STATE OF MAINE
PUBLIC UTILITIES COMMISSION

2019 Annual Report

February 1, 2020

Maine Public Utilities Commission

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Commissioners

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Chairman

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Consumer Assistance and Safety

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Telephone and Water

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Commissioners' Letter

This report provides an overview of the work conducted by the Maine Public Utilities Commission (Commission) in 2019 administering the laws concerning public utilities in Maine.

This past year included some tremendous accomplishments for the Commission as well as good news for Maine consumers. The Emergency Services Communication Bureau received a $680,741 federal grant to improve 911 location information in Maine. In addition, the Bureau launched a public information campaign with two public service announcements about emergency calling and texting to 911.

The Commission's Electric and Gas Division conducted the annual standard offer RFP for electricity supply. Maine residential and small business consumers will see reductions of 19-23% on the supply portion of their bill effective January 1, 2020. Consumers will see annual savings of over $100.

The Executive Summary of the report is detailed on page 3 and highlights the more noteworthy cases and events that occurred during calendar year 2019. Major cases include the CMP metering and billing investigation and CMP rate case, the New England Clean Energy Connect transmission line, the Maine Water Company merger and Emera Maine merger. 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 300%.

Finally, the Commission dedicates this annual report to Chris Simpson who unexpectedly passed away in 2019. Chris inspired us all and was recognized by Governor Mills as the Commission's employee of the year. 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,

Philip L. Bartlett II 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 2019.

Topic	Description
911 Public Service Announcements	The Emergency Services Communication Bureau launched a public information campaign with two public service announcements about emergency calling and texting to 911. In one PSA, a heart attack emergency is dramatized with a woman calling 911 on her cell phone. A second PSA depicts a home invasion where a young woman texts to 911. Texting is a service that was expanded in December 2018.
Standard Offer Price Decrease	The Standard Offer RFP conducted by the Commission in late 2019 resulted in significant price decreases in January 2020 for all CMP and Emera Maine residential and business consumers who take standard offer supply service. The supply price decreases range from 19-23% and are primarily driven by wholesale market conditions in New England. These prices will reduce average monthly residential bills by 8-9%.
CMP Metering and Billing Investigation	After extensive hearings, testimony and a forensic audit conducted by the Liberty Group to determine whether CMP's systems produce accurate measurements of customer usage with bills that reflect correct customer usage levels and charges, the Commission staff issued an Examiners' Report on January 9, 2020. The report identified major problems with the implementation of CMP's new billing system as well as significant concerns over poor customer service and recommended a substantial penalty discussed in the rate case section below. The report also concludes that CMP's meters functioned properly and that high consumer bills were primarily a result of extremely cold weather and a large increase in the standard offer supply price. The OPA's expert also performed an analysis and its findings did not refute the Liberty audit. The Commission is expected to deliberate this case in January 2020.
New England Clean Energy Connect Project (NECEC)	The Commission approved a stipulation and issued 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. The Commission found that the project met all the statutory requirements and is in the public interest concluding that the benefits to Maine ratepayers and citizens, significantly outweigh the adverse impacts. In addition, the Commission's approval of the Stipulation provides funding mechanisms and programs to provide rate relief to Maine ratepayers, benefits for low-income customers, and support for a variety of other programs that benefit Maine.
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 perfect score for its damage prevention program (Dig Safe).

EXECUTIVE SUMMARY CONTINUED

Topic	Description
Emera/Enmax Merger Case	On May 7, 2019, Emera Maine filed a petition for approval of reorganization resulting from a proposed transaction in which ENMAX Corporation would acquire all of the outstanding common stock of BHE Holdings Inc. the parent company of Emera Maine. A stipulation was received providing for $8M in customer rate credits, $5M for low income ratepayers, and reliability and service quality metrics. The Commission is holding additional hearings on the stipulation and will deliberate this case in early 2020.
Maine Water Company Merger with SJC	On May 3, 2019, Maine Water filed a Petition for Approval of Reorganization. Maine Water is a wholly-owned subsidiary of Connecticut Water Service, Inc. The reorganization at issue was a merger between Connecticut Water and SJW Group. SJW is the parent company of San Jose Water Company. A stipulation was presented providing a $467,000 bill credit to Maine customers and requiring that Maine Water's senior leadership team continue to be located in Maine with no changes to the day-to-day managerial and operational changes as a result of the merger. The stipulation was approved in October.
Renewables Legislation	A number of important renewable energy legislative proposals were enacted during the 2019 legislative session that require Commission action. These include amendments to the Commission's net energy billing and interconnection rules, adopting a new rule governing distributed generation procurements, and issuing an RFP for pilot programs to support beneficial electrification of the transportation sector.
Long Term Renewable Contracts	The Commission approved three long-term contracts in 2019. A. The Three Rivers Solar project located in Hancock County with a capacity of up to 100 MW_{AC} with expected operations in 2021. B. Weaver Wind located in Eastbrook is a 72.6-megawatt onshore wind facility expected to be operational no later than December 31, 2020. C. Maine Aqua Ventus (MAV) is a deep-water offshore wind project being developed by the University of Maine and its partners. MAV includes up to two floating wind turbines located in the Gulf of Maine.
CMP Rate Investigation	On January 9, 2020, the Commission staff issued an Examiners' Report recommending a substantial reduction to CMP's return on common equity equivalent to $4.9 million per year, may be lifted only when CMP meets all service-quality metrics for at least 12 consecutive months. The staff also recommends a rate increase for improvements to customer service and reliability. The result of this proposed increase and significant ROE adjustment for failures in poor management and results, equates to an increase of $20.4 million, less than half of the $44.7 million CMP requested. This would result in an 8.1% increase in distribution rates effective March 2020, or a 2.45% increase to an average residential bill. The Commission is expected to deliberate this case in January 2020.

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 and public utilities.

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 63 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.

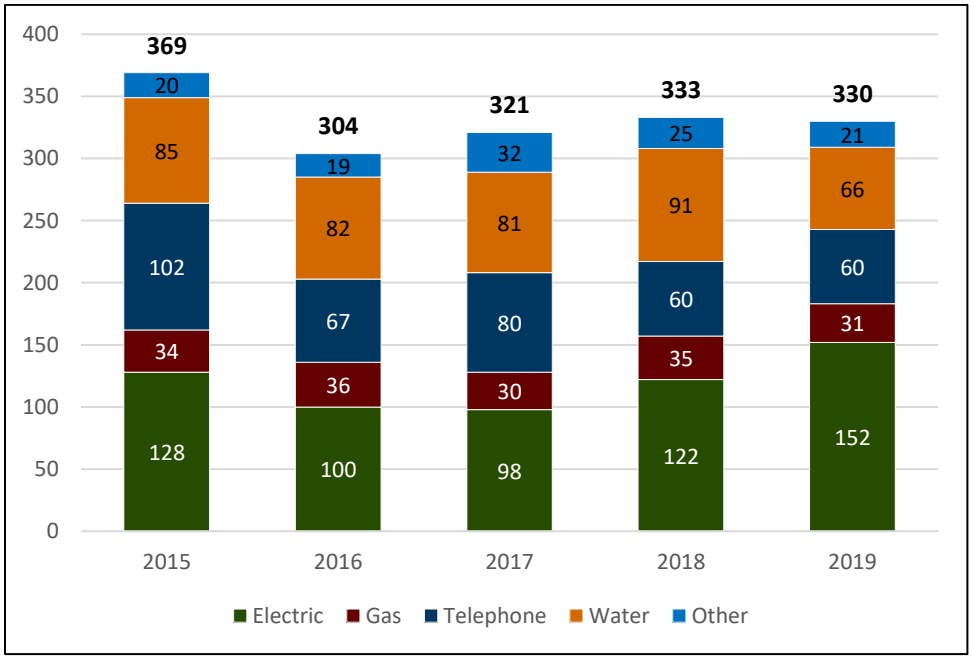
The Administrative Division handles day-to-day operational management of the Commission, with responsibilities for fiscal and personnel matters, contract and docket management, legislative analysis and the Commission's facilities. This division also oversees information technology including the Commission's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

Efficient Case Management

On average, the Commission receives approximately 330 cases a year from the utilities we regulate. As noted below, over 66% 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. That analysis showed that 50 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

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 legislation (2016 Act)[2] that provided for the removal of the obligation to provide POLR service in 22 specific municipalities, starting with Maine's seven largest municipalities in the summer of 2016.[3] The removal of the POLR service obligation continued for the next 15 largest municipalities[4] 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.

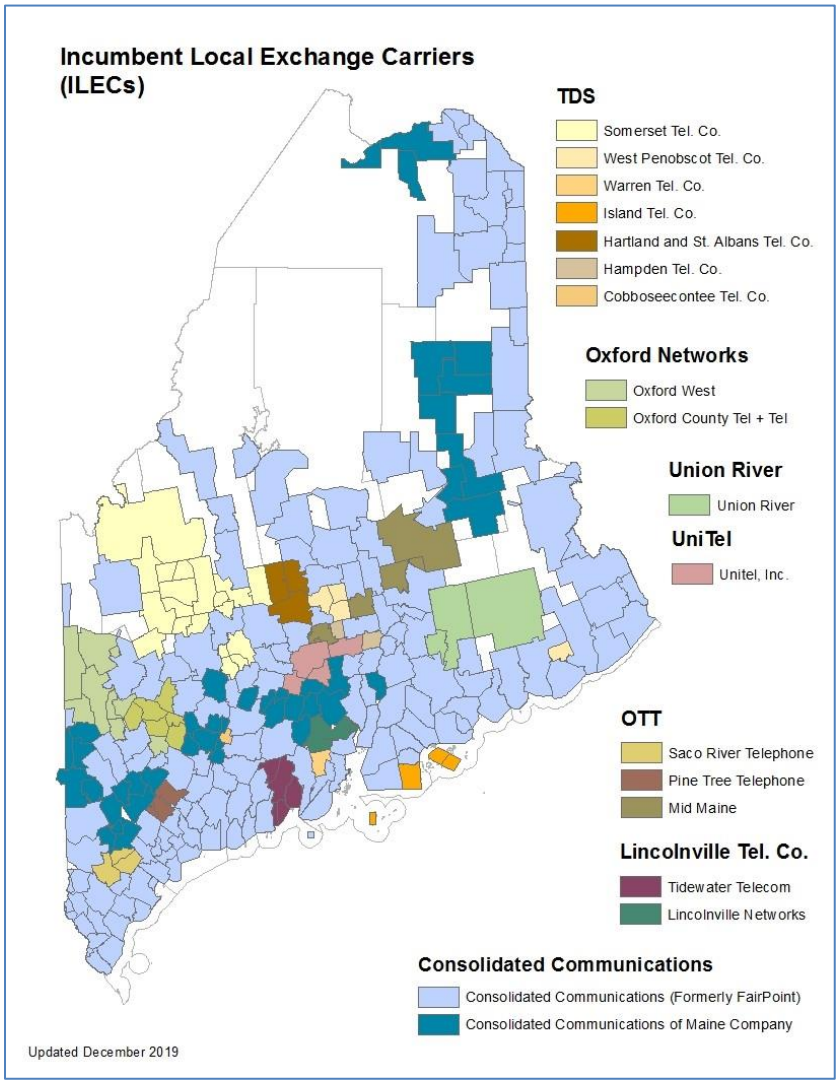
The 2016 Act directs the Commission to include in its Annual Report, through 2022, information related to which municipalities have had the POLR obligation lifted as well as any municipalities where the Commission approved the discontinuance, reduction or impairment of service and any complaints the 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 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

[1] POLR service provides access to these services, but any charges, *e.g.* long-distance charges, are not included in the flat-rate.
[2] Public Law 2015, c. 462
[3] Portland, Lewiston, Bangor, South Portland, Auburn, Biddeford and Sanford
[4] Scarborough, Gorham, Waterville, Kennebunk, Cape Elizabeth, Old Orchard Beach, Yarmouth, Bath, Westbrook, Freeport, Brewer, Kittery, Windham, Brunswick, and Augusta

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.[5]

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

[5] In 2018, the Commission received a complaint from Consolidated customers in Brooksville, Maine regarding the quality of their landline voice service. In response to the complaint, Consolidated upgraded and replaced some of its facilities in the Brooksville area. The Commission has not removed Consolidated's POLR service obligation in Brooksville.

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

		ILEC Data				POLR Data			
Telephone Group	Telephone Company	2008 Access Lines	2018 Access Lines	Change 2017-2018	Change 2008-2018	2014	2018	Change 2017-2018	Change 2014-2018
Consolidated Communications of Maine Telephone Company	China Telephone	2,700	702	-10%	-74%	241	128	-6%	-47%
	Northland Telephone Co.	20,764	9,673	-8%	-53%	2,344	1,170	-10%	-50%
	Community Service Telephone Co.	9,280	3,395	-11%	-63%	1,133	558	-11%	-51%
	Sidney Telephone Co.	1,254	343	-13%	-73%	162	87	-22%	-46%
	Maine Telephone Co.	8,163	2,562	-7%	-69%	932	493	-12%	-47%
	Standish Telephone Co.	5,753	1,665	-12%	-71%	542	294	-16%	-46%
Consolidated Communications	Consolidated Communications	411,345	136,571	-15%	-67%	24,488	8,829	-23%	-64%
UniTel	UniTel Co.	4,386	2,915	-3%	-34%	428	251	-23%	-41%
Union River	Union River	1,260	1,066	-1%	-15%	1,048	1,064	-1%	2%
TDS	Cobboseecontee Tel & Tel Co.	645	243	-8%	-62%	77	44	-12%	-43%
	Hampden Telephone Co.	2,857	1,430	-7%	-50%	314	183	-8%	-42%
	Hartland & St. Albans Telephone Co.	3,659	2,102	-5%	-43%	441	251	5%	-43%
	Island Telephone Co.	620	524	1%	-15%	209	164	-9%	-22%
	Somerset Telephone Co.	10,509	6,858	-4%	-35%	1,586	999	-11%	-37%
	Warren Telephone Co.	1,528	673	-8%	-56%	184	99	-16%	-46%
	West Penobscot Telephone Co.	2,207	1,619	-1%	-27%	282	182	5%	-35%
Lincolnville	Lincolnville Networks	1,794	1,490	1%	-17%	154	145	-4%	-6%
	Tidewater Telecom	10,261	6,267	-4%	-39%	1,070	693	-6%	-35%
OTT	Mid-Maine Communications	5,228	1,954	-10%	-63%	1,343	712	-14%	-47%
	Pine Tree Tel & Tel Co.	5,373	1,783	-9%	-67%	1,802	1,104	-11%	-39%
	Saco River Tel. & Tel Co.	7,079	2,378	-10%	-66%	1,723	1,075	-11%	-38%
FirstLight	Oxford West Telephone Co.	6,373	2,823	-10%	-56%	4,348	2,740	-10%	-37%
	Oxford Telephone Co.	5,595	2,246	-12%	-60%	3,666	2,226	-12%	-39%
	Total Retail Lines	**528,633**	**191,282**	**-13%**	**-64%**	**48,517**	**23,491**	**-15%**	**-52%**

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 214,000 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.

KEY EVENTS

Pole Attachment Rulemaking Related to Rates

In 2018, the Commission opened a Notice of Inquiry (NOI) to obtain information from interested persons regarding possible amendments to its pole attachment rule, Chapter 880, relating to the calculation of costs and resulting rates for pole attachments (Docket 2018-00010). On March 22, 2019, the Commission opened a rulemaking proceeding on these issues (Docket 2019-00028). The Commission adopted the FCC's "cable rate" as the formula for determining a presumptively reasonable pole attachment rate in Maine noting it has been tried and tested and is widely used across the country. The Commission also amended the rule to implement legislation enacted during the 2019 legislative session that provides that current attachers to any joint use utility pole are responsible for the costs of any make-ready work (including replacement of a pole) that is necessary to accommodate a municipal attachment to a pole for police power purposes, or for the purpose of providing broadband service to an unserved or underserved area.[6] The Commission adopted these amendments to the rule in November of 2019.

207 Area Code Exhaustion

According to the NPA (Number Planning Area) exhaust projections, Maine could see the 207 Area Code exhausted by the third quarter of 2024. Currently, Alaska, Delaware, Hawaii, Montana, New Hampshire, North Dakota, Rhode Island, South Dakota, Vermont, Wyoming, Washington, D.C. and Maine have a single area code. When a state comes within two years of exhaust, that triggers immediate area code relief action which could include an overlay of a new area code or creating a geographic split of the state's dialing area. The Commission plans to open a proceeding in 2020 to find ways to mitigate this problem.

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

[6] Public Law 2019, c. 217

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 2019/20 fiscal year of $3.9 million.

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 2019, 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).[7]

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 nine 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. Maine statute 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.[8] The TRS Advisory Council implements 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. Pursuant to statute, the Council submits to the Commission an annual budget of its projected costs for the coming fiscal year, not to exceed $600,000, and the Commission transfers the funds quarterly to the TRS Council Fund to fund

[7] The Commission is required to report on this information pursuant to 35-A M.R.S. § 7508(4).
[8] 35-A M.R.S. § 7104(7)

Council activities. The Council is required by statute to submit an annual report to the Commission on December 1, 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.[9] The Commission has formally requested this report.

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 2019.[10]

[9] 35-A M.R.S. § 8704(8)

[10] Pursuant to 35-A M.R.S. § 120(5), the Commission is required to report on this information in its annual report.

5. ELECTRIC

THE ELECTRIC INDUSTRY IN MAINE[11]

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.

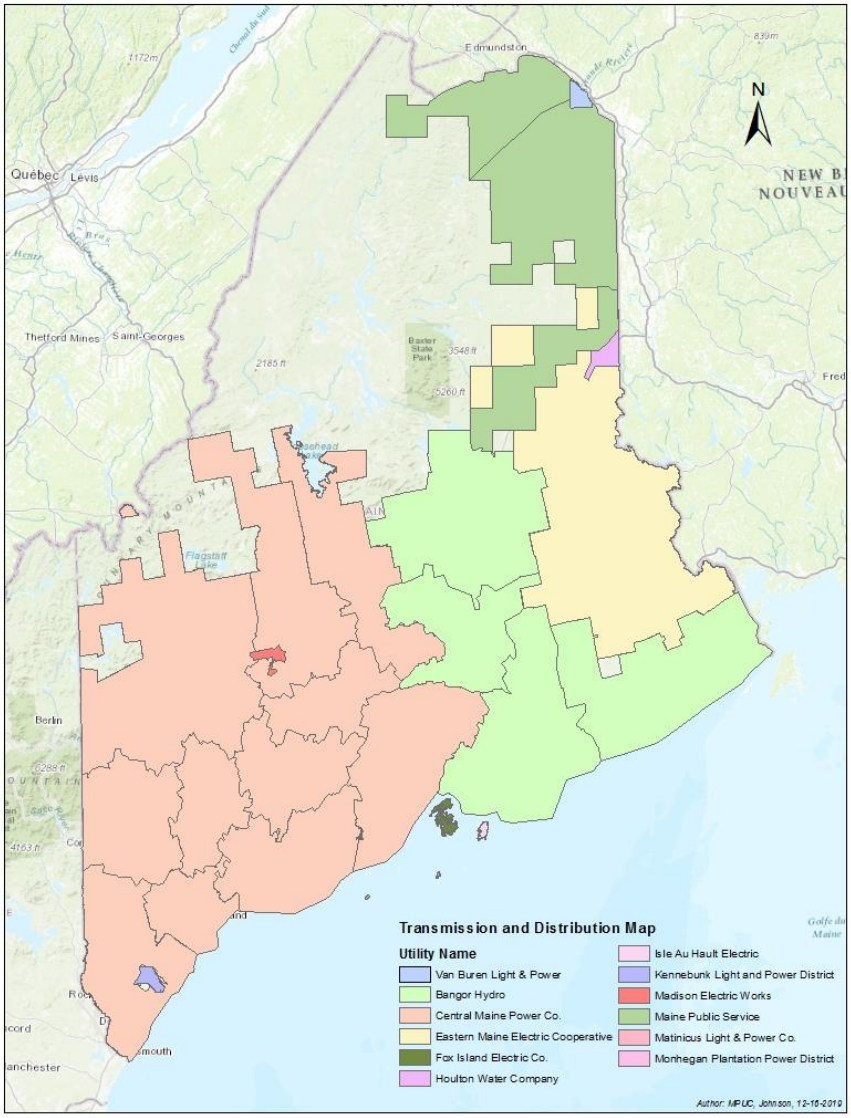
The Commission regulates the operations and rates of the Maine T&D utilities, except for transmission rates, which are regulated by the Federal Energy Regulatory Commission (FERC). The Commission licenses retail electricity suppliers and marketers, and generally

[11] 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 250 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, 2019 were $33.41/MWh, which is about 21.3% lower than prices during the prior 12-month period. During the most recent winter period, December 2018 – February 2019, prices averaged $46.39/MWh, which is about 34.8% lower 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

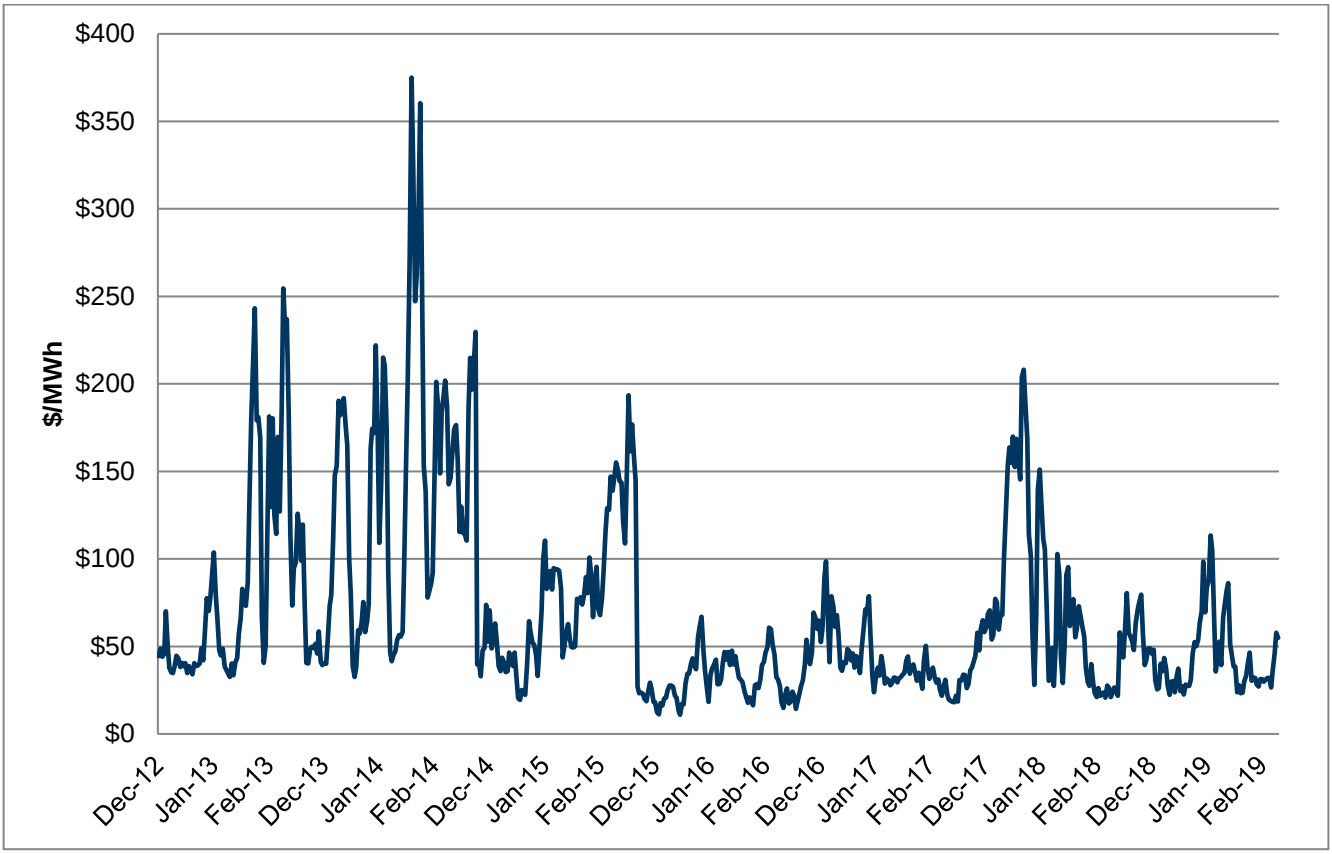
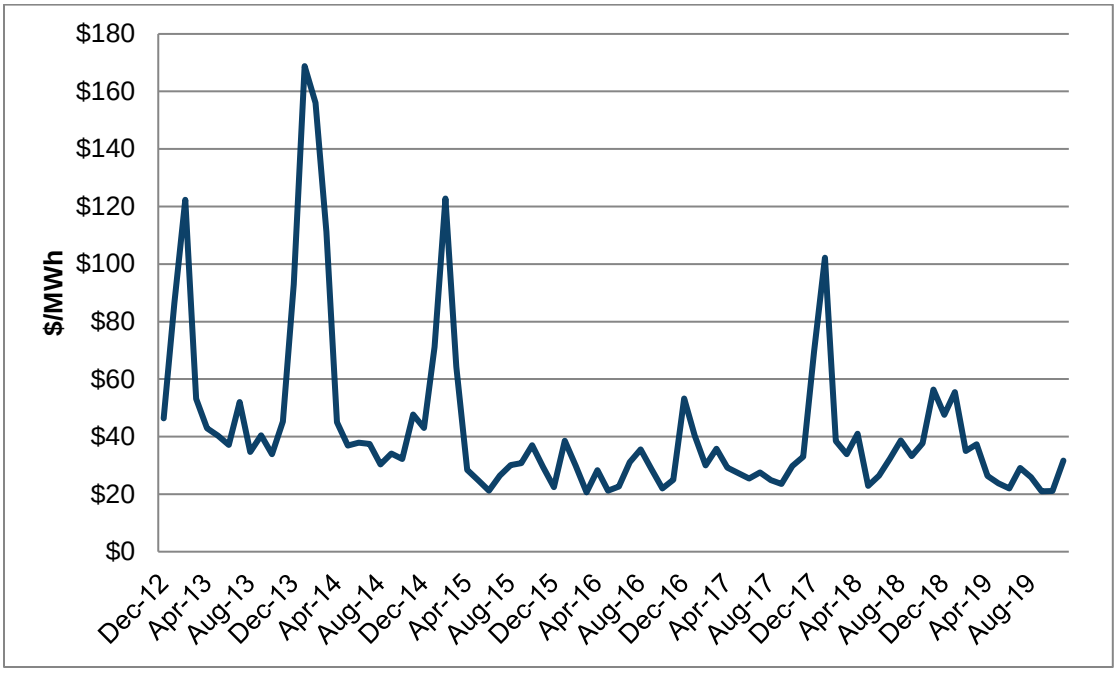


Figure 4 – ISO-NE Day-Ahead LMP; Daily Average Winter Months



Wholesale Capacity Market

In addition to energy, electricity supply prices include a component for capacity. Capacity prices are set for the ISO-NE region three years in advance of when they will be in effect through the Forward Capacity Auction processes administered by ISO-NE. During 2019, the effective capacity price on average for the year was $8.08/kW-month. Capacity prices for calendar year 2020 are significantly lower, averaging $6.02/kW-month. The lower capacity prices for 2020 are a contributing factor to the decreases in standard offer prices that took effect on January 1, 2020.

Retail Supply Prices

Retail electricity supply prices for most customers in Maine were higher in 2019 compared to the prior year. The standard offer solicitation process conducted by the Commission at the end of 2018 resulted in electricity supply prices for calendar year 2019 of 9.00 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 14-16% higher than in 2018, resulting in an 5-7% increase in the average residential customers total bill.

In December 2019, 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, 2020. For CMP residential and small business customers, the accepted bids resulted in a new standard offer price of 7.30 cents/kWh, which reflects an 19% decrease compared to prices during 2019. For CMP medium business customers, the new prices equated to about 7.00 cents/kWh on average over the term, which reflects a decrease of 22% compared to prices during 2019. 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 6.88 cents/kWh, which reflects a 18% decrease compared to the prior year. For Emera Maine medium business customers, the new prices equated to about 7.09 cents/kWh on average over the term, which reflects a decrease of 21% compared to prior prices. Prices for Emera Maine's large business customers have been and will continue to be set in the same manner as described above for CMP.

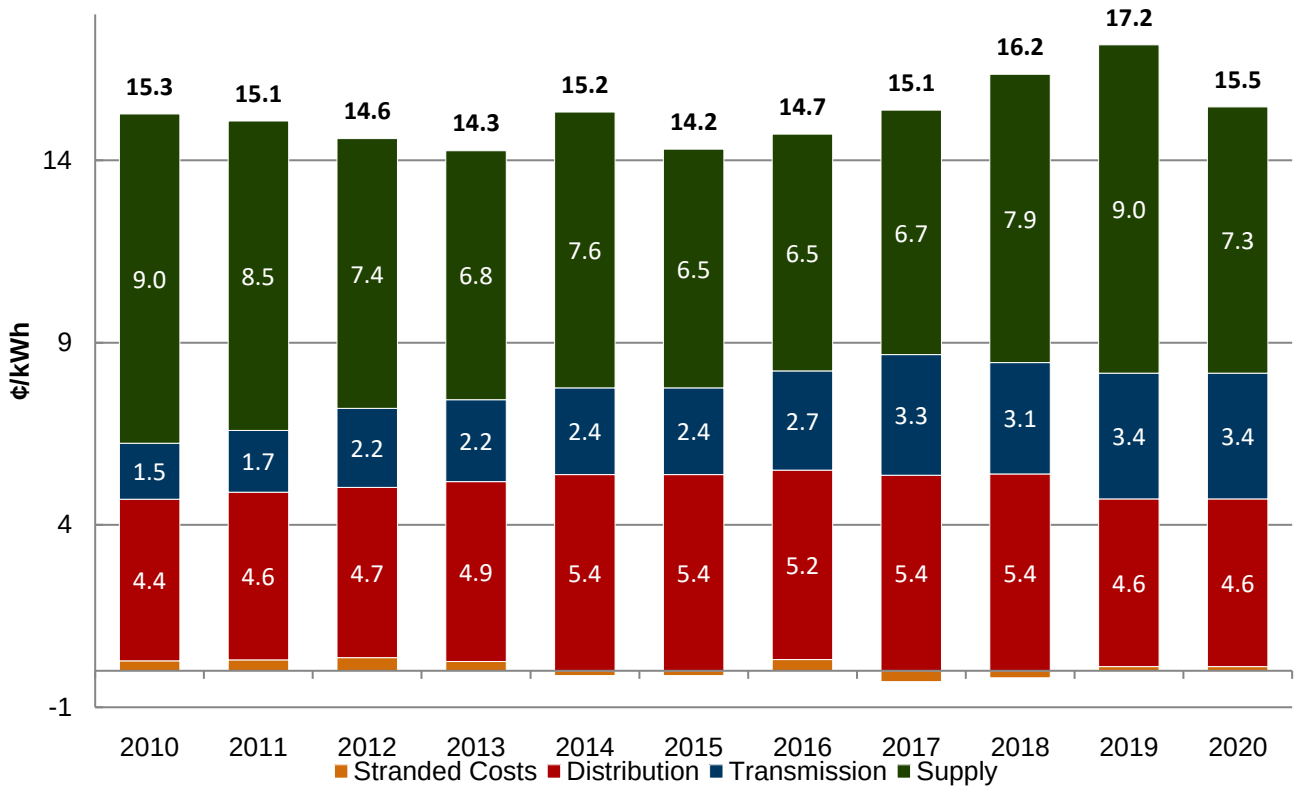
Table 3 – Standard Offer Prices 2020 Compared to 2019

Central Maine Power Company	2019	2020	% Decrease
Residential/Small Business Standard Offer Supply Price	9.00 ¢/kWh	7.30 ¢/kWh	19%↓
Typical Residential Total Bill (assumes 550 kWh monthly usage)	$95.53/ month	$86.18/ month	9.8%↓
Medium Business Customers Annual Average Supply Price	8.95 ¢/kWh	7.00 ¢/kWh	22%↓
Emera Maine - Bangor Hydro District			
Residential/Small Business Standard Offer Supply Price	8.37 ¢/kWh	6.88 ¢/kWh	18%↓
Medium Business Customers Annual Average Supply Price	9.03 ¢/kWh	7.09 ¢/kWh	21%↓

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 from 2016 through 2019, but showed a significant decline in 2020 as detailed in Table 4. The distribution component decreased in 2019 primarily due to the removal in rates of recovery costs from the October 2017 wind storm.

Table 4 – CMP Total Price by Component



Note: 2020 rates reflect rates in effect at January 1, 2020

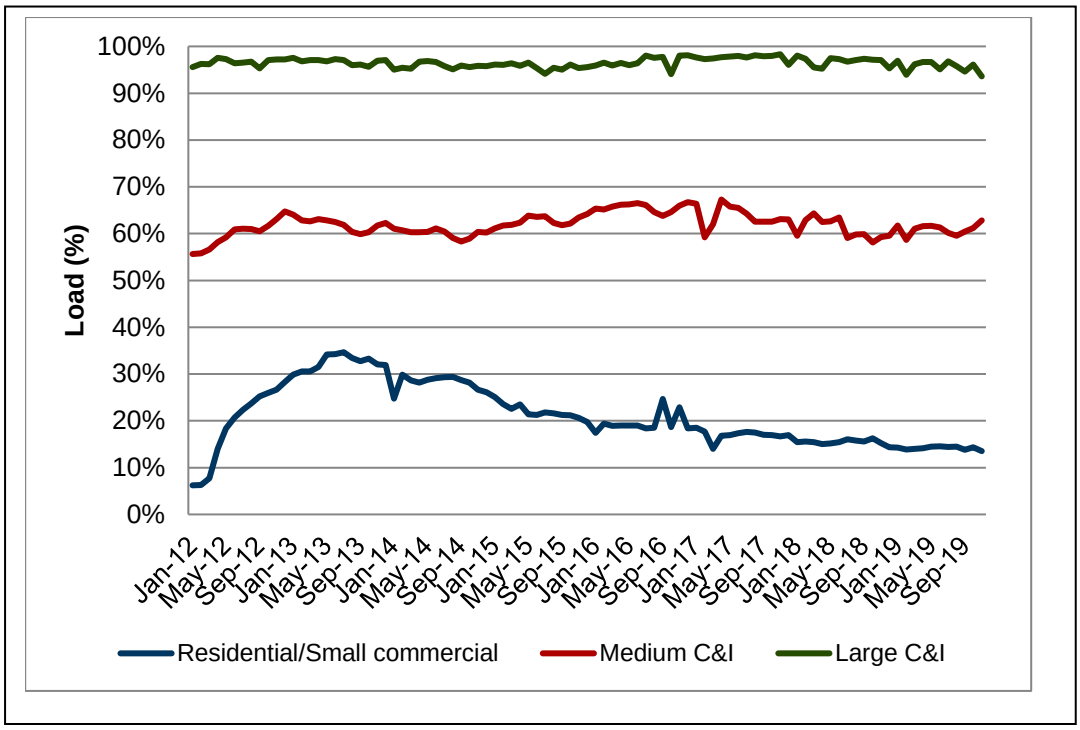
Retail Supply Market Activity

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.

During 2019, the amount of residential and small commercial supply served by CEPs continued to decline, as was the case during 2018. As of late 2019, about 13% of residential/small commercial supply was served by CEPs, down from a high of 35% in early 2013. Figure 5 below 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 2019, including a green power program that allows customers to purchase renewable energy credits (RECs).

Figure 5 – Load Served by Competitive Electric Providers, Jan. 2011 – Sept. 2019



As has been the case in prior years, during 2019 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 2019, the distribution rates of Maines investor-owned utilities varied. Emera Maine rates did not change. CMP's residential rates decreased by approximately 8%. This is due primarily to the removal in rates of recovery costs from the October 2017 wind storm and an adjustment to the revenue decoupling mechanism while being somewhat offset by the removal of the one-time reduction from the federal TCJA. Among its provisions, the TCJA reduced the corporate tax rate from 35% to 21%.

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. For CMP and Emera residential customers the stranded costs included in rates are negligible. They currently range from a negative $0.0006 per kWh to $0.002 per kWh.

Transmission rates for CMP increased by approximately 10% overall in 2019. Emera Maine BHD's rate decreased by about 5% and Emera Maine's MPD rate increased by approximately 32%. The significant drivers of CMP's increase are increase regional network service expenses and increased costs attributed to the true-up from forecast to actual cost. Emera Maine's BHD decrease is primarily a result of including excess deferred income taxes and the delay of a project that was anticipated to be in service. Emera Maine's MPD rate increase is a result of lower revenue credits due to wheeling discounts and generating plant closures and the addition of several capital investments. 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 Pool Transmission Facilities (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 residential transmission rates are approximately 3.5 ¢/kWh. In contrast, the transmission rate for an Emera Maine's MPD residential customer is about 1.1 ¢/kWh reflecting, in part, the fact that Emera Maine's MPD is not part of the ISO-NE system.

Current retail rates for Maine residential consumers for all electric utilities in Maine are summarized in Table 5 below.

Table 5 – Residential Electricity Rates

RESIDENTIAL ELECTRICITY RATES IN MAINE

As of December 31, 2019[1]

	% of State Residential Load	kWh	Delivery Rate T&D ¢/kWh	Delivery Rate Stranded Cost ¢/kWh	Delivery Rate Total Delivery ¢/kWh	Standard Offer Rate ¢/kWh	Total Rate ¢/kWh
INVESTOR-OWNED UTILITIES							
Central Maine Power	79.0%	3,616,793,824	8.1	0.3	8.4	9.0	**17.4 ¢/kWh**
Emera Maine - BHD[2]	13.1%	600,871,243	10.0	0.2	10.2	8.4	**18.6 ¢/kWh**
Emera Maine - MPD	4.1%	189,999,338	7.6	-0.1	7.5	8.5	**16.0 ¢/kWh**
COOPERATIVES & MUNICIPAL-OWNED UTILITIES							
Eastern Maine Electric Cooperative	1.2%	56,266,778	10.0	N/A	10.0	6.7	**16.7 ¢/kWh**
Houlton	0.7%	31,048,093	3.5	N/A	3.5	7.2	**10.7 ¢/kWh**
Van Buren	0.2%	7,602,524	4.5	N/A	4.5	6.8	**11.3 ¢/kWh**
Kennebunk Light & Power	1.1%	51,581,833	4.7	N/A	4.7	8.1	**12.8 ¢/kWh**
Madison Electric Works	0.4%	17,705,096	3.7	N/A	3.7	7.7	**11.4 ¢/kWh**
Matinicus	0.0%	224,979	Exempt from Standard Offer requirements				**48.6 ¢/kWh**
Monhegan	0.0%	343,016	Exempt from Standard Offer requirements				**74.5 ¢/kWh**
Fox Island	0.1%	6,864,075	20.6	N/A	20.6	10.3	**30.9 ¢/kWh**
Isle au Haut	0.0%	157,909	43.7	N/A	43.7	7.2	**50.9 ¢/kWh**
STATE AVERAGE	**100.0%**	**4,579,458,708**	**8.3**	**0.3**	**8.3**	**8.6**	**16.9 ¢/kWh**

1. Central Maine Power, Emera Maine - Bangor Hydro District and Emera Maine - Maine Public District information based on residential rates as of 7/1/19 and standard offer rates averaged over 2019. Consumer-owned utilities' information, except Isle au Haut, is based on 2018 annual reports (filed in 2019) and supply rates in effect 12/31/19. Isle au Haut information is based on its 2017 annual report (filed in 2018).

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

MAJOR CASES, ISSUES AND PROCEEDINGS

CMP Billing, Metering and Customer Communications Investigations

In response to complaints received about high bills and possible bill errors from significant numbers of CMP customers during the winter of 2017/2018, in March of 2018 the Commission initiated a forensic audit of CMP's metering and billing systems (Docket No. 2018-00052). The customer complaints followed a significant wind storm in October 2017 that resulted in unprecedented power outages across the State, extraordinarily cold weather, and the cutover by CMP to a new billing system. The Commission engaged the Liberty Consulting Group (Liberty) to conduct the audit. In December of 2018, Liberty issued its final report on all aspects of the audit.

In January 2019, the Commission initiated a formal adjudicatory investigation into CMP's metering and billing issues (Docket 2019-00015). The Liberty Report was incorporated in this investigation. During the course of the investigation, parties conducted discovery on the Liberty Report, filed testimony, and the Commission Staff issued two Bench Analyses. In addition, a consultant for the OPA conducted additional analysis of high bills and billing errors, focusing on CMP customer accounts with high bill complaints after the Liberty Audit study period. Evidentiary hearings with the parties and public witness hearings to hear from non-parties in the case were conducted. The public witness hearings were held in conjunction with the investigation into CMP's rates (Docket 2018-00194). Approximately 100 people testified at the public witness hearings and 250 people attended overall. Legal briefs were filed and an Examiner's Report was issued January 9, 2020, stating the Staff's findings and recommended actions for Commission consideration.

The Staff recommended a Commission finding that CMP's management of the implementation of its new billing system was imprudent as well as several actions to be taken by CMP, including retaining a third-party to conduct additional testing of the billing system and resolve remaining defects, and establishing an independent electricity-use audit program to resolve open complaints about high usage. At the time of drafting this report, parties' comments or exceptions were due January 23 and the Commission expected to deliberate the matter on January 30. The CASD continues to resolve formal consumer complaints regarding CMP during the last two years. As of early January 2020, the CASD had obtained more than $350,000 in billing credits for consumers. As more cases are resolved, credits will continue to roll back to consumers.

CMP Rate Case

The Commission initiated a rate case proceeding after receiving a complaint from CMP customers asking the Commission to open an investigation to look at whether CMP was over-earning and therefore whether its rates should be reduced. The Commission opened an investigation to examine whether CMP's current rates were reasonable and directed CMP to make a rate case filing (Docket 2018-00194). In addition, in conjunction with initiating the metering and billing investigation described above, the Commission determined that customer service and communication issues, including those included in the Liberty Report, would be included in this rate case.

During 2019, parties filed testimony, Staff filed a Bench Analysis, parties conducted discovery, an evidentiary hearing with the parties and public witness hearings for non-parties

were conducted. The public witness hearings were held in conjunction with the investigation into CMP's metering and billing issues (Docket 2019-00015). In August, the Commission approved a delay in the rate case proceeding so that a decision would occur only once the Commission has made a decision in the metering and billing docket. In doing so, the Commission noted that the results of the metering and billing case must be thoroughly understood before proceeding to the rate case. Legal briefs were filed in September and an Examiner's Report was issued January 9, 2020 outlining the Staff's findings and recommended actions for Commission consideration.

The Commission staff recommends that the Commission approve a rate increase for improvements to customer service and reliability. The result of this proposed increase, coupled with a significant downward return on equity (ROE) adjustment of 75 basis points for failures in poor management and results, equates to a rate increase of $20.456 million, less than half of the $44.7 million CMP requested. The ROE adjustment is equivalent to $4.9 million per year which may be lifted only when the Company meets all benchmarks for all service-quality metrics for at least 12 consecutive months. This recommended reduction exceeds any prior adjustment by the Commission to a T&D utility's ROE due to poor management and could result in an allowed return below the common-equity return of any other electric utility in the country. Staff also recommended a management audit to evaluate whether CMP's current management structure is appropriate and in the interest of Maine ratepayers. If approved by the Commission, this would result in an 8.1% increase in distribution rates effective March 1, 2020, or a 2.45% increase to an average residential monthly bill.

Parties' comments or exceptions were due January 23 and the Commission expected to deliberate the matter on January 30. The Commission has also been examining rate design issues in the case on a parallel track. The schedule has included testimony, discovery, a Staff Bench Analysis, an evidentiary hearing, legal briefs, a Staff Examiners' Report and party exceptions. The rate design issues are expected to be deliberated by the Commission in 2020.

Central Maine Power Transmission Line Proceeding (New England Clean Energy Connect)

On September 27, 2017, CMP filed a Petition for a Certificate of Public Convenience and Necessity (CPCN) for the New England Clean Energy Connect (NECEC), a 145-mile 1,200 MW HVDC transmission line from the Québec-Maine border to Lewiston (Docket 2017-00232). The Petition was related to a proposal submitted by CMP in response to the Massachusetts RFP for Long-Term Contracts for Clean Energy Projects (MA RFP). Pursuant to the proposal, the NECEC would provide for the delivery of up to 1,200 MW of hydroelectric power from Hydro-Quebec to New England in accordance with the MA RFP, and the cost of the project would be borne by Massachusetts electric customers. On May 3, 2019, the Commission issued an Order approving a stipulation among several parties in the proceeding. As part of the Order, the Commission issued a CPCN for the NECEC, finding that the NECEC meets the applicable statutory public interest and public need standard. In so finding, the Commission concluded that the benefits of the project to Maine ratepayers and citizens, which were estimated to be in the hundreds of millions of dollars, significantly outweighed the adverse impacts. The Commission found that the NECEC would provide benefits to Maine in the form of lower wholesale

electricity rates and enhanced system reliability for Maine's electricity consumers, the creation of jobs and increased property taxes in the State, and substantial environmental benefits through lower fossil fuel generation and associated reductions in greenhouse gas emissions. In approving the stipulation, the Commission found that it satisfied Commission rules governing stipulations and that it provided significant additional benefits to Maine beyond the benefits of the NECEC itself by funding mechanisms and programs to provide rate relief to Maine ratepayers, benefits for low-income customers, and support for a variety of other programs intended to benefit Maine communities and the environment. Table 6 below is directly from the Commission order in this case and provides a summary of the impacts to Maine of the NECEC and the stipulation provisions.

Table 6 – NECEC Impacts and Value to Maine

Wholesale Market Effects	Description	Value to Maine	
		Nominal	Present Value
Energy Market Prices	Energy price suppression effect	$14-$44 million annually	$122-$384 million
Capacity Market Effect	Estimated capacity market price reduction	$19 million annually for first 10 years	$101 million
Reliability and Fuel Security	Enhancements to transmission reliability and supply reliablity and diversity	Not quantified	Not quantified
Macroeconomic Effects	**Description**	**Value to Maine, 2009$**	
During Construction Period	Positive impact on Maine GDP	Annual average, 2017-2022: $94-$98 million	
During Operations	Positive impact on Maine GDP. Includes effect of wholesale energy and capacity market savings.	Annual average, 2023-2027: $25-$29 million	
Regional Environmental and Local Community Impacts	**Description**	**Value**	
Effects on Host Communities	Significant detrimental impact on scenic, historic and recreational values, associated tourism and local economy	Not quantified	
GHG Emmissions Reductions	Reduction in regional carbon emissions	3.0 to 3.6 million metric tons/year	
Stipulation Conditions	**Description**	**Value to Maine**	
		Nominal	**Present Value**
Stipulation provisions	Benefits package included in Stipulation	Total $250 million over 40 years	$72-$85 million

The Commission's decision was appealed to the Maine Law Court, which heard oral arguments on December 6, 2019. The appeal is pending.

Emera Maine Reorganization

On May 7, 2019, Emera Maine, Maine Electric Power Company, Inc., and Chester SVC Partnership filed a request for Commission approval of a proposed reorganization (Docket 2019-00097) that would allow ENMAX Corporation (ENMAX) to acquire all of the outstanding common stock of BHE Holdings Inc., the direct parent company of Emera Maine. The Commission is evaluating the request based on a net benefits standard pursuant to legislation enacted during the 2019 session (Public Law 2019, c. 353, An Act Regarding

Utility Reorganizations). Parties filed testimony and conducted discovery. The Commission Staff Bench Memorandum outlined concerns and risks presented by the proposed acquisition and proposed conditions for approval which may help to mitigate those concerns. The Commission held two public witness hearings to provide non-parties to the case an opportunity to present testimony or argument to the Commission. Settlement discussions also occurred, and on December 9, 2019, a stipulation was filed by a number of parties to the case. The remaining parties did not sign the stipulation but did not oppose it. The Commission held a hearing on the stipulation and a late intervenor to the case objected to the stipulation. On December 17, the Commission deliberated the matter and unanimously decided that more information was needed before it could conclude whether the stipulation satisfied the new net benefits standard. Commission Staff directed parties to provide additional information in January 2020 and another hearing on the stipulation will occur on February 6.

Emera Maine Tax Case

On October 2, 2017, Emera Maine filed a petition for an increase to 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 TCJA which became law on January 1, 2018. 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 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 35% 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.

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 35% to 21%. The Commission subsequently initiated an investigation into CMP's rates and revenue requirements and is examining the TCJA impacts on the accumulated deferred income tax balances as part of that case (Docket 2018-00194) which is expected to be deliberated by the Commission at the end of January 2020.

RGGI Disbursements

During its 2016 session, the Legislature enacted Public Law 2015, c. 498, An Act To Reduce Electric Rates for Maine's Businesses (2016 Act). 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 12, 2019, the Commission issued a Request for Applications for 2019 disbursements (Docket 2019-00135). The applications were due by August 9, 2019. On October 24, 2019, the Commission issued an Order that identified the customers that would be eligible for disbursements during the 2019-2020 fiscal year, and the amount each customer would receive, and directed the Trust to transfer $1,000,000 from the RGGI Trust Fund to the Commission for fiscal year 2019-2020, to be disbursed by the Commission to affected customers.

Renewable Energy Legislation

A number of renewable energy legislative proposals were enacted during the 2019 session that required Commission action, including several rulemakings. These are summarized below.

Renewable Portfolio Requirements

Public Law 2019, c. 477, An Act to Reform Maine's Renewable Portfolio Standard, made several changes to Maine's renewable portfolio requirements. It made changes to resource eligibility, removes the provision that the 10% requirement for Class I end in 2022, creates a new Class IA renewable resource portfolio requirement and a new thermal renewable energy resource requirement. It also applies a 300% multiplier for the output of a generator fueled by municipal solid waste in conjunction with recycling in Class II. Proposed changes to the rule are routine technical with the exception of the Class II 300% multiplier provision which is major substantive. The thermal renewable energy resource requirement does not begin until 2021 and the rule amendments related to the thermal renewable resource requirement will be conducted in a subsequent rulemaking proceeding. On August 9, 2019, the Commission opened a rulemaking proceeding (Docket 2019-00177) and issued proposed rule changes. A public hearing was held on September 12, written comments were due September 9 and 25. On November 8, the Commission adopted the routine technical amendments to the rule and the major substantive provision dealing with Class II 300% multiplier provision will be reviewed by the Legislature during the 2020 session.

Net Energy Billing

Public Law 2019, c. 478, An Act To Promote Solar Energy Projects and Distributed Generation Resources in Maine, made changes to NEB including increasing the maximum capacity of eligible facilities from 660 KW to less than 5 MW; removing any limit on the number of meters or accounts that can be associated with an eligible facility; replacing an ownership requirement with a "financial interest" requirement, which includes a purchase power arrangement; and creating a commercial and institutional customer program. On August 21, 2019, the Commission opened a rulemaking proceeding (Docket 2019-00197) and issued proposed NEB rule changes. A public hearing was held on September 16, written comments were due September 11 and 30. On November 22, the Commission adopted amendments to the rule.

Distributed Generation Procurement
Public Law 2019, c. 478 creates a new distributed generation (DG) procurement program that requires the Commission to periodically solicit long-term contract proposals for specified target amounts of energy, capacity and renewable energy credits (RECs) from developers of renewable DG facilities. The Act directs the Commission to implement rules regarding a number of issues related to the procurements (e.g., consumer protections, standard contract, minimum requirements for bids/offers, ensuring competitive bid process). On August 28, the Commission opened a rulemaking proceeding (Docket 2019-00219) and issued a proposed rule. A public hearing was held on October 8, written comments were due October 18. On December 11, the Commission adopted its new DG procurement rule, Chapter 312. There are ongoing meetings between the Commission Staff and stakeholders regarding issues related to standard contracts and financial security for NEB and shared DG projects.

Interconnection Issues
Public Law 2019, c. 478 also provides that the Commission shall ensure the timely review and execution of interconnection requests and the timely completion of work needed for the safe, reliable and cost-effective interconnection of DG resources. It further provides that the Commission shall establish by rule requirements for investor-owned T&D utilities to interconnect DG resources to the grid and financial penalties to ensure timely actions by those utilities to achieve the procurements. In September 2019, the Commission opened a Notice of Inquiry (Docket 2019-00226) to get input from stakeholders on a variety of issues in advance of the rulemaking proceeding. The Commission held a workshop and solicited written comments from stakeholders. In early November, Commission Staff informally issued proposed amendments to its interconnection rule, Chapter 324, and scheduled a conference to discuss them.

Prior to the conference, a number of stakeholders, representing investor-owned T&D utilities and renewable energy developers seeking to develop projects under the Act's expanded NEB and new DG procurement program (Joint Petitioners), circulated jointly proposed amendments and filed a petition for an emergency rulemaking. The first DG solicitation is to take place by July 1, 2020, and the Act requires that bidders have a fully executed interconnection service agreement with a T&D utility. The Joint Petitioners requested that the Commission adopt the proposed emergency rulemaking changes so that their requested changes would be in effect during the pendency of a more comprehensive Commission-initiated rulemaking proceeding. On November 27, 2019, the Commission adopted the emergency rule noting that without these improvements to the interconnection process, many developers may be prevented from participating in the solicitation required by the Act, thereby reducing the competitiveness of the procurement and thwarting the Act's objectives. Additionally, the Commission found that the proposed amendments were limited to those that would provide immediate improvements to interconnection-queue management that will make it more likely for viable DG projects to become eligible for the DG procurement under the Act. The Commission will be initiating a regular rulemaking proceeding to make more changes to its interconnection rule early in 2020.

Beneficial Electrification
Public Law 2019, c. 365, An Act To Support Electrification of Certain Technologies for the Benefit of Maine Consumers and Utility Systems and the Environment directs the

Commission to request proposals for pilot programs to support beneficial electrification of the transportation sector. On August 28, 2019, the Commission issued a Request for Proposals (RFP) (Docket 2019-00217). Initial proposals were due November 20. Public synopses were released for comment pursuant to the Act and the Commission will be receiving presentations from bidders in January 2020. T he Act directs the Commission to select any proposals by March 1, 2020.

Offshore Wind

By Commission Order issued November 6, 2019[12], the Commission approved the long-term contract for capacity and associated energy between Maine Aqua Ventus I GP, LLC (MAV) and CMP, as required by legislation enacted during the 2019 session (Resolves 2019, c. 87, Resolve, To Require the Approval by the Public Utilities Commission of a Proposal for a Long-term Contract for Deep-water Offshore Wind Energy). The project is a floating wind demonstration project which includes up to two floating wind turbines located in the Gulf of Maine in State waters at a location approximately 2.5 miles off the southern coast of Monhegan Island and approximately 12 miles off the coast of the mainland in the University of Maine Offshore Wind Test Site.

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 and transmission system and reliability planning at the regional stakeholder meetings of the Regional Transmission Operator (RTO), ISO-NE, and participates as a party in proceedings at the 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 Bartlett serves on the RGGI Board of Directors and its Executive Committee. Summarized below are the major regional matters that the Commission was involved in during 2019.

Forward Capacity Market (FCM)

The 13th ISO-NE forward capacity auction (FCA 13) was conducted in February 2018. The region acquired 34,840 megawatts (MW), including 650 MW of demand resources and 600 MW of solar generation, for the 2022-2023 capacity year. The clearing price dropped 18% to $3.80/kw-month which was the lowest since 2013 and resulted in an estimated total cost of the New England capacity market for the FCA 13 period of approximately $1.6 billion, a reduction of approximately $480 million from the prior period. This represents a savings to Maine consumers of over $38 million.

[12] *MPUC Ocean Energy Long-term Contracting*, Docket No. 2010-00235, Order Approving Contract (Nov. 6, 2019)

Fuel Security
The winter of 2018-19 was the first winter after the end of the winter reliability program. Prior to the end of the program ISO-NE raised concerns and made filings at FERC regarding 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 took 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 some of these related proceedings are pending, and one of these cases has been appealed to federal court. FERC also directed ISO-NE to develop and file market rule changes to address fuel security challenges. ISO-NE and electricity market stakeholders have been extensively engaged in the development of ISO-NE's "Energy Security Improvements" since April of 2019. Chairman Bartlett testified at FERC in July 2019 raising concerns about this proposal and its potential impacts on Maine ratepayers. An ISO-NE filing to FERC implementing market rule changes is expected in March of 2020. The Commission has been extensively involved in market rule discussions.

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 2019, Maine has received just over $111 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 manufacturers in Maine.

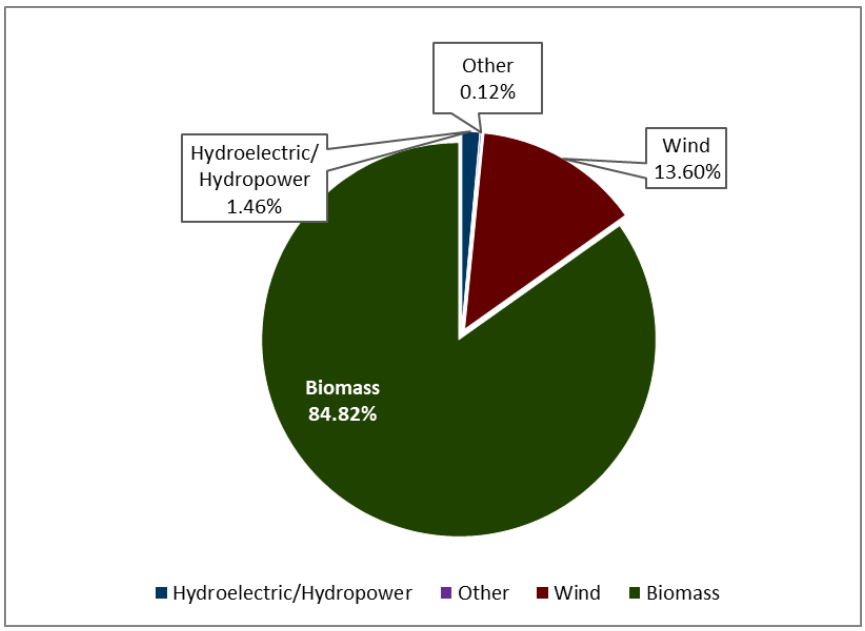
Renewable Portfolio Standard (RPS)
Maine's Electricity Restructuring Act originally established a 30% resource portfolio standard (RPS), requiring electricity suppliers (including standard offer suppliers) to supply 30% of their Maine load from "eligible resources." The Act defined eligible resources 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 increased by one percent per year to ten percent in 2017 and each year thereafter.

Any generation facility used toward a supplier's Class I RPS obligation must be certified by the Commission. During 2018, the Commission certified 19 generators as Class I compliant, bringing the total certified generators to 133, 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 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 2018, the most recent year data is available.

Figure 6 – Class I renewable Portfolio

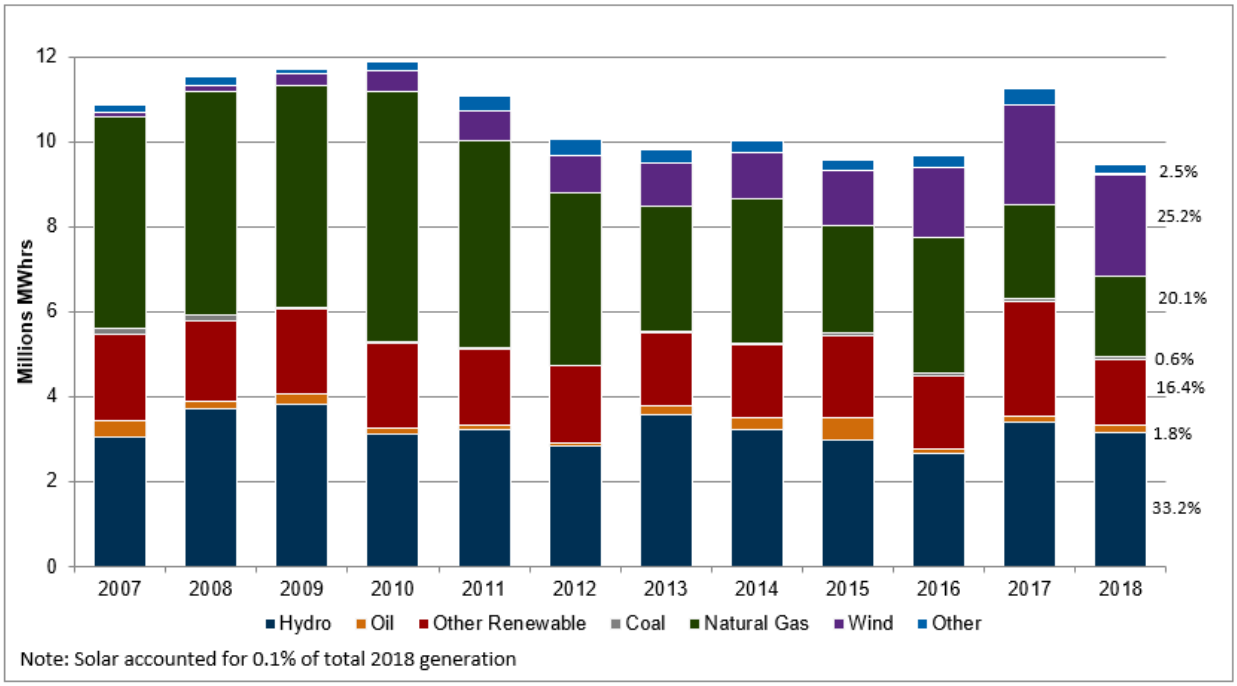


In-State Generation Resources

There is approximately 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 2018 (the most recent year for which EIA data is available) are shown in Figure 7 above. Approximately 74.9% of electricity produced in Maine in 2018 came from renewable resources. This is slightly higher than the 74.8% figure from 2017.

SUMMARY OF ELECTRIC RESTRUCTURING ACTIVITY IN OTHER STATES

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

http://www.eia.gov/electricity/policies/restructuring/restructure_elect.html

REQUIRED REPORTING

Rate Adjustment Mechanisms

The Commission is authorized by statute[13] 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. In the pending CMP rate case discussed above, the Commission is considering potential changes to certain provisions of CMP's rate adjustment mechanism. Emera Maine is not operating under a rate adjustment mechanism and its rates are set through the traditional ratemaking process.

[13] 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.[14] 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 FERC jurisdictional 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.

[14] 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

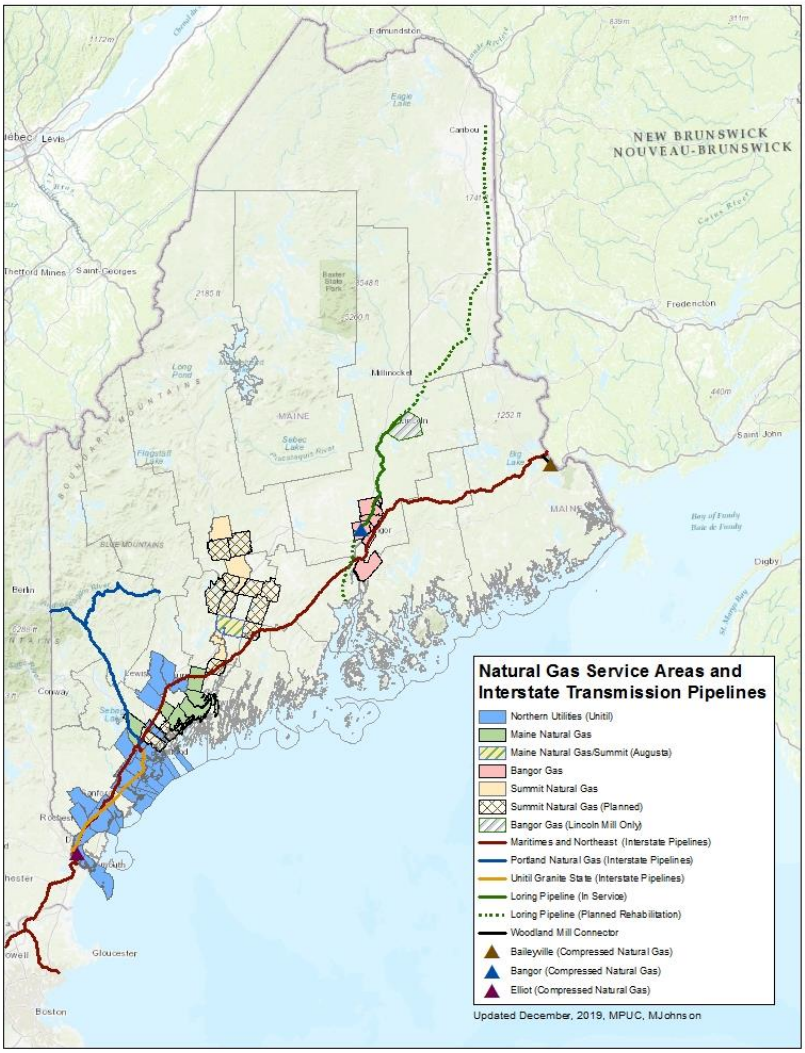


Table 7 below provides a summary of how many customers each LDC has served over the past six years. The chart is based on the average number of customers by month. For a limited time (2014, 2015), the Commission granted Summit's request to have its customer count kept confidential.

Table 7 - Natural Gas LDC Customers (monthly average)

Company	2014	2015	2016	2017	2018	2019
Bangor Natural Gas	5,430	5,838	6,150	6,372	6,755	7,124
Maine Natural Gas	4,200	4,432	4,543	4,732	4,948	5,090
Summit Natural Gas	N/A	N/A	2,998	3,361	3,717	4,091
Northern Utilities	30,830	31,544	31,908	32,212	33,320	33,639
Total	**40,460**	**41,814**	**45,599**	**46,677**	**48,740**	**49,944**

MARKET TRENDS AND CONSUMER PRICES

Wholesale Market

Wholesale natural gas commodity prices in much of the U.S. have been stable over the past several years due to the availability of natural gas from domestic production, most notably, from the Marcellus Shale. Prices stabilized during 2016 and have continued at comparable levels through 2019. As compared to the average spot price in 2018 of $3.13 per million British thermal units (MMBtu) at Henry Hub (a standard U.S. pricing index as reported by EIA), wholesale prices in 2019 averaged $2.53/MMBtu. The low price in 2019 was $2.11/MMBtu and the high was $3.50/MMBtu. In past 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. While these constraints still cause volatility in New England wholesale market prices, the 2018/2019 winter period was relatively less volatile, and basis has been relatively lower than the 2012 to 2015 winter periods.

Figure 9 – Wholesale Prices, Algonquin City Gate (Natural gas) vs. Henry Hub;

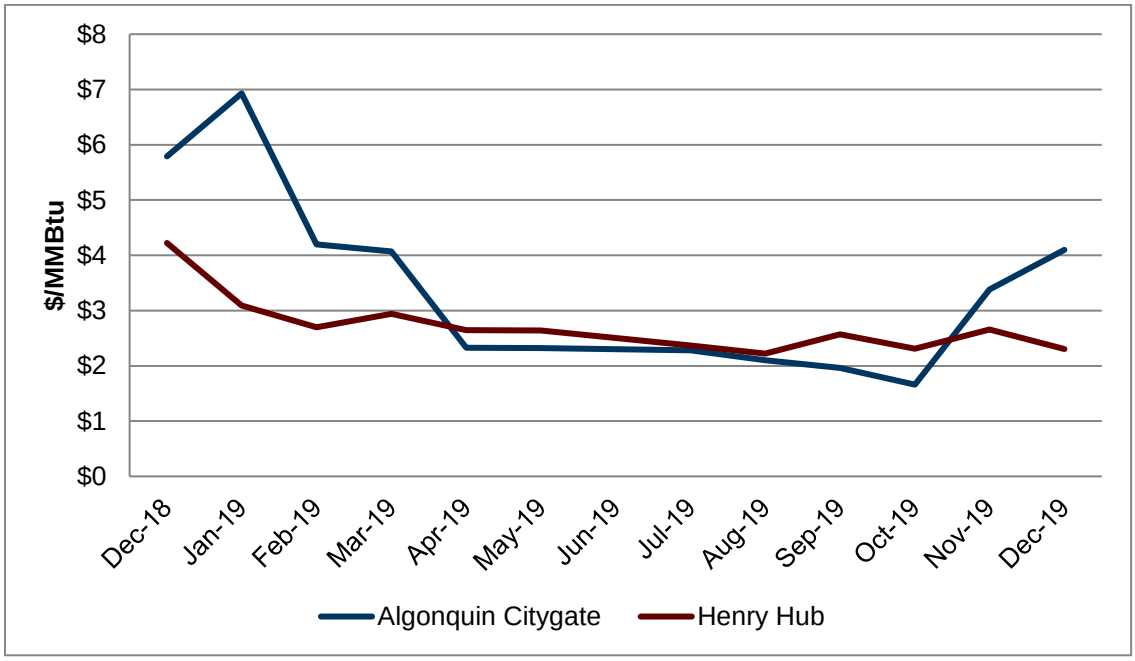


Figure 9 above provides historic wholesale prices at Henry Hub and prices at the Algonquin Citygate (a standard New England index).

Retail Market

Table 8 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. The sharp decrease in prices is due to the decrease in the cost of the gas commodity.

Table 8 – Comparison of LDC Rates

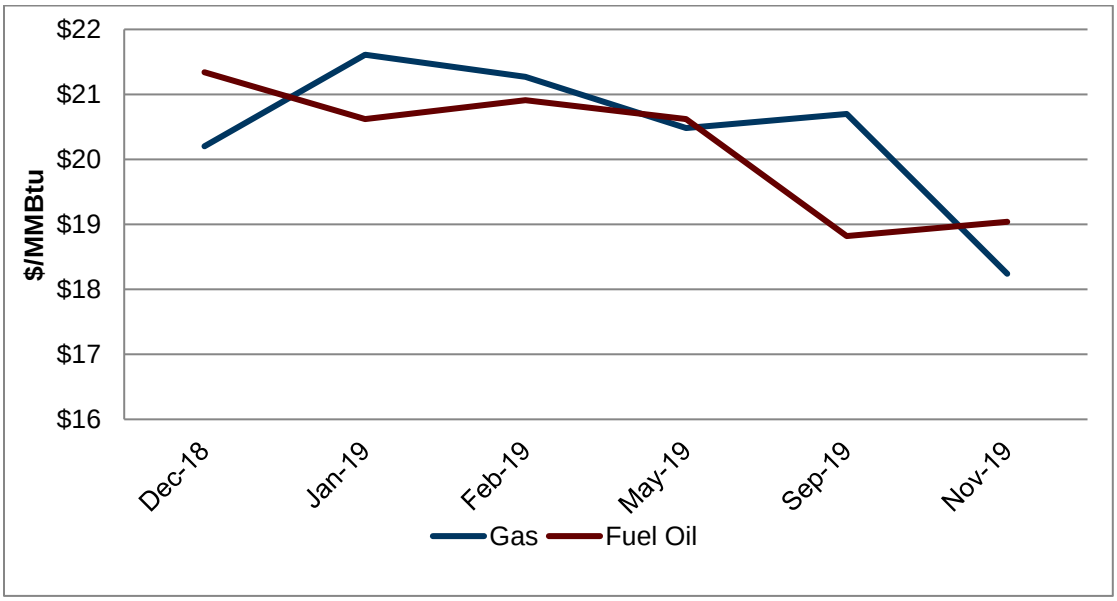
Local Distribution Company	Distribution Rate[5]	Cost of Gas Rate[5]	Total Rate	% Change from 2018	Notes
Northern Utilities	$0.62	$0.87	$1.48	-11%	1
Maine Natural Gas Company	$0.85	$0.71	$1.56	-28%	2
Bangor Natural Gas Company	$0.48	$0.72	$1.20	-29%	3
Summit Natural Gas	$1.08	$0.07	$1.15	-46%	4

NOTES:

1. Northern Utilities has a seasonal cost of gas rate. The amounts above are 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 sets a cost of gas rate each month. The amounts above are based upon December.
4. Summit Natural Gas has an annual cost of gas rate.
5. Average rates reflect monthly usage of 120 therms.

In 2019, natural gas and home heating oil prices were generally comparable with the differences being likely more reflective of the current weather conditions than market conditions in general. 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

Northern Utilities, Inc. d/b/a Unitil's filed a proposed increase of $7 million in distribution revenues. If this proposal were approved as filed, it would result in a 7% increase in total operating revenues. For residential customers, Unitil estimates that the average bill increase under its proposal would be (a) $5.85 per month for non-heating customers and (b) $9.90 per month for heating customers. The Commission held a public hearing in this case on December 10, 2019. A decision is expected no later than March 2020.

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 in its 2018 Rate Plan Annual Rate Compliance Filing (Docket No. 2018-00057) adjusted Non-Augusta rates to reflect the impact of the reduction in the federal income tax rate on the current revenue requirement. In 2019, Maine Natural Gas made a filing regarding the impact of the TCJA on its deferred income taxes, making the necessary adjustments to the Non-Augusta customer's rates in the 2019 Rate Plan Annual Rate Compliance Filing (Docket No. 2019-00048). The Company's Augusta rates are not currently based on costs of service and, therefore, the effects of the TJCA will be examined in a future rate proceeding.

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 were warranted (Docket 2018-00006). The Commission closed this docket noting that the issue would be examined as part of the Company's next annual rate filing. The impact of the TCJA change on the current taxes included in Summit's revenue requirement was examined in 2019 in Docket 2019-00066 and the Commission concluded that no TCJA adjustments were necessary at that time given the Company's current rate structure and that this issue, as well as the impact of the TCJA on deferred income taxes, would be examined further in the Company's next rate proceeding.

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 were warranted (Docket 2018-00007). The Commission concluded the case in 2019 and found that no TCJA adjustments were necessary at that time given the Company's current rate structure and that this issue would be examined further in the Company's next rate proceeding. The Commission did require that Bangor Gas re-establish the unprotected Excess Deferred Income Taxes that it had written-off in 2017 pending a full review in the next rate proceeding to determine to whether any of those benefits should be flowed through to ratepayers.

35-A M.R.S. § 4706 REQUIRED REPORTING

Alternative Rate-Making Mechanisms

The Commission is authorized by statute[15] 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 2019.

Low-Income Assistance Programs

Section 4706-B requires the Commission to report on low-income assistance programs offered by LDCs. During 2019, 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.

[15] 35-A M.R.S. § 4706

7. EFFICIENCY MAINE TRUST

Pursuant to the Efficiency Maine Trust Act (Act), the Commission oversees the triennial plans and efficiency programs administered by the Efficiency Maine Trust (Trust).[16] During the 2019 session, the Legislature amended the Act to modify the Commission's oversight of the Trust and specify certain standards applicable to the Trust's triennial plans and how the cost-effectiveness of efficiency programs must be determined (Public Law 2019, c. 313 (emergency, effective June 17, 2019), An Act to Clarify Certain Standards for the Efficiency Maine Trust's Triennial Plan and Public Law 2019, c. 306, An Act to Transform Maine's Heat Pump Market to Advance Economic Security and Climate Objectives). For example, where the Act previously directed the Commission to convene an adjudicatory proceeding to review the Trust's determination of cost-effectiveness, the applicable discount rate, and avoided costs, these determinations are now to be made pursuant to the standards set forth in the Act or otherwise by the Trust.[17]

On November 2, 2018, the Trust filed its fourth triennial plan with the Commission for review and approval (Docket 2018-00321). On May 24, 2019, the Commission approved the Fourth Triennial Plan. On June 25, 2019 and December 11, 2019, the Commission issued orders approving the Trust's requests for significant changes to the approved Fourth Triennial Plan to reflect the legislation referenced above. More specifically, the Commission's orders modified the screening methodologies and assumptions used to screen the cost-effectiveness of energy efficiency measures in the Fourth Triennial Plan, and the orders approved updates to the budget and performance metrics.

[16] 35-A M.R.S. §§ 10101-10123
[17] 35-A M.R.S. §§ 10104(4)(A), 10110(4-A), 10111(2)

8. GAS SAFETY

GAS SAFETY REGULATION AND ENFORCEMENT IN MAINE

The Commission regulates natural gas service reliability and ensures compliance with safety standards for 1,285 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 36,890 services. These facilities were in service throughout Maine as of December 31, 2018, 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, 2019. In addition, the Commission enforces safety standards for approximately 600 Liquid Propane Gas (LPG) distribution facilities that provide LPG service to multi-unit housing complexes, commercial buildings and other facilities where LPG 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 2019 evaluation, for calendar year 2018, resulted in a perfect score of 100% for the Commission's pipeline safety program. This is the fifth 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 was NAPSR's Chairperson and the association's annual National Meeting was held in South Portland, Maine.

During 2019, the gas safety staff spent 242 inspection person days conducting 247 individual inspections and compliance audits of Liquid Propane Gas (LPG) and natural gas facilities (see explanation of "inspection person days" in the footnote to Table 9 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 47 inspections involved LPG facilities and 200 inspections involved natural gas facilities.

Table 9 below depicts the various types of inspections completed by the gas safety staff over the past five years.

Table 9 – Inspection Data

	Inspection Person Days*				
Inspection Type – Natural Gas	**2015**	**2016**	**2017**	**2018**	**2019**
Operating Procedures & Records	28.5	19.5	41.5	46	33
Construction & Related Records	78	85	85	77	112.5
Integrity Management Programs	5.5	8	1	3	8
Operator Qualification Programs	10.5	14.5	22	19	12
Accident or Incident Investigations	1	3	1	N/A	N/A
Damage Prevention	2	8	7.5	8	1.5
Public Awareness Programs	5	6.5	2	7	1.5
Drug & Alcohol Testing Programs	1	1.5	1.5	8	1
Compliance Follow-Up	61	15.5	17.5	24	23
Operator Training	3	10	5.5	4	0.5
Inspection Type - Propane					
Procedures & Records	25	47.5	43	46	37.5
Operator Qualification Programs	N/A	N/A	N/A	1	N/A
Accident or Incident Investigations	N/A	N/A	N/A	3	N/A
Integrity Management Programs	N/A	N/A	N/A	N/A	N/A
Damage Prevention	1.5	N/A	N/A	N/A	1
Compliance Follow-Up	3	10.5	5	17	7.5
Operator Training	3	5	3	3	1
# of Facilities Inspected (not Inspection Person Days)	153	159	143	149	106

*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 2019 resulted in operators taking some required corrective actions to bring their facilities into compliance. Most of these corrective actions were handled through informal proceedings, without notices of probable violations (NOPVs) or civil penalties. However, the following NOPV was issued to an LPG operator in 2019:

- Dead River for failure to follow procedures, failure to meet the requirements of NFPA 58, and failure to conduct annual inspecting and testing of pressure relief devices. Penalty: $10,000.

Inspections of natural gas operators also resulted in several required corrective actions. Like those with the LPG operators, most corrective actions were resolved through informal proceedings. However, the following NOPV was issued to a natural gas operator in 2019:

- Maine Natural Gas for failure to follow procedures and failure to properly implement a QA/QC program. Penalty: $50,000.

2019 Construction

In total, the four natural gas utilities in Maine added 65.7 miles of new mains and 1,343 new services. A breakdown, by utility, is depicted in Table 10.

Table 10 - 2019 Natural Gas Expansion

Utility	Mains (miles)		Number of Services	
	Added in 2019	Total Installed	Added in 2019	Total Installed
Bangor Natural Gas	37.3	322.3	392	6,286
Maine Natural Gas	7.5	218.1	202	4,770
Summit Natural Gas of Maine	11.0	210.3	321	4,275
Unitil (Northern Utilities)	9.9	599.6	428	22,902
Totals:	**65.7**	**1,350.3**	**1,343**	**38,233**

The expansion information in Table 10 for 2019 (mains and services) was provided to Commission staff by each utility in January 2020. Total mains and services were calculated by adding each utility's stated 2019 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 2018. Of Bangor Gas' 2019 main additions, 21 miles of it were the former Loring (Air Force Base) jet fuel pipeline, from Hampden to Searsport, which was placed into service for natural gas distribution.

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 2019, Northern retired 5.17 miles of cast iron main, 1.12 miles of bare/unprotected steel or wrought iron main, and 1.85 miles of plastic pipe, on its low-pressure system. The cumulative project totals are now: 32.44 miles of cast iron retired, 10.03 miles of bare/unprotected steel retired, and 8.52 miles of plastic pipe retired. At the beginning of the project, in 2010, approximately 70 miles of cast iron and 10.1 miles of bare steel mains were identified for replacement. Recently, an additional 2.5 miles of bare steel was discovered, bringing the new total to 12.6 miles of bare steel to be replaced. In 2020, Northern expects to retire 9.20 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 2019, with the Program receiving a perfect score.

INDUSTRY TRENDS

A review of Table 11 below shows that the overall number of damage incidents experienced in 2019 increased by 16% as compared to 2018, with the majority of incidents involving telecommunications facilities. The increase is attributed to electric and water facilities. The Commission believes that this increase is primarily related to a longer construction season in 2019 as compared to 2018. In 2018, a late frost reduced the construction period, thereby

reducing overall construction activity for the year. The reported total incidents figure includes some miscellaneous incidents which is why the subcategories do not add to the total.

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 11 – Summary of Dig Safe Activities

Metric	2016	2017	2018	2019
Reported Total Incidents	435	432	300	349
Reported Electric Incidents	92	114	59	74
Reported Gas Incidents	83	72	62	60
Reported Telecom Incidents	101	110	110	80
Reported Water Incidents	41	42	22	45
Reported Sewer Incidents	27	15	10	13
Reported CATV Incidents	65	41	49	44
Excavator Violations	105	100	73	61
Operator Violations	92	101	85	78
Penalties Assessed	$199,000	$168,800	$272,500	$180,000
Penalties Waived with Training	$49,500	$42,000	$27,500	$20,500
Penalties Not Waived	$149,500	$126,800	$245,000	$151,500

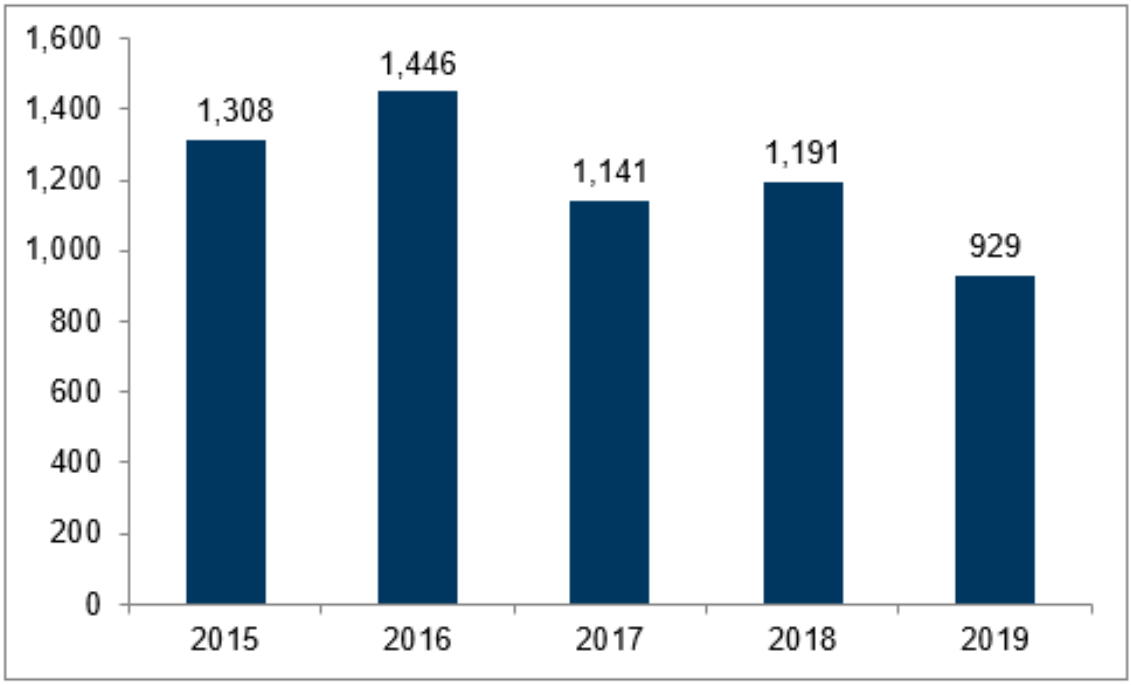
Public Awareness, Training and Education The Commission continues to strongly support and promote education and training about how to reduce and prevent damage incidents involving underground facilities and ensure the safety of residents and property located near those facilities. Maine's Underground 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 Augusta, Brunswick, Newry, Wells, 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 29 certification and/or informational training sessions at various businesses, organizations, trade shows and at the Commission with 929 participants. In the past five years, the Commission and MUST have trained over 6,000 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 2019, the Commission received 66 new water cases as compared to 60 in 2018. 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 through the 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 Company (MWC) operating divisions and whether any rate adjustments are warranted (Docket 2018-00008). In February 2019, the OPA and MWC filed a stipulation with the Commission. The Commission approved the stipulation on March 15, 2019. The major components of the stipulation are detailed below.

Five MWC Divisions – Camden and Rockland, Freeport, Oakland, Skowhegan, and Millinocket – will experience significant reductions in their overall federal income tax expenses as a result of the TCJA. MWC has agreed to record a monthly regulatory liability for the reduction in its federal income tax expense beginning January 1, 2018. This accumulated liability will flow back to ratepayers over a period to be decided in each Division's next general rate case, which will be filed no later than March 1, 2022.

The remaining MWC Divisions will not book a regulatory liability but have a decrease in water infrastructure surcharge revenue as a result of the TCJA. MWC will make a full adjustment of the water infrastructure surcharge revenue in those Divisions' next water infrastructure surcharge filings.

Maine Water Company Reorganization

In 2018, the Maine Water Company (MWC) filed an Application for Approval of Reorganization, 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 was also subject to approval for change of control from the Connecticut Public Utilities and Regulatory Authority (CT PURA). In December 2018, in a Proposed Final Decision, PURA recommended denial for change of control. In January 2019, CTWS and SJW filed a letter with Connecticut PURA withdrawing their change of control application. Shortly thereafter MWC withdrew its Application and indicated that the Companies would continue to evaluate future action before the two regulatory bodies.

On May 3, 2019, MWC filed a Petition for Approval of Reorganization, again for a merger between Connecticut Water and SJW Group (SJW) (Merger). On September 11, 2019, the Office of Public Advocate (OPA) and MWC finalized and executed a stipulation, the purpose of which was to settle all the issues with respect to this proceeding. The stipulation included a number of commitments being made by Maine Water to satisfy the "net benefits" standard in 35-A M.R.S. § 708(2)(A) (2019) as detailed below.

1. Maine Water will provide customer bill credits totaling approximately $467,000. This bill credit represents 2.224% of total last-allowed revenues of Maine Water.
2. Maine Water will not seek recovery of any acquisition premium being paid in the Merger or "goodwill" associated with the transaction.
3. Maine Water will have a board of directors consisting of at least five members. A majority of the board will reside in the New England region and be independent directors. Maine Water's Board of Directors will have the exclusive responsibility to select its officers deemed best able to serve the local interests; support the continued achievement of target levels in the annual customer satisfaction survey; approve any dividends; review and approve MWC's annual operating budgets and annual capital budgets.
4. Maine Water's senior leadership team will continue to be located in Maine. There will be no changes to the day-to-day managerial and operational responsibilities of Maine Water's management as a result of the Merger.

The merger was approved on October 4, 2019 and closed on October 9, 2019.

PFAS Detection Concerns Water Utilities

Recently, concerns have arisen due to the detection of a group of chemical compounds known as per- and polyfluoroalkyl substances (PFAS) in drinking water, wastewater and the environment. On March 6, 2019, Governor Mills signed an executive order establishing Maine's PFAS Task Force to, (1) identify the extent of PFAS exposure in Maine, (2) examine the risks of PFAS to Maine residents and the environment, and (3) recommend State approaches to most effectively address PFAS in Maine.

The Task Force will submit a report to the Governor with recommendations for future actions to address PFAS in Maine in early 2020.

Sampling for these compounds has occurred as part of a USEPA sampling program in 2013-2015 and two targeted and voluntary sampling rounds coordinated by the Maine CDC Drinking Water Program in 2017 and 2019. The combined sampling efforts have resulted in analysis of drinking water samples for PFAS from systems that represent more than 65% of the population served by Community Water Systems. To date, only one public water supply (a small mobile home park) has been found to have contaminant concentrations exceeding the EPA Health Advisory for drinking water of 70 parts per trillion (ppt). This system is

currently providing bottled water to their customers while considering installation of a treatment system and/or replacement of the water source. A water district in Southern Maine has elected to install a treatment system for PFAS in one of their well sources, although PFAS levels in the well did not exceed the EPA Health Advisory.

Based on PFAS sampling in Maine's public water systems to date, PFAS does not appear to be present in most public drinking water. Where detected, PFAS levels tend to be well below EPA's Health Advisory.

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 was 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. Based on input from water utilities, water associations, state agencies, and interested persons, the Commission staff issued a Preliminary Recommendation in March 2018, which included six major findings:

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.

The Commission is continuing its evaluation of this issue and anticipates that it will make a final decision in this Inquiry in 2020.

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. In 2019, the Commission approved filings from water utilities related to infrastructure investment totaling $26 Million.

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

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 2019.

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. 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 promote efficiency in the review of applications to provide these regulated services (Docket No. 2017-00327). The amended rule became effective April 25, 2018.

The Commission did not receive any applications to provide charter, water taxi, and unscheduled freight services in Casco Bay in 2019.

11. EMERGENCY SERVICES COMMUNICATION BUREAU

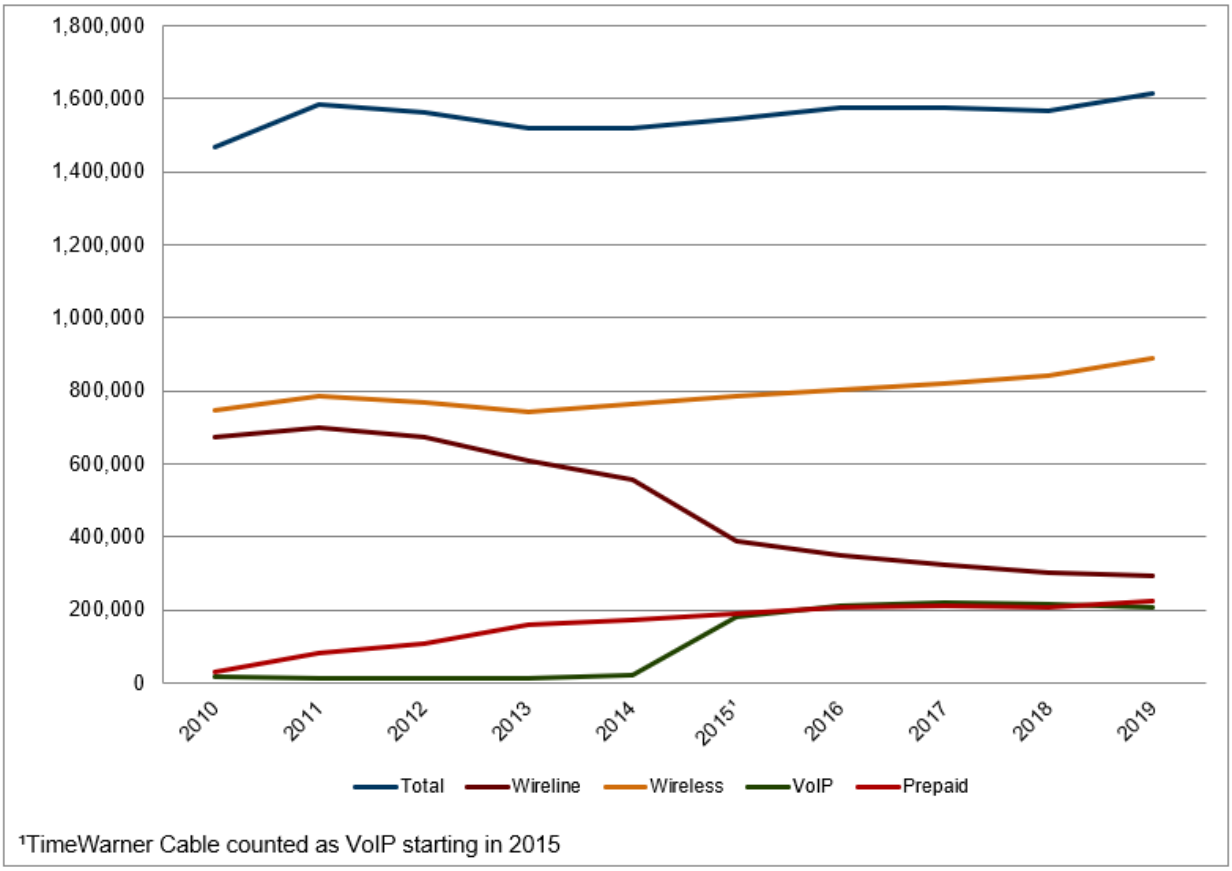
911 SERVICES IN MAINE

The Emergency Services Communication Bureau (ESCB) manages the statewide 911 system, which is the component of the emergency response system that delivers 911 calls and displays the telephone number and physical location of the caller at one of Maine's 24 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

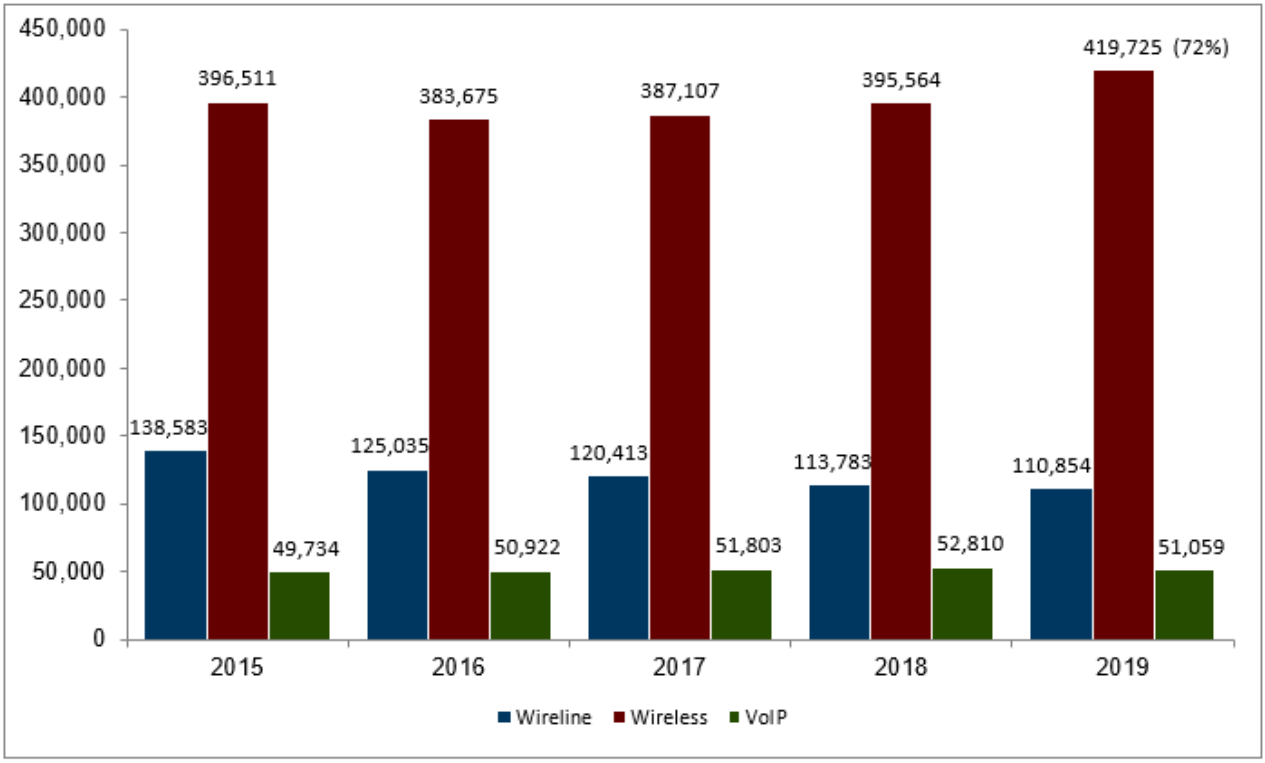
Nationally and in Maine, wireless phones have accounted for the largest portion of payments of the E911 surcharge. Fees collected from wireline phones continue a downward trend. See Figure 12.

Figure 12 – Phone Lines Contributing to E911 Surcharge



In 2019, 72 percent of all calls to 911 came from wireless phones. See Figure 13.

Figure 13 - 911 Calls



KEY EVENTS

911 Standardized Dispatch Protocols Stakeholder Group and Fire Protocols Rulemaking

Legislation (Resolves 2019, Chapter 24) enacted during the 2019 session directed the Commission to convene a stakeholder group to develop recommendations regarding 911 standardized dispatch protocol requirements and use of the 911 fund to cover costs of protocol implementation. The Commission opened a Notice of Inquiry (Docket 2019-00159) to assist the Commission in this effort and submitted its report to the Legislature, pursuant to the Act, on November 1, 2019. During the stakeholder meetings, a number of stakeholders raised concerns about the number of calls that are subject to quality assurance review (the individual review of calls to help ensure that the protocols are being followed correctly) noting that this has resulted in the need for additional staffing. The quality assurance review is performed and funded by the PSAPs or dispatch only centers that have elected to use protocols. The call review requirements for emergency medical dispatch (EMD) are set by the Department of Public Safety Emergency Medical Services Board (DPS EMS) and the call review requirements for emergency fire dispatch (EFD) are set by the Commission. The Commission noted during the stakeholder meetings that the protocol vendor's new call review standard, if adopted in Maine, would reduce the number of calls that need to be reviewed and opened a rulemaking proceeding to reduce the number of fire calls subject to quality assurance review (Docket 2019-00243). The Commission will adopt rule changes by the end of first quarter 2020.

Program Funding/Surcharge
Surcharge revenue is held in a dedicated, interest-bearing account and is tracked through the State's accounting system. Prior to the 2019 legislative session, the surcharge level was set by statute and was $.45 a month per line or retail transaction. The fund's reserve balance has been increasing due to efficiencies realized with the transition to a NG911 system in 2014. As a result, the Commission, in 2015, 2018 and 2019, 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. The legislation was not enacted. During the 2019 session, however, legislation was enacted which lowered the surcharge from 45 cents to 35 cents and gave the Commission the discretion to establish the surcharge amount, not to exceed 35 cents, beginning January 1, 2020.[18] In September 2019, the Commission opened an investigation (Docket 2019-00233) and proposed setting the surcharge at the statutory maximum of 35 cents. The Commission noted that the 35 cents would generate approximately $6.8 million annually and the 2020 and 2021 budgets for the Commission's ESCB are approximately $7.4 million. As a result, even when setting the surcharge at the statutory maximum, the Commission expects that the ESCB will operate at a significant deficit. The Commission sought comments from interested persons and in November 2019, the Commission set the surcharge amount at 35 cents noting the importance of maintaining an adequate balance in the 911 Fund to manage the possible transition of Maine's NG911 system to a new vendor in addition to the other potential needs described above.

911 Infrastructure Contract
The Commission negotiated an extension of the NG911 contract with Consolidated Communications. The Commission hired a consultant/subject matter expert with extensive NG911 expertise to assist with the review of all technical requirements for alignment with industry standards and best practices to ensure that Maine is positioned well for the next five years. The amendment provides for a system refresh of all hardware and software, with only minor exceptions. The new term ends in 2025.

911 Federal Grant
The Commission received a $680,741 Federal Grant from the U.S. Department of Transportation and Department of Commerce to improve 911 location information in Maine. Maine was one of 34 states to receive federal funding to advance the development of Next Generation (NextGen) 911 systems. This improved data will be provided through the 911 system to Maine PSAPs so they can dispatch first responders to more precise locations.

911 Public Service Announcements (PSAs)
The Commission launched a public information campaign to educate Mainers about calling and texting 911 in an emergency. Two 30-second PSAs began airing statewide in August. In one PSA, a heart attack emergency is dramatized with a woman calling 911 on her cell phone. A second PSA depicts a home invasion where a young woman texts to 911, a service that was expanded in December 2018. Texting to 911 is available at all PSAPs throughout Maine and is the result of collaboration between the ESCB and major wireless telecommunications carriers. Maine was among the first states to launch this advanced

[18] Public Law 2019, c. 343 Part SSSS

technology. The PSAs can be found at the following: Using 911: https://youtu.be/5PjJQqhbPpE Texting 911: https://youtu.be/VmUZQQULc2w

Dispatch Center Consolidation Grant Program

During the 2018 legislative session, Public Law 2017, c. 428, An Act to Assist with Dispatch Center Consolidation, was enacted. T he Act authorizes the ESCB to use up to $1million of the 911 surcharge to provide grants to dispatch centers for nonrecurring costs association with the consolidation of the dispatch center into PSAPs. Pursuant to the Act, the Commission adopted routine technical rules establishing the application process and allowable uses of grant funds. The Commission received two applications (South Berwick and Standish) and provided consolidation funds to both of those dispatch centers. The Commission issued a second announcement seeking additional applications on a rolling basis while consolidation grant funds remain available.

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 14 below for a summary of students trained.

Table 14 - Students Trained

Course Name	Students Trained in 2018	Students Trained in 2019	Percent Change
NG911/ New Hire Training	83	61	-27%
Emergency Telecommunicator Course	80	74	-8%
Emergency Medical Dispatch Certification	86	73	-15%
Emergency Medical Dispatch Quality Assurance (EMD-Q)	15	18	20%
Emergency Medical Dispatch AQUA Software Training	22	35	59%
Emergency Medical Dispatch ProQA Software Training	82	64	-22%
Emergency Fire Dispatch Certification	287	75	-74%
Emergency Fire Dispatch Quality Assurance (EFD-Q)	51	16	-69%
Emergency Fire Dispatch ProQA Software Training	258	71	-72%
NG911 Referesher Training	0	19	100%
Center Manager Certification Program	0	35	100%

The ESCB also provided funding for a full day training course offered by the Maine Chapter of the National Emergency Number Association. In addition, in September, the ESCB funded and hosted the Center Manager Certification Program. This comprehensive five-day national course was enthusiastically received by PSAP directors and supervisors across Maine.

PSAP Audits

During 2019 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:

- TTY compliance continues to require improvement. 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. Most PSAPs were up to date and no center was more than three versions behind.
- All PSAPs have standard operating procedures and/or policies in place that address call taking, transfer of calls and text to 911.

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 2020.

ESCB rules require PSAPs to answer all calls in ten seconds or less 90% of the time. This data is measured on an annual basis. PSAP's falling below this requirement are notified and asked for a corrective action plan. See Table 15 below.

Table 15 – 2019 PSAP Call Center Efficiency

PSAP	Incoming 911 Calls - 2019	% Calls Answered ≤ 10 seconds	Avg Ring Duration
Androscoggin RCC	14,280	97.3%	6.0
Biddeford PD	21,130	96.7%	6.0
Brunswick PD	14,588	98.6%	5.0
Cumberland RCC	33,215	93.0%	7.0
DPS Bangor	12,582	94.6%	11.0
DPS CMRCC	54,268	84.7%	9.0
DPS Houlton	13,281	95.8%	6.0
Franklin RCC	11,258	96.7%	6.0
Hancock RCC	17,266	97.9%	6.0
Knox RCC	13,877	98.1%	5.0
Lewiston Auburn RCC	44,305	95.0%	6.0
Lincoln RCC	13,601	99.3%	5.0
Oxford RCC	26,309	98.8%	5.0
Penobscot RCC	63,830	83.5%	8.0
Piscataquis RCC	5,954	97.7%	6.0
Portland PD	62,302	77.0%	9.0
Sagadahoc RCC	15,913	99.6%	4.0
Sanford PD	32,447	97.0%	6.0
Scarborough PD	15,138	97.4%	6.0
Somerset RCC	43,210	98.7%	5.0
Waldo RCC	11,144	90.6%	8.0
Washington RCC	11,505	98.6%	6.0
Westbrook RCC	16,483	98.7%	5.0
York PD	13,752	95.4%	6.0
Total Calls	**581,638**		

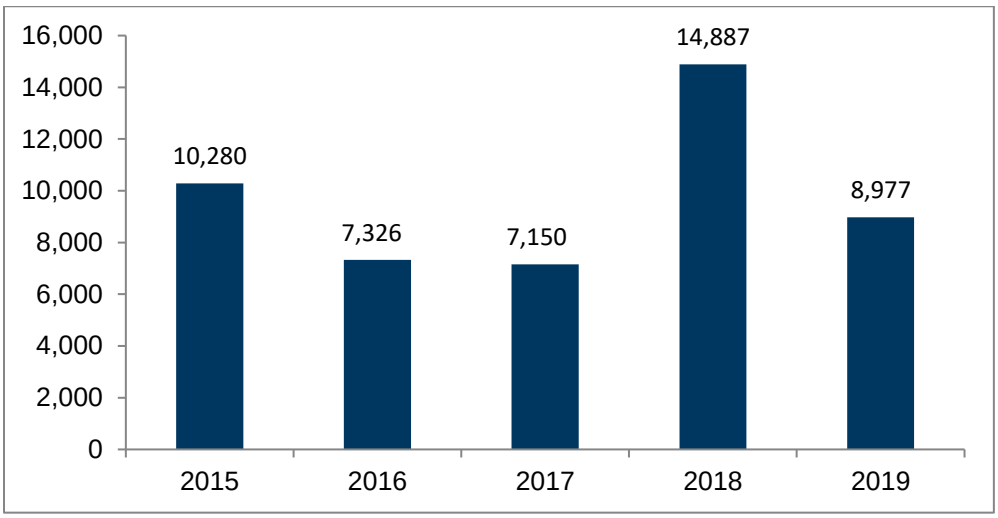
12. CONSUMER ASSISTANCE

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 8,977 consumer contacts in 2019, as compared to 14,887 in 2018. The high volume of contacts in 2018 is due almost entirely to the CMP high bill issue which is detailed earlier in this report.

Figure 14 – CASD Contacts 2014 – 2019



Consumer Complaints

As shown in Figure 15 below, the CASD received 1,793 complaints in 2019. This is a small increase over 2018, but well above the complaint levels in 2015-2017. 93% of all complaints were filed against electric transmission and distribution utilities. As noted above, this large volume of complaints is due primarily to the ongoing concerns related to CMP metering and billing as well as high bill issue. 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. This contracted staff continued through 2019.

Figure 15 - Consumer Complaints 2014 – 2019

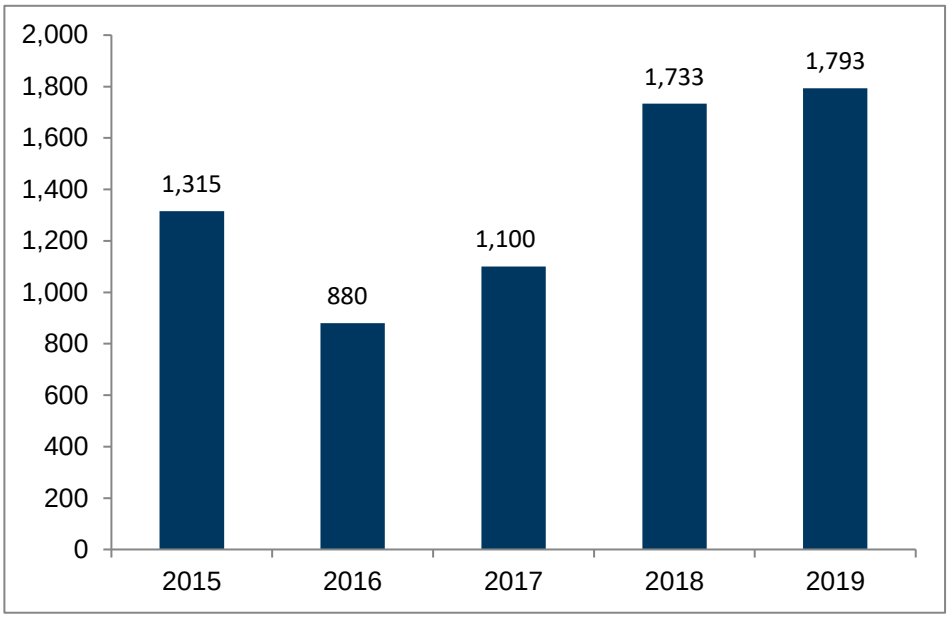
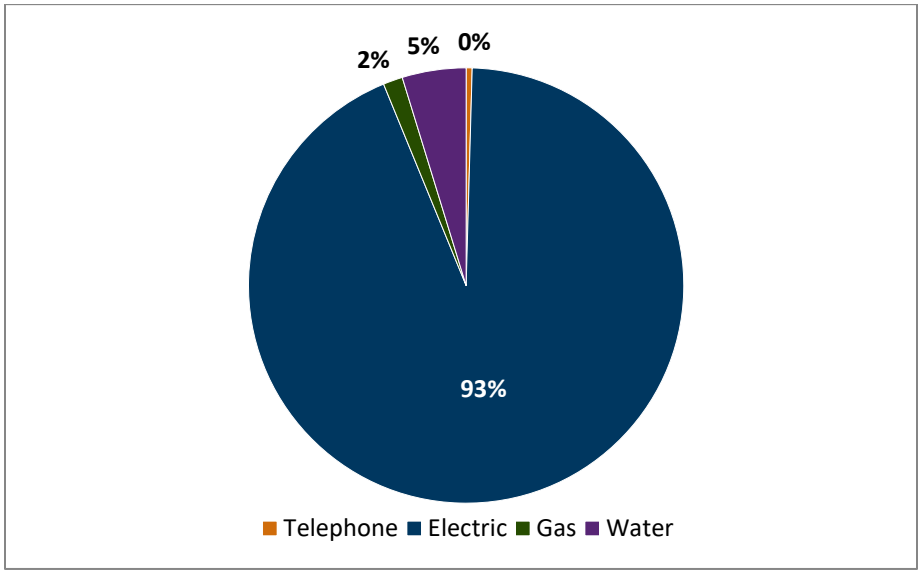


Figure 16 below breaks down complaints received by utility industry. Figure 16 shows that electric complaints represented 93% of the total number of complaints received by the CASD in 2019, the same level as 2018.

Figure 16 - Complaint Type in 2019



Refunds to Consumers

The CASD frequently obtains credits or refunds for customers as part of its resolution of customer complaints filed against utilities. In 2019, the CASD obtained $320,744 in refunds to customers. This was approximately double the $151,404 in refunds that the CASD obtained for customers in 2018. The majority of the $320,744 was refunded to customers of Central Maine Power to resolve billing complaints.

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 16 – 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 2018	1,102	$346,846	71	$1,555	0	$0
Nov 2018	3,119	$561,360	273	$13,407	1	$10
Dec 2018	5,389	$821,717	557	$9,861	2	$16
Jan 2019	5,886	$1,639,473	459	$25,203	2	$25
Feb 2019	7,733	$875,216	790	$11,724	4	$30
Mar 2019	9,632	$880,551	1,152	$10,961	5	$26
Apr 2019	13,138	$455,067	650	$13,937	0	$0
May 2019	13,529	$159,000	1,039	$12,387	1	$30
Jun 2019	13,700	$161,683	1,387	$14,631	2	$89
Jul 2019	14,035	$127,407	189	$5,182	2	$0
Aug 2019	14,097	$78,194	211	$4,759	2	$0
Sep 2019	14,088	$2,260,533	254	$15,125	3	$17
Total		**$8,367,047**		**$138,732**		**$243**

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 16 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.

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 adjudicatory decision-making process, Title 35-A provides that appellate jurisdiction to review final Commission decisions, except for rulemakings, 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 Rule (Chapter 313). The amended rule would have reduced 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 was then pending in the Superior Court. During the 2019 legislative session, Public Law 2019, c. 16, An Act to Eliminate Gross Metering (Act), was enacted. The Act amended the definition of net energy billing and directed the Commission to amend its net energy billing rule within 60 days of the effective date of the Act to be substantively equivalent to the rule in effect on January 1, 2017. The Act rendered the issue pending in Superior Court moot and the Commission amended its rule pursuant to the Act.

New England Clean Energy Connect

On May 3, 2019, the Commission issued an Order granting a Certificate of Public Convenience and Necessity (CPCN) for the New England Clean Energy Connect (NECEC) and approving a Stipulation. The NECEC is a 145-mile 1,200 MW HVDC transmission line from the Québec-Maine border to Lewiston. The Commission found that the NECEC met the applicable statutory public interest and public need standard. In approving the Stipulation, the Commission concluded that it satisfied the Commission's rules governing stipulations and that the Stipulation provided additional benefits beyond the benefits of the NECEC itself. The Commission's decision was appealed to the Maine Law Court which heard oral arguments on December 6, 2019. The appeal is pending.

Bangor Natural Gas Cost of Gas

On September 20, 2019, the Commission issued an Order finding that Bangor Gas had failed to follow one of its terms and conditions that provides for recovery of lost gas from transportation customers – those customers that choose their own supplier for gas. The Commission also found that the Commission had not authorized this and ordered the Company to conform its practices to its terms and conditions and refund customers amounts they were overcharged for a period of six years. The Commission's decision was appealed to the Maine Law Court and the appeal is pending.

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 FY2019, 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 E911system.

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

The Emergency Services Communications Fund (E911)

This fund had an unencumbered balance of $7,457,049 and an encumbered balance of $1,417,019 brought forward from FY2018. $6,820,745 was expended in FY2019. An unencumbered balance of $9,019,030 and an encumbered balance of $1,630,753 were brought forward to FY2020. The surcharge collected in FY2019 was $7,306,146. The prepaid wireless fees collected in FY2019 were $1,211,699.

PUC Regulatory Related Accounts

Regulatory Fund
The authorized Regulatory Fund assessment for FY2019 was $7,573,098. An unencumbered balance of $3,424,947 and an encumbered balance of $137,752 were brought forward from FY2018. The Commission spent $8,268,430 in FY2019.

An unencumbered balance of $2,686,455 and an encumbered balance of $346,406 were brought forward to FY2020. The encumbered balances generally represent ongoing contracts.

Reimbursement Fund
In FY2019, the Commission collected $1,700 in filing fees, $570 in copying fees and $239,789 in fines. An unencumbered balance of $832,308 and an encumbered balance of $193,608 were brought forward from FY2018. During FY2019, $488,184 was expended. An unencumbered balance of $777,795 and an encumbered balance of $1,420 were brought forward to FY2020.

The Budget in Perspective

In June 2019, the Legislature approved the Commission's biennial budget. Table 17 details the Commission's FY20 expenditure plan including position count, based on original work program.

Table 17 - FY2020 Work Program

Regulatory Fund	
Position Count	**54.5**
Personal Services	7,051,383
All Other	2,621,352
Capital	0
Total	**9,672,735**
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	**1,994,049**
Regional Greenhouse Gas Initiative	
All Other	**1,000,000**
Cost Recovery Fund	
All Other	**0**
Emergency Services Comm. Bureau (E-911)	
Position Count	**9**
Personal Services	935,765
All Other	6,295,582
Capital	0
Total	**7,231,347**

The Regulatory Fund Assessment in Perspective

Table 18 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 FY2019 was $7,573,098. Assessment breakdown by utility sector is described below in Table 19.

Table 18 - 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
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
2018	424,462,677	200,597,876	146,728,469	148,263,936	4,565,770	924,618,728	7,573,098

Table 19 – Total Assessment by Utility Sector

Sector	Assessment
Electric	4,745,130
Telecommunications	884,962
Natural Gas	1,386,941
Water	545,423
Water Common Carrier	10,642
Total	**7,573,098**

15. COMMISSIONERS' BIOGRAPHIES

Philip L. Bartlett II, J.D., was appointed to the Maine Public Utilities Commission in June 2019 by Governor Janet Mills. Prior to his appointment, he practiced law with Scaccia, Bartlett & Chabot. He also served in the Maine Senate from 2004 to 2012 and was elected by his peers to serve as Senate Majority Leader from 2008 to 2010. Bartlett chaired the Energy, Utilities and Technology Committee as well as the Joint Select Committee on Maine's Energy Future and he served on the Government Oversight Committee, Natural Resources Committee and Labor Committee. He taught micro and macroeconomics at the collegiate level. Chairman Bartlett holds a juris doctorate degree from Harvard Law School. He completed his undergraduate work at Tufts University, where he graduated Summa Cum Laude majoring in Economics and Political Science. His term expires in March 2025.

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, he 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 was promoted numerous times to management positions overseeing various aspects of the manufacturing process. Prior to his tenure at Sappi, Commissioner Davis was a systems engineer for Exxon Chemical working in New Jersey, Louisiana, Texas and England until his decision to return to Maine. Commissioner 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 – 2019

* Benjamin F. Cleaves	1915-1919
William B. Skelton	1915-1919
Charles W. Mullen	1915-1916
John E. Bunker	1917-1917
Herbert W. Trafton	1918-1936
* Charles E. Gurney	1921-1927
Albert Greenlaw	1924-1933
* Albert J. Stearns	1928-1934
Edward Chase	1934-1940
* Frank E. Southard	1935-1953
C. Carroll Blaisdell	1937-1941
James L. Boyle	1941-1947
George E. Hill	1942-1953
Edgar F. Corliss	1948-1954
* Sumner T. Pike	1954-1955
Frederick N. Allen	1954-1967
Richard J. McMahon	1955-1961
* Thomas E. Delahanty	1955-1958
* David M. Marshall	1958-1969
* Earle M. Hillman	1962-1968
* John G. Feehan	1968-1977
Leslie H. Stanley	1970-1976
* Peter Bradford	1971-1977
	1982-1987
Lincoln Smith	1975-1982
* Ralph H. Gelder	1977-1983
Diantha A. Carrigan	1977-1982
Cheryl Harrington	1982-1991
* David Moskovitz	1984-1989
* Kenneth Gordon	1988-1993
Elizabeth Paine	1989-1995
Heather F. Hunt	1995-1998
William M. Nugent	1991-2003
* Thomas L. Welch	1993-2005
	2011-2014
Stephen L. Diamond	1998-2006
* Sharon M. Reishus	2003-2010
* Kurt Adams	2005-2008
Vendean Vafiades	2007-2012
* Jack Cashman	2008-2011
David P. Littell	2010-2015
Carlisle J.T. McLean	2015-2017
* Mark A. Vannoy	2014-2019

*** Denotes Chairman**