

STATE OF MAINE PUBLIC UTILITIES COMMISSION



2018 Annual Report

February 1, 2019

Maine Public Utilities Commission

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Commissioners

Mark A. Vannoy
Chairman

R. Bruce Williamson
Commissioner

Randall D. Davis
Commissioner

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Commissioners' Letter

This report provides an overview of the work conducted by the Maine Public Utilities Commission (Commission) in 2018 administering the laws concerning public utilities in Maine.

This past year included some tremendous accomplishments for the Commission. The Emergency Services Communications Bureau implemented text to 911 to all Public Safety Answering Points (PSAPs) statewide. This is a major technology advancement, and Maine is among the first in the nation to successfully implement this important technology.

The Commission's gas safety staff received a 100% score for the fourth consecutive year from the United States DOT's Pipeline & Hazardous Materials Safety Administration.

The Executive Summary of the report is detailed on page 2 and highlights some of the more noteworthy cases and events that occurred during calendar year 2018. Major cases include the CMP metering and billing investigation, the New England Clean Energy Connect proposed transmission line, and the Emera Maine rate case. The Commission has a very dedicated and talented group of employees who work on these cases. As noted in Section 3 of the report, our employees analyze and 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 PUC goal for the Maine State Employees Combined Charitable Appeal by over 40%.

In all aspects of its work, the Commission continues to exercise its regulatory, adjudicatory and public policy responsibilities diligently 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
Commissioner

Randall D. Davis
Commissioner

2. EXECUTIVE SUMMARY

This section of the annual report highlights some of the more noteworthy cases and events that occurred during calendar year 2018.

Topic	Description
Text to 911	The Emergency Services Communication Bureau successfully implemented text to 911 at all PSAPs. Maine is one of the first states to implement this advancement in technology statewide.
Standard Offer Price Increase for 2019	The Standard Offer RFP conducted by the Commission in late 2018 will result in price increases in January 2019 for all CMP and Emera residential consumers who take standard offer supply service. The price increases result in a 6.5% change to a customer's total bill and are primarily driven by the natural gas constraints in New England.
CMP Metering and Billing Investigation	In late 2017, the Commission began receiving numerous complaints from CMP customers about their bills. On March 1, 2018, the Commission opened a summary investigation into CMP's metering, billing and customer communications issues (Docket 2018-00052). The Commission retained Liberty Consulting Group to conduct an independent audit to determine whether CMP's systems produce accurate measurements of customer usage with bills that reflect correct customer usage levels and charges. The Liberty analysis and report concluded that CMP's meters functioned properly and that high consumer bills were a result of the extremely cold weather. The report also identified major problems with the implementation of CMP's new billing system as well as concerns over poor customer service. The Commission opened a two track adjudicatory process to resolve these issues.
New England Clean Energy Connect Project (NECEC)	On September 27, 2017, CMP filed for a Certificate of Public Convenience and Necessity (CPCN) for the New England Clean Energy Connect Project (NECEC), a 145-mile 1,200 MW transmission line from the Québec-Maine Border to Lewiston. This case (Docket 2017-00232) has been very active in 2018 and the Commission held three public hearings seeking input from Maine citizens, business and municipalities. Intervenors include but are not limited to Calpine Corporation, Conservation Law Foundation, Industrial Energy Consumers Group, Office of the Public Advocate, and several towns and cities in Maine. Based on the current schedule, the Commission Staff will issue an Examiners' Report in March 2019. The Commission will likely issue a decision on the CPCN in March or April 2019.
Gas Safety and Dig Safe	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).

EXECUTIVE SUMMARY CONTINUED

Topic	Description
Emera Maine 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%. After analysis, testimony and hearings, the Commission issued an Order dated June 28, 2018, and authorized the Company to increase its delivery rates by \$4.5 million or 5.32% as of July 1, 2018. The Commission's decision is based on a cost of equity of 9.35%.
Telephone Provider of Last Resort (POLR) Legislation	Public Law 2015, Chapter 462, removed Consolidated Communications' obligation to provide provider of last resort (POLR), or basic telephone service, in Portland, South Portland, Lewiston, Auburn, Bangor, Biddeford and Sanford in 2016. In 2017, following public meetings held by the Commission and Consolidated's meeting certain service quality standards, Consolidated was relieved of its POLR obligation in Scarborough, Gorham, Waterville, Kennebunk, Cape Elizabeth, Old Orchard Beach, Yarmouth, Bath, Westbrook, and Freeport. In April 2018, following public meetings held by the Commission and Consolidated's meeting certain service quality standards, Consolidated was relieved of its POLR service obligation in Brewer, Kittery, Windham, Brunswick, and Augusta.
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 into the utilities preparedness and response to the storm. On October 4, 2018, the Commission issued an Order, finding that the severity of the storm was unpredicted and, to a large degree, unprecedented, and based on the weather forecast information and the availability of storm restoration crew resources, both CMP and Emera Maine acted reasonably in their preparation for and response to the storm. The Order also detailed improvements for future storm performance by the utilities including coordination and communication with other involved entities and the accuracy of outage and restoration time information provided to customers.
Tax Cuts and Jobs Act	The federal Tax Cuts and Jobs Act (TCJA) which became law on January 1, 2018 included provisions that reduced the corporate tax rate from 35% to 21%. The Commission opened cases for all impacted utilities related to this legislation. While not all of these cases have been concluded, costs to ratepayers have been reduced by \$21 million on the current portion of income taxes included in rates for CMP, Emera Maine, Northern Utilities, and Maine Natural Gas.
Northern Utilities Rate Case	On May 31, 2017, Northern Utilities requested approval for an increase in distribution rates of \$6.5 million. After incorporating the effect of the TCJA and the Commission's determinations in the case, the Commission ordered Northern to decrease its rates by \$87,243 as of March 1, 2018. The Commission did not approve any rate increase associated with the adjustments presented by the Company to its test year operating revenues.

3. 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 62 includes accountants, engineers, lawyers, financial analysts, economists, consumer specialists, and administrative and support staff. It is divided into six operating areas 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.

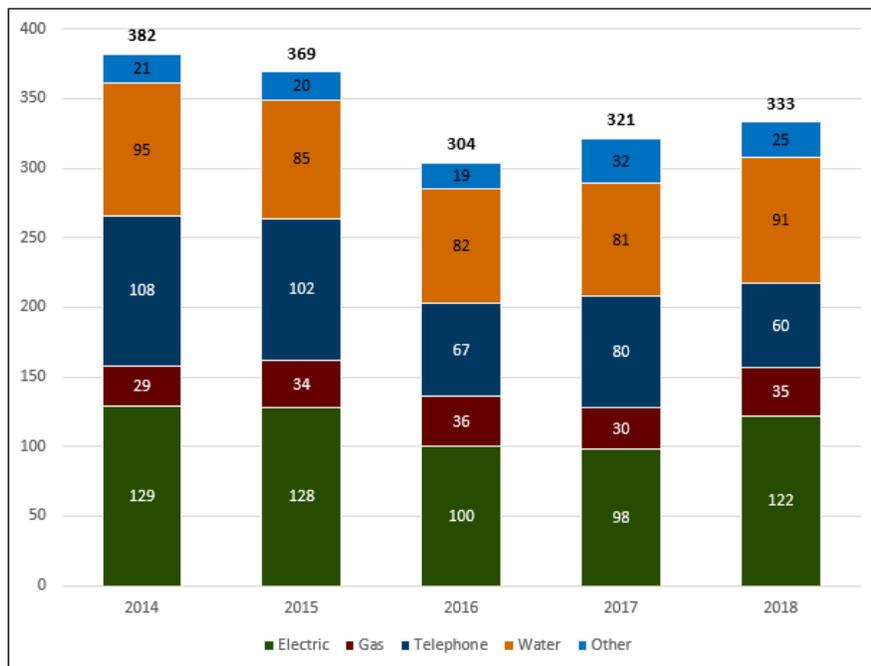
Efficient Case Management

On average, the Commission receives approximately 340 cases a year from the utilities we regulate. As noted below, over 60% of these cases relate to electric and water utilities.

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.

Fifty percent of communication cases have been resolved within one month; 50 percent of electric and "all other" industry dockets are resolved within the first two months; and half of gas industry dockets are resolved within 3 months.

Table 1 – Commission Cases by Industry



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.¹ Figure 1 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 2016².

The removal of the POLR service obligation continued for the next 15 largest municipalities³ in Maine, in groups of five municipalities, through early 2018. Removal of the obligation in these municipalities was predicated on the POLR service provider meeting certain service quality standards. The POLR service provider in all 22 municipalities was Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE (FairPoint), now Consolidated Communications, Inc. (Consolidated) which assumed all of FairPoint's obligations.

Section 9 of the 2016 Act directs the Commission to include in its Annual Report, through 2022, information related to which municipalities have had the POLR obligation lifted as well as any municipalities where the Commission approved the discontinuance, reduction or impairment of service and any complaints the Commission may have received regarding the costs of or a lack of access to reliable basic telephone service in municipalities where the POLR obligation has been removed. The POLR service obligation has been eliminated in all 22 municipalities specified in the 2016 Act.

Consolidated may request that the obligation be removed in additional municipalities. Before the Commission will lift the obligation in additional municipalities, Consolidated 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. To date, Consolidated has not requested to have its POLR obligation lifted in any additional municipalities. In the municipalities where Consolidated has been relieved of its

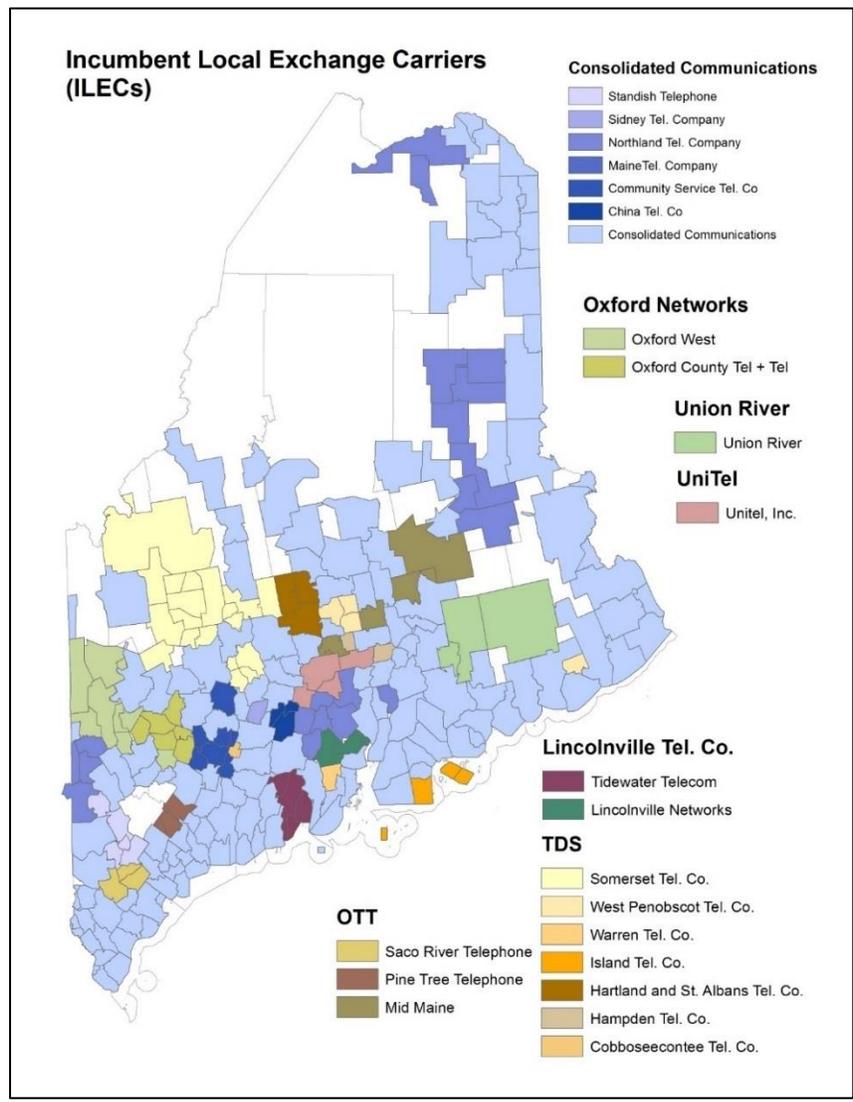
¹ POLR service provides access to these services, but any charges, e.g. long-distance charges, are not included in the flat-rate.

² Portland, Lewiston, Bangor, South Portland, Auburn, Biddeford and Sanford.

³ Scarborough, Gorham, Waterville, Kennebunk, Cape Elizabeth, Old Orchard Beach, Yarmouth, Bath, Westbrook, Freeport, Brewer, Kittery, Windham, Brunswick, and Augusta.

POLR service obligation, it is prohibited from discontinuing, reducing, or impairing (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 Consolidated must make before it may abandon service in any municipality. To date, the Commission has not approved the discontinuing, reducing or impairing of any other telephone service in any municipalities. In addition, the Commission has not received any complaints regarding the costs of or a lack of access to reliable basic telephone service in municipalities where the POLR obligation has been removed.

Figure 1 – Incumbent Local Exchange Carriers



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

Table 2 – ILEC and POLR Access Line Summary

Telephone Group	Telephone Company	ILEC Data				POLR Data			
		2008 Access Lines	2017 Access Lines	Change 2016-2017	Change 2008-2017	2014 Access Lines	2017 Access Lines	Change 2016-2017	Change 2014-2017
Consolidated	China Telephone	2,700	779	-13%	-71%	241	136	-11%	-44%
	Northland Telephone Co.	20,764	10,515	-7%	-49%	2,344	1,300	-11%	-45%
	Community Service Telephone Co.	9,280	3,794	-10%	-59%	1,133	625	-12%	-45%
	Sidney Telephone Co.	1,254	394	-12%	-69%	162	111	-4%	-31%
	Maine Telephone Co.	8,163	2,761	-10%	-66%	932	563	-8%	-40%
	Standish Telephone Co.	5,753	1,884	-10%	-67%	542	351	-5%	-35%
	Consolidated Co.	411,345	160,963	-10%	-61%	24,488	11,438	-32%	-53%
UniTel	UniTel Co.	4,386	3,001	4%	-32%	428	324	1%	-24%
Union River	Union River	1,260	1,074	0%	-15%	1,048	1,072	0%	2%
TDS	Cobboosecontee Tel & Tel Co.	645	263	-14%	-59%	77	50	-9%	-35%
	Hampden Telephone Co.	2,857	1,539	-10%	-46%	314	199	-14%	-37%
	Hartland & St. Albans Telephone Co.	3,659	2,203	-6%	-40%	441	240	-18%	-46%
	Island Telephone Co.	620	521	-7%	-16%	209	181	-6%	-13%
	Somerset Telephone Co.	10,509	7,145	-3%	-32%	1,586	1,119	-10%	-29%
	Warren Telephone Co.	1,528	731	-9%	-52%	184	118	-10%	-36%
	West Penobscot Telephone Co.	2,207	1,632	-2%	-26%	282	174	-15%	-38%
Lincolnville	Lincolnville Networks	1,794	1,473	-2%	-18%	154	151	-14%	-2%
	Tidewater Telecom	10,261	6,544	-5%	-36%	1,070	736	-11%	-31%
OTT	Mid-Maine Communications	5,228	2,168	-9%	-59%	1,343	830	-13%	-38%
	Pine Tree Tel & Tel Co.	5,373	1,968	-10%	-63%	1,802	1,243	-11%	-31%
	Saco River Tel. & Tel Co.	7,079	2,655	-10%	-62%	1,723	1,205	-12%	-30%
Oxford	Oxford West Telephone Co.	6,373	3,146	-13%	-51%	4,348	3,047	-14%	-30%
	Oxford Telephone Co.	5,595	2,546	-15%	-54%	3,666	2,526	-15%	-31%
	Total Retail Lines	528,633	219,699	-9%	-58%	48,517	27,739	-21%	-43%

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 13% of ILEC customers opt for POLR service. Table 2, 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. An increasing number of customers are substituting mobile wireless service and cable for traditional wireline service. The mobile cellular market now has more than 1.2 million cell phone subscribers in Maine, 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.

LEGISLATIVE ACTIVITIES

Pole Attachment Inquiry Related to Rates

During the 2017 session, the Legislature enacted Public Law 2017, c. 199, An Act to Amend the Law Regarding Joint Use of Certain Utility and Telecommunications Infrastructure, which amended State law to expand the entities that have rights regarding joint use of certain equipment such as utility poles, 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. Any amendments to the rule related to the rates entities pay to attach was not required to be part of those amendments. While the Commission attempted to address rate issues as well, it did not have sufficient time or the necessary information in the record to make amendments regarding rates at that time. The Commission adopted the amendments related to the terms and conditions for attaching to utility poles on January 12, 2018. On January 18, 2018, the Commission opened a Notice of Inquiry (NOI) to obtain information from interested persons regarding possible amendments to the rule relating to the calculation of costs and resulting rates for pole attachments (Docket 2018-00010). The Commission expects to open a Notice of Rulemaking in early 2019.

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 high-speed 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 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 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 2018 the Commission approved a budget for the 2018/19 fiscal year of \$3.7 million.

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) changed 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. The change in methodology was 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 has seen this in the recently approved budget of \$3.7 million as compared to last year's budget of \$3.14 million. In 2018, the Commission amended its MTEAF rule, Chapter 285, to implement the 2017 Act. In addition, the Commission conducted a separate proceeding to determine the actual per connection amount for the MTEAF. The amount set was \$0.21 per month.

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 2018, the Commission did not receive any new requests for PIPs. The annual cost of the program, which currently includes 35 PIPs, is approximately \$30,000 and is funded by the Maine Universal Service Fund (MUSF).⁴

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 eight years; hence the Commission has transferred a total of \$185,000 to the CEF in each of those years.

Telecommunications Relay Services

Telecommunications Relay Services (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. Title 35-A M.R.S. § 7104(7) provides that in order to ensure the affordability of TRS throughout the State, the Commission shall establish funding support for these services, including related outreach programs, within the MUSF. During the 2018 legislative session, Public Law, c. 408, An Act to Enhance Operations of the TRS Advisory Council, was enacted. The Act made changes to the Council including expanding the scope of the Council's authority from providing advice to providers of TRS to implementing the Maine TRS program as certified by the FCC. Other explicitly defined duties of the Council include the ability to contract for intrastate TRS and outreach services, to organize and fund projects to promote the use of TRS and to develop, administer and fund pilot projects to provide access to TRS. The Act also changed the funding of the Council to require that the Council submit to the Commission an annual budget of its projected costs for the coming

⁴ The Commission is required to report on this information pursuant to 35-A M.R.S. § 7508(4).

fiscal year, not to exceed \$600,000, and requires that the Commission transfer the funds quarterly to the TRS Council Fund, created by the Act to fund Council activities. The Act also directs the Council to submit an annual report to the Commission that details the activities of the Council including all Council expenditures from the fund and how all vendors the Council contracts with for services were selected.

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 125th 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 2018.⁵

⁵ 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 MAINE⁶

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 costs include the few remaining net, above-market costs for generation obligations that utilities incurred prior to industry restructuring, as well as more recent 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 (Public Law 2009, c. 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.

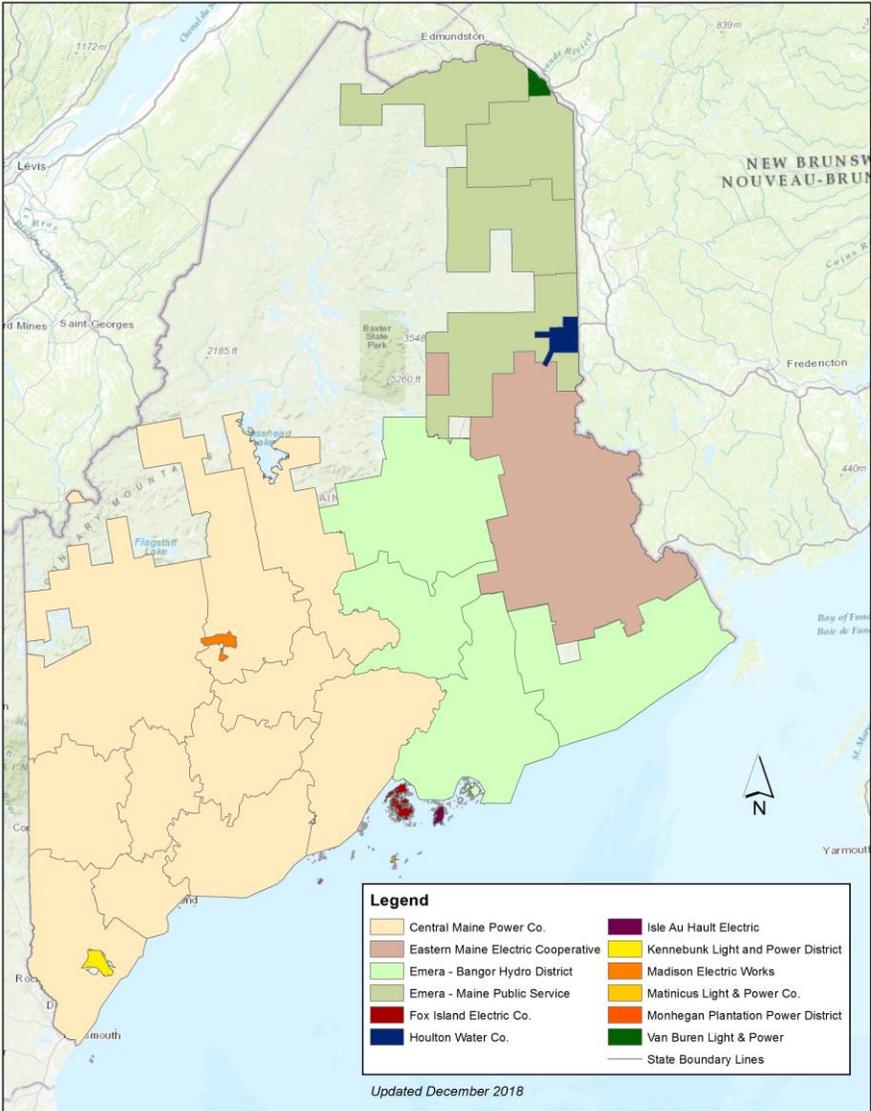
The Commission regulates the operations and rates of the Maine T&D utilities, except for transmission rates, which are regulated by the Federal Energy Regulatory Commission (FERC). The Commission licenses retail electricity suppliers and marketers, and generally

⁶ 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.

oversees the Maine retail market. The Commission also administers competitive 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 consumer-owned utilities (COUs). The IOUs, Central Maine Power Company (CMP) and Emera Maine (EME), serve about 95% of the total state load. Figure 2 below shows the geographic areas each utility serves.

Figure 2 – T&D Service Areas



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, 2018 were \$42.46/MWh, which is about 36.9% higher than prices during the prior 12-month period. During the most recent winter period, December 2017 – February 2018, prices averaged \$71.16/MWh, which is about 72.7% higher than the prior winter period. Average wholesale energy prices in the ISO-NE spot market over the last several years are shown in Figures 3 and 4 below.

Figure 3 - ISO-NE Day-Ahead Locational Marginal Prices (LMP); Average Monthly

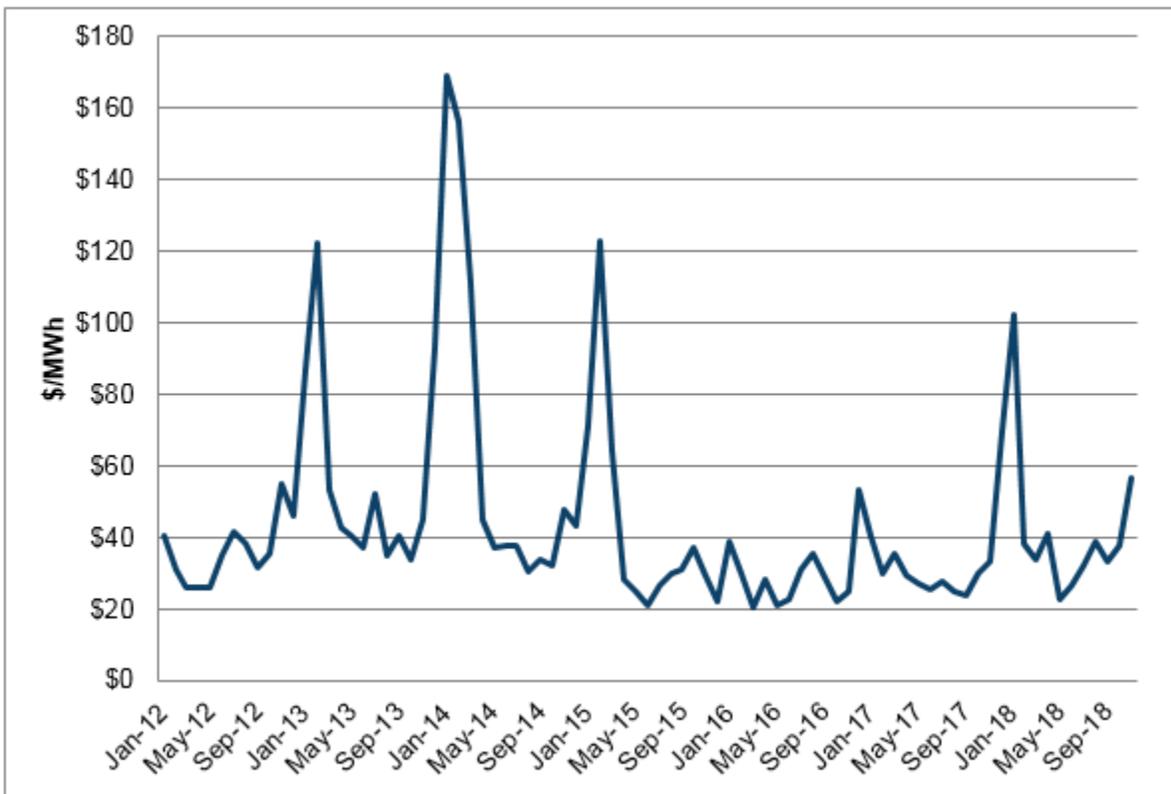
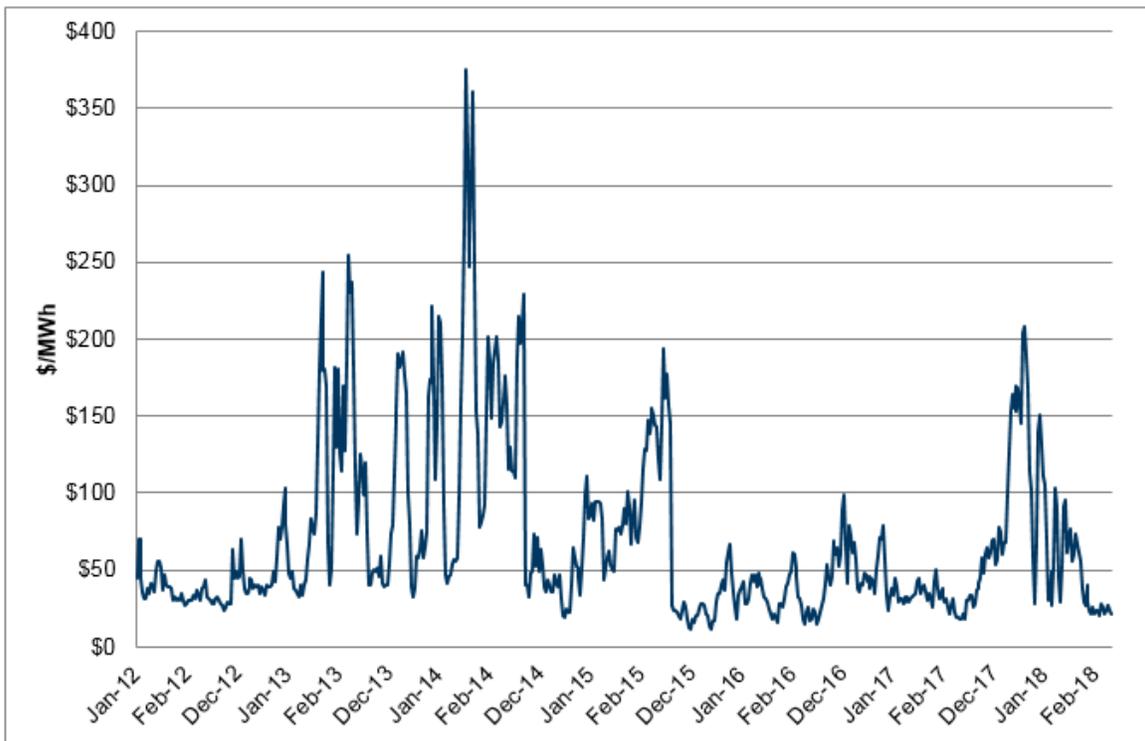


Figure 4 – ISO-NE Day-Ahead LMP; Daily Average Winter Months



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 2019 described below.

Retail Supply Prices

Retail electricity supply prices for most customers in Maine were higher in 2018 compared to the prior year. The standard offer solicitation process conducted by the Commission at the end of 2017 resulted in electricity supply prices for calendar year 2018 of 7.92 cents/kWh for CMP residential and small business consumers and 7.22 cents/kWh for Emera Maine – Bangor Hydro District residential and small business consumers. These prices range from 14-18% higher than in 2017, resulting in an 5-8% increase in the average residential customers total bill.

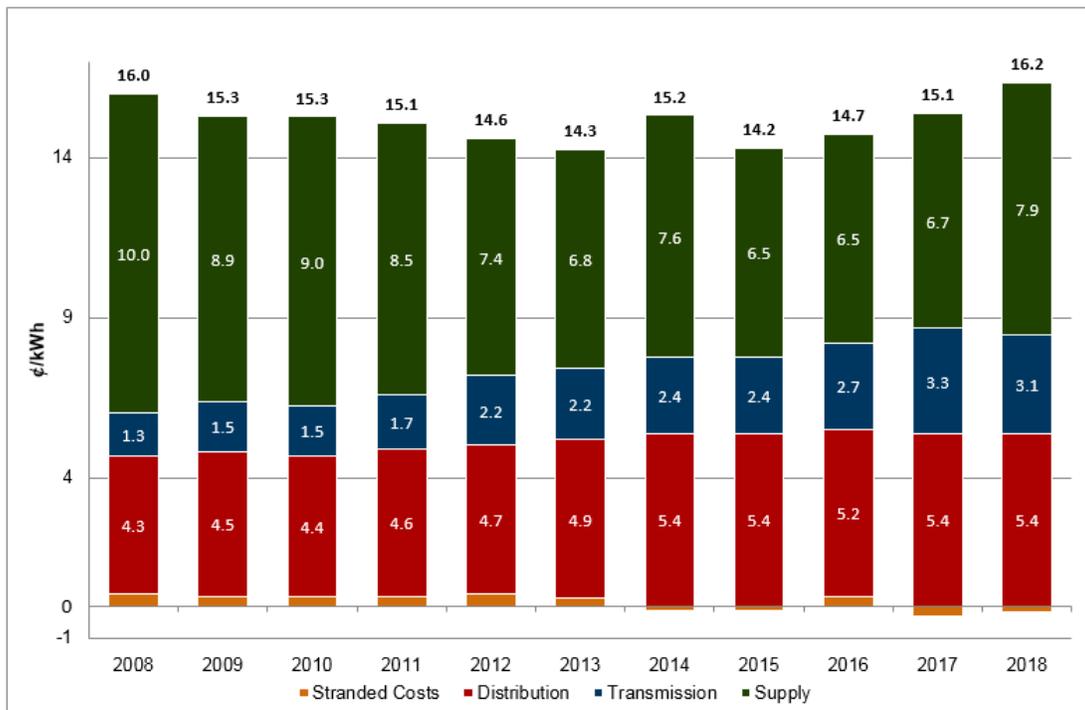
In December 2018, the Commission accepted bids and set new standard offer service prices for customers of CMP and Emera Maine, Bangor Hydro District (BHD). The new prices are effective for a 12-month term beginning January 1, 2019. For CMP residential and small business customers, the accepted bids resulted in a new standard offer price of 9.00 cents/kWh, which reflects an 13.7% increase compared to prices during 2018. For CMP

medium business customers, the new prices equated to about 8.95 cents/kWh on average over the term, which reflects an increase of 7.8% compared to prices during 2018. 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 8.37 cents/kWh, which reflects a 15.8% increase compared to the prior year. For Emera Maine medium business customers, the new prices equated to about 9.03 cents/kWh on average over the term, which reflects an increase of 11.4% 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.

The following table provides a year by year price comparison by component for CMP residential customers. The supply portion of the overall price has grown the last three years while the transmission and distribution components have remained stable from 2017 to 2018.

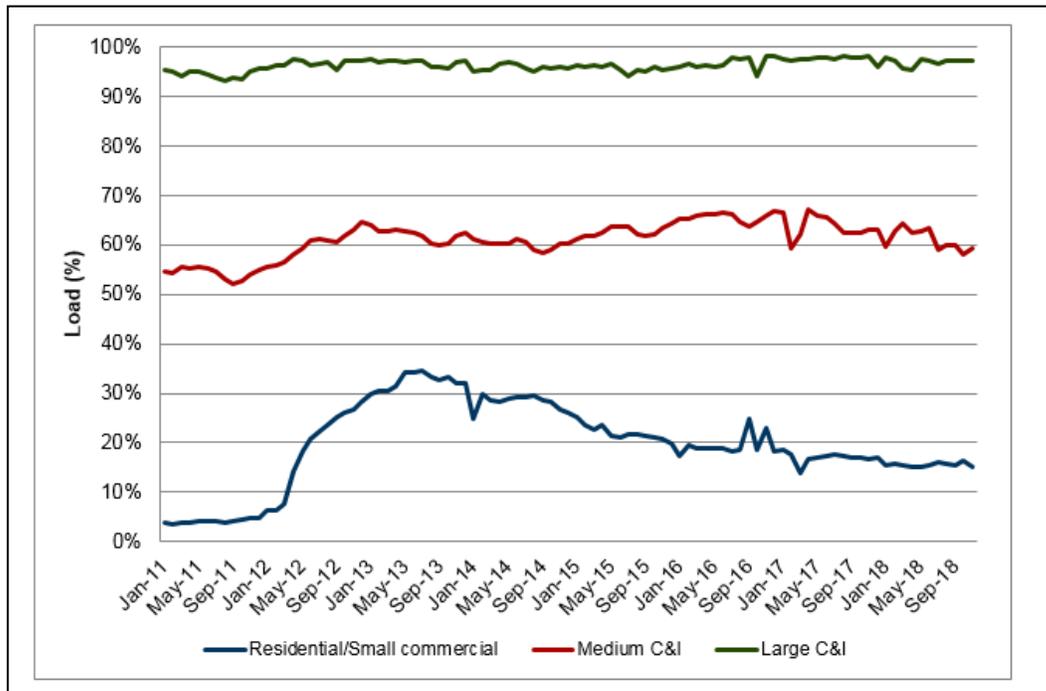
Table 3 – CMP Total Price by Component



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 5 – Load Served by Competitive Electric Providers, Jan. 2011 – Sept. 2018



During 2018, the amount of residential and small commercial supply served by CEPs continued to decline, as was the case during 2017. As of late 2018, about 15% of residential/small commercial supply was served by CEPs, down from a high of 35% in early 2013. Figure 5 above shows the migration patterns by sector, over the past several years.

Specialized supply products for residential and small commercial customers continued to be available during 2018, including a green power program that allows customers to purchase renewable energy credits (RECs).

As has been the case in prior years, during 2018 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 2018, the distribution rates of Maine's investor-owned utilities varied. CMP's rates remained largely the same. This is due primarily to costs related to expenses incurred from the October 2017 wind storm being offset by the reduction from the federal Tax Cuts and Jobs Act. Emera Maine rates increased by 5% (see Emera Maine Rate Case).

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. For CMP and Emera Maine the residential stranded costs were slightly less than a negative one-half cent per kWh.

Transmission rates for CMP decreased by approximately 23% overall in 2018. Transmission rates increased in each of Emera Maine’s districts. BHD increased by about 19% and Emera Maine’s MPD rate increased by approximately 83%. The significant drivers of CMP’s decrease are flowing through part of the benefits of the Tax Cuts and Jobs Act as well as the true-up from forecast to actual cost. These credits more than offset CMP’s storm cost recovery. Emera Maine’s BHD increase is primarily a result of an increase in capital additions and storm recovery costs. Emera Maine’s MPD rate increase is a result of removing one-time FERC ordered refunds and the addition of several capital investments. Unlike CMP, Emera’s rate increases do not reflect flowing through any of the tax change benefits to customers. This matter is currently being reviewed by FERC. 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 3.6 ¢/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.

Table 4 – Residential Electricity Rates

RESIDENTIAL ELECTRICITY RATES IN MAINE							
As of December 31, 2018*							
	% of State Residential Load	kWh	Delivery Rate			Standard Offer Rate ¢/kWh	Total Rate ¢/kWh
			T&D ¢/kWh	Stranded Cost ¢/kWh	Total Delivery ¢/kWh		
INVESTOR-OWNED UTILITIES							
Central Maine Power*	78.9%	3,629,686,000	8.6	-0.2	8.4	7.9	16.3 ¢/kWh
Emera Maine - BHD*	13.6%	623,635,910	10.2	0.7	10.9	7.2	18.1 ¢/kWh
Emera Maine - MPD*	4.0%	184,289,206	7.4	-0.1	7.3	7.4	14.7 ¢/kWh
COOPERATIVES & MUNICIPAL-OWNED UTILITIES							
Eastern Maine Electric Cooperative	1.2%	54,248,829	9.7	N/A	9.7	7.6	17.3 ¢/kWh
Houlton	0.6%	29,875,077	3.4	N/A	3.4	6.9	10.3 ¢/kWh
Van Buren	0.2%	7,305,606	4.9	N/A	4.9	7.0	11.9 ¢/kWh
Kennebunk Light & Power	1.0%	47,956,414	5.0	N/A	5.0	8.0	13.0 ¢/kWh
Madison Electric Works	0.4%	17,258,083	7.5	N/A	7.5	7.7	15.2 ¢/kWh
Matinicus	0.0%	214,280	Exempt from Standard Offer requirements				49.4 ¢/kWh
Monhegan	0.0%	329,311	Exempt from Standard Offer requirements				74.7 ¢/kWh
Fox Island	0.1%	6,869,410	20.4	N/A	20.4	10.0	30.4 ¢/kWh
Isle au Haut	0.0%	157,909	43.7	N/A	43.7	7.2	50.9 ¢/kWh
Swans Island**							
STATE AVERAGE	100.0%	4,601,826,035	8.7	-0.1	8.7	7.8	16.5 ¢/kWh

* 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 2017 annual reports (filed in 2018) and supply rates in effect 12/31/18.

** 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 surcharge as established in 2016-00209.

Current retail rates for Maine residential consumers for all electric utilities in Maine are summarized in Table 4 above.

MAJOR CASES, ISSUES AND PROCEEDINGS

Emera Maine Rate Case

On October 2, 2017, Emera Maine filed a petition for an increase its distribution rates (Docket 2017-00198). Emera Maine requested a \$10 million, or 12%, increase in its overall distribution revenues. In late December 2017, while the Company's rate request was still pending before the Commission, Congress passed the Tax Cuts and Jobs Act (TCJA) which became law on January 1, 2018. Among its provisions, the TCJA reduced the corporate tax rate from 35% to 21%. The Commission required that Emera Maine update its rate request to reflect the impact of the TCJA on its proposed rates. By Order dated June 28, 2018, the Commission authorized the Company to increase its delivery rates by \$4.5 million or 5.32% as of July 1, 2018. The Commission's decision is based on a cost of equity of 9.35%. The approved rates reflect the current federal tax rate of 21%. The Commission's decision also required that Emera Maine defer the difference between rates based upon the 34% and 21% tax rate for the period of January 1, 2018 to June 30, 2018. By Order dated September 11, 2018, the Commission granted in part a Motion for Reconsideration from the Company, deciding to reopen the question of how the savings associated with the TCJA for the January 1, 2018 through June 30, 2018 time period should be calculated. This issue is being considered in another docket (Docket 2018-00271) in conjunction with the review of the excess deferred income taxes that resulted from the TCJA.

Commission Initiated Investigation Into Central Maine Power's Rates and Revenue Requirement

On August 7, 2018, the Commission initiated an investigation into CMP's rates and revenue requirements (Docket 2018-00194). On October 15, 2018, the Company submitted its testimony and proposals on rate design. Under the Company's proposal, its proposed rate design changes would not take effect until December 1, 2020. The rate design aspects of the case are expected to conclude in October 2019 and the non-rate design portions are expected to conclude in August 2019.

Central Maine Power Tax Case

On January 11, 2018, the Commission opened an investigation into the impact of the TCJA on CMP and whether any rate adjustments are warranted (Docket 2018-00004). As part of the annual rate review, CMP adjusted its rates to reflect the change in the federal tax from 34% to 21%. The Commission subsequently initiated an investigation into CMP's rates and revenue requirements and expects to examine the TCJA impacts on the accumulated deferred income tax balances as part of that case (Docket 2018-00194).

Central Maine Power Transmission Line Proceeding

On September 27, 2017, CMP 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 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 scheduled to conclude in March 2019.

Central Maine Power Billing, Metering and Customer Communications Investigation

In late October 2017, CMP went operational with its new Customer Information System (CIS) billing program. On March 1, 2018, the Commission initiated a summary investigation into the Company's metering, billing and communication issues in response to the large number of complaints that the Commission had received from CMP's customers, most of which related to high bills and possible billing errors (Docket No. 2018-00052). In addition, a number of these customers reported difficulty, or a complete inability, to contact CMP to discuss their billing issues. On March 22, 2018, given the highly technical nature of CMP's new billing system the Commission initiated a forensic audit of CMP's systems which may be related to possible billing errors.

On December 20, 2018, the Commission issued the Liberty Report. The report included the following statements regarding metering and high bills: "CMP's meters produce accurate measurements of customer usage. Our analysis showed usage at levels consistent with the expectations that the cold weather of last winter would suggest."

Regarding billing system implementation and customer communications, the Liberty report concluded: "Significant gaps in SmartCare testing and training and in the transition to it produced in its initial phase of operation unnecessarily large numbers of errors requiring lengthy manual correction before bill issuance. A shortage of personnel contributed to the inability to eliminate errors before go-live. Continuing shortages of experienced personnel after go-live unduly delayed fixes to the errors, caused significant customer difficulty in reaching CMP representatives and in getting answers to questions and concerns, and meant overly long delays in resolving billing problems. Customer performance metrics fell below norms and remained so for some time, some of them still today. CMP experienced a 22 percent increase in times to handle calls following SmartCare go-live and high rates of calls abandoned by customers before response by the company. CMP has also failed to meet consistently its target level of service (answering 80 percent of customer calls within 45 seconds, a target consistent with industry experience) as it continued in the second and third quarters of 2018 to struggle to address customer billing issues. A lack of sufficient staffing has materially contributed to long answer and call handling times. A lack of sufficient experience and supervision have impaired the ability to resolve specific customer inquiries and complaints and to address systemic issues underlying them."

On January 8, 2019, the Commission determined that sufficient grounds exist to initiate a formal investigation of all matters which were the subject of the independent audit conducted by Liberty Consulting. While the Liberty audit did not find a systemic billing or metering problem which would have resulted in high bill complaints by customers, the Commission determined that it is appropriate to allow the parties to explore Liberty's findings as part of a separate adjudicatory proceeding. Intervenors would be allowed to conduct discovery on CMP and the Liberty auditors, and provide their own analysis to the Commission. CMP would also be allowed to provide their own analysis to the Commission. Ultimately, the

information developed and any of the parties analysis and recommendations would be the subject of public hearings as outlined in 35-A M.R.S. §1303(2).

The Commission also determined that customer communication and service issues identified in the Liberty audit also warrant further investigation as part of a formal adjudicatory proceeding in CMP's rate investigation. Addressing these issues in the rate investigation will allow the Commission to resolve any possible imprudence concerning CMP's performance to protect ratepayers and incorporate any rate adjustments which are found to be appropriate as part of the Commission's rate order.

Central Maine Power October 2017 Storm

On October 29 and 30, 2017, a rain/wind storm moved into the State and caused significant outages in the territories of both CMP and Emera Maine. Service to approximately 467,000 CMP customers and 90,000 Emera Maine customers was interrupted because of the storm. In several cases, customers were without power for more than a week. Given the extent and duration of the outages which resulted from the storm, the Commission, on December 19, 2017, opened a summary investigation to gather information on the T&D utilities' preparedness and response to the storm (Docket No. 2017-00324).⁷ In opening the investigation the Commission stated that it would also review what steps T&D utilities have taken, or should take in the future, to prepare their systems for the effects of future storms.

In its October 4, 2018 Order, the Commission found that the severity of the October Storm was unpredicted and, to a large degree, unprecedented. In this context, and for reasons discussed in the Order, the Commission found that the preparation for and response to the storm by CMP and Emera Maine were reasonable. Therefore, the Commission concluded that no further investigation of their preparation and restoration response was warranted although recommendations for improvement were clearly identified. This completed this aspect of the proceeding. The Commission noted areas for improvement by the T&D utilities with respect to coordination and communication with State, county and town entities, as well as the accuracy of outage and restoration time information provided to customers. The Commission required CMP and Emera Maine to file reports with the Commission by December 1, 2018, detailing their improvement plans for future storms. The Commission also examined how the T&D utilities and ILECs coordinate their reliability and restoration efforts given the largely deregulated telephone industry in the State. The Commission intends to initiate an investigation to examine pole set area issues with the objective of improving storm restoration processes as well as the overall condition of the delivery system.

Rulemaking Regarding Testing of T&D Utilities Metering and Billing Systems

During the 2018 legislative session, Public Law 2017, c. 44, An Act to Restore Confidence in Utility Billing Systems, was enacted. The Act directed the Commission to conduct a major substantive rulemaking governing the testing of the metering and billing systems of T&D utilities to ensure accuracy regarding the measurement of usage and the determination of customer bills. On October 29, 2018, the Commission opened a Notice or Rulemaking

⁷ Concurrent with this investigation, the reasonableness of the restoration costs incurred by CMP and Emera Maine for the October storm were also examined. CMP's costs were resolved by stipulation in Docket No. 2018-00069 and Emera Maine's case is currently pending (Docket No. 2018-00021).

(Docket 2018-00311). The Commission provisionally adopted the rule on January 7, 2019. The provisionally adopted rule will be considered by the Legislature during the 2019 session.

RGGI Disbursements

During its 2016 session, the Legislature enacted Public law 2015, c. 498, An Act To Reduce Electric Rates for Maine's Businesses. The 2016 Act directed the Efficiency Maine Trust (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.

On July 10, 2018, the Commission issued a Request for Applications for 2018 disbursements (Docket 2018-00140). The applications were due by August 17, 2018. On October 5, 2018, the Commission issued an Order that identified the customers that would be eligible for disbursements during the 2018-2019 fiscal year, and the amount each customer would receive, and directed the Trust to transfer \$1,178,331.75 from the RGGI Trust Fund to the Commission as the first quarterly payment for fiscal year 2018-2019, to be disbursed by the Commission to affected customers. The first quarterly disbursement was made in November 2018.

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, 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. In April 2018, the Commission found that, during the first contract year, Stored Solar operated its facilities at 50% capacity or greater and provided \$16,428,857 of its \$20,743,934 required in-state benefits, resulting in a reduction to the contract price of 20.80%

(Docket 2017-00187). In June 2018, the Commission found that, during the first contract year, ReEnergy had operated its facilities at 50% capacity or greater and had provided all of its required in-state benefits, resulting in no reduction to the contract price (Docket 2016-00084).

The above market costs for the two contracts through December 31, 2018 total \$8.5M leaving a remaining balance of \$4.9M 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 were delivered.

Investigation into Rate-Setting Mechanisms Regarding Non-Wire Alternatives

On December 15, 2017, the Commission issued an Order concluding its Investigation into the Designation of a Non-Transmission Alternative (NTA) Coordinator (Docket 2016-00049). In that Investigation, the Commission considered whether the designation of a third-party NTA Coordinator would be in the public interest. In its Order, the Commission found that it would not be in the public interest to designate a third party NTA Coordinator. Instead, the Commission found that the NTA-related policy goals set forth in the Smart Grid Policy Act, Title 35-A, M.R.S., section 3143 are more likely to be realized in an efficient and effective manner by removing the incentives in existing rate-setting paradigms that could cause T&D utilities to favor wires solutions over non-wires ones. The Commission directed CMP and Emera Maine to file, within six months of the date of the Order, rate proposals that address the incentive issues by putting wires and non-wires solutions on an equal footing from a rate-making perspective. To comply with the Commission's Order, CMP and Emera Maine, on June 22, 2018, filed a Report prepared by Concentric Energy Advisors. The Commission subsequently opened an Investigation Into Rate-Setting Mechanisms Regarding Non-Wire Alternatives (Docket 2018-00171) to consider the utilities' filings.

The Concentric Report provided relevant background and a discussion of the existing disincentives, as well as potential ways to mitigate or eliminate these disincentives. The Concentric Report identified potential disincentives related to (1) sales/revenue loss, (2) rate recovery differences, and (3) investment scale, and outlined potential mechanisms and features that could be employed to mitigate or eliminate disincentives in each of these three categories. CMP and Emera Maine were directed to file more detailed filings that provide proposals for specific and actionable ratemaking mechanisms to address the non-wire alternative (NWA) disincentive issues. The Companies were also asked to provide a description of internal company processes that could be implemented to ensure that consideration of NWAs was integrated into the company's planning and decision-making processes. These filings were due October 1, 2018. A bench analysis was completed in December and a case conference was scheduled for January 16, 2019.

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 (Docket 2017-00018). The purpose of the investigation was 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. The Commission found that Emera Maine was imprudent in the management of its Acadia Substation project. As a result, the Commission allowed \$5.6 million as the rate base for prudently incurred distribution costs.

The rate base adjustment was incorporated into the calculation of revenue requirements in Emera Maine's rate case (Docket 2017-00198).

Affiliate Standards of Conduct Rulemaking

During its 2017 session, the Legislature enacted Public Law 2017, c. 287, An Act To Clarify the Authority of an Affiliate of a Utility To Own Power Generation outside of the Utility's Territory. The Act allows affiliates of investor-owned T&D utilities to own generation or generation-related assets outside the utility's territory subject to codes of conduct established by the Commission. The Commission provisionally adopted its major substantive rule, Chapter 308, on January 5, 2018. The Legislature, during the 2018 session, authorized final adoption with certain changes and clarifications, Resolves 2017, c. 49. By Order dated May 24, 2018, the Commission finally adopted the rule.

Competitive Electricity Provider Consumer Protections

On October 16, 2017, the Commission initiated a proceeding to consider changes to its CEP consumer protection rules, Chapter 305 (Docket No. 2017-00268). The proceeding was in response to legislation, enacted during the 2017 session, that provides additional customer protections for consumers that elect to receive electricity supply service from CEPs.⁸ In addition, the Commission proceeding included 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. On March 9, 2018, the Commission opened a rulemaking proceeding and proposed amendments to Chapter 305 (Docket 2018-00056). The Commission adopted the amended rule on September 13, 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 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, Critical Infrastructure Committee, and Board of Directors, and Commissioner Williamson serves on the RGGI Board of Directors. Summarized below are the major regional matters that the Commission was involved in during 2018.

⁸ Public Law 2017, c. 74, An Act To Improve Transparency in the Electricity Supply Market.

Forward Capacity Market (FCM)

The 12th ISO-NE forward capacity auction (FCA 12) was conducted in February 2018. The region acquired 34,830 megawatts (MW), including 3,600 MW of demand resources, for the 2021–2022 capacity year. The clearing price dropped 13% to \$4.63/kw-month which was the lowest since 2013 and resulted in an estimated total cost of the New England capacity market for the FCA 12 period of approximately \$2.07 billion, a reduction of approximately \$330 million from the prior period.

Winter Reliability Program 2017/2018

Like last year's program, the 2017/2018 winter reliability program aimed at addressing concerns about reliability during cold weather events when natural gas supplies may be constrained. Specifically, the program is intended 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. The winter of 2017-2018 marked the last year of the winter reliability program. The winter reliability program was replaced by an ISO-NE initiative called Pay for Performance (PfP). PfP was expected to provide incentives for better generator performance especially during the winter season. Because the program went into effect after last winter, the ISO has not provided any data to date on the effectiveness of the program.

Fuel Security

Several FERC dockets focused on fuel security, which is an issue that was first raised by ISO-NE in 2017. ISO-NE defines fuel security as “the ability of power plants to have or obtain the fuel required to generate electricity, especially during the winter peak season.” ISO studied numerous scenarios to examine how anticipated generating resource and fuel-mix combinations could impact reliable operation of the regional bulk power system during the winter period. In February of 2018, ISO-NE filed its Operational Fuel Security Analysis (OFSA) at FERC in a FERC investigation of grid resilience (Docket No. AD18-7-000). On May 1, 2018, ISO-NE made a filing at FERC seeking to retain in the Forward Capacity Market two generating stations and their LNG supply facility in the Boston area. These units (Mystic units) had announced their intention to retire before the Forward Capacity auction which will take place in February 2019 for the 2023-2024 performance period. This case has produced related cases involving the Mystic units, in particular, and fuel security in New England, in general. The Commission and NESCOE have been active participants in these cases. The Commission has advocated for limiting fuel security costs to Maine ratepayers and both the Commission and NESCOE sought to limit the conditions in which additional fuel security related costs would be imposed on ratepayers. Rehearing requests in these related proceedings are pending.

Cybersecurity

Commissioners have maintained a dialogue with the Federal Energy Regulatory Commission and the Department of Homeland Security concerning the cybersecurity 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 operate in the current threat environment.

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 2018, Maine has received just over \$100 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) and to provide cost reductions for eligible energy intensive manufactures in Maine.

Renewable Portfolio Standard (RPS)

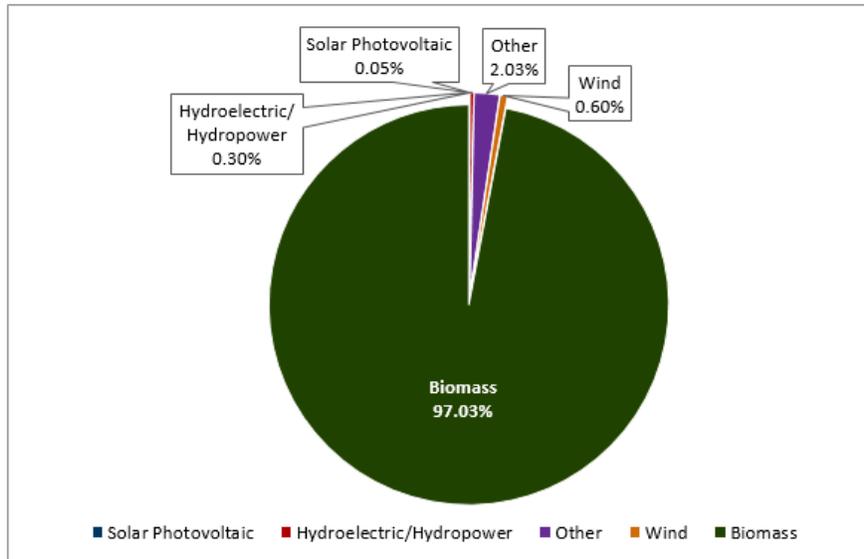
Maine's Electricity Restructuring Act originally established a 30% resource portfolio standard (RPS), requiring electricity suppliers (including standard offer suppliers) to supply 30% of their Maine load from "eligible resources." The Act defined eligible resources to be generating units with capacity 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.⁹

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: <http://www.maine.gov/mpuc/electricity/rps-class-i-list.shtml>

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 6 below shows the mix of RECs used for Maine customers in 2017, the most recent year data is available.

⁹ 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.

Figure 6 – Class I renewable Portfolio

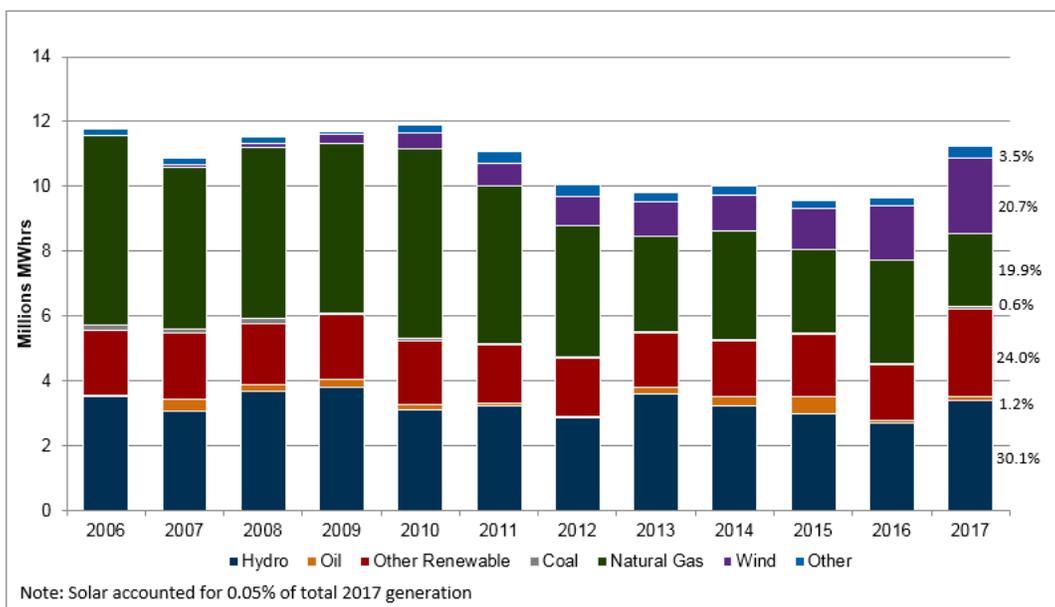


In-State Generation Resources

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: http://www.iso-ne.com/genrtion_resrcs/snl_clmd_cap/index.html
- NMISA: <http://www.nmisa.com/>

Figure 7 – Electricity Generation by Fuel



The fuel sources of electricity produced in Maine during 2017 (the most recent year for which EIA data is available) are shown in Figure 7 above. Approximately 74.8% of electricity produced in Maine in 2017 came from renewable resources. This is 12 percentage points higher than the 63% figure from 2016.

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 statute¹⁰ 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 2018.

¹⁰ 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.¹¹ 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, Topsham and Augusta areas. 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 8 below provides a map of the LDC service areas and interstate pipelines located in Maine.

¹¹ Business customers have the option of purchasing their gas supply from a non-LDC supplier or marketer.

Figure 8 – Natural Gas Pipelines and LDC Service Areas



Table 5 below provides a summary of how many customers each LDC has served over the past six 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 5 - Natural Gas LDCs Customers

Company	2013	2014	2015	2016	2017	2018
Bangor Natural Gas	3,922	5,430	5,838	6,150	6,372	6,755
Maine Natural Gas	3,313	4,200	4,432	4,543	4,732	4,948
Summit Natural Gas	0	N/A	N/A	2,998	3,361	3,717
Northern Utilities	27,096	30,830	31,544	31,908	32,212	33,320
Total	34,331	40,460	41,814	45,599	46,677	48,740

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 and 2018, although there was an increase in the pricing for the last two months of 2018 due to earlier than normal cold temperatures and lower than average storage levels. As compared to the average spot price in 2017 of \$3.00 per million British thermal units (MMBtu) at Henry Hub (a standard U.S. pricing index as reported by EIA), wholesale prices in 2018 averaged \$3.13/MMBtu. The low price in 2018 was \$2.65/MMBtu and the high was \$4.10/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”, was due to constraints on pipeline capacity into and within the region. However, during the winters of 2016/2017 and 2017/2018, 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 9 – Wholesale Prices, Algonquin City Gate (Natural gas) vs. Henry Hub;

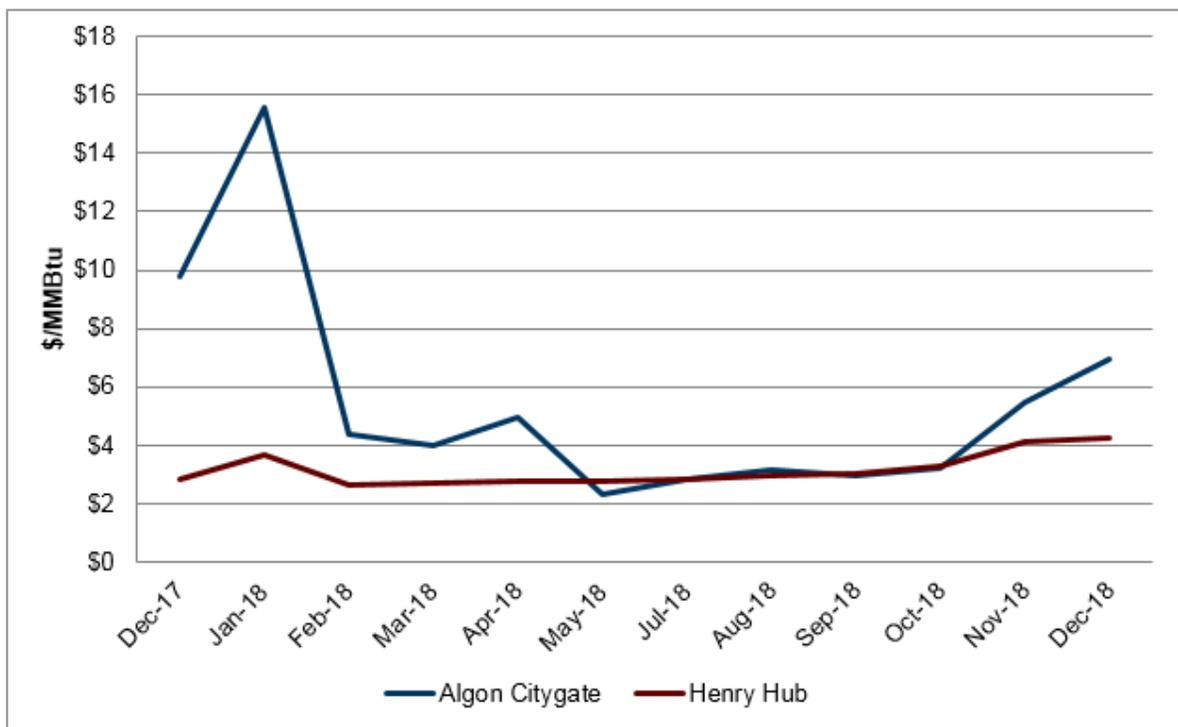


Figure 9 above provides historic wholesale prices at Henry Hub and prices at the Algonquin Citygate (a standard New England index).

Retail Market

Table 6 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.

Table 6 – Comparison of LDC Rates

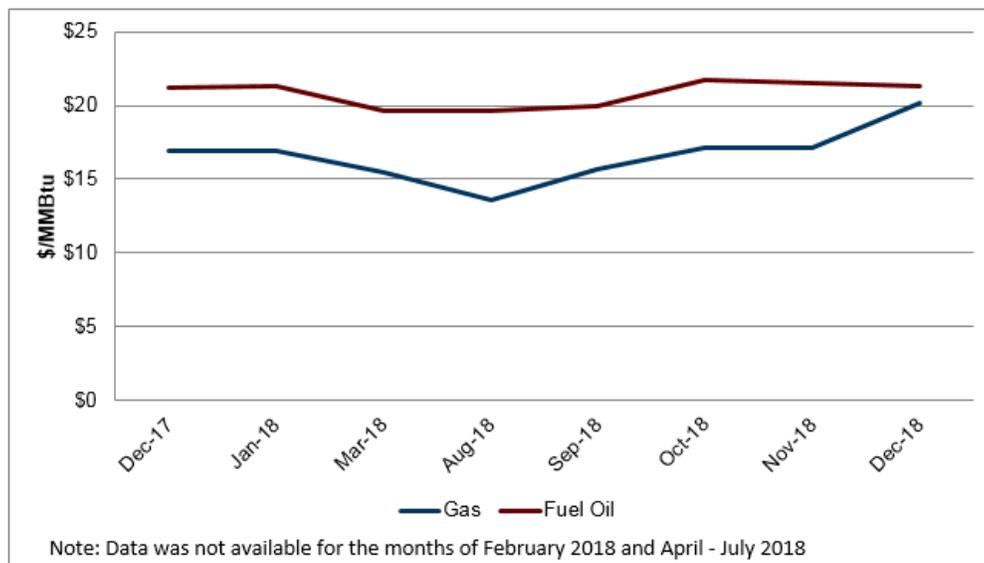
Local Distribution Company	Distribution Rate ⁵	Cost of Gas Rate ⁵	Total Rate	% Change from 2017	Notes
Northern Utilities	\$0.51	\$0.87	\$1.38	1%	1
Maine Natural Gas Company	\$0.77	\$0.71	\$1.48	53%	2
Bangor Natural Gas Company	\$0.48	\$1.20	\$1.68	28%	3
Summit Natural Gas	\$1.07	\$1.07	\$2.14	23%	4

NOTES:

1. Northern Utilities has a seasonal cost of gas rate - above is based on winter season
2. Maine Natural Gas sets a cost of gas rate each month - The amounts above are based upon December rates. MNG sets distribution rates for service outside of the Greater Augusta area and separate rates for Greater Augusta. The figures above reflect approximately 7% higher rates for the areas outside of the Greater Augusta area.
3. Bangor Natural Gas Company sets a cost of gas rate each month - The amounts above are based upon December rates.
4. Summit Natural Gas has an annual cost of gas rate
5. Average rates reflect monthly usage of 120 therms.

In 2018, natural gas maintained its 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 2018, this relationship has continued although the margin is much smaller. Figure 10 illustrates the retail prices for natural gas and home heating oil in Maine.

Figure 10 – Prices in Maine, Home Heating Oil vs. Natural Gas Delivered to the Home



MAJOR CASES, ISSUES AND PROCEEDINGS

Northern Utilities Proposed Increase in Rates

On May 31, 2017, Northern Utilities Inc. d/b/a Unitil (Northern or the Company) filed a petition for an increase its rates (Docket No. 2017-00065). The Company’s original request was for an increase of \$6.5 million. On January 16, 2018, Northern updated its filing to include the

effect of the TCJA. Northern's revised proposed revenue requirement was \$3.5 million. As the Commission's February 28, 2018 Order notes, the Commission's determinations in the case would have resulted in an overall increase of approximately \$2.1 million prior to incorporating the effect of the TCJA. After incorporating the effect of the TCJA, the Commission ordered the Company to decrease its delivery rates by \$87,243 as of March 1, 2018. The Commission's decision is based on a cost of equity of 9.50%.

Maine Natural Gas Tax Case

On January 11, 2018, the Commission opened an investigation into the impact of the TCJA on Maine Natural Gas and whether any rate adjustments are warranted (Docket 2018-00005). The Company's rates were adjusted to reflect the effects of the TCJA in its annual rate adjustment filing (Docket 2018-00057). Maine Natural Gas is still reviewing its records to determine the impact on its deferred income taxes and will make a filing in 2019 to propose any necessary rate treatment.

Summit Natural Gas Tax Case

On January 11, 2018, the Commission opened an investigation into the impact of the TCJA on Summit Natural Gas and whether any rate adjustments are warranted (Docket 2018-00006). The Commission closed this docket and this issue will be examined as part of the Company's next annual rate filing which is expected to be filed at the end of March 2019.

Bangor Natural Gas Tax Case

On January 11, 2018, the Commission opened an investigation into the impact of the TCJA on Bangor Natural Gas and whether any rate adjustments are warranted (Docket 2018-00007). The Commission expects to conclude this case in 2019.

35-A M.R.S. § 4706 REQUIRED REPORTING

Alternative Rate-Making Mechanisms

The Commission is authorized by statute¹² 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 2018.

¹² 35-A M.R.S. § 4706

Low-Income Assistance Programs

Section 4706-B requires the Commission to report on low-income assistance programs offered by LDCs. During 2018, Northern Utilities continued to provide a discount of 30% of total service charges to low-income residential customers. Maine Natural Gas and Bangor Gas continued to provide qualifying, low income customers with a 28% discount on their delivery charges (excluding the cost of gas). Finally, Summit Natural Gas continued to offer higher levels of conversion incentives to low-income residential customers.

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.¹³

On July 24, 2018, the Commission opened an investigation to determine avoided costs and other parameters to be used to determine the cost-effectiveness of the measures and programs to be included in the Trust's Fourth Triennial Plan which governs the Trust's efficiency programs and budgets for fiscal years 2020, 2021, and 2022 (Docket No. 2018-00191). On November 2, 2018, the Trust filed its fourth triennial plan with the Commission (Docket No. 2018-00321). Docket No. 2018-00191 and its record were consolidated and incorporated into Docket No. 2018-00321. The Commission anticipates completing its review of the triennial plan before July 1, 2019.

¹³ 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 1,239 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 36,511 services. These facilities were in service throughout Maine as of December 31, 2017, 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, 2018. 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 2018 evaluation, for calendar year 2017, resulted in a perfect score of 100% for the Commission's pipeline safety program. This is the fourth year in a row that Maine's program has received a perfect score. Even though the program received a perfect score, the staff strives to improve the program based on feedback provided by the PHMSA evaluations. PHMSA requires that each certified state actively participates in the National Association of Pipeline Safety Representatives (NAPSR). For the one-year term ending September 30, 2019, the MPUC's Gas Safety Manager is NAPSR's Chairperson.

On December 13, 2018, the Commission's gas safety staff attended an emergency response, tabletop drill, conducted by Unitil (Northern Utilities) at their Portland office. This drill, a scenario simulating the over pressurization of Portland's low pressure distribution system, was well attended by public officials and emergency responders from throughout Unitil's service areas. Unitil conducts emergency response drills annually and the planning for this one, including the selection of the scenario, began well before the September over pressurization incident in the Merrimac Valley of Massachusetts.

During 2018, the gas safety staff spent 242 inspection_person days conducting 266 individual inspections and compliance audits of Liquid Propane Gas (LPG) and natural gas facilities (see explanation of "person days" in the footnote to Table 5 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. Approximately 70 inspections involved LPG facilities and 196 inspections involved natural gas facilities.

Table 7 below depicts the various types of inspections completed by the gas safety staff over the past five years.

Table 7 – Inspection Data

Inspection Type – Natural Gas	Inspection Person Days*				
	2014	2015	2016	2017	2018
Operating Procedures & Records	24	28.5	19.5	41.5	46
Construction & Related Records	121	78	85	85	77
Integrity Management Programs	1	5.5	8	1	3
Operator Qualification Programs	19	10.5	14.5	22	19
Accident or Incident Investigations	N/A	1	3	1	N/A
Damage Prevention	6	2	8	7.5	8
Public Awareness Programs	3	5	6.5	2	7
Drug & Alcohol Testing Programs	4	1	1.5	1.5	8
Compliance Follow-Up	6	61	15.5	17.5	24
Operator Training	3	3	10	5.5	4
Inspection Type - Propane					
Procedures & Records	39	25	47.5	43	46
Operator Qualification Programs	N/A	N/A	N/A	N/A	1
Accident or Incident Investigations	N/A	N/A	N/A	N/A	3
Integrity Management Programs	19	N/A	N/A	N/A	N/A
Damage Prevention	N/A	1.5	N/A	N/A	N/A
Compliance Follow-Up	5	3	10.5	5	17
Operator Training	N/A	3	5	3	3
# of Facilities Inspected (not Inspection Person Days)	178	153	159	143	149
*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.					

Many of the LPG inspections conducted in 2018 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 several 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 2018:

- Summit Natural Gas of Maine (SNGME) for failure to construct mains in accordance with specifications and standards. Penalty: \$15,000.
- Maine Natural Gas for joining plastic pipe and inspecting plastic pipe joints without the necessary qualification. Penalty: \$15,000.
- Unutil (Northern Utilities) failure to follow procedures for the classification and repair of a leak. Penalty: \$5,000.
- Maine Natural Gas for failure to expose and protect an existing underground facility when installing a natural gas facility by trenchless technology (2011 construction that resulted in damage discovered in 2018). Penalty: \$25,000.

2018 Construction

In total, the four natural gas utilities in Maine added 44.8 miles of new mains and 1,354 new services. A breakdown, by utility, is depicted in Table 8.

Table 8 - 2018 Natural Gas Expansion

Utility	Mains (miles)		Number of Services	
	Added in 2018	Total Installed	Added in 2018	Total Installed
Bangor Natural Gas	17.6	283.9	296	6,692
Maine Natural Gas	4.6	209.7	171	4,571
Summit Natural Gas of Maine				
Kennebec Valley	9.7	201.9	107	3,936
Cumberland, Falmouth, Yarmouth	2.8		158	
Unutil (Northern Utilities)	10.1	588.8	622	22,667
Total	44.8	1,284.3	1,354	37,866

The expansion information in Table 8 for 2018 (mains and services) was provided to Commission staff by each utility in January 2019. Total mains and services were calculated by adding each utility's stated 2018 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 2017.

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. In 2018, Northern retired 3.59 miles of cast iron main, 1.20 miles of bare/unprotected steel or wrought iron main, and 0.40 miles of plastic pipe, on its low pressure system. The cumulative project totals are now: 27.27 miles (out of approximately 70 miles in 2010) of cast iron retired, 8.91 miles (out of approximately 10 miles in 2010) of bare/unprotected steel retired, and 6.67 miles of plastic pipe retired. In 2019, Northern expects to retire 7.08 miles more of cast iron and bare/unprotected steel or wrought iron mains.

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 non-member 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 2018 is provided in Table 7 below.

In 2017, 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 2018, with the Program receiving 248 out of a total of 258 points, or 96%.

INDUSTRY TRENDS

A review of Table 9 below shows that the overall number of damage incidents experienced in 2018 decreased by 30% as compared to 2017, with the majority of incidents involving telecommunications facilities. The decline is mostly attributed to electric facilities. The reported total incidents figure includes some miscellaneous incidents which is why the subcategories do not add to the total. The Commission believes that some of this decline is to our ongoing focus on public awareness about safety as well as the training efforts that are detailed below. In addition, the late frost last year may have impacted the construction period, thereby reducing overall activity.

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.

Table 9 – Summary of Dig Safe Activities

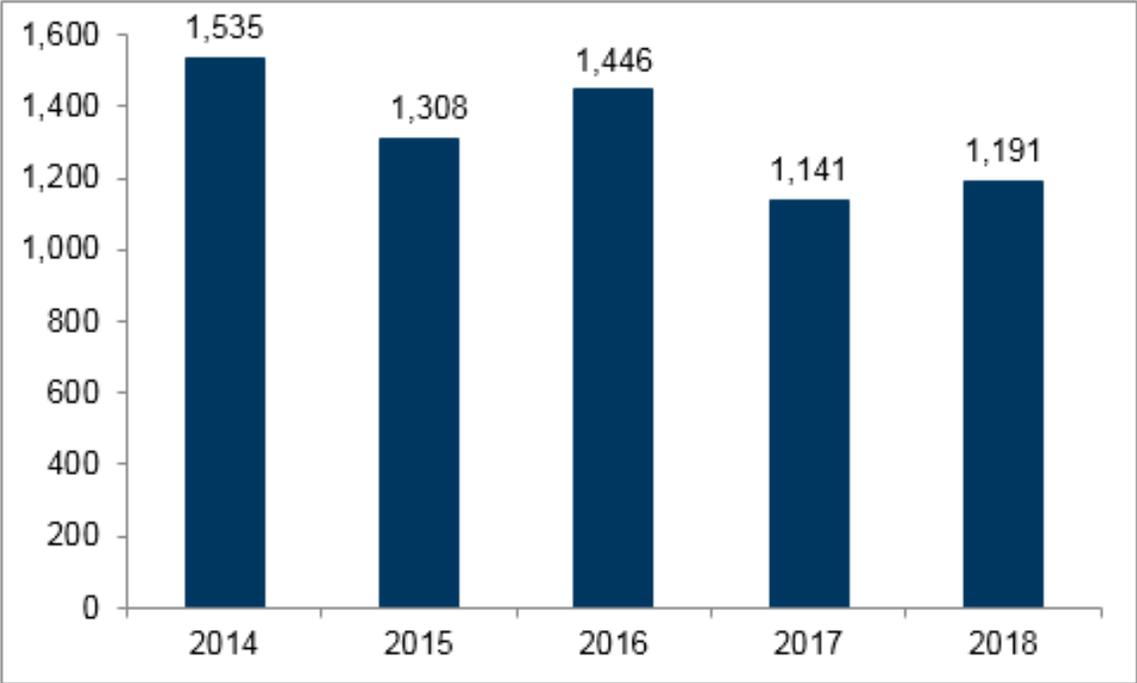
Metric	2015	2016	2017	2018
Reported Total Incidents	387	435	432	300
Reported Electric Incidents	78	92	114	59
Reported Gas Incidents	59	83	72	62
Reported Telecom Incidents	106	101	110	110
Reported Water Incidents	30	41	42	22
Reported Sewer Incidents	14	27	15	10
Reported CATV Incidents	82	65	41	49
Excavator Violations	103	105	100	73
Operator Violations	96	92	101	85
Penalties Assessed	\$167,500	\$199,000	\$168,800	\$272,500
Penalties Waived with Training	\$48,000	\$49,500	\$42,000	\$27,500
Penalties Not Waived	\$119,500	\$149,500	\$126,800	\$245,000

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 2018, 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 Bangor, Augusta, Bethel, Wells, Auburn, and Presque Isle. 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 25 certification and/or informational training sessions at various businesses, organizations, trade shows and at the Commission with 1,191 participants. In the past five years, the Commission and MUST have trained over 6,600 people on how to reduce and prevent damage incidents involving underground facilities as detailed in Figure 11 below.

Figure 11 - 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 2018, the Commission received 60 new water cases as compared to 80 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 Services' 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

Maine Water Company Tax Case

On January 11, 2018, the Commission opened an investigation into the impact of the TCJA on the Maine Water Companies and whether any rate adjustments are warranted (Docket 2018-00008). The Commission expects to conclude this case in early 2019.

Maine Water Company Reorganization

On May 4, 2018, The Maine Water Company (MWC) filed an Application for Approval of Reorganization Pursuant to 35-A M.R.S. § 708, seeking approval of a reorganization that would occur upon the merger of SJW Group (SJW) and MWC's parent company, Connecticut Water Service, Inc. (CTWS). The proposed merger would create a new ultimate parent company and affiliated interests of MWC. Statute requires that the applicant establish that the reorganization is consistent with the interests of the utility's ratepayers and investors.

The proposed merger was also subject to approval for change of control from the Connecticut Public Utilities and Regulatory Authority (CT PURA). On December 3, 2018, in a Proposed Final Decision, which recommended denial for change of control, CT PURA determined that the proposed transaction would leave Connecticut Water Service, Inc. in worse condition both financially and managerially, that it does not offer sufficient meaningful, specific, or measurable public benefit, and that it undermines local control of Connecticut utilities. On January 9, 2019, CTWS and SJW filed a letter with Connecticut PURA withdrawing their change of control application.

On January 10, 2019, MWC requested an opportunity to discuss with Commission Staff any appropriate procedural measures and the future course of the pending Maine case.

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 Inquiry (Docket No. 2016-00233) into water supply issues affecting Maine's water utilities. 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 issued a Preliminary Recommendation in March 2018, which included six major findings:¹⁴

1. Maine's water utilities responded well to the 2016 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.

Written comments on the Preliminary Recommendation were due June 15, 2018. The Commission Staff will issue a Final Recommendation for the Commission's consideration. The Commission anticipates that it will issue a final decision in this Inquiry in the first quarter of 2019.

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 \$1.3 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 \$385 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

¹⁴ 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.

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 rate-adjustment 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 2018.¹⁵

Waterborne Transportation in Casco Bay

Pursuant to Title 35-A, M.R.S., 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, c. 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 three applications to provide charter, water taxi, and unscheduled freight services in Casco Bay. In 2018, the Commission initiated a rulemaking proceeding to amend 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 (Docket No. 2017-00327). The amended rule became effective April 25, 2018.

¹⁵ 35-A MRS § 6102-A(1)

11. EMERGENCY SERVICES COMMUNICATION BUREAU

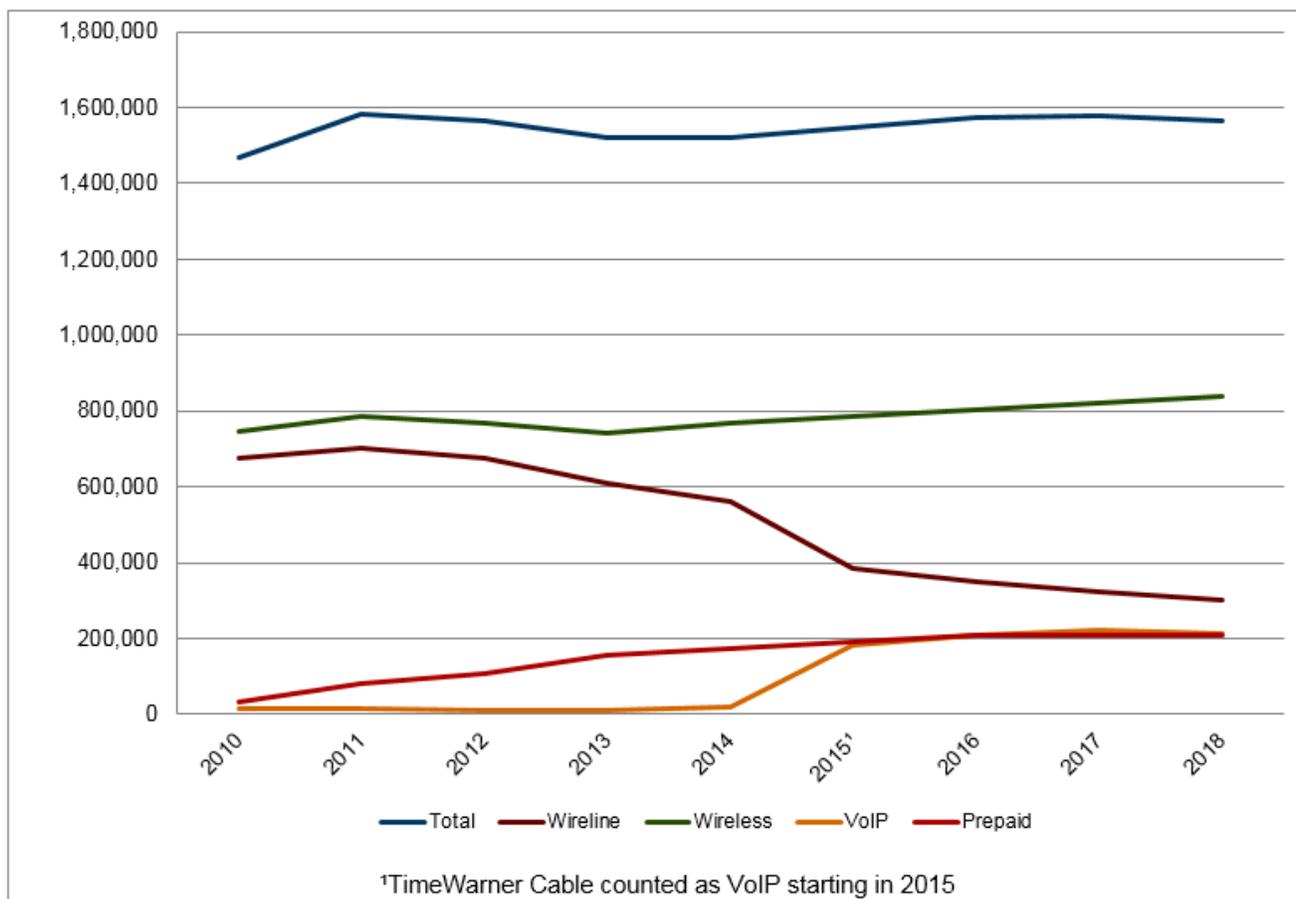
911 SERVICES IN MAINE

The Emergency Services Communication Bureau (ESCB or Bureau) 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). The ESCB is funded by the E911 surcharge which is assessed on all wireline, wireless (prepaid and postpaid) and VoIP service.

INDUSTRY TRENDS

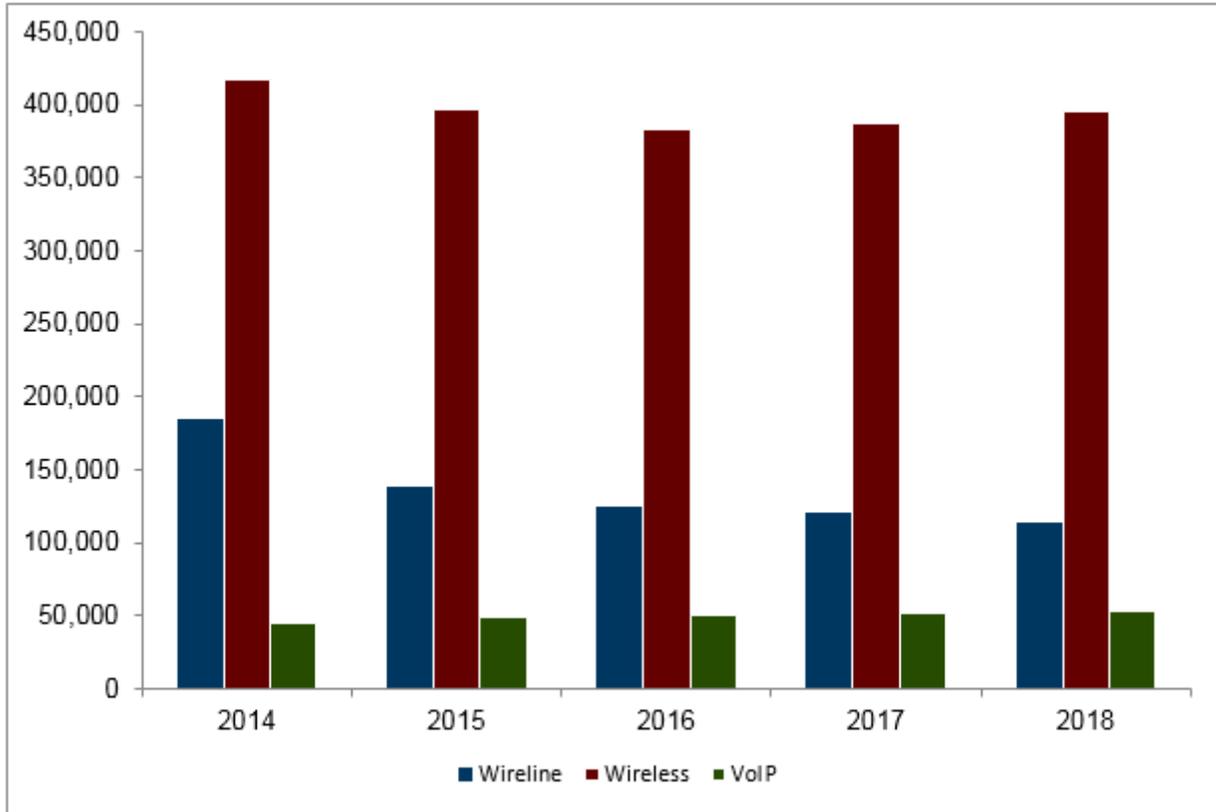
Nationally and in Maine, wireless phones have accounted for the largest portion of payments of the E911 surcharge. Fees collected from wireline phones continue a downward trend. See Figure 12.

Figure 12 – Phone Lines Contributing to E911 Surcharge



In 2018, as in previous years, there were more 911 calls made from wireless phones. For the first time in Maine, 70% of all calls were from wireless phones. See Figure 13.

Figure 13 - 911 Calls



KEY EVENTS

Text to 911

In 2013, the Bureau implemented text to 911 via TTY at two PSAPs that served the entire State. After transitioning its legacy Enhanced 911 system to Next Generation 911, the Bureau began the process of migrating to a more advanced text to 911 methodology that takes advantage of its Internet Protocol (IP) based system. In October 2018, the Bureau completed testing with all five wireless carriers in Maine at all 24 PSAPs. Text messages are now delivered to a PSAP based on the caller's location.

The ability to send a text to 911 is intended primarily for use in two emergency scenarios: for those individuals who are deaf or hard of hearing or speech impaired, and for those unable to make a voice call, for example during a medical emergency that renders the person incapable of speech, or in the instance of a home invasion or abduction.

Closure of 2 PSAPs

For the first time in many years, the ESCB closed two PSAPs in June 2018. Department of Public Safety (DPS) closed its Gray Regional Communications Center (RCC) due to the inability to secure adequate staffing. DPS transitioned services provided at Gray RCC

to its Augusta dispatch, Central Maine RCC. To lessen the call taking burden in Augusta, the Bureau changed the routing of many cell towers in Southern Maine to other PSAPs where data supported that calls from certain cell towers were mostly transferred to other PSAPs upon receipt. Prior to its closure, DPS Gray served as the backup for several PSAPs and also as one of the 911 default routing centers for the system. These services were transitioned to some of the larger PSAPs.

The City of Bangor elected to have Penobscot County RCC take over its PSAP services but remain open as a dispatch-only center. All 911 calls formerly received by Bangor Dispatch are now being answered by Penobscot County RCC. There are now 24 PSAPs in Maine.

Dispatch Center Consolidation Grant Program Rulemaking

During the 2018 legislative session, Public Law 2017, c. 428, An Act to Assist with Dispatch Center Consolidation, was enacted. The Act authorizes the ESCB to use up to \$1,000,000 of the 911 surcharge to provide grants to dispatch centers for nonrecurring costs associated with the consolidation of the dispatch centers into PSAPs. It directs the ECSB to adopt routine technical rules establishing the application process and allowable uses of grant funds. On July 31, 2018, the Commission opened a Notice of Inquiry (NOI) in order to gather information and viewpoints from interested persons on various issues in advance of the rulemaking proceeding (Docket 2018-00195). On October 30, 2018 the Commission issued a Notice of Rulemaking (NOR) and proposed rule (Docket 2018-00307) for public comment and the Commission adopted the rule in December 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. See Table 10 below for a summary of students trained.

Table 10 - Students Trained

Course Name	Students Trained in 2017	Students Trained in 2018	Percent Change
NG911/ New Hire Training	86	83	-3%
Emergency Telecommunicator Course	91	80	-12%
Emergency Medical Dispatch Certification	96	86	-10%
Emergency Medical Dispatch Quality Assurance (EMD-Q)	21	15	-29%
Emergency Medical Dispatch AQUA Software Training	42	22	-48%
Emergency Medical Dispatch ProQA Software Training	95	82	-14%
Emergency Fire Dispatch Certification	194	287	48%
Emergency Fire Dispatch Quality Assurance (EFD-Q)	25	51	104%
Emergency Fire Dispatch ProQA Software Training	194	258	33%

The ESCB also provided at least partial funding for three different training courses offered by the Maine Chapter of the National Emergency Number Association and the Maine Emergency County Communications Association. In addition, it developed an online course to teach PSAP personnel how to use the new text to 911 functionality.

Quality Assurance Program Development

Expansion of Call Handling Protocols

Public Law 2015, c. 230, An Act to Improve the Safety and Survival of 911 Callers and First Responders, enacted during the 2015 legislative session, provided for the implementation of standardized dispatch protocols for answering fire 911 calls in Maine. The Act directed the Commission to use up to 5¢ of the surcharge collected pursuant to 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. The Act also provides that the ESCB provide quality assurance training and software to assist PSAPs in ensuring compliance with the protocols and directed the ESCB to adopt routine technical rules related to the adoption, implementation and administration of the protocols which were to be phased in over a three-year period. The rule was adopted in 2016 and the fire protocols were fully implemented in December 2018.

PSAP Audits

During 2018 an audit was performed at all 24 PSAPs to ensure laws, rules and required policies and procedures are being followed and that any deficiencies identified previously were resolved. Observations made during the audits include the following:

- Emergency Fire Dispatch protocols have been implemented at all 24 PSAPs.
- TTY compliance continues to require improvement. Most centers continue to test TTY position-to-position or PSAP-to-PSAP, which is an internal call that does not test the true functionality of the equipment. Some centers have removed their TTY machines which are essential in performing a complaint test from outside of the NG911 network. In addition, PSAPs must be consistent with the frequency and documentation of their testing.
- Provided medical and fire software must be kept up to date as changes are made to protocols in new releases. While most centers were only behind one version, which came out one month prior to the audit, several centers were behind at least 6 versions.

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 2019.

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. One of the PSAP's that fell below the call answering standard in 2018 has closed. See Table 11 below.

Table 11 – 2018 PSAP Call Center Efficiency

PSAP	Incoming 911 Calls - 2018	% Calls Answered ≤ 10 seconds	Avg Ring Duration
Androscoggin RCC	13,144	97.0%	6.0
Bangor PD*	9,728	94.1%	6.0
Biddeford PD	19,689	97.3%	6.0
Brunswick PD	14,642	97.7%	5.0
Cumberland RCC	31,073	91.2%	7.0
DPS Bangor	12,907	95.2%	8.0
DPS CMRCC	41,276	86.3%	9.0
DPS Gray *	14,550	87.6%	8.0
DPS Houlton	12,106	96.4%	6.0
Franklin RCC	9,725	97.9%	5.0
Hancock RCC	15,948	96.9%	6.0
Knox RCC	13,122	98.4%	5.0
Lewiston Auburn RCC	42,167	94.2%	6.0
Lincoln RCC	12,342	98.9%	5.0
Oxford RCC	25,535	99.1%	5.0
Penobscot RCC	53,550	81.2%	9.0
Piscataquis RCC	5,553	97.7%	6.0
Portland PD	59,433	78.7%	9.0
Sagadahoc RCC	16,364	99.2%	4.0
Sanford PD	27,048	98.3%	6.0
Scarborough PD	13,800	97.0%	6.0
Somerset RCC	46,385	98.4%	5.0
Waldo RCC	10,850	93.0%	8.0
Washington RCC	11,674	98.4%	6.0
Westbrook RCC	16,381	98.6%	5.0
York PD	13,165	96.6%	6.0
Total Calls	562,157		

*PSAPs closed June 13, 2018

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.

The fund’s reserve balance is increasing largely due to efficiencies realized with the transition to a NG911 system in 2014. In 2015 and 2018, the Commission introduced bills to manage the surcharge and collect only what is necessary to run the system, allow for technology enhancements to better meet the evolving needs of the system, and address unanticipated system issues outside the terms of the contract that need immediate resolution. The Commission will be introducing similar legislation in the upcoming legislative session.

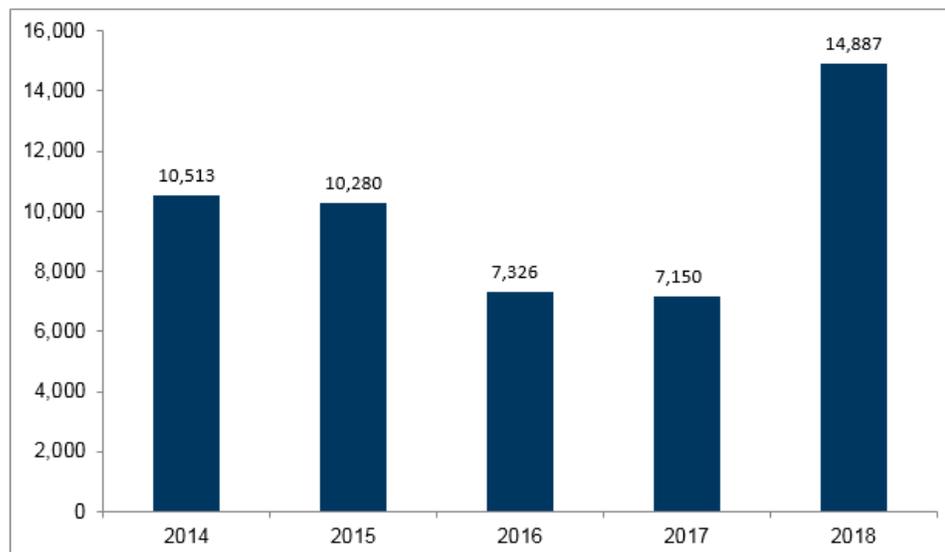
12. CONSUMER ASSISTANCE

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 14 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 14,887 consumer contacts in 2018, as compared to 7,150 in 2017. The high volume of contacts in 2018 is due almost entirely to the CMP high bill issue which is detailed on page 20 of this report.

Figure 14 – CASD Contacts 2014 – 2018



Consumer Complaints

As shown in Figure 15 below, the CASD received 1,733 complaints in 2018. This is a 55% increase from the 1,100 complaints received in 2017. A total of 1,601 complaints were filed against electric transmission and distribution utilities. As noted above, this large volume of complaints is due primarily to the CMP high bill issue detailed on page 20 of this report. In

addition to the 1,733 complaints handled by the CASD, the CASD also referred 3,141 customer complaints of high use to the CMP specialized complaint resolution team to resolve. The workload challenges created by the CMP high bill issue resulted in the CASD having to add two full time contracted staff in 2018 to help address the high volume of customer contacts/complaints.

Figure 15 - Consumer Complaints 2014 - 2018

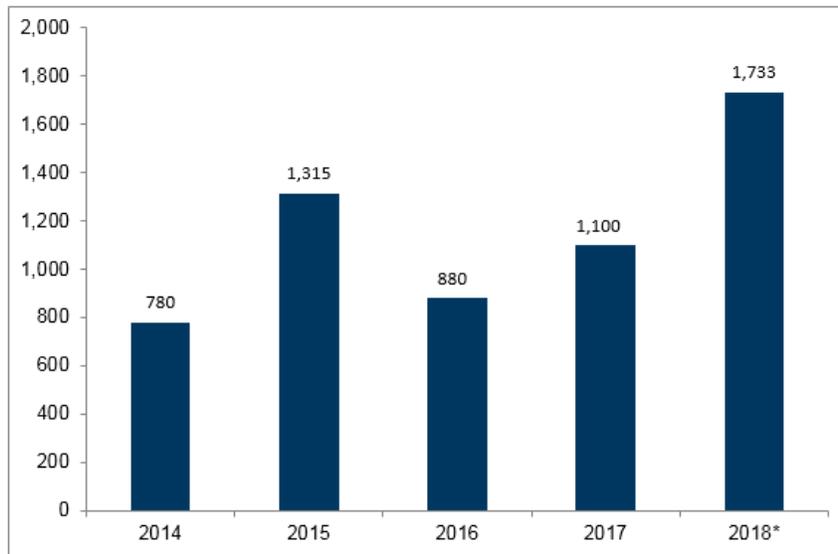
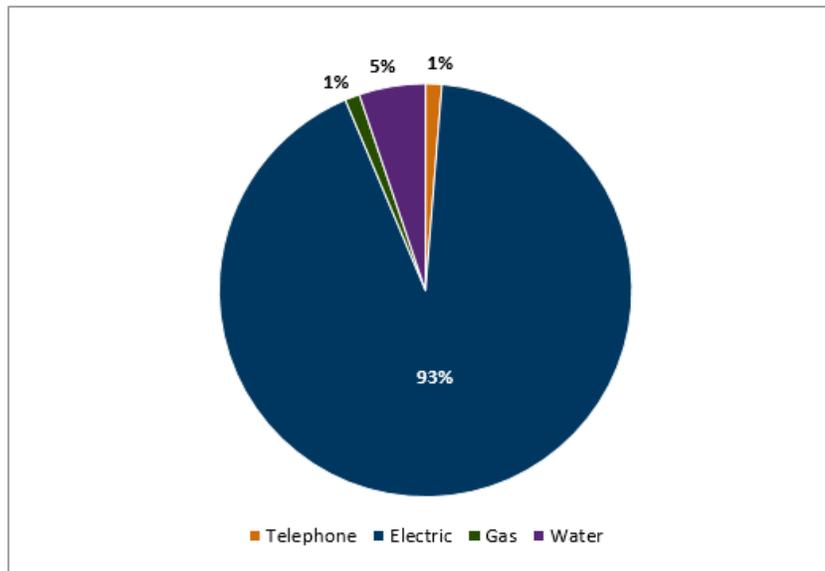


Figure 16 below breaks down complaints received by utility industry. Figure 18 shows that electric complaints represented 93% of the total number of complaints received by the CASD in 2018. This is a three-percentage point increase from the 90% of complaints filed against electric utilities in 2017, again due to the CMP high bill issue.

Figure 16 - Complaint Type in 2018



Refunds to Consumers

The CASD frequently obtains credits or refunds for customers as part of its resolution of customer complaints filed against utilities. In 2018, \$151,404 was abated to 263 customers.

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.

Table 12 – Program Statistics

Month	LIAP Program		Oxygen Program		Ventilator Program	
	Number of Participants	Amount of Benefit	Number of Participants	Amount of Benefit	Number of Participants	Amount of Benefit
Oct 2017	1,666	\$179,157	48	\$5,875	0	\$0
Nov 2017	3,144	\$340,617	73	\$8,189	0	\$0
Dec 2017	4,223	\$159,194	118	\$6,582	0	\$0
Jan 2018	5,374	\$1,397,162	265	\$19,060	0	\$0
Feb 2018	6,757	\$684,474	331	\$12,405	0	\$0
Mar 2018	7,337	\$477,154	329	\$9,225	0	\$0
Apr 2018	1,956	\$377,952	261	\$9,380	0	\$0
May 2018	2,043	\$142,332	249	\$6,954	0	\$0
Jun 2018	2,212	\$247,809	253	\$7,201	0	\$0
Jul 2018	7,700	\$101,807	360	\$10,588	2	\$71
Aug 2018	7,326	\$127,204	475	\$9,663	0	\$0
Sep 2018	10,032	\$1,105,280	229	\$4,319	1	\$61
Total		\$5,340,142		\$109,441		\$132

Note: The total apportionment for the 2017 - 2018 LIAP year was \$8,291,890. The majority of the underspent funds were attributable to CMP - Commission staff contacted CMP and was told that the funds were applied to customer bills in October. CMP has not filed a corrected 4th quarter report so the table above does not reflect that additional benefit amount paid.

The Commission's report must, at a minimum, include:

- A. For each month of the program year, the number of participants enrolled in low-income 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 12 above 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.

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, requires all electric 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. Chapter 317 of the Commission's rules establish the requirements and procedures for the AMP. Among other things, the rule 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. The rule also established that for every month participating customers pay their current bills on time, 1/12th of the customer's arrearages, up to a maximum of \$300, will be forgiven.

The Act directed the Commission to submit a report to the Legislature in January 2018 regarding the effectiveness of the program. The Commission submitted its report and during that session, Public Law 2017, c. 414, An Act to Extend the Arrears Management Program, was enacted. The Act extends the AMP program for three years until September 30, 2021, makes the AMP elective for consumer-owned T&D utilities and directs the Commission to submit another report to the Legislature in 2021 assessing the effectiveness of the program.

13. 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 its Net Energy Billing rules (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. The Commission's adoption of these amendments was appealed to the Law Court. On August 16, 2018, the Law Court issued a decision dismissing the appeal on the grounds that it does not have original jurisdiction over appeals from administrative rulemaking proceedings. The matter is now pending in the Superior Court.

14. 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 FY2018, the Commission regulated electric, gas, telephone, water and water common carrier utilities, enforced Maine's underground facilities damage prevention law, and managed the state-wide E911 system.

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 \$5,764,355 and an encumbered balance of \$2,245,548 brought forward from FY2017. \$7,618,137 was expended in FY2018. An unencumbered balance of \$7,457,049 and an encumbered balance of \$1,417,019 were brought forward to FY2019. The surcharge collected in FY2018 was \$7,329,647. The prepaid wireless fees collected in FY2018 were \$1,130,022.

PUC Regulatory Related Accounts

Regulatory Fund

The authorized Regulatory Fund assessment for FY2018 was \$7,573,098. An unencumbered balance of \$3,115,535 and an encumbered balance of \$122,526 were brought forward from FY2017. The Commission spent \$7,713,263 in FY2018.

An unencumbered balance of \$3,424,947 and an encumbered balance of \$137,752 were brought forward to FY2019. The encumbered balances generally represent ongoing contracts.

Reimbursement Fund

In FY2018, the Commission collected \$578,789 in filing fees, \$5,460 in copying fees and \$289,850 in fines. An unencumbered balance of \$188,559 and an encumbered balance of \$0 were brought forward from FY2017. During FY2018, \$45,742 was expended. An unencumbered balance of \$832,308 and an encumbered balance of \$193,608 were brought forward to FY2019.

The Budget in Perspective

In June 2017, the Legislature approved the Commission's biennial budget. Table 13 details the Commission's FY19 expenditure plan including position count, based on original work program.

Table 13 - FY2019 Work Program

Regulatory Fund	
Position Count	56.25
Personal Services	\$6,882,866
All Other	\$2,583,915
Capital	0
Total	\$9,446,781
Commission Reimbursement Fund	
All Other	\$50,000
Commission Damage Prevention	
Position Count	0
Personal Services	\$59,458
All Other	\$542
Capital	0
Total	\$60,000
Oversight and Evaluation Fund	
All Other	\$252,660
Prepaid Wireless Fee Fund	
All Other	\$1,806,351
Regional Greenhouse Gas Initiative	
All Other	\$3,000,000
Cost Recovery Fund	
All Other	\$500
Emergency Services Comm. Bureau (E-911)	
Position Count	9
Personal Services	\$905,493
All Other	\$6,320,781
Capital	0
Total	\$7,226,274

The Regulatory Fund Assessment in Perspective

Table 14 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 FY2018 was \$7,573,098. The assessment breakdown by utility sector is described below in Table 15. The assessment has remained flat the last two years.

Table 14 - 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
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
2017	425,200,389	210,006,436	145,601,635	139,015,634	5,418,336	925,242,160	7,573,098

Table 15 – Total Assessment by Utility Sector

Sector	Assessment
Electric	\$4,910,763
Telecommunications	\$936,367
Natural Gas	\$1,238,631
Water	\$486,670
Water Common Carrier	\$667
Total	\$7,573,098

15. 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.

16. PAST COMMISSIONERS

1915 – 2018

* Benjamin F. Cleaves	1915-1919	* David Moskovitz	1984-1989
William B. Skelton	1915-1919	* Kenneth Gordon	1988-1993
Charles W. Mullen	1915-1916	Elizabeth Paine	1989-1995
John E. Bunker	1917-1917	Heather F. Hunt	1995-1998
Herbert W. Trafton	1918-1936	William M. Nugent	1991-2003
* Charles E. Gurney	1921-1927	* Thomas L. Welch	1993-2005
Albert Greenlaw	1924-1933		2011-2014
* Albert J. Stearns	1928-1934	Stephen L. Diamond	1998-2006
Edward Chase	1934-1940	* Sharon M. Reishus	2003-2010
* Frank E. Southard	1935-1953	* Kurt Adams	2005-2008
C. Carroll Blaisdell	1937-1941	Vendean Vafiades	2007-2012
James L. Boyle	1941-1947	* Jack Cashman	2008-2011
George E. Hill	1942-1953	David P. Littell	2010-2015
Edgar F. Corliss	1948-1954	Carlisle J.T. McLean	2015-2017
* 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		
Cheryl Harrington	1982-1991		

*** Denotes Chairman**

