. The OCA is an "end user" member of the New England Power Pool (NEPOOL) Participants Committee, and as a result the OCA has a vote on this important body on behalf of New Hampshire electric customers.

The OCA is a member of the National Association of State Utility Advocates (NASUCA), an organization of consumer representatives at the federal and state levels. Members of the OCA staff participate in NASUCA committees addressing consumer protections in the electric, natural gas, telecommunications, and water industries. Through NASUCA, the OCA keeps abreast of developments throughout the country, and often joins other advocates in filings with agencies such as the Federal Communications Commission (FCC) and the Federal Energy Regulatory Commission (FERC). The OCA also participates in the ISO New England Consumer Liaison Group (CLG), which seeks to increase residential customer representation at the ISO-NE. However, because the CLG is merely a forum for sharing information, the OCA is concerned about the lack of a formal role for

ratepayer advocates in ISO New England governance.

THE OCA'S ROLE WITH CONSUMERS

The OCA is committed to keeping consumers aware of industry trends and current rate related policies, as well as initiatives such as energy efficiency and low-income assistance programs. The OCA regularly assists individual consumers by providing utility contact data, information about Commission procedures and references to relevant legislative proposals. The OCA receives weekly phone calls, letters and emails with consumer questions and concerns. To get a response to the consumer as quickly as possible, the OCA records basic information about the complaint and notifies the Commission's Consumer Services Division and the appropriate utility customer service representative about the problem.

The OCA receives questions about all types of consumer issues, not just those related to public utilities. The OCA endeavors to help all members of the public by identifying the most appropriate resources available to address the consumer's questions or concerns. To the extent the OCA becomes aware of a pattern of consumer complaints or inquiries about a utility, the OCA can request Commission or legislative action on behalf of all residential customers. The OCA's advocacy may occur within the context of a pending proceeding or may take the form of an independent request for Commission action.

RESIDENTIAL RATEPAYERS ADVISORY BOARD

In 1999, the legislature established a Residential Ratepayers Advisory Board to advise the OCA and, as previously noted, to serve as the screening panel when appointing or reappointing the Consumer Advocate becomes necessary. The Board consists of nine members: three appointed by the Speaker of the House; three appointed by the Senate President; and three appointed by the Governor and Executive Council. The Board members represent a broad range of interests including senior citizens, people with disabilities, small business owners, low-income individuals, residents of public housing, and environmental issues. Current Board members are listed at http://www.oca.nh.gov/Advisory%20Board/AdvBrdRoster.pdf.

Board meetings are open to the public and all meeting materials are posted on our website.

CONSUMER ADVOCATE EXPENDITURES

Salaries	10	329,404	328,281
Current Expense	20	2,112	1,396
Rent & Lease – Other	22	1,715	1,664
Organizational Dues	26	4,156	4,257
Transfers to OIT	27	28,641	29,595
Transfers to General Services	28	20,787	21,243
Telecommunications	39	2,001	1,979
Indirect Costs	40	3,169	3,261
Consultants	46	0	3,119
Trans. to Other Agencies	49 [2]	16,182	16,402
Other Personnel Services	50 [3]	7,236	0
Westlaw	57	6,660	6,720
Benefits	60	146,648	143,186
Educational Training	66	450	100
Travel (In State)	70	1,006	1,392
Travel (Out of State)	80	4,824	3,228
Litigation Expense	233	35,739	43,180

Notes:

[1] Source of Information - NH First FY 2016 Closing Report dated July 23, 2016, and FY 2017 Closing Report dated July 22, 2017.

[2] The major expenses include funds transferred to support the Attorney General's office.

[3] This includes the salary expense for part-time staff assigned to the Office of Consumer Advocate.

SITE EVALUATION COMMITTEE

As a result of legislation passed in 2014, the Site Evaluation Committee (SEC) is now administratively attached to the Public Utilities Commission. That same legislation also made significant amendments to RSA 162-H, *Energy Facility Evaluation, Siting, Construction and Operation*. The SEC has implemented the new process established in the amended statute. The position of SEC Administrator was filled in September 2015. Following an extensive public stakeholder process, the administrative rules relative to the organization, practices, and procedures of the SEC and the criteria for the siting of energy facilities, including wind energy systems, were significantly amended, effective December 2015.

Legislation passed in 2015, Laws of N.H. 2015, Chapter 264 (HB 572), required the SEC to adopt rules for the siting of high pressure gas pipelines. The SEC conducted a rulemaking proceeding, which included public notice and comment, and the rules were amended effective August 2016. In accordance with another statutory requirement, a recordkeeping system and accounting and payment procedures were developed for the state agency representatives and public members of the SEC as well as Counsel for the Public. The first annual review and evaluation of the application and filing fees was also completed in 2017.

During the past biennial period, the SEC completed its review of four projects: the Joint Application of National Grid and Eversource Energy, known as the Merrimack Valley Reliability Project; the Application of Antrim Wind Energy; the Joint Petition for Approval to Transfer Ownership of Essential Power Newington; and the Joint Petition for Approval to Transfer Membership Interests in Granite Ridge Energy. Two other projects, the Joint Petition of Northern Pass Transmission and Eversource Energy, and the Application of Eversource Energy, known as the Seacoast Reliability Project, are currently under review.

SITE EVALUATION COMMITTEE ACTIVITY FY 16 AND FY 17

Docket	# of Days for Site Visits	Public Information Meetings and Public Hearings	Adjudicative Hearings and Deliberations	Orders (general)
MVRP	-	**4**	2.5 days	20
Antrim	2 days	2	16 days	30
NPT	7 days	16	20 days	106
Seacoast	1 day	4	-	24
Granite Ridge	-	0	1 days	3
Newington	-	0	1 days	2
Declaratory Petition	-	0	.5 days	1
Total	**10 days**	**26**	**41**	**186**

SITE EVALUATION COMMITTEE EXPENDITURES

Salaries	10	7,644	99,603
Current Expense	20	1,370	7,094
Transfers to OIT	27	-	7,406
Transfers to General Services	28	-	15,968
Equipment	30	-	296
Telecommunications	39	-	622
Consultants	46	1,103	5,882
Other Personnel Services	50 [2]	1,820	23,061
Benefits	60	2,848	37,903
Board Expenses	65 [3]	5,132	50,872
Remuneration	68 [4]	-	120,978
Travel (In State)	70	-	7,327
Travel (Out of State)	80	-	-

Notes:
[1] Source of Information - NH First FY 2016 Closing Report dated July 23, 2016 & FY 2017 Closing Report dated July 22, 2017.
[2] This is for a part-time administrative assistant.
[3] This includes the compensation for the public members
[4] This expense is reimbursement to other state agencies participating in SEC dockets.