# STATE OF MAINE PUBLIC UTILITIES COMMISSION



# 2017 Annual Report

February 1, 2018

**Maine Public Utilities Commission** 

Chairman Mark A. Vannoy Commissioner R. Bruce Williamson Commissioner Randall D. Davis

101 Second Street, Hallowell, Maine 04347 18 State House Station Augusta, Maine 04333-0018 Tel: 207-287-3831 Fax: 207-287-1039 TTY: 711

Website: http://www.maine.gov/mpuc/

Consumer Assistance Hot Line: 1-800-452-4699

E-Mail: maine.puc@maine.gov

The Commission does not discriminate in employment or in the provision of services because of race, creed, national origin, sex, political affiliation, religion, ancestry, disability, or sexual orientation. The Commission will provide reasonable accommodation for access to services.

Call 207-287-3831 or Maine Relay 711

Maine Public Utilities Commission

# **Table of Contents**

Section

ctio	on Pa	<u>ige</u>
1.	Commissioners' Letter	. 1
2.	Organization Overview	. 3
3.	Executive Summary	. 7

1

3.	Executive Summary	7
4.	Telecommunications	9
5.	Electric	19
6.	Natural Gas	36
7.	Efficiency Maine Trust	43
8.	Gas Safety	44
9.	Dig Safe	47
10	.Water and Waterborne Transportation	50
11	Emergency Services Communication Bureau	53
12	.Consumer Assistance	60
13	. Summary of Commission Rulemakings	66
14	.Summary of Law Court Appeals	68
15	.Reports to the Legislature	69
16	.Fiscal Information	70
17	. Commissioners' Biographies	73
18	.Past Commissioners	74



# Commissioners

Mark A. Vannoy Chairman

R. Bruce Williamson Commissioner

Randall D. Davis Commissioner

### **Division Directors**

Derek Davidson Consumer Assistance and Safety

Jeff McNelly Telephone and Water

Faith Huntington Electric and Gas

Maria Jacques Emergency Services Communication Bureau

Harry Lanphear Administration

Mitchell Tannenbaum Legal

### **Commissioners' Letter**

This report provides an overview of the work conducted by the Maine Public Utilities Commission (Commission) in 2017 administering the laws concerning public utilities in Maine. This past year included work on several complex cases including the Northern Utilities rate case, Emera Maine rate case, as well as the FairPoint Communications merger with Consolidated Communications.

### **Emergency Services Communications**

The Commission's Emergency Services Communication Bureau successfully implemented fire dispatch protocols at 15 of Maine's Public Safety Answering Points in 2017. The remainder will be completed in 2018. Like existing medical protocols, fire protocols will allow first responders to more efficiently respond to and address fires in Maine. The fire protocols were approved by the Legislature in 2015.

# Pipeline and Infrastructure Safety

The Commission's Consumer Assistance and Safety Division (CASD) received a 100% score for the third consecutive year from the United States DOT's Pipeline & Hazardous Materials Safety Administration (PHMSA) for the administration of its pipeline safety program and a 96% score for its damage prevention program. In addition, the CASD frequently obtains credits or refunds for customers as part of its resolution of customer complaints filed against utilities. In 2017, \$331,713 was abated to 174 customers.

### **Electricity**

Retail electricity supply prices for most customers in Maine declined slightly in 2017. In addition, stranded costs were reduced as the last two largest long-term power contracts under the Federal law known as PURPA (the Public Utility Regulatory Policies Act of 1978) expired and spent fuel trust fund proceeds of \$21.5 million were reimbursed to customers. In November 2017, the Commission's request for proposals for standard offer supply prices beginning January 2018 resulted in higher rates for all customers. Looking at the total residential bill for CMP customers, combining supply and delivery service, an average residential customer could expect to see an increase of about 8% in their monthly bill in 2018. For Emera Maine residential customers, the increase will be about 5%.

### Natural Gas

The Commission conducted a review of LNG proposals as a result of Public Law 2015, c. 445, "An Act To Allow the Public Utilities Commission to Contract for Liquefied Natural Gas Storage and Distribution" (LNG Storage Act). The Commission concluded that, based on the record in the proceeding, none of the proposals presented satisfied the statutory requirements of the LNG Storage Act.

# **Telecommunications**

In December 2016, Consolidated Communications Holdings, Inc., headquartered in Illinois, announced it had entered into an agreement to acquire FairPoint Communications, Inc. and filed a proposed merger plan with the Commission. Upon an extensive review of the filings in this case, the Commission approved a stipulation of the parties and approved the merger on June 5, 2017. Consolidated also agreed to invest at least \$17.4 million per year in its Maine telephone network during 2018 through 2020. There have been few, if any, noticeable changes in the provision of services since Consolidated assumed control of FairPoint.

### <u>Water</u>

Drought conditions in 2016 dictated that the Commission look closely at its rules to ensure that water utilities could address the possible adverse consumer impacts of a severe drought. The Commission proactively collected data from water utilities and opened an inquiry to explore the issue. The Commission has proposed new rules and is currently seeking comments. We expect new rules to be in place by Spring 2018.

### **Conclusion**

The Executive Summary of the report is detailed on page 7 and highlights some of the more noteworthy cases and events that occurred during calendar year 2017.

The Commission has a very dedicated and talented group of employees. As noted in Section 2, page 5 of the report, our employees process cases very efficiently. In addition to their hard work for the people of Maine, we are proud to report that our employees exceeded the goal for the Maine State Employees Combined Charitable Appeal (MSECCA) by 31%.

In all aspects of its work, the Commission continues to diligently exercise its regulatory, adjudicatory and public policy responsibilities to ensure that utility services for Maine residential and business consumers are provided at rates that are just and reasonable and consistent with good utility practice. We look forward to working with the Legislature this year on utility issues.

With regards,

Mark A. Vannoy Chairman

R. Bruce Williamson

R. Bruce Williamson Commissioner

Randell D. David

Randall D. Davis Commissioner

# 2. ORGANIZATION OVERVIEW

The Maine Public Utilities Commission regulates electric, gas, telephone and water utilities to ensure that Maine citizens have access to safe and reliable utility services at rates that are just and reasonable for residential and business consumers. The Commission, created by the Maine Legislature in 1913, has broad powers to regulate public utilities in Maine including electricity, telephone, water, and gas providers. The Commission also responds to customer questions and complaints, grants utility operating authority, regulates utility service standards and monitors utility operations for safety and reliability and has authority over rates and service of ferry transportation in Casco Bay.

Like a court, the Commission adjudicates cases and may take testimony, subpoena witnesses and records, issue decisions or orders, and hold public and evidentiary hearings. The Commission encourages participation by all affected parties, including utility customers. The Commission also conducts investigations and rulemakings, investigates allegations of illegal utility activity and responds to legislative directives.

The three full-time Commissioners are nominated by the Governor, reviewed by the Legislature's Joint Standing Committee on Energy, Utilities and Technology and confirmed by the full Senate, for staggered terms of six years. The Governor designates one Commissioner as Chairman. The Commissioners make all final Commission decisions by public vote and action of the majority.

The Commission's staff of 60 includes accountants, engineers, lawyers, financial analysts, economists, consumer specialists, and administrative and support staff. It is divided into six operating areas (See Figure 1) according to industry area or function.

The Telephone and Water Division and the Electric and Gas Division are designated to work on the issues related to these industries. Division staff conduct technical and financial investigations and analyses of utility operations, analyze applications by utilities to issue securities, advise the Commissioners on matters of rate base, revenues, expenses, depreciation, cost of capital, engineering, rate design, energy science, statistics and other technical elements of these utility areas. Staff also conduct various supply procurement processes, including standard offer electricity supply service.

**The Emergency Services Communication Bureau** manages the statewide Enhanced 911 (E911) system, including program development and implementation. The statewide 911 system is the component of the emergency response system that delivers 911 calls and displays the telephone number and physical location of the caller at one of Maine's 26 Public Safety Answering Points (PSAPs).

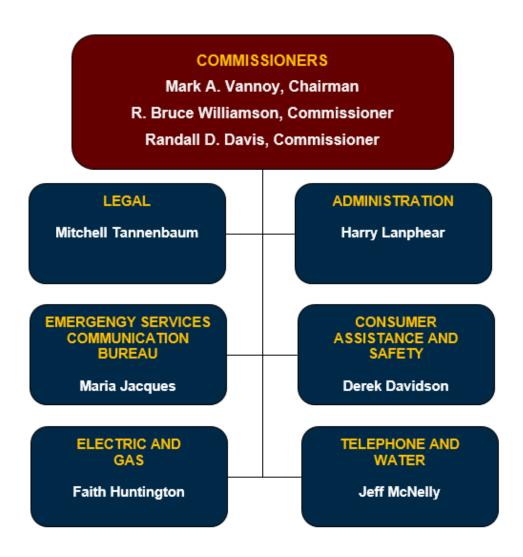
**The Consumer Assistance and Safety Division (CASD)** provides information and assistance to utility customers to help them resolve disputes with utilities. CASD investigates a variety of complaints involving utility service, including quality of utility service, billing disputes, payment arrangements, rates or charges, disconnection, and utility repairs. The CASD educates the public and utilities about consumer rights and responsibilities and evaluates utility compliance with state statutes and Commission rules. The CASD also

oversees gas safety regulation and enforcement as well as underground facilities damage prevention.

**The Legal Division** provides hearing officers in cases before the Commission and assists in preparing and presenting Commission testimony on legislative proposals. This division represents the Commission before federal and state appellate and trial courts, and various regional and federal administrative and regulatory agencies.

**The Administrative Division** handles day-to-day operational management of the Commission, with responsibilities for fiscal and personnel matters, contract and docket management, legislative analysis and the Commission's facilities. This division also oversees information technology including the Commission's Case Management and Consumer Complaint System.

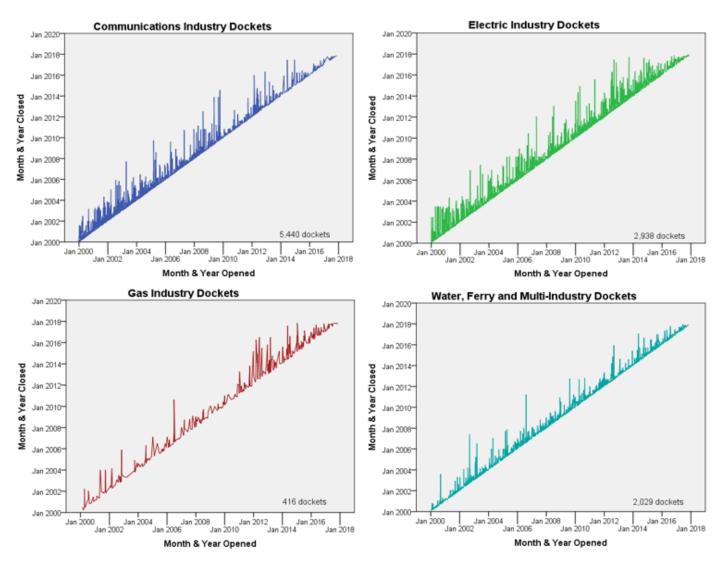
#### Figure 1 – Commission Organizational Chart



#### **Efficient Case Management**

An analysis of all dockets in the 2000-2017 interval identifies the types of dockets brought to the Commission, the proportion of dockets by industry type, and how long it takes between the initial filing and the final closing of dockets. For simplification, we divided industry types into four categories: gas, electric, telecommunications, and an "all other" fourth category that combines water utilities, water transport, and multi-industry special dockets. The charts below display the counts and longevity before the Commission by each industry category, according to month and year opened, and the month and year closed. Since 2000, there have been 5,440 communications dockets; 2,938 electric dockets; 416 gas dockets; and 2,029 water, water transport and multi-industry dockets. There have been about 601 dockets a year, for a total of 10,823 dockets over the 18-year interval.

The 45-degree diagonal in each chart is formed by dockets that opened and concluded within 1-2 months. It is a dense line because typically more than half of dockets are closed within a single month, and sometimes 2 months. Fifty percent of communication cases have been closed within 1 month; fifty percent of electric and "all other" industry dockets are closed within the first two months; and half of gas industry dockets are closed within 3 months.



There have been outliers – exceptionally long cases - but they are rare. The outliers are distinct and individually identifiable in these charts. Some are well remembered for the contentious nature of the issues, the larger number of parties involved, and the full process demanded by the parties to the dockets: electric restructuring-related cases; communications cases from the last decade; certain gas cases since 2014; and a few others. Some of the longest-running cases occur before 2012 and exist simply because the docket-registration system required an open docket number to allow a party to a case to file a periodic compliance status report, although the case fundamentals were complete.

# 3. EXECUTIVE SUMMARY

This section of the annual report highlights some of the more noteworthy cases and events that occurred during calendar year 2017.

Topic	Description						
Awards	The United States DOT's Pipeline & Hazardous Materials Safety Administration (PHMSA) gave the CASD a perfect score of 100% for the Commission's pipeline safety program. PHMSA also gave the CASD a 96% score for its damage prevention program (Dig Safe).						
Emergency Fire Dispatch	The Emergency Services Communication Bureau successfully implemented Emergency Fire Dispatch protocols at 15 of Maine's Public Safety Answering Points in 2017. The remainder will be completed by May 2018. Like medical protocols, fire protocols will allow first responders to more efficiently respond to and address fires in Maine. The fire protocols were approved by the Legislature in 2015.						
Standard Offer Price Increase for 2018	While electricity supply prices in 2017 declined, the Standard Offer RFP conducted by the Commission in November 2017 will result in price increases for all CMP and Emera residential consumers in 2018 who take standard offer supply service. The price increases range from 5-8% of a customer's total bill and are primarily driven by the increase in capacity market clearing prices in New England.						
Net Energy Billing	After significant public comment and feedback from interested parties, in March 2017, the Commission amended Chapter 313. The amended rule grandfathers existing NEB customers for 15 years. For new NEB customers starting in 2018, the amount of the energy produced by a customer's facility that may be used to offset the transmission and distribution (T&D) portion of the bill will be reduced over time. The amount that can be used to offset the supply portion of the bill will not be reduced. The changes were made to address 1) the costs of small generation facilities that are used to net energy bill, such as solar PV, have been declining significantly, and this trend is expected to continue, and 2) under the old rule, ratepayers that were not participating in net energy billing were paying for the transmission and distribution grid facilities, such as poles and wires, that net energy billing customers were using both to import and export electricity to and from the grid.						
FairPoint Communications and Consolidated Communications Merger	In December 2016, Consolidated Communications Holdings, Inc., headquartered in Illinois, announced it had entered into an agreement to acquire FairPoint Communications, Inc. and filed a proposed merger plan with the Commission. Upon an extensive review of the filings in this case, the Commission approved a stipulation of the parties and approved the merger on June 5, 2017 subject to certain provisions being met. To date, Consolidated Communications has met all compliance requirements ordered by the Commission.						

# EXECUTIVE SUMMARY CONTINUED

Topic	Description
Non- Transmission Alternative Coordinator	This case was opened to (1) define the role of a Non-Transmission Alternative (NTA) Coordinator, (2) develop related processes to procure the NTA services, and (3) determine whether the designation of an NTA Coordinator is in the public interest. The Commission ordered that, because the processes required to accommodate the NTA Coordinator framework would be cumbersome, lengthy and expensive, and, because any NTA Coordinator duties would be duplicative of those that the utilities are at least as, if not more, qualified to perform, it is not in the public interest to designate a NTA Coordinator.
LNG Case	The Commission conducted a review of LNG proposals as a result of Public Law 2015, c. 445, "An Act To Allow the Public Utilities Commission to Contract for Liquefied Natural Gas Storage and Distribution". Seven bidders submitted proposals. The Commission concluded that, none of the proposals satisfied the requirements of the LNG Storage Act that such contracts (1) be commercially reasonable; (2) be in the public interest; (3) will materially enhance LNG storage in the region; (4) will significantly affect peak pricing; and (5) are reasonably likely to be cost beneficial to utility ratepayers.
Emera Rate Case	In October 2017, Emera Maine filed a request to increase its distribution revenue requirement to approximately \$93.8 million resulting in a proposed increase in distribution rates of approximately 12%. The main drivers are capital investments; system reliability investments, such as tree trimming and investments related to customer experience and service levels. After analysis, testimony and hearings, the Commission is expected to decide this case in June 2018.
Telephone Provider of Last Resort (POLR) Legislation	Public Law 2015, Chapter 462 (the Act) passed in 2016 directed the Commission to conduct a major substantive rulemaking to implement certain provisions of the Act relating to the removal of the provider of last resort (POLR) service obligation in certain municipalities. In 2017 ten additional communities had the POLR service obligation removed. The Commission held meetings in each community, and subsequently approved the removal of the POLR service obligation requested by FairPoint.
CMP and Emera Maine Storm Inquiry	Given the extent of and duration of the outages which resulted from the October 2017 wind storm, on December 19, 2017 the Commission initiated a summary investigation to gather information on the transmission and distribution (T&D) utilities preparedness and response to the storm. In addition, the Commission will review what steps T&D utilities have taken, or should be taking in the future, to prepare their systems for the effects of future storms. Finally, as part of this investigation, the Commission will review how T&D utilities and Incumbent Local Exchange Carriers (ILECs) are coordinating their reliability and restoration efforts given the recent restructuring of regulation of telephone service in the State.

# 4. TELECOMMUNICATIONS

# **REGULATION OF THE TELEPHONE INDUSTRY IN MAINE**

As a result of changes in law enacted in 2012 by the Maine Legislature, the only retail telephone service the Commission regulates is Provider of Last Resort (POLR) service. POLR service is currently offered by Maine's incumbent local exchange carriers (ILECs), and provides consumers with the ability to receive basic telephone service at a flat rate within a basic calling area. POLR service also provides access to emergency services, operator services, long-distance service, and directory assistance, and it provides for a toll limitation option for low-income customers.<sup>1</sup> Figure 2 on the following page shows the service territories of the POLR service providers in Maine.

During its 2016 session, the 127th Maine Legislature enacted Public Law 2015 c. 462, "An Act to Increase Competition and Ensure a Robust Information and Telecommunications Market" (2016 Act). The 2016 Act provided for the removal of the obligation to provide POLR service in 22 specific municipalities, starting with Maine's seven largest municipalities in the summer of 2016: Portland, Lewiston, Bangor, South Portland, Auburn, Biddeford and Sanford.

The removal of the POLR service obligation continues for the next 15 largest municipalities in Maine, in groups of five municipalities, through early 2018. Removal of the obligation in these 15 municipalities is predicated on the POLR service provider meeting certain service quality standards. The POLR service provider in all 22 municipalities is Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE, known simply as FairPoint.<sup>2</sup> As of the date of this Report, the POLR service obligation has been eliminated in Portland, Lewiston, Bangor, South Portland, Auburn, Biddeford, Sanford, Scarborough, Gorham, Waterville, Kennebunk, Cape Elizabeth, Old Orchard Beach, Yarmouth, Bath, Westbrook, and Freeport. If FairPoint meets the service quality standards for the last two quarters of 2017, it may request that the Commission remove its POLR service obligation in Brewer, Kittery, Windham, Brunswick, and Augusta.

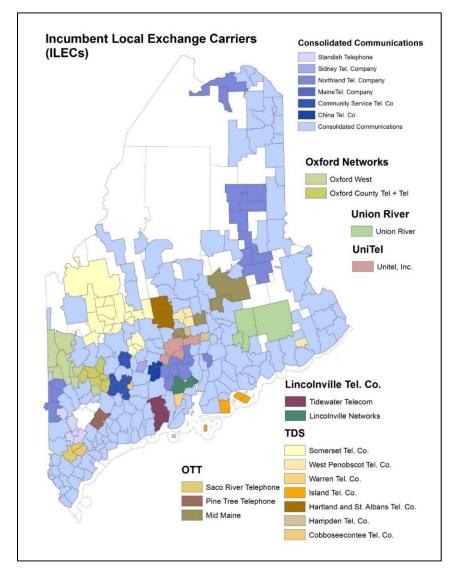
Once the Commission has removed FairPoint's POLR service obligation in the last five specified municipalities, FairPoint will have the opportunity to request that the obligation be removed in additional municipalities. Before the Commission will grant relief to FairPoint from its POLR service obligation in any municipality beyond the 22 specified in the Act, it must meet the applicable service quality standards, and demonstrate to the Commission that sufficient competition exists for both wireline and wireless service in the municipality for which relief is requested.

In the municipalities where the 2016 Act or the Commission have relieved FairPoint of its POLR service obligation, FairPoint is prohibited from discontinuing, reducing, or impairing

<sup>&</sup>lt;sup>1</sup> POLR service provides access to these services, but any charges, *e.g.* long-distance charges, are not included in the flat-rate.

<sup>&</sup>lt;sup>2</sup> FairPoint has since been acquired by Consolidated Communications, Inc. which has assumed all of FairPoint's obligations.

(collectively known as abandoning) any other telephone service unless it receives Commission approval. Chapter 220 of the Commission's Rules, sets forth the showing that FairPoint must make before it may abandon service in any municipality.



# Figure 2 – Incumbent Local Exchange Carriers

On January 15, 2018, the Commission submitted to the Joint Standing Committee on Energy, Utilities and Technology a "Report Regarding Commission Review of the Effect of Relief of the Provider of Last Resort Service Obligation Pursuant to the Provisions of Public Law 2015, Chapter 462" (POLR Legislative Report). The POLR Legislative Report contains additional information concerning the removal of the POLR obligation in the 22 municipalities specified in the 2016 Act.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Section 9 of the 2016 Act directs the Commission to include through 2022 in its annual report pursuant to § 120(7) certain POLR information.

In addition to jurisdiction over POLR service, the Commission retains jurisdiction over the enforcement of certain provisions of Federal telecommunications statutes related to the provision of wholesale telephone services and the interactions between competitive providers of telecommunications services. The Commission also retains the authority to certificate competitive local exchange carriers (CLECs) who wish to operate in Maine, but the Commission does not regulate any aspect of their actual provision of voice service, such as pricing, terms and conditions, and service quality. The Commission has no regulatory authority over the provision of wireless (*i.e.*, cellular) or VoIP voice services, nor does it regulate the provision of Internet service by any provider.

### INDUSTRY TRENDS

### An Evolving Business

		ILEC	Data			POLR	Data	
Telephone Company	2008 Access Lines	2016 Access Lines	Change 2015- 2016	Change 2008- 2016	2014 Access Lines	2016 Access Lines	Change 2015- 2016	Change 2014- 2016
China Telephone	2,700	893	-14%	-67%	241	152	-18%	-37%
Northland Telephone Co.	20,764	11,258	-8%	-46%	2,344	1,461	12%	-38%
Community Service Telephone Co.	9,280	4,230	-9%	-54%	1,133	711	-10%	-37%
Sidney Telephone Co.	1,254	446	-7%	-64%	162	116	263%	-28%
Maine Telephone Co.	8,163	3,083	-9%	-62%	932	610	-9%	-35%
Standish Telephone Co.	5,753	2,097	-7%	-64%	542	371	57%	-32%
FairPoint NNE	411,345	178,952	-10%	-56%	24,488	16,789	-20%	-31%
UniTel Co.	4,386	2,888	-12%	-34%	428	320	-11%	-25%
Union River	1,260	1,072	1%	-15%	1,048	1,070	1%	2%
Cobboseecontee Tel & Tel Co.	645	307	-12%	-52%	77	55	-18%	-29%
Hampden Telephone Co.	2,857	1,710	-7%	-40%	314	232	-15%	-26%
Hartland & St. Albans Telephone Co.	3,659	2,340	-4%	-36%	441	291	-16%	-34%
Island Telephone Co.	620	562	2%	-9%	209	193	-3%	-8%
Somerset Telephone Co.	10,509	7,358	-3%	-30%	1,586	1,242	-10%	-22%
Warren Telephone Co.	1,528	805	-7%	-47%	184	131	-21%	-29%
West Penobscot Telephone Co.	2,207	1,665	-1%	-25%	282	205	-17%	-27%
Lincolnville Networks	1,794	1,505	-2%	-16%	154	175	21%	14%
Tidewater Telecom	10,261	6,873	-5%	-33%	1,070	826	-10%	-23%
Mid-Maine Communications	5,228	2,384	-10%	-54%	1,343	958	-18%	-29%
Pine Tree Tel & Tel Co.	5,373	2,179	-10%	-59%	1,802	1,390	-12%	-23%
Saco River Tel. & Tel Co.	7,079	2,940	-9%	-58%	1,723	1,364	-10%	-21%
Oxford West Telephone Co.	6,373	3,629	-9%	-43%	4,348	3,552	-8%	-18%
Oxford Telephone Co.	5,595	2,985	-7%	-47%	3,666	2,956	-8%	-19%
Total Retail Lines	528,633	242,161	-9%	-54%	48,517	35,170	-14%	-28%

### Table 1 – ILEC and POLR Access Line Summary

The telecommunications industry in Maine is being impacted by increasing competition and other factors, as is evident in the reduction of ILEC access lines and POLR service subscribers. Not only has there been a noticeable reduction of POLR service subscribers in recent years, but only about 15% of ILEC customers opt for POLR service. Table 1, above depicts historical data for both ILEC access lines and POLR service customers. All

consumers can obtain long distance service from a carrier other than their local exchange carrier. Telephone service employing VoIP technology – particularly the offerings of cable television providers – competes aggressively with traditional ILEC service in those areas where cable broadband is available. CLECs serve a large portion of Maine's customers. An increasing number of customers are substituting mobile wireless service for traditional wireline service. The mobile cellular market now has more than 1.2 million cell phone subscribers, compared to approximately 242,000 retail wireline access customers served by ILECs. However, wireless service is not ubiquitous and may be unreliable or inconsistent in certain areas. The Commission has no authority to require wireless carriers to build out or improve their service, but does review and certify wireless buildout data from U.S. Cellular, which receives Federal Universal Service Fund (USF) support.

# Broadband

While the Commission supports the goal of extending broadband access to as many residents as possible, the Commission has no authority over the provision of broadband service in the State. When FairPoint took over Verizon's service territory in 2008, FairPoint agreed to meet specific broadband build-out goals, which were expressed in terms of minimum speed requirements to a set percentage of customers in their territory that was acquired from Verizon. FairPoint has met those goals. In 2014, the Federal Communications Commission (FCC) expanded its efforts to modernize the federal USF by redirecting resources previously used to support voice service to support of broadband expansion in unserved or underserved areas. In 2015, FairPoint accepted approximately \$13.3 million in annual federal support, for a total support amount of almost \$80 million over six years. In order to receive the federal funding, FairPoint committed to providing broadband service at minimum speeds of 10 Mbps download and 1 Mbps upload to approximately 35,500 previously unserved or underserved locations in Maine, by the end of 2020. By the end of 2017, FairPoint was required to have built out to 40% of the total required locations, and the Company has indicated to the Commission that it met that commitment.

### Preservation of Area Code 207

While the FCC maintains nationwide authority over numbering policies and rules, the Commission has delegated authority to enforce certain aspects of those rules as they apply within the State. The Commission employs its delegated authority to enforce measures designed to use numbering resources in Maine as efficiently as possible. The increased use of wireless devices, direct assignment of numbers to VoIP providers, and increasing machine-to-machine communications have contributed to increased demand on Maine's numbering resources, but, with cooperation from the State's telecommunications providers, the latest forecast from the FCC includes an exhaust date for the 207 area code of Quarter 4 of 2031. The Commission will continue its efforts to encourage efficient numbering usage by telecommunications providers in the State.

### KEY EVENTS

### FairPoint SQI Investigation

During 2017, the Commission conducted a proceeding to examine the Company's failure to meet one or more service quality index (SQI) benchmarks during the period from July 2014 through June 2016. The investigation resulted in a Commission-approved stipulation between FairPoint and the Office of Public Advocate (OPA) that required FairPoint to undertake specific infrastructure replacement projects that FairPoint did not otherwise have plans to undertake. The projects have an estimated total cost of about \$185,000, and FairPoint committed to use its best efforts to complete the projects by the end of 2018. If the projects are not completed by the end of 2019, FairPoint must spend an additional \$15,000 on other similar projects. The projects should improve FairPoint's service quality by addressing identified needs in areas that have shown high levels of trouble reports. The Commission had the authority to impose a substantial fine upon FairPoint for its service quality issues, but concluded that having FairPoint fix identified infrastructure issues in its network was a better solution for FairPoint's customers.

### Merger of FairPoint with Consolidated Communications

In late 2016, FairPoint and Consolidated Communications, Inc. (Consolidated) requested Commission approval of a transaction whereby Consolidated would acquire FairPoint's parent Company, FairPoint Communications, Inc. (FCI).<sup>4</sup> Consolidated and FCI requested approval of the reorganization pursuant to 35-A M.R.S. §§ 708, 901, 902 and 1101, including \$935 million in financing.

The Petition stated that the merger is consistent with the interests of FairPoint's POLR and wholesale customers because it would have no adverse effect on rates, would increase the surviving entity's financial stability, would result in a larger, more effective competitor, and would allow the Maine-based FairPoint affiliates to access CCI's telecommunications industry expertise, which should lead to improved products and services. In addition, the Petition asserted that the proposed refinancing of FCI's debt would result in lower interest rates, which would be beneficial to the company and its customers.

The Commission conducted a thorough examination of the proposed merger and received input from interested parties, including the OPA, CLECs, the Telephone Association of Maine (TAM), which represents the rural ILECs operating in Maine, and the labor unions representing FairPoint's workers. The petitioners and the intervenor parties submitted pre-filed testimony and, along with the Commission, conducted discovery on the filings. The Commission convened and facilitated a series of meetings to determine if a settlement could be reached among the parties that would alleviate the need for hearings on the Petition. On May 23, 2017, all parties except for the labor unions submitted a stipulation to the Commission.

The stipulation recommended that the Commission grant all approvals and authorizations necessary to consummate the proposed merger subject to certain conditions. One condition

<sup>&</sup>lt;sup>4</sup> The transaction involved all subsidiaries of FairPoint Communications, Inc., including Maine ILECs FairPoint, China Telephone Co., Community Service Telephone Co., Maine Telephone Co., Northland Telephone Co., Sidney Telephone Co., and Standish Telephone Co..

was that for the five-year term of the 911 contract, FairPoint would not seek to eliminate or involuntarily remove key FairPoint employees who are associated with the operation of the 911 system. The purpose of this provision was to ensure that current experienced FairPoint employees would continue to run the E911 system. Another condition was that, for 30 months from the date the merger is completed the, FairPoint and Maine's other ILECs would continue to honor an agreement regarding the terms and conditions that govern the exchange of traffic between FairPoint and the other ILECs, and other matters, including compensation, related to the joint use of the telephone network.

The stipulation also required that FairPoint continue to honor existing interconnection agreements that it has with the various CLECs, and that, if any such agreements have a termination date that is within thirty months of the merger closing date, FairPoint would continue to honor the terms of the ICA for at least that length of time. The stipulation also required that FairPoint not make any material changes to existing systems and processes used by the CLECs to order and provision FairPoint facilities and services for a period of at least thirty months. In addition, FairPoint agreed to not seek, for thirty months, any change in rates for wholesale services provided to CLECs, unless required by federal law. FairPoint also agreed not to seek any change in the service quality standards for wholesale services provided to CLECs.

In addition, FairPoint agreed to continue to provide the Commission with confidential information related to its federal broadband build-out obligations, including customer locations and Internet speed availability, as well as provide quarterly updates on its progress in meeting its federal broadband build-out obligations.

FairPoint also agreed to complete, within five and one-half years of the date of the merger, the in-progress conversion of its legacy broadband network to a more modern Ethernetbased network. This conversion will allow customers to obtain faster Internet service than they currently receive. FairPoint also agreed to invest at least \$17.4 million per year in its Maine telephone network during 2018 through 2020.

On June 5, 2017, the Commission issued an Order approving the stipulation. As the successor to FairPoint, the Commission found that Consolidated had assumed all FairPoint's existing regulatory obligations, commitments, and reporting requirements. This includes FairPoint's rights and obligations related to the provision of POLR service. There have been few, if any, noticeable changes in the provision of services since Consolidated assumed control of FairPoint.

# LEGISLATIVE ACTIVITIES

# Pole Attachment Rulemaking

The Commission first promulgated rules for attachments to utility poles in 1985, and last amended those rules in 1993. Over the intervening decades, the nature of the telecommunications industry has dramatically changed. The telecommunications marketplace has moved from a largely monopoly industry featuring legacy copper-based, landline telephone service, to highly competitive, increasingly mobile, wireless, and Internetbased industry. Given the changes in the industry and the advances in telecommunications technology, the Commission, in 2015, opened an Inquiry into amending and modernizing its pole attachment rules.<sup>5</sup> Over the course of the Inquiry, it became clear that the statutes governing pole attachments in Maine also needed to be adjusted to clarify the jurisdiction of the Commission with regard to utility pole attachments, as well as to recognize the changes in the telecommunications industry.

During its 2017 session, the Legislature enacted Public Law 2017, c. 199. The legislation amended state law to expand the entities that have rights regarding joint use of certain equipment such as utility poles under Maine law, clarified the Commission's authority in this area, and directed the Commission to amend its pole attachment rule, Chapter 880, by January 15, 2018 to address terms and conditions of joint use of utility poles. On July 28, 2017, the Commission commenced an Inquiry that included for discussion a draft rule and sought information from interested persons to aid the Commission in advance of the rulemaking proceeding.<sup>6</sup> The Commission received written comments and held two workshops with interested persons to discuss the draft rule and other issues related to pole attachments in Maine. On September 27, 2017, the Commission issued a Notice of Rulemaking and proposed rule.<sup>7</sup> On December 6, 2017, the Commission held a public hearing on the rulemaking and received testimony from a number of interested parties. The Commission received written comments on the Commission's proposed amendments to the Rule on December 18, 2017. Chapter 880 was deliberated by the Commission and approved on January 12, 2018.

### Provider of Last Resort (POLR) Major Substantive Rule

During the 2016 session, the Legislature enacted Public Law 2015, c. 462, "An Act To Increase Competition and Ensure a Robust Information and Telecommunications Market" (the Act). The Act directed the Commission to promulgate rules to implement the provisions of the Act that related to the removal of the POLR service obligation, and abandonment of service. On December 14, 2016, the Commission provisionally adopted Chapter 220 of its Rules. The Legislature considered the Commission's provisionally adopted rule during its 2017 session and enacted Resolves 2017, c. 4 which authorized the Commission to finally adopt the Rule. By Order dated May 31, 2017, the Commission finally adopted the Rule, which ultimately became effective on July 6, 2017.

# Maine Telecommunications Education Access Fund (MTEAF)

The Commission administers the MTEAF, which provides funding that allows Networkmaine (an entity within the University of Maine System) to operate the Maine School and Library Network (MSLN). The MSLN provides qualified schools and libraries in the State with highspeed Internet access, content databases and search capabilities, content filtering, and training. The MTEAF collects funds from voice network service providers operating in the State. The Commission uses an independent administrator, Solix, Inc., to handle all administrative aspects of the Fund.

The Commission approves the annual budget request submitted by Networkmaine on behalf of the Department of Education and the Maine State Library, and establishes the rate for contributions to the MTEAF. The budget filing describes the activities of the MSLN in

<sup>&</sup>lt;sup>5</sup> Docket No. 2015-00295

<sup>&</sup>lt;sup>6</sup> Docket No. 2017-00183

<sup>&</sup>lt;sup>7</sup> Docket No. 2017-00247

meeting the broadband needs of schools and libraries over the preceding year, and it proposes a spending level for the upcoming year, based on program needs. In 2017 the Commission approved a budget for the 2017/18 fiscal year of \$3.14 million, which is the smallest budget amount requested since 2008. The decline in the requested budget amount has been caused by a significant reduction in the amount of intrastate retail revenue reported by the service providers, which results in lower contributions into the MTEAF. The reduced reported revenues are due to a reduction in the number of traditional wireline voice customers as more subscribers switch to wireless or VoIP providers, who report a smaller percentage of their revenue as being intrastate under safe harbor guidelines established by the FCC.

The reduction in reported revenue and the resulting decrease in contributions to the MTEAF was one of the major factors behind the enactment of Public Law 2017, c. 244 "An Act to Ensure Continued Availability of High-Speed Broadband Internet at Maine's Schools and Libraries" (the 2017 Act). The 2017 Act changes the contribution basis for the MTEAF from a capped percentage of revenue to a per connection (per line or per number) amount that is capped at \$0.21 per month. This surcharge is levied on a maximum of 25 lines per customer billing account. The change in methodology is expected to stabilize, and even gradually increase, contributions to the MTEAF, allowing the Fund to operate on a sound financial footing and continue to provide for the broadband needs of the State's schools and libraries. The Commission is in the process of amending Chapter 285 Maine Telecommunications Education Access Fund to implement the revised statute. After the rule is amended, the Commission will commence a proceeding to determine the actual per connection amount for the MTEAF. The change in contribution methodology will be implemented as soon as reasonably practicable during 2018.

### An Act to Repeal or Clean Up Outdated Telecommunications Statutes

During the 2017 legislative session Public Law 2017, c. 73, "An Act to Repeal or Clean Up Outdated Telecommunications Statutes," (the Act) was approved by the Governor. The Act repealed several sections of Title 35-A that were outdated or have been effectively superseded by the enactment of other legislation, beginning with Public Law 2011, c. 623, which started the process of deregulating most telecommunications services in Maine. Specifically, the Act requires that the Commission ensure that access rates (the rates paid by long distance carriers to originate or terminate calls on local exchange carrier networks) comply with federal law. The Act also eliminated outdated Title 35-A provisions concerning local measured service, competitive bidding requirements for ILECs, regulation of inside wire, and notice requirements of rate changes for toll calls and prepaid calling services. Finally, the Act changed the requirement for POLR service providers that do not publish a hard copy telephone number directory by allowing the POLR service provider to provide directory listings in electronic or hard copy format on an on-demand basis to any POLR service customer who requests such listings.

### Public Interest Phones (PIPs)

Beginning in 2007, pursuant to 35-A M.R.S. § 7508 and Chapter 252 of the Commission's Rules, the Commission has overseen the installation of Public Interest Payphone (PIP) sites. throughout Maine. In 2017, the Commission did not receive any new requests for PIPs. The annual cost of the program, which currently includes 35 PIPs, is approximately \$36,000 and is funded by the Maine Universal Service Fund (MUSF).<sup>8</sup>

### **Communications Equipment Fund**

Title 35-A M.R.S § 7104(5) requires the Commission to annually transfer \$85,000 from the MUSF to the Communications Equipment Fund (CEF), which is established pursuant to 26 M.R.S. § 1419-A. The CEF is administered by the Bureau of Rehabilitation Services within the Department of Labor (the Bureau). The CEF is used by the Division of Deaf, Hard of Hearing and Late Deafened within the Bureau for the purchase, lease, distribution, upgrading, installation, maintenance and repair of specialized customer communications equipment for deaf, hard of hearing, late deafened or speech impaired persons and persons with disabilities, for training in the use of such equipment, and for administrative costs. In addition to the required amount, the Bureau may request that the Commission transfer an additional annual amount of \$100,000 to the CEF if the Bureau does not receive sufficient funds from federal or other sources to carry out the purposes of the CEF. The Bureau has requested and received from the MUSF this additional amount for the past seven years; hence the Commission has transferred a total of \$185,000 to the CEF in each of those years.

Section 7104(5) also allows the Bureau to request that up to \$57,500 be transferred annually from the MUSF to the CEF to support the emergency alert telecommunications service program, which is established pursuant to 26 M.R.S. § 1419-A(6). Prior to transferring the funds, the Commission must find that the funds are necessary to carry out the purpose of the program and that sufficient attempts have been made by the Bureau to maximize federal support for the program. The Bureau has not requested that any funds be transferred from the MUSF for this program during the past six years.

# **Telecommunications Relay Services**

Title 35-A M.R.S. § 7104(7) requires the Commission to establish funding support within the MUSF for telecommunications relay services (TRS) in Maine, including related outreach programs. TRS are used to allow deaf, hard-of-hearing and speech impaired persons to place and receive voice telephone calls with the assistance of a third-party intermediary. The funding level for the TRS is established by the Commission based upon the recommendation of the Telecommunications Relay Services Advisory Council, as established in 35-A M.R.S. § 8704. The statute further directs the Commission to require contributions to the MUSF to meet the established TRS funding support levels. In determining the reasonable funding levels for the TRS, the Commission may consider whether the recommended funding is for TRS that are (1) federally required; (2) services provided in other states with a similar deaf, hard-of-hearing and speech impaired population as Maine; and (3) services that are designed to maximize the effectiveness of TRS through the application of new technologies. The provision of TRS, including outreach programs, has been handled for many years through a contract between the TRS Advisory Council and Hamilton Telecommunications.

<sup>&</sup>lt;sup>8</sup> The Commission is required to report on this information pursuant to 35-A M.R.S. § 7508(4).

The monthly contract amount is \$40,000 per month. The TRS Advisory Council continues to monitor the use of TRS in Maine.

### Lifeline

The federal Lifeline program provides a monthly benefit which helps to lower or eliminate the cost of a monthly phone or Internet bill for those who qualify. Only one benefit is available per household, and it may be applied to either phone or Internet service. To participate in the program, consumers must have an income that is at or below 135% of the federal poverty guidelines, or they must participate in a qualifying state, federal or tribal assistance program. Consumers qualify for Lifeline if they, or one or more of their dependents, receive benefits from one of the following federal programs: Medicaid, Supplemental Nutrition Assistance Program, Supplemental Security Income, and Federal Public Housing Assistance. Eligible Lifeline subscribers receive a combined federal/state discount of up to \$12.75 per month, which is provided as a credit on their phone bills. All ILECs participate in the Lifeline program, and several wireless carriers offer the federal Lifeline discount to eligible subscribers.

### **Telephone Exemptions**

In accordance with statutory changes enacted by the 125<sup>th</sup> Maine Legislature, the Commission may grant exemptions from certain portions of Title 35-A to POLR service providers. The Commission received no requests for exemptions from POLR service providers in 2017.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Pursuant to 35-A M.R.S. § 120(5), the Commission is required to report on this information in its annual report.

# 5. ELECTRIC

### THE ELECTRIC INDUSTRY IN MAINE<sup>10</sup>

Electricity service to Maine consumers is comprised of two components: delivery and supply. Delivery includes transmission, distribution and customer-related items such as metering and billing, and supply includes the production and provision of electric energy and capacity. Delivery encompasses high-voltage transmission and lower-voltage distribution systems, including the construction, operation and maintenance of those facilities. Delivery is considered to be a monopoly service and is fully regulated. Supply is not considered to be a monopoly service, and is provided by various entities operating in regional and state wholesale and retail markets with less regulation and oversight. At the retail level, consumers in Maine receive delivery service from a regulated transmission and distribution (T&D) utility, and supply service from a licensed competitive electricity provider (CEP).

T&D rates are comprised of three components: transmission, distribution, and stranded costs. Transmission rates cover the cost of constructing and operating the transmission system in Maine, as well as costs allocated to Maine for regional pool transmission facilities (PTF), which are the high voltage transmission lines that serve as the backbone of the New England system and are paid for by all New England ratepayers. Distribution rates cover costs incurred by the T&D utility to construct and operate the local distribution system, as well as costs for customer-related activities such as metering and billing. Stranded cost rates cover the net, above-market costs for generation obligations that utilities incurred prior to industry restructuring, as well as net costs from more recent contracts authorized pursuant to specific statutory provisions, such as the long-term contracting statute (35-A M.R.S. § 3210-C), the Community-based Renewable Energy Pilot Program statute (35-A M.R.S. § 3601-3609), and unallocated language, Section A-6, of the Ocean Energy Act (PL 2009, Ch. 615).

Most of Maine is part of the regional bulk power and wholesale market systems that are operated and administered by the New England Independent System Operator (ISO-NE). The exception to this is northern Maine, which is not directly interconnected with the ISO-NE system. Northern Maine is interconnected to the New Brunswick Power system, and has its own system administrator, the Northern Maine Independent System Administrator (NMISA).

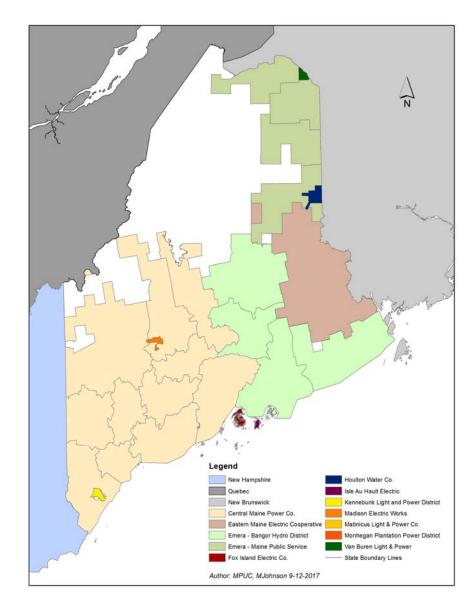
Electricity use by Maine consumers is currently about 12 million megawatt hours (MWh) per year, with a peak demand of about 2,000 MW. Maine is currently a net electricity exporter, with total generation capacity from in-state plants in the range of 3,200 MW.

The Commission regulates the operations and rates of the Maine T&D utilities, except for transmission rates, which are regulated by the Federal Energy Regulatory Commission (FERC). The Commission licenses retail electricity suppliers and marketers, and generally oversees the Maine retail market. The Commission also administers competitive

<sup>&</sup>lt;sup>10</sup> In addition to reporting on the electric industry, this section includes the Commission's Reports on Electric Restructuring required pursuant to 35-A M.R.S. § 3217, Electric Incentive Ratemaking required pursuant to 35-A M.R.S. § 3195(5) and Smart Grid Infrastructure pursuant to 35-A M.R.S. § 3143.

procurement processes for standard offer service, and administers other power supply procurement processes pursuant to specific statutory direction and authority. Finally, the Commission monitors regional wholesale markets and bulk power and transmission systems, including the ISO-NE and NMISA systems, and advocates for Maine consumers in regional forums and before FERC.

There are 12 T&D utilities in Maine: two investor-owned utilities (IOUs) and ten consumerowned utilities (COUs). The IOUs, Central Maine Power Company (CMP) and Emera Maine (EME), serve about 95% of the total state load. Figure 3 below shows the geographic areas each utility serves.



### Figure 3 – T&D Service Areas

Figure 4 below reflects the 2013 Commission approved merger of Bangor Hydro-Electric Company and Maine Public Service Company into a single utility - Emera Maine. The merger became effective January 1, 2014. Emera Maine currently maintains separate terms and conditions and rate schedules for what is now referred to as the Bangor Hydro district and the Maine Public Service district. In addition, on December 16, 2015 Iberdrola USA (CMP's parent company) and UIL Holdings Corporation (based in Connecticut) announced the closing of a merger between their companies. The merger creates a diversified energy and utility company with \$30 billion in assets and operations in 25 states. The company operates under the name AVANGRID, Inc.

There are approximately 230 Maine-licensed CEPs with whom customers have made arrangements for supply for about 55% of Maine's retail electricity usage. The remaining usage is supplied by the suppliers selected by the Commission to provide "default" service or "standard offer service".

### MARKET TRENDS AND CONSUMER PRICES

### Wholesale Energy Market

On an annual average basis, regional wholesale energy prices in the ISO-NE spot market during the 12-month period ending October 31, 2017 were \$31.02/MWh, which is about 12.6% higher than prices during the prior 12-month period. During the most recent winter period, December 2016 – February 2017, prices averaged \$41.20/MWh, which is about 36% higher than the prior winter period but 48% lower than the winter before that. Average wholesale energy prices in the ISO-NE spot market over the last several years are shown in Figures 4 and 5 below.

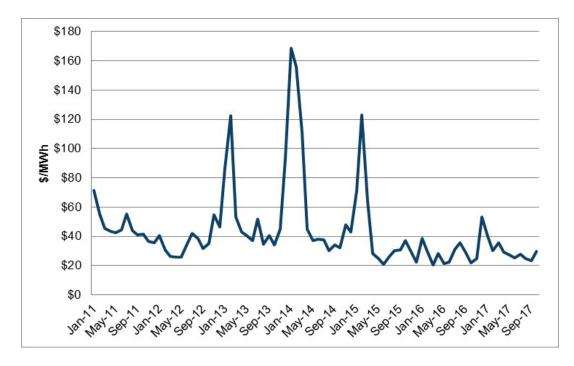


Figure 4 - ISO-NE Day-Ahead Locational Marginal Prices (LMP); Average Monthly

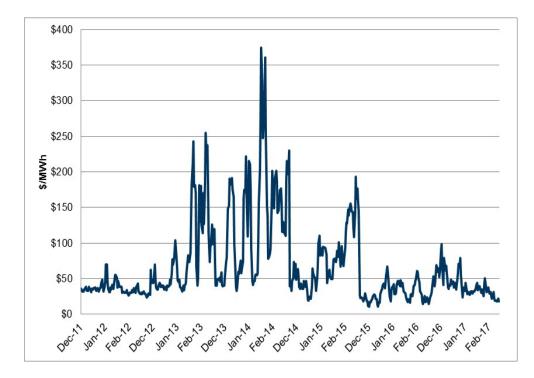


Figure 5 – ISO-NE Day-Ahead LMP; Daily Average Winter Months

# Wholesale Capacity Market

In addition to energy, electricity supply prices include a component for capacity. Capacity prices are set in ISO-NE three years in advance of when they will be in effect through the Forward Capacity Auction processes administered by ISO-NE. During 2017, the effective capacity prices on average for the year were \$5.40/kW-month. Capacity prices for calendar year 2018 are significantly higher, averaging \$8.50/kW-month. The capacity price increases, which were driven by the need for new generating plants to replace plants that are retiring, are a significant driver of the increases in retail supply prices for 2018 described below.

# **Retail Supply Prices**

Retail electricity supply prices for most customers in Maine were relatively stable in 2017 compared to the prior year. The standard offer solicitation process conducted by the Commission at the end of 2016 resulted in electricity supply prices for calendar year 2017 of 6.69 cents/kWh for CMP residential and small business consumers and 6.32 cents/kWh for Emera Maine – Bangor Hydro District residential and small business consumers. These prices are within 5% of prices during 2016.

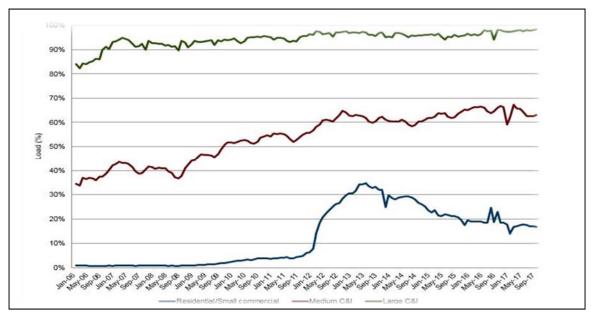
In September 2016, the Commission accepted bids for new standard offer prices for residential and small and medium business customers of Emera Maine, Maine Public District (MPD). The prices were effective November 1, 2016. The accepted bids were for fixed prices for seven months that are 16.5% and 17.0% lower than prior prices for residential/small commercial and medium commercial customers, respectively. The accepted bids also included indexed pricing after the initial seven months of the term through December 2019.

In November 2017, the Commission accepted bids and set new standard offer service prices for customers of CMP and Emera Maine, Bangor Hydro District (BHD). The new prices are effective for a 12-month term beginning January 1, 2018. For CMP residential and small business customers, the accepted bids resulted in a new standard offer price of 7.92 cents/kWh, which reflects an 18% increase compared to prices during 2017. For CMP medium business customers, the new prices equated to about 8.3 cents/kWh on average over the term, which reflects an increase of 21% compared to prices during 2017. The bid accepted for large business customers is indexed to the market, and prices will be set by the Commission in advance of each month based on then-current market prices. For Emera Maine residential and small business customers, the accepted bids resulted in a new standard offer price of 7.22 cents/kWh, which reflects a 14% increase compared to the prior year. For Emera Maine medium business customers, the new prices equated to about 8.1 cents/kWh on average over the term, which reflects an increase of 21% compared bids resulted in a new standard offer price of 7.22 cents/kWh, which reflects a 14% increase compared to the prior year. For Emera Maine medium business customers, the new prices equated to about 8.1 cents/kWh on average over the term, which reflects an increase of 21% compared to prior prices. Prices for Emera Maine's large business customers have been and will continue to be set in the same manner as described above for CMP.

Prices available from CEPs were varied. For residential and small business customers, CEP prices were generally higher than standard offer prices.

### Retail Supply Market Activity

Since March 2000, consumers in Maine have had the right to select their electricity supply products and suppliers. For many years, there was a robust market throughout most of Maine for medium and large commercial and industrial (C&I) customers, but virtually none for residential and small commercial customers. However, beginning in 2012, retail competition increased substantially for residential and small commercial customers, and there are now several CEPs serving this sector.



# Figure 6 – Load Served by Competitive Electric Providers, Statewide Average by Class; January 2006 – September 2017

During 2017, the amount of residential and small commercial supply served by CEPs continued to decline, as was the case during 2016, due to the availability of lower supply prices for standard offer service. As of late 2017, less than 20% of residential/small commercial supply was served by CEPs, down from a high of 35% in early 2013. Figure 6 above shows the migration patterns of customers, by sector, over the past several years.

Specialized supply products for residential and small commercial customers continued to be available during 2017, including a green power program that allows customers to purchase renewable energy credits (RECs).

As has been the case in prior years, during 2017 competition remained weak in northern Maine due to its electrical isolation from a functional wholesale market, such as the market in the ISO-NE region. This isolation has hindered the retail market from developing in this part of the state since retail access began in 2000.

# **Utility Delivery Service Rates**

Delivery service rates include distribution, transmission and stranded cost components. Distribution rates include the capital and operating costs of the electric distribution systems, as well as customer-related costs such as metering and billing. During 2017, the distribution rates of each of Maine's investor-owned utilities increased. CMP's (5%) and Emera Maine-MPD (7%) had the largest increase in distribution rates, while Emera Maine-BHD rates rose approximately 3%.

Stranded cost rates include the net costs associated with pre-restructuring power purchase agreements. Net costs that result from more recently approved power purchase contracts authorized pursuant to the long-term contracting statute, the Community-based Renewable Energy Pilot Program statutes and the Ocean Energy Act are not technically stranded costs, but are addressed in the stranded cost rate processes and reflected in stranded cost rates. In addition, expenses associated with prior nuclear power arrangements are included in the stranded costs. Accordingly, the Department of Energy (DOE) damage awards related to Maine Yankee, Connecticut Yankee and Yankee Atomic companies are included in stranded cost rates.

As noted in the Regional Matters section below, Phase 3 of the DOE litigation was decided late in 2016. In addition, Maine Yankee terminated its Spent Fuel Decommissioning Trust Fund and distributed the over-funded amount to its owner T&D utilities. In stranded cost cases for both CMP and Emera Maine, the Commission determined the flow back to ratepayers of the Phase 3 award and the excess from the Spent Fuel trust. The flow back of the Yankee-related awards to ratepayers through stranded cost rates resulted in negative stranded cost rates for both CMP and Emera Maine. For CMP, the residential stranded cost rate effective July 1, 2017 was slightly less than a negative one-half cent per kWh. For Emera Maine-MPD, stranded cost rates remained negative during the 2016-2017 period at a negative one-fifth of a cent per kWh. Stranded cost rates for the Emera Maine-Bangor Hydro District effective July 1, 2017 were 1.5 cents per kWh. The stranded costs rates for Emera Maine-BHD are expected to decline significantly with the expiration of the long-term power purchase agreement with Penobscot Energy Recovery Company (PERC) in February 2018. Transmission rates include the costs of local transmission facilities, as well as Maine's share of regional Pool Transmission Facilities (PTF). Transmission rates for CMP increased by

approximately 22% overall in 2017. Transmission rates decreased in each of Emera Maine's districts. BHD decreased by about 10% and Emera Maine's MPD rate declined by approximately 27%. The significant drivers of CMP's increase are increased plant in service, true-up from forecast to actual and a correction related to RNS impact on the local system. Emera Maine's BHD decrease is primarily a result of an increase in ISO-NE credits. Emera Maine's MPD rate decreased as a result of FERC ordered refunds. As noted in prior Annual Reports, transmission rates for CMP and Emera Maine's BHD have increased significantly over the last ten years. These increases are due largely to major transmission system upgrades throughout New England, including by CMP and Emera Maine. Under the ISO-NE tariff, costs of PTF projects in New England are shared among all New England states in proportion to load, so that Maine customers pay 8%-9% of the cost of regional PTF projects regardless of where they are physically located. CMP's and Emera Maine's BHD customers' transmission rate is approximately 3¢/kWh. In contrast, the transmission rate for an Emera Maine's MPD residential customers is about 0.9 ¢/kWh reflecting, in part, the fact that Emera Maine's MPD is not part of the ISO-NE system. Current retail rates for Maine residential consumers are summarized in Table 2 below.

RESIDENTIAL ELECTRICITY RATES IN MAINE As of December 31, 2017*											
	% of State Residential Load	l kWh		Delivery Ra	Standard Offer	Total					
			T&D ¢/kWh	Stranded Cost ¢/kWh	Total Delivery ¢/kWh	Rate ∉/kWh	Rate ¢/kWh				
NVESTOR-OWNED UTILITIES											
Central Maine Power*	79.0%	3,629,255,128	8.6	0.0	8.6	6.7	15.3 ¢/kWI				
Emera Maine - BHD*	13.4%	617,294,891	9.4	1.5	10.9	6.6	17.5 ¢/kW				
Emera Maine - MPD*	4.0%	185,389,548	6.8	-0.2	6.6	7.1	13.7 ¢/kW				
COOPERATIVES & MUNICIPAL-OWNED	UTILITIES										
Eastern Maine Electric Cooperative	1.2%	54,292,245	9.3	N/A	9.3	7.7	17.0 ¢/kW				
Houlton	0.6%	29,630,493	4.0	N/A	4.0	7.3	11.3 ¢/kW				
Van Buren	0.2%	7,489,856	4.5	N/A	4.5	7.4	11.9 ¢/kW				
Kennebunk Light & Power	1.0%	47,389,305	5.0	N/A	5.0	8.0	13.0 ¢/kW				
Madison Electric Works	0.4%	17,650,045	7.5	N/A	7.5	7.7	15.2 ¢/kW				
Matinicus	0.0%	216,374	E	empt from Stand	ard Offer requir	ements	48.6 ¢/kW				
Monhegan	0.0%	322,053	Exempt from Standard Offer requireme				75.2 ¢/kW				
FoxIsland	0.1%	6,522,854	20.6	N/A	20.6	9.5	30.1 ¢/kW				
Isle au Haut	0.0%	160,827	32.0	N/A	32.0	6.6	38.6 ¢/kW				
Swans Island**											
STATE AVERAGE	100.0%	4,595,613,619	8.6	0.2	8.8	6.7	15.5 ¢/kW				

### Table 2 – Residential Electricity Rates

\* Central Maine Power, Emera Maine - Bangor Hydro District and Emera Maine - Maine Public District information based on residential rates as of 7/1/18 and standard offer rates averaged over 2017. Consumer-owned utilities' information based on 2016 annual reports (filed in 2017) and supply rates in effect 12/31/17.

\*\* Swans Island Electric Coop was purchased by Emera Maine. Emera residential customers located on Swans Island and Frechboro currently pay the Emera BHD rate plus a surchase as established in Docket 2016-00209.

# MAJOR CASES, ISSUES AND PROCEEDINGS

### Emera Maine Rate Case

On October 2, 2017, pursuant to the provisions of 35-A M.R.S. § 307, Emera Maine filed a petition for an increase its distribution rates. Emera Maine requested a \$10.1 million, or 12%, increase in its overall distribution revenues. The proposed increase is based on a return on equity of 9.5%. Emera Maine proposes that the increase be recovered through an equal percentage increase across customer classes and rate components. The proceeding is scheduled to conclude in June 2018.

### **Central Maine Power Transmission Line Proceeding**

On September 27, 2017, Central Maine Power Company filed a Petition for Certificate of Public Convenience and Necessity (CPCN) for the New England Clean Energy Connect. (NECEC). The NECEC would involve the construction of a 145 mile 1,200 MW HVDC transmission line from the Québec-Maine border to Lewiston and related facilities and network upgrades, including includes two new converter stations and certain upgrades to the existing transmission system. (Docket No. 2017-00232). The Petition was filed pursuant to 35-A M.R.S. § 3132 and Chapter 330 of the Commission's rules and is part of a joint bid submitted by CMP in response to the Massachusetts Request for Proposals for Long-Term Contracts for Clean Energy Projects. The proceeding is schedule to conclude in September 2018.

### **RGGI** Disbursements

During its 2016 session, the Legislature enacted An Act To Reduce Electric Rates for Maine's Businesses. The 2016 Act directed the Efficiency Maine Trust to transfer to the Commission \$3,000,000 per year from the Maine's Regional Greenhouse Gas Initiative (RGGI) Trust Fund per year for fiscal years (FY) 2016-17, 2017-18, and 2018-19. The funds would be used for disbursements to "affected" manufacturing customers in proportion to their retail purchase of electricity. The 2016 Act defined "affected customers" as customers that: (1) are not primarily in the business of selling electricity; (2) receive service at transmission or sub-transmission voltage within a utility transmission system administered by an independent system operator of the New England bulk power system; and (3) are energy intensive manufacturers.

In its 2017 session, the Legislature enacted Public Law 2017, c. 282 "An Act To Establish Energy Policy in Maine" (2017 Act), which amended the 2016 Act in several ways, including that the total amount to be disbursed from the RGGI Trust Fund, to the extent those funds are available, must be \$2,500,000 in FY 2017-18, \$2,500,000 in FY 2018-19 and \$1,000,000 in FY 2019-20. The 2017 Act also provided affected customers an opportunity to elect by October 1, 2017 not to receive a disbursement for the full period of fiscal years 2017-18 through 2019-20.

On July 14, 2017, the Commission issued a Request for Applications for 2017 disbursements. The applications were due by August 21, 2017. On September 27, 2017, the Commission issued an Order that identified the customers that would be eligible for disbursements during the 2017-18 fiscal year, and the amount each customer would receive, and directed the Efficiency Maine Trust to transfer \$1,127,854.95 from the RGGI Trust Fund to the Commission as the first quarterly payment for fiscal year 2017-2018, to be disbursed

by the Commission to affected customers in accordance with the 2017 Act. This first quarterly disbursement was made in November 2017.

### **Biomass Contract Solicitation**

During its 2016 session, the Maine Legislature enacted Public Law 2015, c. 483, "An Act To Establish a Process for the Procurement of Biomass Resources" (Act), that directed the Commission to initiate a competitive solicitation for the procurement of energy from up to 80 MW of biomass resources for contracts through one or more two-year contracts with transmission and distribution utilities contingent upon available funds. The Act established a Cost Recovery Fund to pay the above-market costs of up to \$13.4 million.

On June 17, 2016, the Commission issued a Request for Proposals for the Sale of Energy from Biomass Resources and, by Orders issued on December 19, 2016 and January 25, 2017, the Commission approved two contracts, one between ReEnergy Ashland LLC and ReEnergy Fort Fairfield LLC (collectively, ReEnergy) and Emera and the second between Stored Solar LLC (Stored Solar) and CMP. Each of the contracts includes requirements that the Biomass Resource provides a defined level of in-state economic benefits, as well as provisions by which contract payments would be reduced if the in-state benefits are not provided. Through Orders issued on May 5, 2017 and August 16, 2017, the Commission approved certain amendments requested by Stored Solar to its contract that specify that it would receive no above-market payments until the Commission determines and verifies the extent to which Stored Solar's required in-state benefits have been provided. The Commission expects this review to occur in early 2018. For the ReEnergy contract, the Commission expects the review of its in-state benefits to occur in the spring or early summer of 2018.

The above market costs for the two contracts through November 30, 2017 total \$6,221,507 leaving a remaining balance of \$7,178,493 in the Cost Recovery Fund as of this date. These amounts reflect actual cash payments as well as accrued amounts that would be paid to Stored Solar after the end of the contract year assuming all in-state benefits are delivered.

### Non-Transmission Alternative Coordinator

On April 4, 2016, the Commission issued a Notice of Investigation, opening an adjudicatory proceeding to examine the possible designation of a Non-Transmission Alternative (NTA) Coordinator (Docket No. 2016-00049). The purpose of the investigation was to: (1) develop a framework for selecting an NTA Coordinator; (2) determine the duties of the NTA Coordinator; (3) determine whether a third party or the utilities should perform NTA Coordinator duties; and (4) address the concept of an advisory committee playing a role in NTA development.

As part of legislation enacted during the 2017 session, Public Law 2017, c. 201, the Commission was directed to issue an Order in the NTA Coordinator proceeding by December 15, 2017 and report the outcome of that proceeding to the Committee by January 1, 2018.

On December 15, 2017, the Commission issued its Order. The Commission found that the policy goals related to NTAs set forth in the Smart Grid Policy Act are more likely to be realized in an efficient and effective manner by removing the incentives in existing rate-setting paradigms that cause T&D utilities to favor wires solutions over non-wires ones; thus, allowing the utilities to consider all of the options on a comparable basis and pursue the solution that meets reliability needs in a manner that is least cost to ratepayers. The Commission directed CMP and Emera Maine to file, within six months, rate proposals that would address the incentive issues.

As required, the Commission reported the outcome of this proceeding to the Joint Standing Committee on Energy, Utilities and Technololgy on December 20, 2017.

### Boothbay Non-Transmission Alternative Pilot

On April 30, 2012, the Commission approved a Non-Transmission Alternative (NTA) Pilot Project to be coordinated by GridSolar, LLC for the Boothbay region of the Mid-Coast area. Under the terms of the Pilot Project, GridSolar would procure NTA resources to address reliability concerns in the Boothbay region that would otherwise require transmission upgrades. During 2014, GridSolar finalized the procurement of a set of NTA resources, including energy efficiency, solar photovoltaic, a diesel back-up generator, battery storage and peak-load shifting, and also conducted several tests of the NTA resources to determine their viability in meeting the area's reliability needs.

On March 28, 2017, GridSolar filed a draft final report on the Boothbay NTA Pilot Program. On September 7, 2017, CMP filed its response to the GridSolar draft. On November 17, 2017, the Hearing Examiners issued a recommended decision for comment by the parties in the case and the docket was deliberated on December 12, 2017. An Order was issued by the Commission on January 16, 2018.

### Emera Maine Acquisition of Swans Island Electric Cooperative

On September 1, 2016, Emera Maine and Swan's Island Electric Cooperative (SIEC) filed a joint petition pursuant to 35-A M.R.S. §§ 1101, 1104, and 2102 requesting approval of a proposed transaction under which Emera Maine would acquire the assets, service territory, and service obligations of SIEC.

On March 13, 2017, the Commission issued an Order in Docket No, 2016-00209 approving a stipulation entered into by Emera Maine and Swan's Island Electric Cooperative (SIEC). By approving the stipulation, the Commission authorized SIEC to sell substantially all of its assets to Emera Maine pursuant to 35-A M.R.S. §§ 1101 and 1104 and authorized Emera Maine to expand its service territory to include Swan's Island and Frenchboro. Service to the inhabitants of those islands will be provided at the same rate schedules and terms and conditions that apply to Emera Maine's Bangor Hydro District, except that SIEC customers will pay a monthly meter surcharge to generate revenue approximately equal to the acquisition costs associated with the transaction.

### Net Energy Billing Rulemaking

On March 1, 2017, the Commission issued an order adopting amendments to Chapter 313.<sup>11</sup> The amended rule reduces over time the amount of a generation facility's output that can offset, or be netted against, the transmission and distribution utility portion of a customer's bill, while leaving unchanged netting for the supply portion of the customer bill. Under the amended rule, the phasing out of offsetting T&D costs will apply to facility installations on or after January 1, 2018, and existing NEB customers will be grandfathered for a 15-year period.

The Commission's adoption of amendments to Chapter 313 has been appealed to Maine's Law Court. See Section 14 for more details on the appeal.

On December 11, 2017, in response to a request by Insource Renewables, LLC, the Commission granted a temporary waiver of the January 1, 2018 deadline to allow certain technical and implementation issues to be resolved by the utilities and the solar installers.

### Albion Road/Maguire Road Substations

On February 2, 2016, the Commission opened an investigation into noise complaints from abutters to Central Maine Power Company's (CMP) Albion Road Substation in Benton, Maine and its Maguire Road Substation in Kennebunk, Maine.<sup>12</sup> These substations were developed as part of CMP's Maine Power Reliability Project.<sup>13</sup> Options to mitigate the noise at both sites were explored throughout the proceeding.

On July 25, 2016, the Commission approved a Partial Stipulation which would result in the construction of a 23-foot sound barrier around the transformer at the Maguire Road Substation. Following the approval of the Partial Stipulation, CMP and the Albion Road Complainants entered into negotiations which ultimately resulted in the CMP's purchase of the Complainants' properties and the dismissal of such landowners' complaints. Subsequently, the Commission has received an additional complaint from other landowners in the vicinity of the Albion Road substation. The Commission currently is in the process of both conducting discovery and holding settlement discussions on these additional complaints.

# **Emera Maine Investigation of Acadia Substation Investment Costs**

On February 1, 2017, the Commission initiated an investigation of the \$7.4 million in costs Emera Maine expended on redesigning and relocating the Acadia Substation in response to local area concerns. The purpose of the investigation is to determine Emera Maine's prudence with respect to the substation project and whether all or part of the expenditure should be recovered through utility rates.

Emera Maine filed testimony in support of its proposed redesign and relocation on March 17, 2017. The Commission Staff filed a Bench Analysis and the Office of the Public Advocate

<sup>&</sup>lt;sup>11</sup> Public Utilities Commission, Amendments to Net Energy Billing Rule (Chapter 313), Docket No. 2016-00222, Order Adopting Rule and Statement of Factual and Policy Basis (Maine PUC March 1, 2017)

 <sup>&</sup>lt;sup>12</sup> Docket No. 2016-00005
 <sup>13</sup> Docket No. 2008-00255

has filed expert testimony in response to the Company's case. It is anticipated that the Commission will hold hearings in this matter in March, 2018.

# Affiliate Standards of Conduct Rulemaking

During its 2017 session, the Legislature enacted "An Act To Clarify the Authority of an Affiliate of a Utility To Own Power Generation outside of the Utility's Territory".<sup>14</sup> The Act specifies that an affiliate of an investor-owned transmission and distribution utility may own generation or generation-related assets in accordance with standards of conduct adopted by the Commission if the generation or generation-related assets are not directly interconnected to the facilities owned or operated by that T&D utility. The Act specifies that Commission-adopted standards of conduct rules are major substantive rules as defined in Title 5, chapter 375, subchapter 2-A.

On October 4, 2017, the Commission issued a Notice of Rulemaking and a proposed rule (Chapter 308) to implement the legislation. (Docket No. 2017-00262). A hearing was held on the proposed rule on December 4, 2017. On January 5, 2018, the Commission voted unanimously to provisionally adopt the proposed rule.

# **Competitive Electricity Provider Consumer Protections**

On October 16, 2017, the Commission initiated a proceeding to consider changes to its competitive electricity provider consumer protection rules (Chapter 305, Docket No. 2017-00268). The proceeding is in response to legislation, enacted during the 2017 session, that provides additional customer protections for consumers that elect to receive electricity supply service from competitive electricity providers (CEPs).<sup>15</sup>

In addition, the Commission proceeding includes an examination of door-to-door marketing practices of CEPs. This examination is a result of a substantial increase in consumer and utility complaints that include unreasonable repetitive sales visits to the same home, sales visits at unreasonable hours of the day, false or misleading information regarding electricity rates, and providing false or misleading information regarding the difference between who is delivering electricity and who is supplying the electricity.

The Commission plans to issue a Notice of Rulemaking and a proposed rule in January 2018.

# REGIONAL MATTERS

The Commission participates in electricity-related regional and national matters in four ways. First, the Commission participates directly in electricity market rule development at the regional stakeholder meetings of the Regional Transmission Operator (RTO), ISO New England Inc. (ISO-NE), and participates as a party in proceedings at the Federal Energy Regulatory Commission (FERC). Second, the Commission may join with other state commissions in participating in federal advocacy, either through the National Association of Regulatory Utility Commissioners (NARUC) or the New England Conference of Public Utility Commissioners (NECPUC). Third, the New England States Committee on Electricity (NESCOE), an organization established pursuant to an order of the FERC for the purpose of

<sup>15</sup> An Act To Improve Transparency in the Electricity Supply Market, Public Law 2017, c. 74

<sup>&</sup>lt;sup>14</sup> Public Law 2017, c.287 (codified at 35-A M.R.S. § 3204(11))

advice and advocacy in energy matters in New England and funded through the ISO-NE tariff provides support and advocacy for New England state commissions and state energy offices. Finally, individual commissioners participate in regional and national activities (such as the Regional Greenhouse Gas Initiative) and various committees of NARUC that may have an impact on utilities or utility customers in Maine. Chairman Vannoy sits on NARUC's Water Committee and Critical Infrastructure Committee. Summarized below are the major regional matters that the Commission was involved in during 2017.

### Forward Capacity Market (FCM)

The eleventh ISO-NE forward capacity auction (FCA 11) was conducted in February 2017. The region acquired 35,835 megawatts (MW), including 3,200 MW of demand resources, for the 2020–2021 capacity year. The clearing price was the lowest in four years and resulted in an estimated total cost of the New England capacity market for the FCA 11 period of approximately \$2.3 billion, a reduction of approximately \$721.3 million from the prior period.

### Photovoltaic Resources in the Load Forecast

For the second year, ISO-NE used a load forecast for FCA 11 that reflects Solar Photovoltaic (PV) resources in the region. The presence of capacity from PV in the forecast reduced the level of capacity required by the FCA by 720 MW. This was a significant load reduction from PV from the 390 MW reduction from the prior year.

### Winter Reliability Program 2016/2017

Like last year's program, this year's winter reliability program is aimed at addressing concerns about reliability during cold weather events when natural gas supplies may be constrained. Specifically, the program is designed to ensure there will be adequate fuel supplies by creating incentives for dual-fuel resource capability and participation, offsetting the carrying costs of unused firm fuel purchased by generators, and providing compensation for demand response services. This year's program funds the operating cost for remaining oil inventories after the end of the winter months rather than simply paying for the cost of maintaining a fuel inventory. This year's program is expected to cost approximately \$30.8 million down from \$33 million for 2016-2017, \$41 million for 2015-2016, \$45 million for 2014-2015 and approximately \$71 million in 2013-2014.

### Yankee - Department of Energy Litigation Awards

Pursuant to 35-A M.R.S. § 4392, Maine Yankee had been required to maintain a Spent Nuclear Fuel Disposal Trust Fund (SF Trust) to secure its obligation to the federal Department of Energy (DOE) for the disposal of spent nuclear fuel used prior to 1983. As previously reported, the SF Trust was over-funded by approximately \$56 million in late-2016. Maine Yankee transferred Phase 3 proceeds and the over-funded amount in the SF Trust assets to its owner utilities in late 2016. In stranded cost cases during the first half of 2017 for both CMP and Emera Maine, the Commission determined that the approximately \$30 million in payments would be returned to customers over a one-year period through a reduction in stranded cost rates. On May 26, 2017, the Trustee for the SF Trust filed a report that it had paid all anticipated expenses associated with the SF Trust and requested certification of the report so that the SF Trust may be dissolved. By Order dated July 13, 2017, the Commission certified the report, allowing Maine Yankee to dissolve the SF Trust and transfer the remaining assets to the owner utilities. Approximately \$4.7 million of the remaining trust assets will be paid to CMP and Emera Maine. The Commission will determine the further disposition of these funds to Maine ratepayers in the context of stranded cost rate proceedings.

On May 22, 2017, the Yankee Companies filed Phase 4 of the litigation with the DOE covering expenses for the 2013-2016 time period. The Yankee Companies expect that a trial date will be set for some time in 2018.

# Cybersecurity

Significant threats to utility operations continue to emerge. These utility operations are regulated at both the federal and state level. Commissioners have maintained a dialogue with the Federal Energy Regulatory Commission and the Department of Homeland Security concerning the threat and response. The Commission is working with federal regulators, the New England Conference of Public Utilities Commissioners (NECPUC) and the region's large utilities to improve the ability of local utilities to minimize their vulnerabilities and respond to emerging cyber threats.

### The Regional Greenhouse Gas Initiative Program Review

Since 2007, Maine has participated in the Regional Greenhouse Gas Initiative (RGGI), a cooperative effort among nine northeastern states to cap and reduce CO2 emissions from the power sector. Cumulatively through 2017, Maine has received almost \$92 million from the sale of carbon allowances through this market-based, cap and trade program. Proceeds are primarily used to fund energy efficiency and energy cost reduction programs through the Efficiency Maine Trust (EMT).

This year the RGGI states have completed a Program Review, which began in 2016 and has included multiple RGGI stakeholder meetings as well as additional public outreach from states. In August, the RGGI States announced program changes that are expected to take effect in 2021. Currently, the RGGI Program Committee is drafting model rules for the participating states to be able to include in their enabling rulemakings and/or legislation.

# ELECTRICITY SUPPLY RESOURCES

# Renewable Portfolio Standard (RPS)

Maine's Electricity Restructuring Act originally established a 30% resource portfolio standard (RPS), requiring electricity suppliers (including standard offer suppliers) to supply 30% of their Maine load from "eligible resources." The Act defined eligible resources to be generating units with capacity that does not exceed 100 MW and that produce electricity from tidal, fuel cells, solar, wind, geothermal, hydroelectric, biomass, or municipal solid waste in conjunction with recycling; that qualify as small power producers under federal regulations; or that are efficient cogeneration units. In 2007, the Legislature expanded the RPS to also require that an additional amount of electricity come from "new" renewable resources, which are generally renewable facilities that have an in-service date after September 1, 2005. New renewable resources include fuel cells, tidal power, solar arrays and installations, geothermal

installations, wind generators, hydroelectric generators that meet all state and federal fish passage requirements, and biomass generators including generators fueled by landfill gas. The "new" requirement (also referred to as "Class 1") began at one percent of load in 2008 and increases by one percent per year to ten percent in 2017, unless the Commission suspends the requirement pursuant to the Act.<sup>16</sup>

Any generation facility used toward a supplier's Class I RPS obligation must be certified by the Commission. During 2017, the Commission certified 19 generators as Class I compliant, bringing the total certified generators to 98, many of which are located in and also certified for the RPS of other New England states. A list of all certified Class I facilities can be obtained from the Commission's website: <u>http://www.maine.gov/mpuc/electricity/rps-class-I-list.shtml</u>

To comply with the Maine RPS, and to provide "green" supply products, suppliers use Renewable Energy Credits (RECs) which are traded and tracked through the regional Generation Information System (GIS) and a comparable system in northern Maine. RECs represent the attribute of the energy, such as the fuel used for production. Maine suppliers may purchase RECs from energy generated throughout the region. Figure 7 below shows the mix of RECs used for Maine customers in 2016, the most recent year data is available.

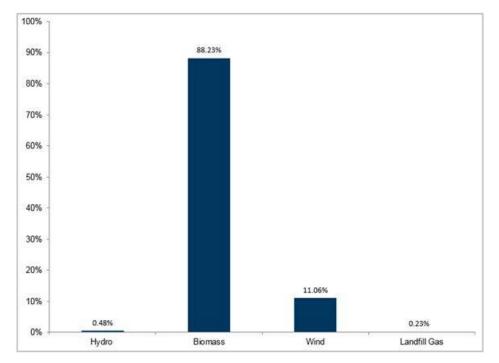


Figure 7 – Class I Renewable Portfolio

As reported in the Commission's March 31, 2017 Annual Report on New Renewable Resource Requirement, the cost of Maine Class I RECs used for compliance in 2016 ranged from approximately \$2.00 per MWh to \$42.50 per MWh, with an average cost of \$13.16 per

<sup>&</sup>lt;sup>16</sup> Pursuant to 35-A M.R.S. § 3210(3-A)(C), the Commission provides a comprehensive report on the RPS to the Legislature by March 31st of each year.

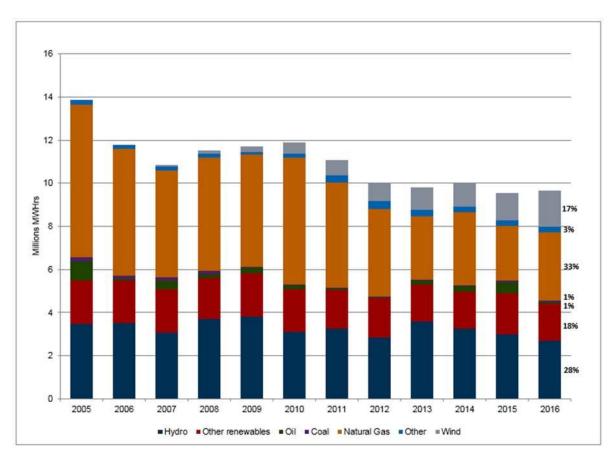
MWh and a total cost of approximately \$11,738,174. Maine Class II RECs ranged from \$0.00 per MWh (some RECs were provided for free as part of an energy transaction) to \$2.00 per MWh, with an average cost of \$0.28 per MWh and a total cost of \$965,818.

#### **In-State Generation Resources**

There is about 3,200 MW of generating capacity located in Maine. Much of the energy produced by these plants is in excess of Maine's demand and, thus, serves load in other states in the region. A complete list of generating plants in Maine is available through:

ISO-NE: <u>http://www.iso-ne.com/genrtion\_resrcs/snl\_clmd\_cap/index.html</u> NMISA: <u>http://www.nmisa.com/</u>

The fuel sources of electricity produced in Maine during 2016 (the most recent year for which EIA data is available) are shown in Figure 8 below. Approximately 63% of electricity produced in Maine in 2016 came from renewable resources.



## Figure 8 – Electricity Generation by Fuel

## SUMMARY OF ELECTRIC RESTRUCTURING ACTIVITY IN OTHER STATES

The Restructuring Act directs the Commission to report on activities in other states associated with changes in the regulation of electric utilities. Fully implemented restructured markets remain primarily concentrated in the northeast and mid-Atlantic states. Detailed information on a state-by-state basis is provided at the link below:

http://www.eia.gov/electricity/policies/restructuring/restructure\_elect.html

### **REQUIRED REPORTING**

#### Rate Adjustment Mechanisms

The Commission is authorized by statute<sup>17</sup> to adopt rate adjustment mechanisms, such as multi-year rate plans and the decoupling of utility profits from utility sales through revenue reconciliation. The statute requires the Commission to report on any significant developments with respect to action taken or proposed to be taken by the Commission in this area as part of its annual report.

Currently, CMP is operating under a rate adjustment mechanism through which its rates are adjusted annually through a revenue decoupling mechanism as well as a provision to reflect costs associated with significant weather events. These rate adjustment mechanisms were approved by the Commission on June 27, 2016. Emera Maine is not operating under a rate adjustment mechanism and its rates are set through the traditional ratemaking process. There were no significant developments during 2017.

<sup>&</sup>lt;sup>17</sup> 35-A M.R.S. § 3195

## 6. NATURAL GAS

## THE NATURAL GAS INDUSTRY IN MAINE

Natural gas service to Maine consumers is comprised of delivery and supply components. Local delivery service is provided by Maine local distribution companies (LDCs) at rates and terms that are regulated by the Commission. Interstate pipeline companies provide for the transportation of natural gas from supply producing regions, such as Canada and the Marcellus Shale, at rates and terms that are regulated by the FERC. Natural gas supply is provided, for some customers, by an LDC and, for others by non-utility suppliers or marketers.<sup>18</sup> Prices for supply from the LDCs are set by Commission-approved cost of gas charges, which reflect the actual costs incurred by an LDC for natural gas as well as for upstream transportation and storage arrangements. The supply prices of non-utility suppliers and marketers are not regulated.

The Commission also regulates sales, acquisitions or mergers among corporations owning LDCs doing business in the State. In addition, the Commission oversees the safety aspects of LDC operations and facilities, as well as of certain propane facilities (See Section 8). Finally, in areas of the natural gas industry where federal agencies have jurisdiction over issues that affect Maine consumers, the Commission actively monitors federal proceedings and participates as warranted.

There are four natural gas LDCs authorized to provide service in Maine. Northern Utilities, Inc. d/b/a Unitil (Northern) serves customers in the south-central Maine area, primarily in greater Portland/South Portland/Westbrook, greater Lewiston/Auburn, Biddeford/Saco and Kittery. Maine Natural Gas Corporation serves customers in the Windham, Gorham, Brunswick, Freeport, Bath and Topsham areas, and during 2013 expanded into Augusta. Bangor Gas Company, LLC serves customers in the greater Bangor area. Finally, Summit Natural Gas of Maine (SNG-Maine or Summit) serves customers in the Kennebec Valley area as well as in the municipalities of Yarmouth, Cumberland and Falmouth.

There are three interstate pipelines with facilities located in Maine: Maritimes & Northeast Pipeline, Portland Natural Gas Transmission System (PNGTS), and Granite State Gas Transmission, an affiliate of Northern. Figure 9 below provides a map of the LDC service areas and interstate pipelines located in Maine.

<sup>&</sup>lt;sup>18</sup> Business customers have the option of purchasing their gas supply from a non-LDC supplier or marketer.

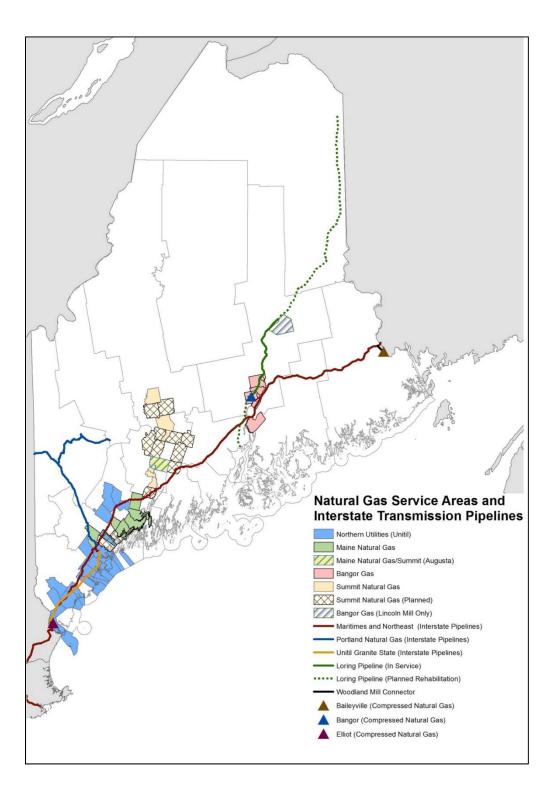


Table 3 below provides a summary of how many customers each LDC has served over the past five years. The chart is based on the average number of customers by month. For a limited time (2014, 2015), the Commission granted Summit's request to have its customer count kept confidential.

### Table 3 - Natural Gas LDCs Customers

Company	2012	2013	2014	2015	2016	2017
Bangor Natural Gas	2,929	3,922	5,430	5,838	6,150	6,372
Maine Natural Gas	2,937	3,313	4,200	4,432	4,543	4,732
Summit Natural Gas	0	0	N/A	N/A	2,998	3,361
Northern Utilities	26,128	27,096	30,830	31,544	31,908	32,212
Total	31,994	34,331	40,460	41,814	45,599	46,677

## MARKET TRENDS AND CONSUMER PRICES

### Wholesale Market

Wholesale natural gas commodity prices in much of the U.S. have been on the decline over the past several years due to substantial increases in domestic production, most notably, from the Marcellus Shale. Prices stabilized during 2016 and have continued at comparable levels throughout 2017. As compared to the average spot price in 2016 of \$2.42 per million British thermal units (MMBtu) at Henry Hub (a standard U.S. pricing index as reported by EIA), wholesale prices in 2017 averaged \$3.00/MMBtu. The low price in 2017 was \$2.85/MMBtu and the high was \$3.30/MMBtu. In recent years, New England wholesale gas prices have been volatile and have diverged significantly from the rest of the country, particularly during cold winter weather conditions. This divergence, referred to as "basis differential" or "basis", was due to constraints on pipeline capacity into and within the region. However, during the winters of 2015/2016 and 2016/2017, wholesale gas prices in New England have been relatively less volatile and basis has been relatively lower than in the prior three winter periods.

### Figure 10 – Wholesale Prices, Algonquin City Gate (Natural gas) vs. Henry Hub;

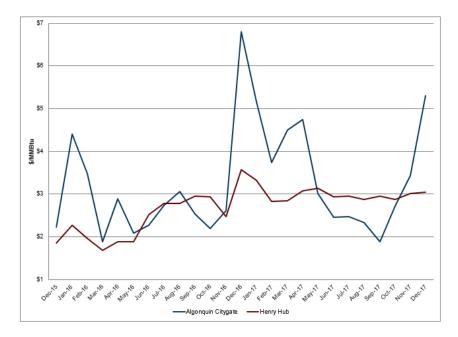


Figure 10 above provides historic wholesale prices at Henry Hub and prices at the Algonquin Citygate (a standard New England index).

#### **Retail Market**

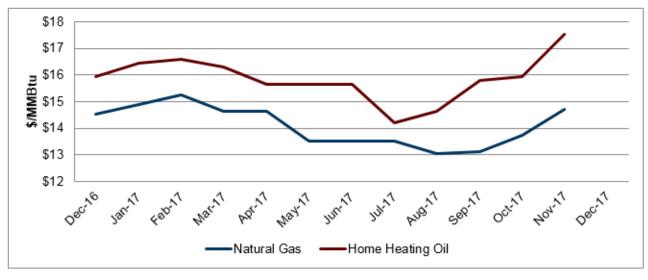
Table 4 below provides the current average retail residential natural gas rates for each of the four Maine LDCs, and a comparison to rates a year ago.

Local Distribution Company	Distribution Rate <sup>5</sup>	Cost of Gas Rate <sup>5</sup>	Total Rate	% Change from 2016	Notes	
Northern Utilities	\$0.61	\$0.76	\$1.36	2%	1	
Maine Natural Gas Company	\$0.75	\$0.71	\$1.46	145%	2	
Bangor Natural Gas Company	\$0.50	\$0.81	\$1.30	13%	3	
Summit Natural Gas	\$1.05	\$0.68	\$1.74	2%	4	
<ul> <li>NOTES:</li> <li>1. Northern Utilities has a seasonal cost of gas rate - above is based on winter season</li> <li>2. Maine Natural Gas has a monthly cost of gas rate - above is based upon December rates. The distribution rate reflects the rates for customers outside of the Greater Augusta area which are approximately 7% lower than those that will be paid by customers in the Greater Augusta area.</li> <li>3. Bangor Natural Gas Company has a monthly cost of gas rate - above is based on December rates</li> <li>4. Summit Natural Gas has an annual cost of gas rate</li> </ul>						
5. Rates shown are in \$/therm or \$/	ccf and reflect n	nonthly usage o	of 120 therms	or ccf.		

## Table 4 – Comparison of LDC Rates

In 2016, natural gas had regained a price advantage compared to home heating oil, reversing the relationship that resulted from the steep decline in oil prices in the prior few years. Through 2017, this relationship has continued. Figure 11 illustrates the retail prices for natural gas and home heating oil in Maine over the past few years.

Figure 11 – Prices in Maine, Home Heating Oil vs. Natural Gas Delivered to the Home



#### Pipeline Infrastructure Development

In recent years, the development of several pipeline expansion projects to increase capacity into and within the New England region continued to be developed or pursued.

The Tennessee Gas Pipeline (TGP) Connecticut Expansion Project will provide 72,000 MMcf/day of additional pipeline capacity to gas utilities in southern Connecticut, and is expected to be completed in late 2017. http://www.kindermorgan.com/business/gas\_pipelines/east/connecticut/

The Algonquin Incremental Market (AIM) Project, which went into service on January 7, 2017, provides an additional 342,000 MMcf/day of pipeline capacity for the region. <u>http://www.spectraenergy.com/Operations/US-Natural-Gas-Operations/New-Projects-US/Algonquin-Incremental-Market-AIM-Project/</u>

The Atlantic Bridge Project received FERC approval in February 2017 but is now awaiting river crossing permitting from Massachusetts' environmental agencies. If approved, Atlantic Bridge will provide an additional 132,700 MMcf/day of pipeline capacity into the region but due to permitting delay its expected in service date is unknown. This project will also allow gas to flow from south to north along the Maritimes and Northeast Pipeline (M&NE) into Maine.

http://www.spectraenergy.com/content/documents/SE/Operations/US\_NatGas\_Ops/Projects-US/AtlanticBridge/AtlanticBridgeFactSheet.pdf.

The Access Northeast (ANE) project, which offers delivery points at four proposed power plant aggregation areas in Connecticut, Rhode Island, Massachusetts, and New Hampshire/Maine, was proposed with a structure that would allow pipeline capacity to be made available to electric generators in the region. ANE has encountered opposition in Massachusetts and Connecticut that has created uncertainty about its future prospects. http://www.accessnortheastenergy.com/

The Continent to Coast (C2C) project is an expansion of capacity along the existing Portland Natural Gas Transmission System (PNGTS) and of its connection to the existing TransCanada Pipeline (TCPL). C2C offers several gas delivery route options. FERC authorized the C2C project on November 28, 2017 to begin service on December 1, 2017. https://www.transcanada.com/en/announcements/2013-04-01portland-natural-gas-transmission-system-announces-continent-to-coast-c2c-expansion-project/

## MAJOR CASES, ISSUES AND PROCEEDINGS

### Northern Utilities Proposed Increase in Rates

On May 31, 2017, Northern Utilities filed, pursuant to the provisions of 35-A M.R.S. § 307, a petition for an increase its rates (Docket No. 2017-00065). The petition requested an increase in annual distribution revenues of approximately \$6.0 million, or 12%. On August 18, 2017, Northern Utilities submitted testimony that sought an additional increase of \$667,000. The proceeding is schedule to conclude in early 2018.

## Liquefied Natural Gas Storage and Distribution Contracts

During its 2016 session, the Legislature enacted Public Law 2015, c. 445, "An Act To Allow the Public Utilities Commission to Contract for Liquefied Natural Gas Storage and Distribution" to provide authority to the Commission to contract for the storage and distribution of liquefied natural gas (LNG). On September 14, 2016, the Commission issued a Request for Proposals and proposals were submitted on November 4, 2016 (Docket No. 2016-00253).

On May 17, 2017, the Commission issued an Order concluding that none of the physical energy storage contract proposals presented satisfied the statutory requirements and, therefore, the Commission could not order the execution of a contract. The Commission stated that it could not find that the statutory perquisites regarding market rules and private participation were satisfied and that none of the proposed contracts satisfied the requirements that such contracts: (1) be commercially reasonable; (2) be in the public interest; (3) would materially enhance LNG storage in the region; (4) would significantly affect peak pricing; and (5) be reasonably likely to be cost beneficial to utility ratepayers. The Commission also found that several proposals might exceed the statutory spending cap.

## Maine Natural Gas Large Volume Customer Underbilling

On August 23, 2017, the Commission initiated an investigation into Maine Natural Gas Corporation's (MNG) significant underbilling of several large volume commercial service customers. (Docket No. 2017-00209). The investigation includes the following issues: a) what led to the underbilling; b) whether the billing error could have been reasonably detected by the customer or the utility; c) the effects of the underbilling on other customers through base rates or cost of gas rates; d) whether it is necessary and feasible to refund any amounts found to be overpaid by other customers through base or cost of gas rates; and e) whether MNG is entitled to recover any of the amount of previously unbilled revenue for service provided. MNG filed initial testimony on November 13, 2017. The investigation is expected to extend several more months.

## Northern's Request for Approval of Targeted Area Build-Out Program in Sanford

On February 28, 2017, Northern Utilities submitted a request for authorization to implement a Targeted Area Build-Out (TAB) Program surcharge in the City of Sanford (Docket No. 2017-00037). A TAB program is a mechanism for Northern Utilities to build-out its distribution network incrementally in targeted areas to serve new customers who are currently off the main line. Such customers are typically required to pay a contribution in aid of construction (CIAC) up front before Northern Utilities can extend the main line and install a new service for the customer. The CIAC can be a significant barrier to consumers choosing to convert to natural gas. The TAB program removes the CIAC barrier by replacing it with a monthly surcharge mechanism in specifically defined geographic areas. The Commission had previously approved a TAB program for the City of Saco.<sup>19</sup> On June 26, 2017, the Commission authorized Northern Utilities to proceed with the TAB program in the City of Sanford.

<sup>&</sup>lt;sup>19</sup> Northern Utilities Inc. D/B/A Unitil, Request for Approval of Rate Targeted Area Build-Out Program, Docket No. 2015-00146, Order Approving Stipulation (Dec. 22, 2015)

## 35-A M.R.S. § 4706 REQUIRED REPORTING

#### Alternative Rate-Making Mechanisms

The Commission is authorized by statute<sup>20</sup> to adopt alternative ratemaking mechanisms for gas utilities "to promote efficiency in operations, create appropriate financial incentives, promote rate stability and promote equitable cost recovery." In particular, the Commission may do the following: adopt multi-year ratemaking plans with mechanisms for future rate changes, reconcile costs and revenue, index revenues or rate changes, establish financial incentives, streamline regulation or deregulate services when not required to protect the public interest, approve rate flexibility programs and modify cost-of-gas adjustment requirements. The statute requires the Commission to report on any significant developments with respect to action taken or proposed to be taken by the Commission in this area as part of its annual report.

During 2016, the Commission approved alternative rate plans for the Augusta customers and Non-Augusta customers of Maine Natural Gas. Summit Natural Gas Company and Bangor Natural Gas Company continue to operate pursuant to previously established multi-year rate plans. There were no significant developments with respect to these rate plans during 2017.

#### Low-Income Assistance Programs

Section 4706-B requires the Commission to report on low-income assistance programs offered by LDCs. During 2017, Northern Utilities continued to provide a discount of 30% of total service charges to low-income residential customers. Maine Natural Gas provides qualifying, low income customers with a 28% discount on their delivery charges (excluding the cost of gas). In September 2017, Bangor Gas implemented a 28% discount on the monthly customer charge and delivery rate (excluding cost of gas) for residential heating customers who are participants in the Low-Income Home Energy Assistance Program ("LIHEAP") administered by the Maine State Housing Authority and who do not receive government housing subsidies. Finally, Summit Natural Gas continued to offer higher levels of conversion incentives to low-income residential customers.

<sup>&</sup>lt;sup>20</sup> 35-A M.R.S. § 4706

# 7. EFFICIENCY MAINE TRUST

Pursuant to the Efficiency Maine Trust Act (Act), the Commission oversees the efficiency programs administered by the Efficiency Maine Trust (Trust). The Commission's oversight role may include, for example, reviewing the calculation of program costs and benefits, reviewing the measurement and verification procedures, and reviewing program evaluations. The Commission is charged with the review and approval of the Trust's triennial plans.<sup>21</sup>

The Commission completed its review and approval of the Trust's current triennial plan, the Third Triennial Plan, in July 2016. The Third Triennial Plan governs the Trust's efficiency programs and budgets for fiscal years 2017, 2018, and 2019. The Maine Supreme Judicial Court upheld the Conservation Law Foundation's challenge of the Commission's approval of the Plan in June 2017 (see Section 14 for more details).

Following approval of the Third Triennial Plan, the Commission reviewed several issues not resolved by the Commission's approval of that Plan, including the scope of the Trust's natural gas conservation program, incentive levels for LED lightbulbs, program evaluation methods, modifications to the low-income program, forward capacity market funding of transmission and sub-transmission customers, and whether voltage optimization measures for electric transmission and distribution systems should be examined in a pilot project.

The Act requires the Trust to seek Commission approval of any significant change to an approved triennial plan. In March 2017, the Trust filed an annual update requesting, among other things, approval to use updated avoided cost data when screening measures to determine if measures are cost-effective and therefore eligible to be offered under the Trust's existing programs and budgets, as approved in the Third Triennial Plan. The Commission retained London Economics International, LLC to assist the Commission in its review of this request, which is currently pending before the Commission in Docket No. 2015-00175.

<sup>&</sup>lt;sup>21</sup> 35-A M.R.S. §§ 10101-10123

## 8. GAS SAFETY

### **GAS SAFETY REGULATION AND ENFORCEMENT IN MAINE**

The Commission regulates natural gas service reliability and ensures compliance with safety standards for 1,210 miles of natural gas distribution mains, 84 miles of intra-state transmission pipelines (including the five-mile private pipeline operated by Woodland Pulp, LLC), and 35,923 services. These facilities were in service throughout Maine as of December 31, 2016, as noted in the operators' annual reports to the U.S. Department of Transportation's Pipeline and Hazardous Material Safety Administration (PHMSA) filed March 15, 2017. In addition, the Commission enforces safety standards for approximately 700 propane gas distribution facilities that deliver propane service to multi-unit housing complexes, commercial buildings and other facilities where propane system failures would likely impact large numbers of people.

The Commission derives its authority for safety oversight from both state and federal laws. Chapters 420 and 421 of the Commission's Rules adopt federal safety regulations for pipelines that transport hazardous gases to protect the public and govern the safe operation of distribution and intrastate transmission facilities within the State.

The Commission is also a certified agent for PHMSA. In this role, the Commission ensures that intrastate natural gas transmission and distribution systems are in compliance with federal pipeline safety standards and corresponding state regulations through operator inspections. Additionally, the Commission performs investigations of natural gas safety incidents and pursues enforcement actions for violations of the federal or state safety regulations.

PHMSA conducts annual evaluations of the pipeline safety programs for all states which have agency certification. PHMSA's 2017 evaluation, for calendar year 2016, resulted in a perfect score of 100% for the Commission's pipeline safety program. This is the third year in a row that Maine's program has received a perfect score. Even though the program received a perfect score, the staff continues to seek ways to improve the program through feedback provided by PHMSA, natural gas and propane operators, and other stakeholders.

During 2017, the gas safety staff spent 251 inspection person days conducting 267 individual inspections and compliance audits of Liquid Propane Gas (LPG) and natural gas facilities (see explanation of "person days" in the footnote to Table 7 below). The purpose of the inspections and audits were to determine whether operators complied with the design, construction, operating, and maintenance requirements of the Commission's safety regulations. Fifty-four inspections involved LPG facilities and 213 inspections involved natural gas facilities. Table 5 below depicts the various types of inspections completed by the gas safety staff over the past five years.

#### Table 5 – Inspection Data

	Inspection Person Days*				
Inspection Type – Natural Gas	2013	2014	2015	2016	2017
Operating Procedures & Records	8	24	28.5	19.5	41.5
Construction & Related Records	113	121	78	85	85
Integrity Management Programs	3	1	5.5	8	1
Operator Qualification Programs	2	19	10.5	14.5	22
Accident or Incident Investigations	1	N/A	1	3	1
Damage Prevention	2	6	2	8	7.5
Public Awareness Programs	5	3	5	6.5	2
Drug & Alcohol Testing Programs	3	4	1	1.5	1.5
Compliance Follow-Up	4	6	61	15.5	17.5
Operator Training	2	3	3	10	5.5
Inspection Type - Propane					
Procedures & Records	N/A	39	25	47.5	43
Operator Training	3	N/A	3	5	3
Integrity Management Programs	1	19	N/A	N/A	N/A
Damage Prevention	N/A	N/A	1.5	N/A	N/A
Compliance Follow-Up	1	5	3	10.5	5
# of Facilities Inspected (not Inspection Person Days) *An "inspection person day" is defined by Pl	166	178	153	159	143

\*An "inspection person day" is defined by PHMSA as all or part of a day spent by pipeline safety staff in on-site evaluation of an operator's system to determine compliance with Federal or State pipeline safety regulations; or in on-site investigation of a pipeline incident; or in training of an operator.

The majority of the LPG inspections conducted in 2017 resulted in operators taking some corrective actions to bring their facilities into compliance. These corrective actions were handled through informal proceedings, without notices of probable violations (NOPVs) or civil penalties.

Inspections of natural gas operators also resulted in a number of corrective actions. Like those with the LPG operators, most corrective actions were resolved through informal proceedings. However, the following is a summary of the NOPVs and civil penalties issued to natural gas operators in 2017:

- \$25,000 to Summit Natural Gas of Maine (SNGME) for failure to make construction records available.
- \$150,000 to SNGME for failure to expose an existing underground facility and provide adequate clearance between that facility when installing a natural gas facility by trenchless technology.

## 2017 Construction

In total, the four natural gas utilities in Maine added 29.3 miles of new mains and 1,110 new services. A breakdown, by utility, is depicted in Table 6:

	Mains	(miles)	Number of Services		
Utility	Added in 2017	Total Installed	Added in 2017	Total Installed	
Bangor Natural Gas	10.4	266.5	192	6,354	
Maine Natural Gas	3.2	205.2	130	4,880	
Summit Natural Gas of Maine					
Kennebec Valley	2.7	189.7	100	3,637	
Cumberland, Falmouth, Yarmouth	5.35		215		
Unitil (Northern Utilities)	7.65	578.5	473	22,162	
Total	29.3	1,239.9	1,110	37,033	

## Table 6 - 2017 Natural Gas Expansion

The expansion information in Table 6 for 2017 (mains and services) was provided to Commission staff by each utility in December 2017. Total mains and services were calculated by adding each utility's stated 2017 expansion to the length of main and services they reported in their Gas Distribution System Annual Report to the Pipeline and Hazardous Materials Safety Administration for Calendar Year 2016.

### Cast Iron and Bare Steel Replacement Program

In 2010, the Commission approved a 14-year replacement program for Northern Utilities' cast iron and bare steel facilities. The program is intended to improve the safety of the system, as well as increase its capacity to serve customers in the Portland area. The Commission monitors Northern's program performance each year through compliance reports which are required to be filed by March 30. In 2017, Northern retired 2.51 miles of cast iron main, 0.59 miles of bare/unprotected steel or wrought iron main, and 0.51 miles of plastic pipe, on its low-pressure system. The cumulative project totals are now: 29.63 miles (out of approximately 70 miles) of cast iron retired, 4.53 miles (out of approximately 10 miles) of bare/unprotected steel retired, and 6.04 miles of plastic pipe retired. In 2018, Northern expects to retire 3.54 miles more of cast iron and bare/unprotected steel or wrought iron main bare/unprotected steel or wrought iron main bare/unprotected steel or wrought iron and bare/unprotected steel or wrought iron and bare/unprotected steel or wrought iron bare/unprotected steel retired, and 6.04 miles of plastic pipe retired. In 2018, Northern expects to retire 3.54 miles more of cast iron and bare/unprotected steel or wrought iron mains.

In 2013, the Commission approved a Targeted Infrastructure Recovery Mechanism (TIRA) that provided for annual increases to distribution base rates to recover the costs associated with the cast iron replacement program. Specifically, as long as the projects are tracking within the cost and schedule metrics established by the Earned Value Management (EVM) analysis, Northern is allowed an annual rate adjustment on May 1<sup>st</sup> to recover its investments. On May 1, 2017, Northern implemented a TIRA adjustment of 2.61% to distribution base rates.

## 9. DIG SAFE

## UNDERGROUND FACILITY DAMAGE PREVENTION AND ENFORCEMENT

The Damage Prevention section of the Consumer Assistance and Safety Division (CASD) is charged with enforcing Maine's underground facilities damage prevention law, called "the Dig Safe Law" (23 M.R.S. § 3360-A). This law is intended to prevent damage to underground utility facilities such as gas lines, water lines, or underground telecommunications and electric cables resulting from excavation.

Under the Dig Safe Law and the Commission's rule implementing the law, Chapter 895, any person or company planning to excavate near underground facilities must follow certain safety procedures, and must notify facility owners of the planned excavation. Most facility operators, such as large utilities, can be notified using the Dig Safe System. Excavators can access the Dig Safe System online at www.digsafe.com, or by calling 1-800-DIGSAFE or 811. Excavators must also notify facility operators who are not members of the Dig Safe System, such as municipalities and smaller utilities. To help excavators identify the nonmember operators that own underground facilities near their intended excavation site, the Commission maintains the OKTODIG program, a database of non-member operators. Excavators can access this program by calling 1-800 OKTODIG or online at www.oktodig.com. Once informed of a pending excavation, utilities have an obligation to locate and mark their underground facilities in accordance with the Dig Safe Law so that excavators will be sufficiently aware of their location when they dig. Violations of the Dig Safe Law and Chapter 895 must be reported to the Commission, which then investigates the incident and determines the appropriate enforcement action, if any. To increase awareness of the provisions of the Dig Safe law and Chapter 895, the Commission performs regular training programs at its offices and also performs on-site training at the request of excavators or facility operators. The Commission also provides public education materials to improve awareness among private property owners of the importance of preventing damage to underground facilities. These materials are available on the Commission's website. A summary of Dig Safe activities for 2017 is provided in Table 7 below.

In 2016, the U.S. Department of Transportation's Pipeline and Hazardous Material Safety Administration (PHMSA) began evaluating States' damage prevention programs to determine whether each State adequately enforces its damage prevention laws and regulations. A finding of "inadequate" enforcement by PHMSA could result in PHMSA choosing to enforce Federal Damage Prevention standards in that state and the state losing a portion of its Gas Safety Program funding. PHMSA completed its review of Maine's Damage Prevention Program in November of 2017, with the Program receiving 248 out of a total of 258 points. This is the same score that the Program received in 2016.

### INDUSTRY TRENDS

A review of Table 7 below shows that the overall number of damage incidents experienced in 2017 was consistent with the number experienced in 2016, and the majority of incidents involved electric facilities. The reported total incidents figure includes some miscellaneous incidents which is why the subcategories do not add to the total. Incident rates for natural gas facilities decreased 13% in 2017 from 2016. This was the first decrease in gas incidents since 2012-2013. From 2013 through 2016, gas incidents had been increasing, most likely due to the extensive amount of new natural gas infrastructure installed during these years, as well as Northern's cast iron and bare steel pipeline replacement project, as discussed in the Gas Safety Section of this report.

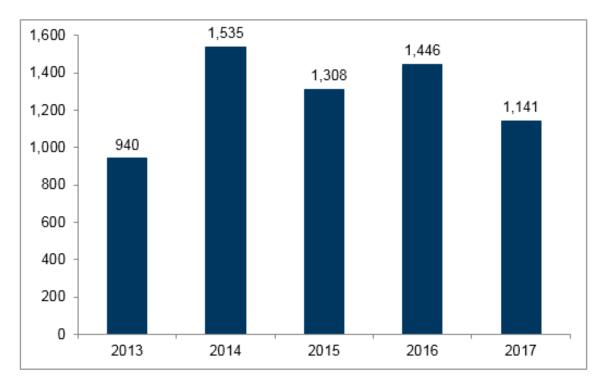
The Commission conducts an on-site investigation for each incident as soon as possible, in many cases on the same day, to determine the cause of the incident and to assess the risk posed to people and underground facilities. Based on this investigation, the Commission will determine any appropriate response to the incident, such as training or the assessment of a financial penalty for the violator.

Metric	2014	2015	2016	2017
Reported Total Incidents	419	387	435	432
Reported Electric Incidents	98	78	92	114
Reported Gas Incidents	53	59	83	72
Reported Telecom Incidents	109	106	101	110
Reported Water Incidents	50	30	41	42
Reported Sewer Incidents	32	14	27	15
Reported CATV Incidents	48	82	65	41
Excavator Violations	109	103	105	100
Operator Violations	95	96	92	101
Penalties Assessed	\$170,350	\$167,500	\$199,000	\$168,800
Penalties Waived with Training	\$51,500	\$48,000	\$49,500	\$42,000
Penalties Not Waived	\$118,850	\$119,500	\$149,500	\$126,800

#### Table 7 – Summary of Dig Safe Activities

**Public Awareness, Training and Education** The Commission continues to strongly support and promote education and training about how to reduce and prevent damage incidents involving underground facilities and ensure the safety of residents and property located near those facilities. Maine's Underground Damage Prevention Rule (chapter 895) allows the Commission to require an excavator or member operator who has violated the rule to attend an educational training program. Often, this training is offered in lieu of a financial penalty. In addition, the Commission encourages excavators and operators to periodically attend training sessions to ensure that they are up-to-date on the most recent technological and regulatory developments relating to underground facilities damage prevention. In addition to coordinating and conducting its own education and training programs, the Commission also works with utilities, excavators, the regional Dig Safe organization, and private property owners to promote education and training of Maine's Dig Safe law. In 2017, the Commission supported training offered by the New England Committee of Managing Underground Safety Training (MUST), which includes Maine Dig Safe members, excavating contractors and underground facility location workers. Training seminars were held in Presque Isle, Bangor, Augusta, Bar Harbor, Freeport and York. Discussions focused on safe work practices around underground facilities, compliant excavation site and underground facility markings, the design of various underground facilities and the risks involved when proper damage prevention steps are not taken.

The Commission also sponsored 19 certification and/or informational training sessions at various businesses, organizations, trade shows and at the Commission with 1,141 participants. In the past five years, the Commission and MUST have trained over 6,380 people on how to reduce and prevent damage incidents involving underground facilities as detailed in Figure 12 below.



## Figure 12 - People trained by the Commission and MUST

## **10. WATER AND WATERBORNE TRANSPORTATION**

## THE WATER INDUSTRY IN MAINE

The 152 water utilities in Maine are comprised of both investor-owned and consumer-owned organizations. Consumer-owned water utilities are Water Departments or Water Districts, which are quasi-municipal entities governed by elected or appointed boards of trustees. Water utilities, whether investor-owned or consumer-owned, are created by Private and Special Laws (charters) enacted by the Legislature. These charters establish corporate (territorial) limits, grant powers, define authority and responsibilities and specify other provisions and criteria which govern the administration and operation of the water utility.

The Commission is charged with oversight of the rates and services of water utilities. In 2017, a variety of cases were processed by the Commission, including rate cases, issue of securities, revisions of non-rate-related terms and conditions, infrastructure surcharge filings, and other requests. The Department of Health and Human Service Drinking Water Program regulates water quality via administration of the Federal Safe Drinking Water Act. The Department of Environmental Protection also oversees some water utility issues, for example, with regulations on water sources.

## KEY EVENTS

## Water Supply Emergency Inquiry

In response to drought conditions which existed in many parts of Maine during the summer and fall of 2016, the Commission initiated an ongoing Inquiry (Docket No. 2016-00233) into water supply issues affecting Maine's water utilities on October 5, 2016. The scope of this Inquiry is not limited to challenges created by drought conditions, but also includes any set of circumstances or emergency that may significantly constrain a utility's source of supply and impact its ability to supply its customers. In the initial phase of this Inquiry, the Commission sought input from interested persons/entities including water utilities, water associations, and state agencies. Based on that input, the Commission Staff plans to issue a Preliminary Recommendation by the end of January 2018, which will include six major findings:<sup>22</sup>

- 1. Maine's water utilities responded well to the recent drought.
- 2. Most of Maine's water utilities should be allowed to make their own decisions regarding water supply emergencies.
- 3. Water utilities need clearly-defined authority to respond to a water supply emergency and the best place to codify such authority is in the utility's Terms and Conditions.
- 4. There are a variety of entities that can provide help to a water utility that needs assistance preparing for, and responding to, a water supply emergency.
- 5. Effective communication before and during a water supply emergency is critical.
- 6. Some Maine water utilities are more vulnerable to a water supply emergency and may need assistance in preparing for, and responding to, such an emergency.

<sup>&</sup>lt;sup>22</sup> The Preliminary Recommendation included attachments that summarize the procedural history of the Inquiry, comments received from interested persons, Commission Staff's research relating to the Inquiry, and Preliminary Recommendation.

Written comments on the Preliminary Recommendation will be due the first quarter of 2018. In addition to seeking written comments, the Commission anticipates holding several workshops throughout the state to solicit oral comments and discussion about the Preliminary Recommendation. Based on written and oral comments, the Commission Staff will draft a Final Recommendation for the Commission's consideration. The Commission anticipates issuing a final decision in this Inquiry in June 2018.

## Drought

Southern Maine was measurably impacted by drought conditions in late summer and early fall of 2016, as much of the more populated area of the state experienced extreme or severe drought conditions. Fortunately, precipitation events occurred with increasing frequency as winter approached and sources of water supply recovered.

Precipitation levels in Maine were closer to normal in 2017; however, as summer drew to a close, a band comprising the coastal region and the eastern part of the state, extending up into Aroostook County, was in a moderate drought. While the impacts were shorter lived than they had been for southern Maine in 2016, a few systems were paying close attention to ground water levels. As fall set in, more normal precipitation patterns alleviated concerns, and at year end supplies had recovered.

## INDUSTRY TRENDS

## Increased Burden of Capital Expenditures

Water utilities, both in Maine and nationwide, have confronted the pending need to replace water infrastructure that is currently at, or in the near future is expected to reach, the end of its useful life.

Much of the infrastructure used to currently deliver water service flows through pipes that were installed in response to growth and economic development in the late 1800s through the post-World War II period. A significant portion of system components, including piping, are becoming antiquated at approximately the same time. The Maine Drinking Water Program estimates that over the next 20 years, an investment of approximately \$1.2 billion is needed to fund water infrastructure replacement in Maine. The cost associated with replacing this infrastructure for all water utilities nationally is estimated to exceed \$384 billion.

All water utilities can recover the cost for new infrastructure through rates over the life of the plant and consumer-owned water utilities are also able to include in rates the full debt repayment for such projects. However, water infrastructure is expensive and the pumping and treatment facilities necessary to serve a hundred customers are roughly the same cost as those needed to serve a thousand customers. Due to the cost and scope of water systems, replacement of water infrastructure can present significant financial challenges to water utilities. As a result, new infrastructure needs can drive substantial rate increases to water utility customers.

Currently, water utilities in Maine are using a variety of funding sources to fund these capital expenditures, including capital reserve accounts and other internal funding methods, federal and state bonds and loans, grants from various sources, and, once replacement is completed, infrastructure surcharges.

#### **Rate Adjustment Mechanism for Water Utilities**

Statute provides that the Commission may establish or authorize a reasonable rateadjustment mechanism to decouple water utility revenues from water utility sales through revenue reconciliation when changes in sales are due to a change in the number of customers or a change in the volume of consumption. Section 6102-A(2) requires the Commission to include in its annual report pursuant to § 120 rate information regarding any adjustments requested and those granted. No rate adjustment mechanisms were requested or granted in 2017.<sup>23</sup>

#### Waterborne Transportation in Casco Bay

Pursuant to Title 35-A, Sections 5101-5111, and Chapters 510, 520, and 560 of the Commission's rules, the Commission regulates the provision of ferry, charter, water taxi, and unscheduled freight services between Peaks Island, Great Diamond Island, Little Diamond Island, Long Island, Chebeague Island, Cliff Island, and the mainland of Cumberland County. No person, other than Casco Bay Island Transit District (CBITD), which was created by Private and Special Law 1981, Chapter 22, may provide ferry service within this regulated territory of Casco Bay without obtaining a certificate of public convenience and necessity from the Commission. Further, no person may provide charter, water taxi, or unscheduled freight service within this regulated territory without obtaining authorization from the Commission. The rates for ferry service and unscheduled freight service are subject to Commission oversight.

During the prior calendar year, the Commission reviewed and approved several applications to provide charter, water taxi, and unscheduled freight services in Casco Bay. In the upcoming calendar year, the Commission anticipates amending Chapter 520, which governs the provision of charter, water taxi, and unscheduled freight services, to facilitate the usage of the Commission's electronic case management system and to promote efficiency in the review of applications to provide these regulated services.

<sup>&</sup>lt;sup>23</sup> 35-A MRS § 6102-A(1)

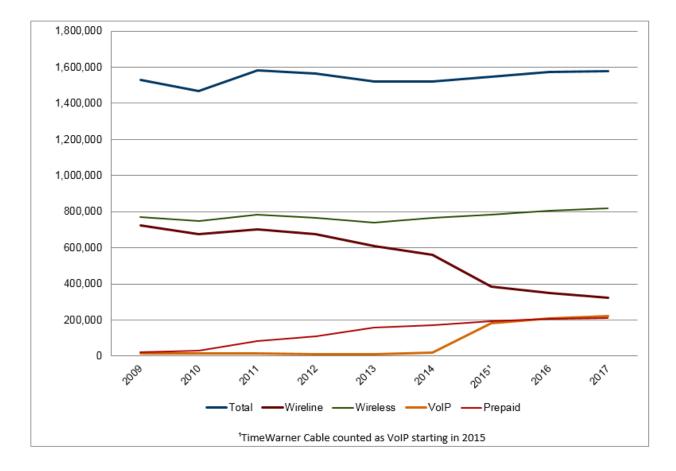
## 11. EMERGENCY SERVICES COMMUNICATION BUREAU

### 911 SERVICES IN MAINE

The Emergency Services Communication Bureau (ESCB) manages the statewide 911 system, which is the component of the emergency response system that delivers 911 calls and displays the telephone number and physical location of the caller at one of Maine's 26 predetermined Public Safety Answering Points (PSAPs). Figure 15 on page 59 shows the geographical coverage area of each of the PSAPs. The ESCB is funded by the E911 surcharge which is assessed on all wireline, wireless (prepaid and postpaid) and VoIP service.

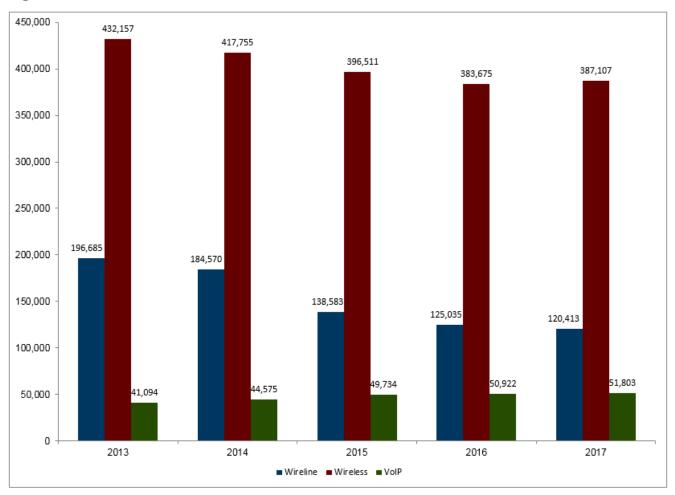
#### INDUSTRY TRENDS

Nationally and in Maine, wireless phones have accounted for the largest portion of payments of the E911 surcharge. Fees collected from wireline phones continue a downward trend. See Figure 13.



#### Figure 13 – Phone Lines Contributing to E911 Surcharge

In 2017, as in previous years, there were more 911 calls made from wireless phones (69.2%) than wireline and VoIP phones combined (30.8%) in Maine. See Figure 14.



## Figure 14 - 911 Calls

## KEY EVENTS

### Next Generation 911 Implementation

A contract was executed with FairPoint Communications in March 2013 for Next Generation 911 (NG911) services to transition Maine's aging E911system to a modern standards-based system capable of handling new communication technologies. The first PSAP was transitioned in March 2014. An aggressive implementation schedule resulted in all 26 PSAPs being successfully cutover to the new system by July 23, 2014. This completed one of the nation's first statewide end-to-end NG911 system deployment based on the Detailed Functional and Interface Standards for the National Emergency Number Associations i3 Solution, positioning Maine well for accepting new technology applications.

In 2017, the ESCB rolled out the ability to place outgoing text messages to 911 callers. This allows PSAPs an additional method of reaching callers who called 911 but hung up prior to

the call be answered, as well as other situations where a person may not be comfortable or able to talk freely on the telephone.

Efforts also focused on migrating incoming text to TTY service to a more robust Internet Protocol based solution that will take advantage of the capabilities of Maine's NG911 system. This deployment will also distribute text calls to PSAPs based on location. This should be complete by early 2018.

### Call Taker and Dispatch Training

The ESCB offers a variety of courses to ensure that 911 call takers and dispatchers have all the necessary skills to handle emergency calls as detailed below. See Table 8 below for a summary of students trained.

- Mandatory Basic Emergency Telecommunicator Course (ETC) The ESCB offers a basic emergency telecommunicator 40-hour curriculum that covers topics including roles and responsibilities, technology, interpersonal communications, call management, police/fire/emergency medical call classifications, radio dispatch procedures, quality improvement, catastrophic events, legal aspects and stress management. This training provides for a uniform base of knowledge for all newly hired emergency dispatchers statewide. All full-time dispatchers are required to take this class within one year of hire.
- **NG911 Equipment & Bureau Policy Training** Initial training for newly-hired PSAP call takers consists of a 2-day equipment and certification course, which must be completed within 90 days of assignment.
- Emergency Medical Dispatch Maine law requires that all 911 call takers be trained and licensed in Emergency Medical Dispatch (EMD), an advanced training requirement that prepares the 911 call taker to assist callers/victims by providing life-saving instructions to follow while waiting for ambulance personnel to arrive on-scene. The ESCB sponsors a three-day EMD certification training for all call takers plus an additional two-day training for supervisors on quality assurance review of the EMD calls.
- Emergency Fire Protocols Maine law requires that all 911 call takers be trained in Emergency Fire Dispatch (EFD) by December 2018. This is an advanced training class that prepares the 911 call taker to assist callers/victims by providing instruction prior to the arrival of fire responders to arrive on-scene. The ESCB sponsors a three-day EFD certification training for all call takers plus an additional two-day training for supervisors on quality assurance review of EFD calls.
- **Continuing Education Courses** The ESCB recognizes the need for continual skills development as well as refresher opportunities for all communications personnel, and sponsors a variety of opportunities throughout the year.

## Table 8 - Students Trained

Course Name	Students Trained in 2016	Students Trained in 2017	Percent Change
NG911/ New Hire Training	84	86	2%
Emergency Telecommunicator Course	77	91	18%
Emergency Medical Dispatch Certification	94	96	2%
Emergency Medical Dispatch Quality Assurance (ED-Q)	20	21	5%
Emergency Medical Dispatch AQUA Training	19	17	-11%
Emergency Medical Dispatch ProQA	38	95	150%
Emergency Fire Dispatch Certification	97	194	100%
Emergency Fire Dispatch Quality Assurance	28	25	-11%
Emergency Fire Dispatch AQUA Training	28	25	-11%
Emergency Fire Dispatch ProQA	94	194	106%

## **Quality Assurance Program Development**

### **Expansion of Call Handling Protocols**

On June 22, 2015, L.D. 1256, "An Act to Improve the Safety and Survival of 911 Callers and First Responders", was enacted into law (Act). The Act states that to assist public safety answering points (PSAPs) in the adoption and implementation of standardized dispatch protocols for answering fire 911 calls, the ESCB shall use up to 5¢ of each surcharge collected under 25 M.R.S. § 2927 subsections 1-E and 1-F to provide PSAPs dispatcher training consistent with the protocols, necessary software and printed support materials. It further provides that the ESCB shall provide quality assurance training and software to assist PSAPs in ensuring compliance with the protocols and directs the ESCB to adopt routine technical rules related to the adoption, implementation and administration of standardized dispatch protocols for answering fire 911 calls.

The Act directs the Commission to phase in, over a three-year period, the required protocols for fire 911 calls by PSAPs and seek input from the management of all PSAPs in developing the program. It also directs the Commission to submit a report to the Committee by January 15, 2019, that includes the cost to adopt and implement standardized dispatch protocols for answering police 911 calls, the time it would take to phase in the adoption and implementation of police protocols based on available funding from the 911 surcharge,

whether there should be a certification and licensing requirement for all standardized dispatch protocols and any recommendations to ensure the efficient and effective oversight of the standardized dispatch protocols.

In late 2015, the Commission initiated a Notice of Inquiry (NOI)<sup>24</sup> in order to gather information from interested persons concerning various issues in advance of the rulemaking proceeding. The Commission solicited written comments and held a meeting with interested persons to discuss issues raised in the comments.

On April 14, 2016, the Commission initiated a Notice of Rulemaking<sup>25</sup> and issued a proposed rule for comment. The Commission held a public hearing on May 17 and written comments were due June 3, 2016. By Commission Order dated August 8, 2016, the Commission adopted the rule.

The implementation of fire protocols is being be phased in by PSAP. As of December 31, 2017, 15 PSAPs have implemented the protocols. The remaining PSAPs will complete the process by May 31, 2018.

## **PSAP** Audits

During 2017 an audit was performed at all 26 PSAPs to ensure laws, rules and required policies and procedures are being followed and that any deficiencies identified previously were resolved. Observations made during 2017 audits:

- Emergency Fire Dispatch protocols have been implemented at 15 PSAPs with the remaining centers having their training in 2018 to meet the required completion date.
- All but one PSAP met or exceeded security measures. It is vital that PSAPs remain vigilant in the protection of their staff and communication facilities.
- Training programs and Standard Operating Procedures are well-written amongst the PSAPs giving telecommunicators a clear path to achieve their day-to-day operations.
- While awareness of TTY testing has been raised and centers are performing tests, often from position to position, PSAPs must work toward conducting test calls externally, not internally. Centers are encouraged to reach out to their community in performing TTY tests.
- PSAPs are encouraged to periodically check for software updates on their Emergency Medical Dispatch software to ensure effective performance.

ESCB staff regularly visited PSAPs to ensure that the NG911 system was working optimally, to assist call takers and supervisors with understanding equipment functionality, and to gather feedback on how the program could be improved. Many suggestions have been adopted. The visits will continue in 2018.

ESCB rules require PSAPs to answer all calls in ten seconds or less 90% of the time. This data is measured on an annual basis. PSAP's falling below this requirement are notified and asked for a corrective action plan. See Table 9 below.

<sup>&</sup>lt;sup>24</sup> Docket No. 2015-00333 <sup>25</sup> Docket No. 2016-00063

## Table 9 – 2017 PSAP Call Center Efficiency

	Incoming	% Calls	
	911 Calls -		Avg Ring
PSAP	2017	10 seconds	Duration
Piscataquis Cty SO	5,712	98.3	5.0
Franklin Cty RCC	9,607	97.9	5.0
DPS Houlton	10,740	97.2	6.0
Waldo Cty RCC	10,789	94.6	7.0
York PD	10,959	95.3	6.0
Washington Cty RCC	11,435	98.3	6.0
Lincoln Cty RCC	12,027	99.2	5.0
Knox Cty RCC	12,733	98.8	5.0
Scarborough PD	12,817	96.9	6.0
Androscoggin Cty SO	13,411	97.3	6.0
DPS Bangor	13,533	95.2	8.0
Brunswick PD	14,336	98.2	5.0
Hancock Cty RCC	15,370	96.7	6.0
Westbrook PD	16,077	98.5	5.0
Sagadahoc Cty RCC	16,284	99.3	4.0
Biddeford PD	17,355	98.0	6.0
Sanford PD	21,586	98.2	6.0
Bangor PD	23,230	94.0	6.0
Oxford Cty RCC	24,478	98.8	5.0
Cumberland Cty RCC	29,453	90.1	7.0
DPS CMRCC	31,124	87.9	8.0
DPS Gray	39,283	87.8	8.0
Somerset Cty RCC	42,116	98.1	6.0
Penobscot Cty RCC	42,178	80.1	9.0
Lewiston Auburn 911	42,504	92.4	6.0
Portland PD	60,186	76.0	9.0
Total Calls	559,323		

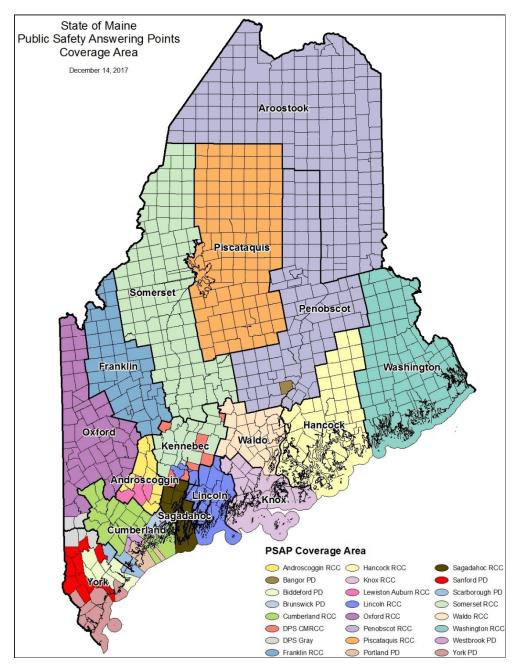
## Program Funding/Surcharge

Surcharge revenue is held in a dedicated, interest-bearing account and is tracked through the State's accounting system. The current surcharge level is set by statute and is \$.45 a month per line or retail transaction.

#### **Surcharge Legislation**

The PUC is realizing greater efficiencies in the transition from the legacy 911 system to the NextGen 911 system than originally anticipated and, as a result, the Commission's 911 reserve balance is increasing. The Commission introduced legislation in 2018 that would authorize the Commission to determine the amount of the 911 surcharge not to exceed the 45 cents in current law. Because the needs of the 911 system vary from year to year, this bill would enable the Commission to reduce the reserve balance and better ensure that the amount collected is limited to what is needed to run the program.

### Figure 15 - PSAP Coverage



## **12. CONSUMER ASSISTANCE**

The Consumer Assistance section of the Consumer Assistance and Safety Division (CASD) is the Commission's primary link with utility customers. The CASD is charged with ensuring that consumers, utilities, and the public receive fair and equitable treatment through education, complaint resolution, and evaluation of utility compliance with consumer protection rules. As part of its mission, the CASD is responsible for educating the public and utilities about consumer rights and responsibilities and other utility-related consumer issues, for investigating and resolving disputes between consumers and utilities, and for evaluating utility compliance with State statutes, Commission rules and the utility's Terms & Conditions for service. The Commission also uses information about consumer contacts with the CASD and other CASD data as a basis for enforcement actions, Commission investigations and in other Commission proceedings.

## **CASD Contacts**

The CASD tracks its contacts with both consumers and utilities as detailed in Figure 16 below. Contacts take several forms, such as the general provision of information and assistance, investigation of a complaint involving a customer dispute with a utility that the parties have been unable to resolve, or processing utility requests for waivers of Commission rules. The CASD recorded 7,150 consumer contacts in 2017. This was consistent with the 7,326 consumer contacts in 2016 and a 30% decrease from the consumer contacts in 2015.

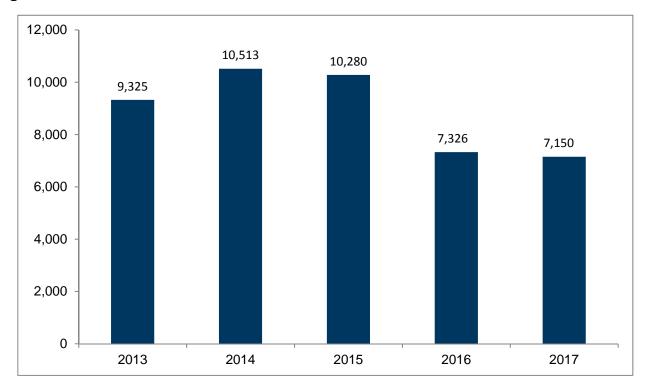
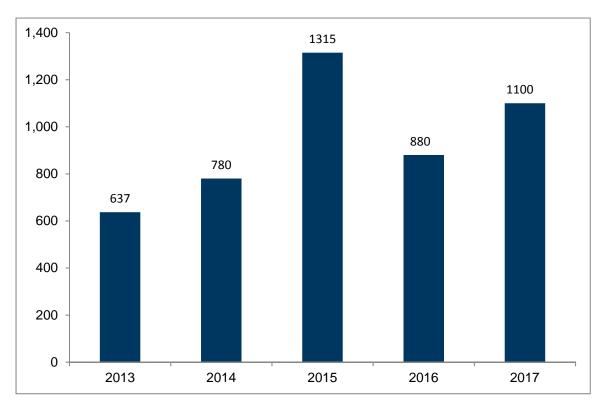


Figure 16 – CASD Contacts 2013 – 2017

## **Consumer Complaints**

As shown in Figure 17 below, the CASD received 1,100 complaints in 2017. This is a 25% increase from the 880 complaints received in 2016 and a 16% decrease from the 1,315 complaints received in 2015.





The increase in complaints from 2016 to 2017 is primarily attributable to a 28% increase in electric complaints. This increase is comprised of a 22% increase in complaints filed against Competitive Electricity Providers (CEPs) and a 33% increase in complaints filed against transmission and distribution utilities. A total of 991 complaints were filed against electric utilities/CEPs in 2017; 88 against CEPs and 903 against transmission and distribution utilities. The number of telephone complaints received by the CASD decreased from 32 in 2016 to 25 in 2017. This is part of an ongoing trend of decreasing complaints filed against telephone utilities, most likely in association with Telecommunications Reform Legislation that was initially implemented in 2012. As a result of this reform, the Commission regulates only Provider of Last Resort Service in certain locations in Maine. The Telecommunications section of this report discusses this reform in more detail.

Figure 18 below breaks down complaints received by utility industry. Figure 18 shows that electric complaints represented 90% of the total number of complaints received by the CASD in 2017. This is a two-percentage point increase from the 88% of complaints filed against electric utilities in 2016. Figure 18 also shows that telephone complaints represented 2% of

the total number of complaints received by the CASD in 2017. This is a two-percentage point decrease from the 4% of complaints filed against telephone utilities in 2016.

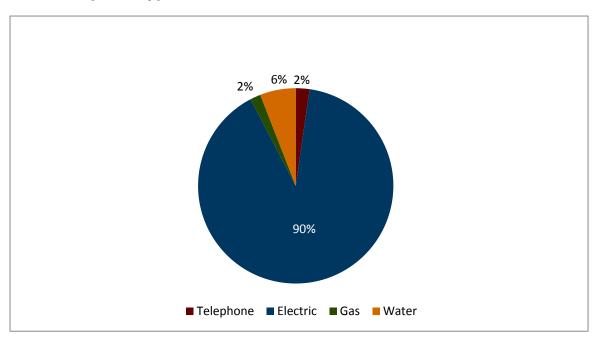


Figure 18 - Complaint Type in 2017

## **Utility Variances and Winter Requests to Disconnect**

Utilities have the right to request a variance (or waiver) from Commission rules for individual applicants or customers whose conduct and known financial condition pose a clear danger of substantial losses to the utility. Decisions issued by the CASD in response to a variance request can be appealed to the Commission by either the utility or the customer. The CASD received 6 variance requests from utilities in 2017, an 84% decrease from the 38 variance requests received in 2016. The decrease in variance requests is due primarily to fewer requests being submitted by CMP, which has historically submitted the majority of the requests. The reduction in variance requests submitted by CMP is likely related to its implementation of a new Customer Information System (CIS) in 2017. The CASD granted two variance requests or 33% of the total submitted in 2017. This compares to 21 variance requests being granted in 2016 or 55% of the total submitted.

Between November 15 and April 15, electric and gas utilities are prohibited from disconnecting customers without first receiving permission from the CASD. During this time period, utilities must make significant attempts to personally contact customers who are behind on their bills to negotiate a payment arrangement prior to seeking permission to disconnect. In situations where the utility cannot make contact or is not able to negotiate a reasonable payment arrangement with a customer after making contact, the utility may submit a request to disconnect the customer's service to the CASD. In these situations, the CASD also attempts contact with the customer to establish a reasonable payment arrangement. In 2017, the CASD received 249 winter requests to disconnect from electric and gas utilities. This was a 36% decrease from the 369 requests received in 2016 and a

53% decrease from the 530 requests received in 2015 (See Figure 19). The decrease from 2016 to 2017 is primarily attributable to a 30% reduction in requests being submitted by CMP, most likely as a result of its CIS implementation as discussed above. The CASD granted 45% of the requests submitted in 2017. This is consistent with the 43% of the requests being granted in 2016 and 52% of the requests being granted in 2015.

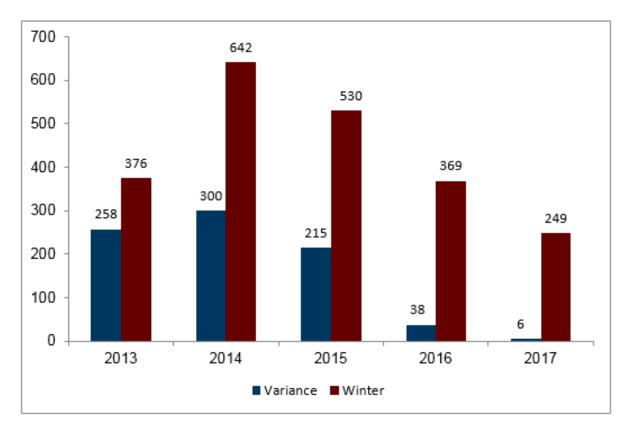


Figure 19 - Winter Requests to Disconnect and Variances Received

## **Refunds to Consumers**

The CASD frequently obtains credits or refunds for customers as part of its resolution of customer complaints filed against utilities. In 2017, \$331,713 was abated to 174 customers. This is a 261% increase over the \$91,851 abated in 2016 and a 98% increase from the \$167,903 abated in 2015.

## LOW INCOME PROGRAMS

### Electric Low-Income Assistance and Oxygen Pump/Ventilator Programs Pursuant to 35-A M.R.S. § 3214(6)

The Commission is required by 35-A M.R.S. § 3214(6) to report annually the results of the Low-Income Assistance Program (LIAP) and Oxygen Pump/Ventilator benefits to the Utilities and Energy Committee. The report must, at a minimum, include:

- A. For each month of the program year, the number of participants enrolled in lowincome assistance programs, the number receiving oxygen pump benefits and the number receiving ventilator benefits;
- B. For each month of the program year, the dollar amount of low-income assistance program benefits, the dollar amount of oxygen pump benefits and the number receiving ventilator benefits; and
- C. An assessment of the effectiveness of the oxygen pump benefit and ventilator benefit with regard to covering only those electric charges directly related to use of an oxygen pump or ventilator by the program participant.

Table 10 summarizes items A and B above: the information relating to the LIAP and Oxygen Pump/Ventilator benefits on a statewide basis. The statistics are derived from the quarterly reports submitted by electric utilities.

	LIAP Program		Oxygen P	rogram	Ventilator Program	
Month	Number of Participants	Amount of Benefit	Number of Participants	Amount of Benefit	Number of Participants	Amount of Benefit
Oct 2016	1,284	\$119,837	61	\$1,916	0	\$0
Nov 2016	4,073	\$555,677	150	\$8,244	0	\$0
Dec 2016	7,309	\$802,199	321	\$12,740	0	\$0
Jan 2017	9,164	\$741,699	264	\$22,034	0	\$0
Feb 2017	10,248	\$700,596	267	\$18,051	0	\$0
Mar 2017	11,478	\$686,984	295	\$16,695	0	\$0
Apr 2017	11,303	\$411,553	503	\$12,518	1	\$16
May 2017	10,925	\$314,103	476	\$11,586	1	\$17
Jun 2017	10,459	\$272,439	448	\$13,559	1	\$16
Jul 2017	9,670	\$120,578	401	\$10,957	1	\$20
Aug 2017	9,367	\$267,468	406	\$10,841	1	\$17
Sep 2017	9,032	\$2,947,401	346	\$9,261	0	\$0
Total		\$7,940,534		\$148,402		\$86

## Table 10 – Program Statistics

Item C above, the assessment of the oxygen pump benefit and ventilator benefit, was added to the LIAP reporting requirements in 2008 due to a problem associated with oxygen pump benefits. The problem resulted in some eligible customers receiving an oxygen pump benefit that exceeded the amount of the customer's entire electric bill. To address this issue, the Legislature adopted section 3 of Chapter 97 (codified at M.R.S. § 3214 (6)(C)), which requires the Commission to provide an assessment of whether the oxygen pump benefit and the ventilator benefit cover only those electric charges directly related to use of an oxygen pump or ventilator by the program participants. In response to this directive, the Commission revised Chapter 314 by reducing the estimated daily and monthly kWh consumption amounts

used to calculate the oxygen pump/ventilator benefit and by prohibiting a benefit from exceeding the customer's total electricity usage. These changes have resolved the problem.

### Arrears Management Program

Public Law 2013, c. 556, "An Act to Assist Electric Utility Ratepayers" (Act) requires all electric transmission and distribution (T&D) utilities to create and administer an Arrearage Management Program (AMP) to assist eligible low-income residential customers who are in arrears on their electricity bills. On April 9, 2015, the Commission completed its rulemaking process, adopting Chapter 317, which set forth requirements and procedures for the AMP. Among other things, the new rule required each utility to submit terms and conditions to create and implement its AMP by October 1, 2015. The rule also established that residential customers who are eligible for LIHEAP in Maine and have an arrearage of \$500 or more that is at least 90 days old are eligible to participate in the program. Further, the rule established that for every month participating customers pay their current bills on time, 1/12<sup>th</sup> of the customer's arrearages, up to a maximum of \$300, will be forgiven.

The Commission convened a stakeholder group in 2016 to discuss the progress of and ways to improve the AMP. The stakeholder group was comprised of representatives from the electric utilities, CAP Agencies, low income advocacy groups, Maine State Housing Authority, OPA, and Commission staff. The stakeholder group met three times in 2017 and discussed participation rates, enrollment issues, electricity assessments by Efficiency Maine, and the re-enrollment of AMP participants in the new AMP year.

In January 2018, the Commission submitted a report assessing the effectiveness of the AMP to the Legislature.

## **13. SUMMARY OF COMMISSION RULEMAKINGS**

The following provides a summary of the Commission Rulemakings in 2017.

### Chapter 220: Provider of Last Resort Service Obligation Removal

This rulemaking adopted procedures for the removal of the obligation of telephone utilities to provide Provider of Last Resort service in municipalities within Maine.

### Chapter 284: Prepaid Wireless Fee

This rulemaking was initiated to amend the rule to comport with recent legislative changes to the collection of telecommunications regulatory fees.

### Chapter 285: Maine Telecommunications Education Access Fund

This rulemaking was initiated to conform the rule to current Maine law.

# Chapter 308: Standards of Conduct for Transmission and Distribution Utilities and Affiliated Generators

This rulemaking was initiated to adopt standards of conduct to govern transmission and distribution utility interactions with generation affiliates.

#### Chapter 313: Customer Net Energy Billing

This rulemaking adopted amendments to adjust incentives in consideration of reduced costs of small renewable technologies.

### Chapter 314: Statewide Low-Income Assistance Program

This rulemaking adopted changes to the statewide electricity low income assistance plan.

## Chapter 322: Metering, Billing, Collections and Enrollment Interactions Among

**Transmissions and Distribution Utilities and Competitive Electricity Providers** This rulemaking was initiated to update the rule's credit and collection provisions.

#### **Chapter 324: Small Generator Interconnection Procedures**

This rulemaking was initiated to update and clarify various provisions of the rule.

#### Chapter 660: Consumer Protection Standards for Water Utilities

This rulemaking was initiated to consider provisions concerning disconnection notification requirements for residential premises that are leased or rented.

### Chapter 815: Consumer Protection Standards for Electric and Gas

This rulemaking was initiated to amend provisions concerning customer deposits and add provisions regarding notification requirements for residential premises that are leased or rented.

### Chapter 880: Attachments to Joint-Use Utility Poles

This rulemaking was initiated to adopt amendments regarding attachment procedures, terms and conditions for new attaching entities.

Emergency Services Communication Bureau

# Chapter 2: Requirements for Enhanced 9-1-1 System Service Provider and Local Exchange Carriers

This rulemaking adopted amendments to requirements for Local Exchange Carriers regarding Enhanced 9-1-1 and the Enhanced 9-1-1 System Service Provider.

## 14. SUMMARY OF LAW COURT APPEALS

Unlike most governmental agencies, the adjudicatory process employed by the Commission is most analogous to that of a court proceeding. Recognizing this unique aspect of the Commission's decision-making process, Title 35-A provides that appellate jurisdiction to review final Commission decisions resides exclusively with the Law Court. This differs from the process for judicial review that applies to most governmental agencies where appeals are taken, in the first instance, to Superior Court. The following provides a summary of the cases appealed to the Law Court that involve the Commission.

## Net Energy Billing Rulemaking

On March 1, 2017, the Commission issued an order adopting amendments to Chapter 313. The amended rule reduces over time the amount of a generation facility's output that can offset, or be netted against, the transmission and distribution utility portion of a customer's bill, while leaving unchanged netting for the supply portion of the customer bill. Under the amended rule, the phasing out of offsetting T&D costs will apply to facility installations on or after January 1, 2018, and existing NEB customers will be grandfathered for a 15 year period. The Commission's adoption of these amendments has been appealed to the Law Court. The appeal is pending.

### Efficiency Maine Trust Third Triennial Plan

In December 2015, the Commission received the Trust's proposed Third Triennial Plan for review and approval in accordance with statute. The Third Triennial Plan governs the Trust's efficiency programs and budgets for fiscal years 2017, 2018, and 2019. As required by statute, the Commission initiated an adjudicatory proceeding to review the Trust's proposed plan. On May 25, 2016, the Trust filed a Stipulation pertaining to the issues raised in the proceeding. On July 6, 2016, the Commission issued an Order Approving Stipulation. The Conservation Law Foundation appealed the Commission's Order to the Law Court. On June 1, 2017, the Law Court issued its decision in which it found no error in the Commission's interpretation and application of statute and affirmed the Commission's decision.

### **Enhanced Communications**

By Order issued on June 20, 2016, the Commission authorized Enhanced Communications of New England, Inc. d/b/a FairPoint Internet and FairPoint Long Distance – NNE (Enhanced) to operate as a Competitive Local Exchange Carrier in all exchanges within Maine, with the exception of those exchanges in which any subsidiary or affiliate provides service as an incumbent local exchange carrier. The Commission found that Enhanced's entry into the service territory of its affiliates raises significant anti-competitive concerns and would be contrary to the longstanding policy goal of using numbering resources efficiently to preserve a single area code in Maine. Enhanced appealed this Commission decision to the Law Court. On August 15, 2017, the Law Court issued it decision in which it rejected Enhanced's contention that the Commission's partial denial is unlawful and unsupported by substantial evidence and, thus affirmed the Commission's Order.

## **15. REPORTS TO THE LEGISLATURE**

The Commission submitted the following reports to the Legislature in 2017. All of these reports may be found on the Commission's website at the following:

http://www.maine.gov/mpuc/legislative/reports.shtml

- Report on the Community-based Renewable Energy Pilot Program, January 15, 2017
- 2016 Annual Report, February 1, 2017
- DEP/EMT/PUC Regional Greenhouse Gas Initiative Annual Report, March 15, 2017
- Annual Renewable Portfolio Standard (RPS) Report, March 31, 2017
- Report on Energy Efficiency Projects for Transmission and Sub-Transmission Level Customers Stakeholder Group Findings, August 1, 2017
- Regional Greenhouse Gas Initiative Report, August 11, 2017

## **16. FISCAL INFORMATION**

The Commission is required by 35-A M.R.S. §120 to report annually to the Joint Standing Committee on Energy, Utilities and Technology on its planned expenditures for the fiscal year and on its use of funds in the previous year. This section of the report fulfills this statutory requirement and provides additional information regarding the Commission's budget. All references in this section are to fiscal years, July 1 to June 30.

In FY2017, the Commission regulated electric, gas, telephone, water and water common carrier utilities, enforced Maine's underground facilities damage prevention law, and managed the statewide E911system.

The Commission operates with two main programs and funds: The Emergency Services Communications Fund and the Regulatory Related Funds as detailed below.

### The Emergency Services Communications Fund (E911)

This fund had an unencumbered balance of \$4,162,544 and an encumbered balance of \$2,275,316 brought forward from FY2016. \$6,879,160 was expended in FY2017. An unencumbered balance of \$5,764,355 and an encumbered balance of \$2,245,548 were brought forward to FY2018. The surcharge collected in FY2017 was \$7,385,818. The prepaid wireless fees collected in FY2017 were \$1,134,999.

### PUC Regulatory Related Accounts

### **Regulatory Fund**

The authorized Regulatory Fund assessment for FY2017 was \$7,573,098. An unencumbered balance of \$2,598,787 and an encumbered balance of \$346,351 were brought forward from FY2016. The Commission spent \$7,704,535 in FY2017.

An unencumbered balance of \$3,115,535 and an encumbered balance of \$122,526 were brought forward to FY2018. The encumbered balances generally represent ongoing contracts.

### **Reimbursement Fund**

In FY2017, the Commission collected \$1,200 in filing fees, \$60 in copying fees and \$504,500 in fines. An unencumbered balance of \$485,481 and an encumbered balance of \$20,862 were brought forward from FY2016. During FY2017, \$32,612 was expended. An unencumbered balance of \$188,559 and an encumbered balance of \$0 were brought forward to FY2018.

### The Budget in Perspective

In June 2017, the Legislature approved the Commission's biennial budget. Table 11 details the Commission's FY18 expenditure plan including position count.

#### Table 11 - FY2018 Work Program

Position Count56.25Personal Services\$6,647,893All Other\$2,576,800Capital0Total\$9,224,693Commission Reimbursement FundAll Other\$50,000Commission Damage PreventionPosition Count0Personal Services\$59,458All Other\$59,458All Other\$59,458All Other\$59,458All Other\$60,000Oversight and Evaluation Fund0All Other\$252,660Prepaid Wireless Fee FundAll Other\$1,657,202Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery FundAll Other\$500Emergency Services Comm. Bureau (E-911)\$500Personal Services\$892,894All Other\$6,303,319	Regulatory Fund	
Personal Services\$6,647,893All Other\$2,576,800Capital0Total\$9,224,693Commission Reimbursement FundAll Other\$50,000Commission Damage Prevention0Personal Services\$59,458All Other\$52,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund0All Other\$252,660Prepaid Wireless Fee Fund\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000Cost Recovery Fund\$500All Other\$500Emergency Services Comm. Bureau (E-911)\$500Personal Services\$892,894All Other\$892,894All Other\$6,303,319		56.25
All Other\$2,576,800Capital0Total\$9,224,693Commission Reimbursement Fund4All Other\$50,000Commission Damage Prevention0Position Count0Personal Services\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund\$60,000All Other\$252,660Prepaid Wireless Fee Fund\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000Cost Recovery Fund\$500All Other\$500Emergency Services Comm. Bureau (E-911)\$500Personal Services\$892,894All Other\$6,303,319		
Capital0Total\$9,224,693Commission Reimbursement FundAll Other\$50,000Commission Damage Prevention0Position Count0Personal Services\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund\$252,660Prepaid Wireless Fee Fund\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000All Other\$3,000,000Cost Recovery Fund\$500All Other\$500Personal Services Comm. Bureau (E-911)\$500Position Count\$9Personal Services\$892,894All Other\$6,303,319		
Total\$9,224,693Commission Reimbursement FundAll Other\$50,000Commission Damage PreventionPosition Count0Personal Services\$59,458All Other\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation FundAll Other\$252,660Prepaid Wireless Fee FundAll Other\$1,657,202Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery FundAll Other\$500Emergency Services Comm. Bureau (E-911)9Personal Services\$892,894All Other\$6,303,319		\$2,070,000
Commission Reimbursement FundAll Other\$50,000Commission Damage Prevention0Position Count0Personal Services\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund\$252,660Prepaid Wireless Fee Fund\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000Cost Recovery Fund\$3,000,000All Other\$3,000,000Personal Services Comm. Bureau (E-911)9Personal Services\$892,894All Other\$6,303,319		\$9 224 693
All Other\$50,000Commission Damage Prevention0Position Count0Personal Services\$59,458All Other\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund\$252,660Prepaid Wireless Fee Fund\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000All Other\$3,000,000Cost Recovery Fund\$500All Other\$500Pregency Services Comm. Bureau (E-911)\$500Personal Services\$892,894All Other\$6,303,319		¥3,224,033
Commission Damage PreventionPosition Count0Personal Services\$59,458All Other\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund4All Other\$252,660Prepaid Wireless Fee Fund\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000Cost Recovery Fund\$300,000All Other\$500Emergency Services Comm. Bureau (E-911)\$500Position Count\$892,894All Other\$6,303,319		\$50,000
Position Count0Personal Services\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund\$252,660All Other\$252,660Prepaid Wireless Fee Fund\$1,657,202All Other\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000Cost Recovery Fund\$3,000,000All Other\$500Emergency Services Comm. Bureau (E-911)9Personal Services\$892,894All Other\$6,303,319		\$30,000
Personal Services\$59,458All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund\$252,660All Other\$252,660Prepaid Wireless Fee Fund\$1,657,202All Other\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000Cost Recovery Fund\$3,000,000All Other\$500Emergency Services Comm. Bureau (E-911)9Position Count9Personal Services\$892,894All Other\$6,303,319		0
All Other\$542Capital0Total\$60,000Oversight and Evaluation Fund4All Other\$252,660Prepaid Wireless Fee Fund4All Other\$1,657,202Regional Greenhouse Gas Initiative\$3,000,000Cost Recovery Fund\$3,000,000All Other\$500Emergency Services Comm. Bureau (E-911)9Personal Services\$892,894All Other\$6,303,319		v
Capital0Total\$60,000Oversight and Evaluation FundAll Other\$252,660Prepaid Wireless Fee FundAll Other\$1,657,202Regional Greenhouse Gas Initiative\$1,657,202All Other\$3,000,000Cost Recovery Fund\$3,000,000All Other\$500Emergency Services Comm. Bureau (E-911)\$500Position Count\$9Personal Services\$892,894All Other\$6,303,319		
Total\$60,000Oversight and Evaluation FundAll Other\$252,660Prepaid Wireless Fee FundAll Other\$1,657,202Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery FundAll Other\$500Emergency Services Comm. Bureau (E-911)9Position Count9Personal Services\$892,894All Other\$6,303,319		
Oversight and Evaluation FundAll Other\$252,660Prepaid Wireless Fee FundAll Other\$1,657,202Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery FundAll Other\$500Emergency Services Comm. Bureau (E-911)9Position Count9Personal Services\$892,894All Other\$6,303,319		<u> </u>
All Other\$252,660Prepaid Wireless Fee FundAll Other\$1,657,202Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery FundAll Other\$500Emergency Services Comm. Bureau (E-911)9Position Count9Personal Services\$892,894All Other\$6,303,319		<b>400,000</b>
Prepaid Wireless Fee FundAll Other\$1,657,202Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery Fund\$500All Other\$500Emergency Services Comm. Bureau (E-911)Position Count9Personal Services\$892,894All Other\$6,303,319		\$252,660
All Other\$1,657,202Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery Fund\$3,000,000All Other\$500Emergency Services Comm. Bureau (E-911)\$500Position Count\$9Personal Services\$892,894All Other\$6,303,319		Ψ232,000
Regional Greenhouse Gas InitiativeAll Other\$3,000,000Cost Recovery Fund\$500All Other\$500Emergency Services Comm. Bureau (E-911)9Position Count9Personal Services\$892,894All Other\$6,303,319		\$1 657 202
All Other\$3,000,000Cost Recovery FundAll Other\$500Emergency Services Comm. Bureau (E-911)Position Count9Personal Services\$892,894All Other\$6,303,319		¢1,001,202
Cost Recovery FundAll Other\$500Emergency Services Comm. Bureau (E-911)Position Count9Personal Services\$892,894All Other\$6,303,319		\$3,000,000
All Other\$500Emergency Services Comm. Bureau (E-911)9Position Count9Personal Services\$892,894All Other\$6,303,319		40,000,000
Emergency Services Comm. Bureau (E-911)Position Count9Personal Services\$892,894All Other\$6,303,319		\$500
Position Count9Personal Services\$892,894All Other\$6,303,319		<b>4000</b>
Personal Services\$892,894All Other\$6,303,319		9
All Other \$6,303,319		
	Capital	φ0,000,010
Total \$7,196,213		\$7 196 213

### The Regulatory Fund Assessment in Perspective

Table 13 below details the most recent five years of Regulatory Fund assessments from Annual Reports filed by the utilities with the Commission. They include revenues for the previous year ending December 31. Calculations are made to determine what percentage of the revenues reported by regulated utilities will produce the amount authorized by statute. The derived factors that will raise the authorized amount are applied against the reported revenues of each utility. Under 35-A M.R.S. § 116, on May 1 of each year the Commission sends an assessment notice to each utility with a July 1 due date. Funds derived from this assessment are used during the fiscal year beginning July 1. The total assessment for FY2017 was \$7,573,098. The assessment breakdown by utility sector is described below in Table 12.

Sector	Assessment
Electric	\$4,801,045
Telecommunications	\$1,065,532
Natural Gas	\$1,221,362
Water	\$485,159
Water Common Carrier	\$ -0-
Total	\$7,573,098

## Table 12 – Total Assessment by Utility Sector

#### Table 13 - Regulatory Fund Assessments for the Past Five Years

Year	Electric Revenues	Telecom Revenues	Water Revenues	Gas Revenues	Water Carriers Revenues	Total Utilities Revenues	Amount Billed
2012	391,325,882	297,835,978	129,690,285	82,984,999	3,622,645	905,459,789	4,939,248
2013	390,977,395	145,630,198	131,245,317	96,112,747	3,759,034	767,724,691	6,412,326
2014	415,949,262	57,786,471	130,866,502	109,386,508	3,802,125	717,790,868	7,126,144
2015	440,444,156	235,341,640	135,159,589	147,685,467	4,093,936	962,724,788	7,772,124
2016	437,109,981	216,779,664	139,657,025	162,171,917	4,346,891	960,065,388	7,573,098

## **17. COMMISSIONERS' BIOGRAPHIES**

**Mark A. Vannoy** was appointed Chairman of the Maine Public Utilities Commission in December 2014 by Governor Paul R. LePage. He had previously served as Commissioner being appointed in June 2012 and reappointed in May 2013. Prior to coming to the Commission, he worked as an Associate Vice President in the infrastructure and civil practice group at Wright Pierce in Topsham, Maine. Before moving to Maine in 2000, he served as an Officer in the United States Navy, completing tours as a NROTC instructor at Cornell University, and a nuclear tour, as the Damage Control Assistant aboard CGN36 USS California. Commissioner Vannoy graduated from the United States Naval Academy in 1993 with a Bachelor of Science in Ocean Engineering. He completed his Masters of Engineering at Cornell University in 2000. His term expires in March 2019.

**R. Bruce Williamson**, PhD, was appointed to the Maine Public Utilities Commission in June 2015 by Governor Paul R. LePage. Prior to his appointment, Commissioner Williamson served as a senior economist at the University of Tennessee's Howard Baker Center for Public Policy. He has also served as a research professor at the University's College of Business Administration. He has worked as a senior economist at the National Defense Business Institute, and at Southwestern Bell Telephone Company. Commissioner Williamson holds a doctorate in economics, with an emphasis in utility economics, from the University of New Mexico. He completed his undergraduate work at Cornell and earned a Masters in International Relations from the Korbel School. His term expires in March 2021.

**Randall D. Davis** was appointed to the Maine Public Utilities Commission in September 2017 by Governor Paul R. LePage. Prior to his appointment, Davis served as the area operations manager for energy at Sappi's Somerset Mill in Skowhegan, where he has worked since starting with the company in 1978. During his career at Sappi, he has been promoted numerous times to management positions overseeing various aspects of the manufacturing process. Prior to his tenure at Sappi, Davis was a systems engineer for Exxon Chemical working in New Jersey, Louisiana, Texas and England until his decision to return to Maine. Davis graduated from the University of Maine in 1976 with a Bachelor of Science in Chemical Engineering. His term expires in March 2023.

## **18. PAST COMMISSIONERS**

## 1915 – 2017

- \* Benjamin F. Cleaves 1915-1919 William B. Skelton 1915-1919 Charles W. Mullen 1915-1916 John E. Bunker 1917-1917 Herbert W. Trafton 1918-1936 \* Charles E. Gurney 1921-1927 Albert Greenlaw 1924-1933 \* Albert J. Stearns 1928-1934 Edward Chase 1934-1940
- \* Frank E. Southard 1935-1953 C. Carroll Blaisdell 1937-1941 James L. Boyle 1941-1947 George E. Hill 1942-1953 Edgar F. Corliss 1948-1954 \* Sumner T. Pike 1954-1955 Frederick N. Allen 1954-1967 Richard J. McMahon 1955-1961 \* Thomas E. Delahanty 1955-1958 \* David M. Marshall 1958-1969 \* Earle M. Hillman 1962-1968 \* John G. Feehan 1968-1977 Leslie H. Stanley 1970-1976 \* Peter Bradford 1971-1977 1982-1987 Lincoln Smith 1975-1982 \* Ralph H. Gelder 1977-1983 Diantha A. Carrigan 1977-1982

* David Moskovitz	1984-1989
* Kenneth Gordon	1988-1993
Elizabeth Paine	1989-1995
Heather F. Hunt	1995-1998
William M. Nugent	1991-2003
* Thomas L. Welch	1993-2005
	2011-2014
Stephen L. Diamond	1998-2006
* Sharon M. Reishus	2003-2010
* Kurt Adams	2005-2008
Vendean Vafiades	2007-2012
* Jack Cashman	2008-2011
David P. Littell	2010-2015
Carlisle J.T. McLean	2015-2017

### \* Denotes Chairman

**Cheryl Harrington** 

1982-1991