



HGE

2019

ANNUAL REPORT





HG&E Board of Commissioners (from left): James A. Sutter, Francis J. Hoey III, and Robert H. Griffin

TO THE HONORABLE MAYOR, MEMBERS OF THE CITY COUNCIL, AND VALUED CUSTOMERS:

Submitted herewith is the One Hundred and Seventeenth Annual Report of the City of Holyoke Gas & Electric Department (HG&E) for the year ending December 31, 2019.

While 2019 brought some significant challenges, HG&E continued to offer some of the lowest utility rates in the region while delivering a strong financial performance. Fitch Ratings upgraded HG&E's credit rating to AA- from A+ during the year.

In 2019, due to the lack of natural gas capacity in the region, HG&E's Gas Division was forced to institute a moratorium on new connections in January. The Department continues to evaluate options that will allow for the moratorium to be lifted, but there are no apparent viable options at present.

HG&E continued its aggressive capital improvement program during the year, completing the replacement of its 17L substation on Cabot Street. This project, in addition to replacing an end-of-life asset, adds needed capacity and improves system reliability. The Electric Division also continued to implement its load management plan, which reduced demand-related costs by \$2.1 million during the year.

The Telecommunications Division continued to provide high-quality fiber optic services throughout the Pioneer Valley and leveraged existing assets to assist local Municipal Light Plants (MLP) with the operation of fiber networks, owned by those MLPs. In addition, HG&E continued to study the feasibility of a local Fiber-to-the-Home network.

HG&E continued to do its part in protecting our environment and supporting our community. In 2019, 53% of the Department's electricity sold at retail came from renewable resources, and 88% of the electricity sold at retail was carbon-free. In addition, our employees contributed \$28,588 to the United Way and also volunteered approximately 4,000 hours to various nonprofit and community organizations throughout the year.

In 2019, HG&E commissioned a customer satisfaction survey that indicated 97.9% of customers are satisfied with their customer service experience, 97.7% are satisfied with utility service reliability, and 91% are satisfied with HG&E rates. In addition, HG&E earned and maintained recognition from several independent organizations, including Smart Energy Provider (SEP) designation from the American Public Power Association (APPA), Reliable Public Power Provider (RP3) from APPA, Smart Electric Power Alliance (SEPA) #3 utility-scale Energy Storage Ranking in the U.S. for Mt. Tom Solar + Storage, Outstanding Innovative Technology Award from Environmental Business Council of New England (EBC), Project of the Year from Energy Manager Today for Mt. Tom Solar + Storage, Certificate of Excellence in Reliability from APPA, and the Safety Achievement Award from American Gas Association (AGA).

We thank City officials and HG&E employees for their continued faithful service, and we will continue to work diligently to provide our customers with reliable utility services at competitive rates, backed by an unprecedented dedication to customer service.

Respectfully,

*Francis J. Hoey III, Commission Chairman
Robert H. Griffin, Commission Treasurer
James A. Sutter, Commission Secretary
James M. Lavelle, Manager*

GAS DIVISION

MORATORIUM

In 2019, the Department instituted a gas moratorium on all requests for new and increased gas load. Regionally the demand for natural gas outpaced supply and HG&E's gas distribution system was operating at capacity during peak demand in the winter. The Department continues to evaluate options that will allow for the moratorium to be lifted; however, it is uncertain when, and if, the moratorium will end.

GAS SUPPLY & FLOW CONTROL

The Department delivered 2,336,135 dekatherms (DTH) of gas in 2019, with a peak daily send-out of 19,668 DTH on January 21. Of that, 12,295 DTH was delivered over the pipeline and 7,373 DTH was supplemented by liquefied natural gas (LNG). HG&E continues to operate an LNG storage and vaporization system, providing the supplemental gas needed during the coldest winter days. LNG also serves as an emergency supply for the City.

In 2019, the Gas Division conducted an independent engineering review of its intermediate-pressure district regulator systems in response to the over-pressurization incident in Massachusetts' Merrimack Valley in 2018. The report included an evaluation of the Department's intermediate-pressure regulator station design, load calculations, and over-pressure protection. The professional engineer (PE) stamped report indicated that HG&E's intermediate-pressure system design is adequately protected through the use of monitor regulators. The Department will follow up on a recommendation to add tertiary support on this system as an additional measure of safety.

GAS MAINS & SERVICES

The Department continued its cast-iron main replacement efforts and replaced one-and-a-half miles of wrought iron and cast-iron pipes with new plastic infrastructure on Meadow Street, South Canal Street, Dwight Street (between High Street and Front Street), and in the Park Slope neighborhood. The new plastic mains are generally four or six inches in diameter, with eight inches being used along South Canal Street.

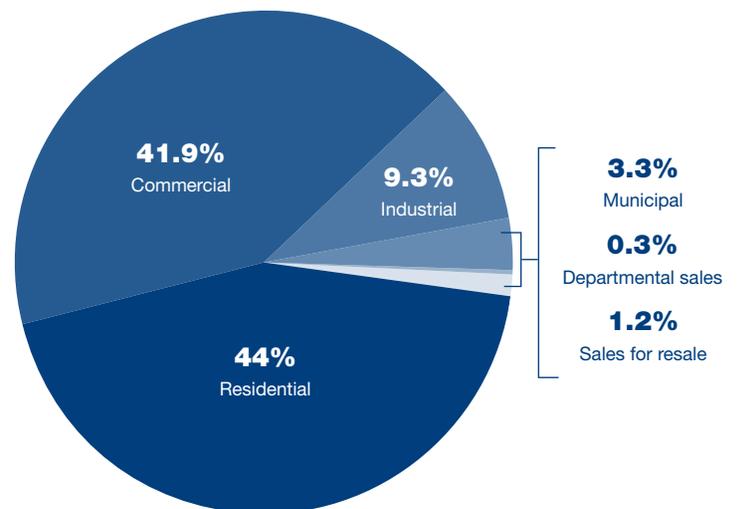
On Glendale Road, the Department replaced 350 feet of coated steel main with new six-inch plastic main and upgraded the residential gas services in the area in concert with a MassDOT infrastructure improvement project.

Per HG&E's Distribution Integrity Management Plan (DIMP), which was implemented in August 2011, the Department is continuing efforts on an accelerated bare steel service replacement program.

There are currently fewer than 1,000 bare steel gas services remaining in Holyoke, down from approximately 3,200 at the beginning of the program. At the conclusion of this program, all gas services will be constructed of either polyethylene plastic or cathodically protected coated steel. Bare steel services were installed from the early 1900s through the late 1960s.

In all, the Department installed over 7,375 feet of new mains and 143 replacement services and abandoned 16 inactive services. HG&E's natural gas distribution system now consists of over 185 miles of mains and just under 8,500 service lines.

2019 GAS REVENUES





Ernie Girard of HG&E's Gas Distribution Crew

LEAK SURVEYS

The Department helps ensure the safety and reliability of the gas distribution system through an extensive series of compulsory and voluntary comprehensive leak surveys. Each year, the Department conducts public building, mobile and walking flame ionization patrols, special monthly winter patrols, and vegetation observation surveys. The full-length walking survey over each individual gas service covered more than 4,600 lines in 2019, or about one-half of the service pipes in the system. The combined surveys accounted for the detection of 85 leaks, mostly minor. All leaks were investigated, prioritized and repaired, in accordance with applicable industry standards and regulations. At year end, the Department has zero leaks on file of environmentally significant impact.

SERVICE

The Department completed 3,097 appliance service calls for customers in Holyoke and Southampton during the year. These calls include boiler/furnace, water heater, and dryer repairs, as well as thermostat installations. In addition, 2,324 gas meters were exchanged to comply with the state-mandated, seven-year meter exchange requirement and a total of 3,948 corrosion inspections were completed to evaluate the integrity of exposed service piping.



ELECTRIC PRODUCTION

HOLYOKE DAM

HYDROELECTRIC FACILITIES

A number of projects were completed in 2019, which improved or contributed to the future generation capacity and reliability of the Department's hydroelectric facilities.

THESE PROJECTS INCLUDED:

Riverside Station Split Electrical Bus Bar: The bus ties for Riverside 4U and 8U were reconfigured due to new ISO-NE bus tie load restrictions.

Unwatering Pump for Hadley #1: A new unwatering pump was installed during the summer of 2019.

Gatehouse Roof: The 1960s roof at the gatehouse was replaced with a new EPDM membrane.

Hadley Boiler: In March 2019 the original 1950s heating equipment at Hadley Station failed. A new high efficiency gas boiler was installed as a replacement.

Hadley Falls #2 Shaft Seal and Fill Gate: The seal element on the mechanical shaft seal and wedges on the penstock fill gate were both replaced.

Valley Station Shaft Sleeve: The shaft had become worn and out of tolerance. While the machine was partially disassembled, a new turbine shaft sleeve was welded and machined in place.

Chemical Station Unit #2: A maintenance outage began on June 3, 2019. The work consisted of the disassembly of all the non-embedded components of the machine. In addition, new wicket gates were fabricated; the generator stator, rotor, and exciter will be rehabilitated and new electrical switch gear and controls installed. Unit is expected to return to service in 2020.

Dam Apron Repairs: After inspection of the dam apron in the spring of 2018, it was noted that several areas required repair. During the low flow period in the summer and fall of 2019, repairs were made, as required.

Rubber Bladder #5: Repairs to a tear in the rubber bladder were completed on August 23, 2019.

OTHER PROJECTS

Annual Spring and Fall Canal Inspections: Assessments of canals and canal walls, including overflows, intakes, penstocks, powerhouses, and tailraces, were completed during shutdowns.

Log Pond Cove: HG&E continued the monitoring of invasive plant species along the impoundment, and continued efforts to control water chestnuts in Log Pond Cove.

MAJOR COMPLIANCE ISSUES ADDRESSED, 2019:

Re-Licensing of City Units #1, #2 and #3: During 2018, the Department completed the lengthy relicensing process and filed all documents with the Federal Energy Regulatory Commission (FERC). In 2019, FERC received final comments and edits from federal and state regulators. The final disposition of the license(s) is expected to be determined by FERC in early 2020.

Applications for License Surrender: The Department installed concrete plugs for the Albion A, Albion D, and Nonotuck units during the fall canal outage. The hydroelectric equipment has been removed from the sites and demolition of the building, by the property owner, is ongoing. The final surrender order for the license(s) is expected to be determined by FERC in 2020.

Robert E. Barrett Fishway Operations: In 2019, HG&E continued its partnership with Holyoke Community College for the collection of data on the number of species passed at the Robert E. Barrett Fishway. Activities included biological sampling, trapping and loading of shad, trapping of shortnose sturgeon and Atlantic salmon, and observations of lift operations and eel passage.

HGED.COM

HYDRO



ENTRANCE

H 8S
W 20
OP 30
CLO :00
N 00
BEV NGES

NOTICE



The fish lift at the Robert E. Barrett Fishway assists migrating fish to reach spawning areas above the Holyoke Dam. HG&E's fish passage facility was the first and most successful fish lift on the Atlantic coast. It comprises two fish elevators, which carry migrating fish up and beyond the dam.

The passage of anadromous and resident fish species that were observed and monitored in the lift system this year included:

AMERICAN SHAD	314,361
ATLANTIC SALMON	3
BLUEBACK HERRING	5,052
GIZZARD SHAD	320
SEA LAMPREY	18,347
SHORTNOSE STURGEON	20
STRIPED BASS	207

2019 FISH PASSAGE

In addition to the fishlift, there are a total of three eel ramp passage facilities on both the Holyoke and South Hadley shores below the dam. The number of American eels counted at the eel ramps in 2019 was 27,505.

In 2019, the public viewing facility at the Barrett Fishway was open from May 8 through June 16 and attracted 8,222 visitors. The ability to view fish on their annual spring spawning run is a rare opportunity, and it demonstrates HG&E's commitment to Connecticut River stewardship and educational initiatives.

2019 HG&E SHAD DERBY

The annual HG&E Shad Derby offers both adult and youth fishing enthusiasts the opportunity to enjoy the recreational benefits of the Connecticut River. The 2019 Shad Derby was held on May 11, 12, 18, and 19. The event attracted 90 registrants in the Senior Division and 23 registrants in the Junior Division.

Jason Tear of Easthampton led the Senior Division with a 4 lb. 8 oz. shad. Jack Ryan of Westfield led the Junior Division with a 4 lb. 1 oz. shad. The John DiNapoli Award for the first shad caught by a youth went to Mark Rotar of Southwick.



ELECTRIC DIVISION

ELECTRIC OPERATIONS

In 2019, a number of projects were completed that will improve the reliability of the Department's electric substation and transmission infrastructure.

THESE PROJECTS INCLUDED:

Holyoke Substation Construction – Phase II: This project entailed the construction of the second and final phase of the Holyoke Substation Replacement project, including replacing the existing 115/13.8 kV dual transformer substation, which was nearing the end of its life and over firm capacity.

The work in 2019 consisted of:

- Transfer of all distribution load (eleven 13.8 kV circuits) from the old switchgear to the new switchgear
- Demolition of the old 115 kV substation in its entirety
- Installation of a new 115 kV bus structure and associated switching equipment, one 60 MVA power transformer, and all associated relaying and controls
- Interconnection of the above equipment to the Phase I work, which was completed in 2018
- Testing, energizing, and commissioning of the entire new substation

All work on this project is now complete, and the substation is carrying load and operating in its normal configuration.

Distribution Arc Flash Study: In order to ensure the safety of field personnel during maintenance and switching operations, a study was commissioned to assess the arc flash hazard on each of the Department's 51 distribution circuits for various work types. Based on the results of the study, we will be able to target future upgrades (i.e., "hot line tag" relay tripping) to address trouble areas.

Preventative Maintenance: As part of the Department's preventative maintenance (PM) plan, major maintenance and testing was performed on various substation and plant equipment throughout the year. In summary, 229 maintenance orders were completed, including major maintenance and/or testing on:

- Six medium voltage vacuum circuit breakers at Walnut Substation
- Two 125 VDC station battery systems at Holyoke and Ingleside Substations
- Forty-four NERC mandated transmission level protective relays at North Canal Substation
- Six 115 kV voltage transformers at North Canal Substation

Support for electric distribution and hydro during the year included the preparation of 149 switching orders with clearances issued for planned and emergency high-voltage work, assistance with the design, testing, and commissioning of several medium voltage automatic transfer switches and motor operated air break switches, as well as assistance with the interconnection processes and protection of various diesel, solar, and energy storage projects.

Maintenance and repair operations were also performed as required on distribution and hydro equipment, including monthly inspections of line reclosers, sectionalizers, and capacitor switching controls. Support was again provided for the City-owned flood control pumping stations in the form of emergency maintenance and pumping operations, as required.

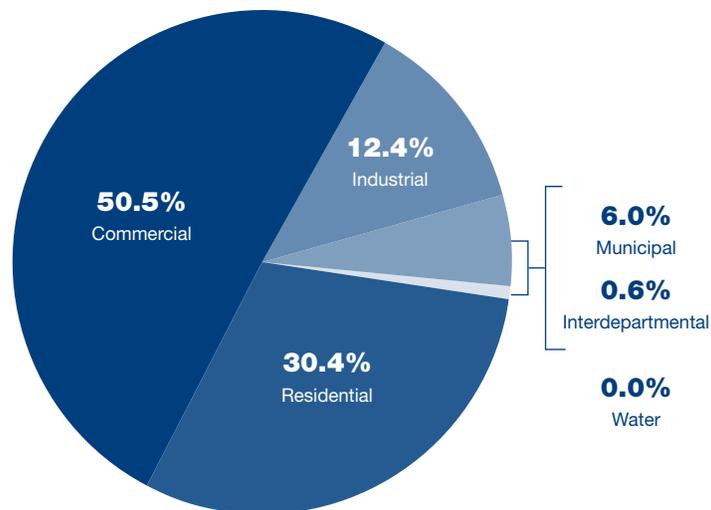
ELECTRIC DISTRIBUTION

In 2019, HG&E continued to make important investments in the electric distribution system. Some of the major investments included the replacement of a 3,300-foot section of underground primary cable on Bayberry Drive, Blossom Lane, and Blackberry Circle, as well as three vaults with new termination cabinets on Bayberry Drive. Two new air break switches with motor operators were installed on South Water Street; they are SCADA-ready and could be operated remotely when necessary. Two additional ¼ mile underground lines were extended from Holyoke Substation to a local computing center to provide a 13.8 kV 20 MVA dedicated, permanent backup circuit for added redundancy to their main 34.5 kV feed from North Canal Substation.

The Department continued its work that began in 2016 involving the removal or replacement of existing vacuum switches in manholes. The project will involve eventually replacing all 94 existing 15 kV vacuum switches located in various manholes throughout the City, which are used in isolating a circuit for the purposes of load shifting, outage restoration, and/or maintenance work. Nine vacuum switches were removed or replaced with air break switches throughout the year, bringing the total to 39 since 2016. The Department will be using automated padmount, oil-filled switches that will eventually replace most of the remaining vacuum switches in the field. These new switches will also provide automation to isolate faulted sections of circuit more quickly and provide control of these devices from remote locations.

Backyard pole lines in the areas served mainly from Highland Substation were constructed in the 1950s and 1960s. The aging infrastructure has created reliability and access issues, which is a liability to the overall system. Based on reliability data, tree trimming expenses, and known hazard areas, locations with backyard facilities were reviewed in 2018. The Department determined whether new facilities are to be installed underground or overhead based on the type of distribution existing nearby. There were 46 services, 24 single family and 22 multifamily, that were relocated from the backyard to the street in locations including Nonotuck Street, Beacon Avenue, Willow Street, Laurel Street, Hitchcock Street, Pinehurst Road, Dunn Avenue, Hampden Street, Allyn Street, Park Slope, and Dartmouth Street.

2019 ELECTRIC DIVISION REVENUES



This work will provide customers with a more reliable electric service, as well as protection from potential safety hazards and safety code violations. Additionally, these measures will reduce some of the tree trimming and outage costs for the Department.

There were 81 transformers that were replaced as part of our ongoing age based asset replacement program. This program is a proactive approach to replacing assets in the field found to be beyond the expected asset life span before a problem arises that causes an outage. Transformers of at least 40 years in age have been initially targeted to be replaced as part of this project. A net 121.5 kVA was removed from the system as a result of the program.

Five padmount transformers on Lyman Street and North East Street in the Flats section of the City had been relocated from the backyard to the street as part of an undertaking to improve access and reliability in that area. Approximately 500' of new secondary main was also installed as part of this project. The original undergrounding of a section of the Flats labeled as Model Cities was completed in the late 1970s. Padmount transformers installed were located away from the street along alleyways. These alleyways are now overgrown and essentially nonexistent, and fences were installed over the years blocking full access to the transformer. This project, the second of two phases that began in 2018, would relocate those transformers with limited access to a location where the transformers can be appropriately maintained.



Gary Rome Hyundai, Whiting Farms Road, Holyoke

Over the years, crews have identified various manholes that have been found to be in poor condition both structurally and operationally. Some of these manholes, as old as 106 years old, are difficult to work in and/or have facilities unable to be supported by existing manhole walls. One such manhole, located on Dwight Street between High Street and Maple Street, was replaced and enlarged to better accommodate crews, as well as any existing and future cabling and accessories within the manhole.

There were two, multiyear MassDOT projects that began in 2019 to improve local infrastructure. One project is the Second Level Canal bridge replacement on Lyman Street. A new 300' duct bank was extended from a manhole near the First Level Canal bridge,

previously reconstructed in 2011, up to Open Square Way, and the overhead pole line was replaced with new underground cable to refeed Gatehouse Road and Curran Construction. The second project is located on Front Street, Heritage Street, and Dwight Street between High Street and Front Street. This project involves repaving the streets and sidewalks, as well as installing new decorative lighting along the roadway. Street lighting infrastructure along Heritage Street was completed in preparation for new wiring and streetlight poles and fixtures.

A number of preventative maintenance (PM) activities continued throughout the year. Testing was performed on 151 new and used transformers, 132 pole-top units, and 19 padmount units.

HG&E also performed 292 manhole inspections and 660 wood pole inspections throughout various areas of the City. Stray voltage testing of approximately 20% of the City was also completed in the Jarvis Avenue, Easthampton Road, Lindor Heights, and Fruit Bowl areas, as well as in the Highlands. There were 175 padmount transformers on various circuits inspected by the Department line crew. Aerial, visual inspections on 20 miles of distribution circuits covering approximately 800 poles were also performed using drones to ensure reliable operation of the distribution system. In addition, infrared inspections were performed on all distribution circuits throughout the City. There were 13 transformers upgraded or replaced due to overloading, leaking, and/or poor conditions. Enhanced wildlife protections were installed on various pieces of equipment throughout the City, which continued to reduce outage time in 2019.

New electric services for the PeoplesBank on Northampton Street, United Tractor Trailer School on Whitney Avenue, and Lincoln Labs on Water Street were completed, resulting in a net additional connected load of 1500 kVA. Service upgrades were performed at the former Holyoke House on Maple Street to accommodate the new residential apartments and commercial store fronts, resulting in an additional connected load of 300 kVA. There were also nine new homes constructed on available lots on Northampton Street, Pine Street, Steiger Road, Southampton Road, Apremont Highway, St. Jerome Avenue, and Hampden Street that required new electric services resulting in a connected load of 60 kVA.

In summary, for 2019, HG&E set 123 poles and removed 152. A net 4,736 kVA connected load was added to the distribution system. Some 30,251 circuit feet of underground cable was installed, while 15,701 was removed. Similarly, 30,600 circuit feet of overhead wire was installed, while 35,903 was removed. Approximately 8,780 feet of PVC conduit was installed. There was a net increase of 29 contract lights and a net decrease of eight streetlights.

RELIABILITY

Reliability statistics allow the Department to track its service reliability and compare it from year to year with other municipal and private utilities. There are four statistics used to define the length and frequency of interruptions to customers, system availability, and the number of customers impacted by both unscheduled outages alone, as well as unscheduled and scheduled outages combined (see chart).

The Department has received the American Public Power Associations' (APPA) Reliable Public Power Provider (RP3) designation since 2011. An RP3 designation is a sign of

a utility's dedication to operating an efficient, safe, and reliable distribution system. Being recognized by the RP3 program demonstrates to community leaders, governing board members, suppliers, and service providers a utility's commitment to its employees, customers, and community. The Department has been a Diamond member, the highest awarded designation, since 2015.

In addition to the RP3 designation, the Department has also received the Certificate of Excellence in Reliability award from APPA since its inception in 2015. This award recognizes the Department for having achieved excellence in reliability by significantly outperforming the electric industry national average and achieving the top quartile of system outage duration from national reliability data collected by the Energy Information Administration (EIA).

UNSCHEDULED OUTAGES ONLY		
STATISTIC	2019	2018
ASAI	99.9945%	99.9966%
CAIDI	31.870 min	67.337 min
SAIDI	31.876 min	23.043 min
SAIFI	1.000 outages	0.342 outages

COMBINED OUTAGES		
STATISTIC	2019	2018
ASAI	99.9908%	99.9926%
CAIDI	38.967 min	77.986 min
SAIDI	50.863 min	47.816 min
SAIFI	1.305 outages	0.613 outages

Average System Availability Index (ASAI)

Represents how much of the time a customer actually has service available to them.

Customer Average Interruption Duration Index (CAIDI)

Represents the average time expected to take to restore service after a sustained interruption.

System Average Interruption Duration Index (SAIDI)

Defines the average interruption duration per customer served.

System Average Interruption Frequency Index (SAIFI)

Defines the average number of times that a customer's service is interrupted during a given year.

METERING

In 2019, the Department continued its advanced metering infrastructure (AMI) system rollout to support commercial and industrial billing and future distribution automation. The Department installed its eighth Connected Grid Router (CGR) on a Department-owned utility pole, which is connected to the Department's fiber infrastructure. These CGRs communicate back to the cloud interface software via a secured tunnel. In addition, the Department installed 696 AMI meters, which included replacing 53 drive-by and 43 nonautomated reading meters. These meters were not providing any outage notification and/or interval meter data. In addition, the Department replaced 600 single phase AMR meters with AMI meters for hard to access locations and to facilitate the mesh network communication paths back to the CGRs.

In conjunction with the Department's Fixed Network AMR system, these metering systems provide outage notification from electric meters, tampering diagnostics for electric and gas meters, interval meter data, and instantaneous meter reads. This technology allows the Department to perform certain tasks remotely, such as successions when opening or closing an account. The metering group has utilized custom reports to track down inactive meters showing consumption, validate meter removals, and detect malfunctioning meters to reduce lost revenue and maintain system accuracy. In addition, the enhanced meter data provides kVAR/kVA intervals and min/max/avg voltage data for five minutes.

In 2019, the AMR system had an average daily read rate of 99.74%, with an initial design of 99%. At the end 2019, the overall remote read capability for the Department was 99.82%, which includes all electric meters without radio frequency (RF) capability.

The electric testing and operations portion of the Meter Department was relocated from its long-time location at Walnut Street to its newly renovated shop at the Jackson Street facility. The Jackson Street shop is now able to accommodate all personnel, testing and meter reading equipment, and inventoried meters, transformers, tools, and other miscellaneous supplies in one centralized location. Metering and line crew personnel working together in one location now improves efficiencies in scheduling everyday work to better meet customer requirements and expectations.

The Department installed 22 high-end revenue meters as part of the newly upgraded Holyoke Substation. These meters provide real-time meter data to the Department's SCADA system as well as feeder meter data that can be used for loss analyses. A total of 13 generator, transformer, and station service meters were tested at Holyoke Substation, as well as Hadley Falls, Cobble, Chemical, City Hydro, and Valley hydro stations. These meters are tested by the Meter Department on a biennial basis through the use of the Department's own portable test unit.

The Department updated 10 locations to increase revenue and metering accuracy. At four locations, the Department removed older current transformers, which allowed the Department to install AMI meters. At the other six locations, current transformers were replaced with high accuracy current transformers either due to safety concerns or because the current transformers were too high for the application.

Throughout the year, the metering group continued to support the Credit Department, performing delinquent customer ons and offs, tagging notifications, meter reads, and collections. In total, 4,619 credit-related duties were performed in 2019.

In summary, there were a net total of 72 electric meters installed, 791 electric meters replaced, and 638 electric meters retired, having an average age of 19.32 years. A total of 1,020 electric meters were tested and calibrated, six power quality checks, 398 turn-ons and 301 turnoffs, and 26 electric successions performed, and 21 vacant consumption reports investigated for metering problems and/or theft of service. There were 12 current transformers installed and 10 current transformers removed. There were 18 current transformers replaced with newer high-accuracy current transformers. There were 12 potential transformers installed and nine potential transformers removed. In addition, two surge protectors were replaced due to warranty expiration, as well as one removal. On the gas side, 2,359 meters were removed and tested, 2,303 meters were installed, 2,134 meters were sealed, one meter turned off, and 660 meters were retired.

WHOLESALE POWER

HG&E manages a diverse power supply portfolio. HG&E purchases power to meet the ever-changing electric loads and brings it into Holyoke from all over New England. HG&E monitors possible monthly and annual peak hours and actively institutes load reduction measures to lower HG&E's load and thus costs during these times. As part of the Energy Purchasing and Risk Management Plan, the Department monitors the available energy supply and sources on a daily basis to stabilize and ensure price certainty for the future cost of power. The Department purchases power on both a short-term and long-term basis to take advantage of the fluctuating market, manage the risk of rising prices, and increase the stability of future energy costs, thereby stabilizing rates for all customers.

In 2019, 39.88% of HG&E's power supply production came from generation that qualifies as renewable, according to definitions set forth by the Renewable Portfolio Standards within the New England states. Additionally, 26.16% of HG&E's production came from generators that produce solar, hydro and wind power, but which HG&E cannot claim as green energy because the renewable energy certificates (REC) are not owned by or retired with HG&E. The Null Energy Label is used to signify non-REC ownership/retirement.

POWER SUPPLY

2019 POWER SUPPLY RESOURCES

PROJECT NAME	FUEL TYPE	PROJECT START DATE	CONTRACT CAPACITY (KW-AC)		CONTRACT END DATE
			WINTER	SUMMER	
BASE UNITS					
NYPA FIRM	HYDRO	1985	1,989	1,989	9/1/25
MILLSTONE 3 - MIX 1	NUCLEAR	1986	1,334	1,334	11/25/45 *
MILLSTONE 3 - PROJ 3	NUCLEAR	1986	2,325	2,325	11/25/45 *
SEABROOK - MIX 1	NUCLEAR	1990	147	147	3/15/50 *
SEABROOK - PROJ 4	NUCLEAR	1990	3,306	3,306	3/15/50 *
SEABROOK - PROJ 5	NUCLEAR	1990	408	408	3/15/50 *
HYDRO QUEBEC 1	N/A	1986	1,189	1,189	LOU **
HYDRO QUEBEC 2	N/A	1989	1,938	1,938	LOU **
W.F. WYMAN 4	#6 OIL	1978	4,199	4,152	9/30/19
NYPA PEAK	HYDRO	1985	426	426	9/1/25
STONYBROOK GT 2A	#2 OIL	1982	2,476	1,910	LOU *
STONYBROOK GT 2B	#2 OIL	1982	2,413	1,850	LOU *
HADLEY FALLS 1&2	HYDRO	1949	33,400	33,400	OWNED *
RIVERSIDE 8	HYDRO	1931	4,575	4,575	OWNED *
RIVERSIDE 4-7	HYDRO	1921	3,270	3,270	OWNED *
BOATLOCK	HYDRO	1924	3,313	3,313	OWNED *
HOLYOKE HYDRO/CABOT 1-2	HYDRO	1923	1,856	1,856	OWNED *
HOLYOKE HYDRO/CABOT 3	HYDRO	1940	450	450	OWNED * ****
HOLYOKE HYDRO/CABOT 4	HYDRO	1955	750	750	OWNED * ****
CHEMICAL	HYDRO	1935	1,600	1,600	OWNED *
BEEBE HOLBROOK	HYDRO	1948	205	205	OWNED *
SKINNER	HYDRO	1924	300	300	OWNED *
VALLEY HYDRO	HYDRO	2004	790	790	OWNED *
ALBION A	HYDRO	2004	281	281	OWNED * ***
ALBION D	HYDRO	2004	395	395	OWNED * ***
NONOTUCK	HYDRO	2004	472	472	OWNED * ****
OPEN SQUARE	HYDRO	2004	525	525	2/29/16 ****
HANCOCK WIND	WIND	2016	6,032	6,032	12/14/41
CONSTELLATION - MUELLER RD	SOLAR	2012	2,693	2,693	12/20/31****
CONSTELLATION - MEADOW ST	SOLAR	2012	793	793	12/20/31****
CITIZENS - COUNTY RD	SOLAR	2013	615	615	2/5/33 ****
HPP MA, LLC - RICAR	SOLAR	2015	792	792	10/1/40 ****
C2 ENERGY CAPITAL - DINN	SOLAR	2016	475	475	12/27/36 ****
C2 ENERGY CAPITAL - KELLY WAY I	SOLAR	2016	475	475	12/27/36 ****
JACKSON CANAL, LLC - AEGIS	SOLAR	2017	833	833	1/4/37 ****
GROWING HOLYOKE, LLC - GARY ROME	SOLAR	2017	666	666	1/6/37 ****
MT. TOM SOLAR, LLC - ENGIE	SOLAR	2017	4,988	4,988	2/7/37 ****
SCANNELL SOLAR, LLC - CONKLIN	SOLAR	2017	633	633	2/24/37 ****
GEEPV - RIVERSIDE A/B	SOLAR	2017	133	133	5/8/37 ****
GEEPV - WALNUT	SOLAR	2017	100	100	11/22/37 ****
SUNWEALTH - HADLEY MILLS	SOLAR	2017	336	336	12/31/37 ****
C2 ENERGY CAPITAL - KELLY WAY II	SOLAR	2018	475	475	6/4/38 ****
GEEPV - BOYS & GIRLS CLUB	SOLAR	2018	150	150	4/20/38 ****
GEEPV - JACKSON	SOLAR	2018	120	120	3/15/38 ****
GEEPV - YMCA	SOLAR	2018	167	167	12/17/38 ****
MT. TOM SOLAR, LLC - ENGIE	STORAGE	2019	3,000	3,000	5/31/38 ****

All capacity contracts follow the ISO New England calendar system.

* Investments continue for the life of the unit (LOU)

** After 8/31/01, there is no firm energy contract, only capacity, entitlement, which continues for the life of the unit

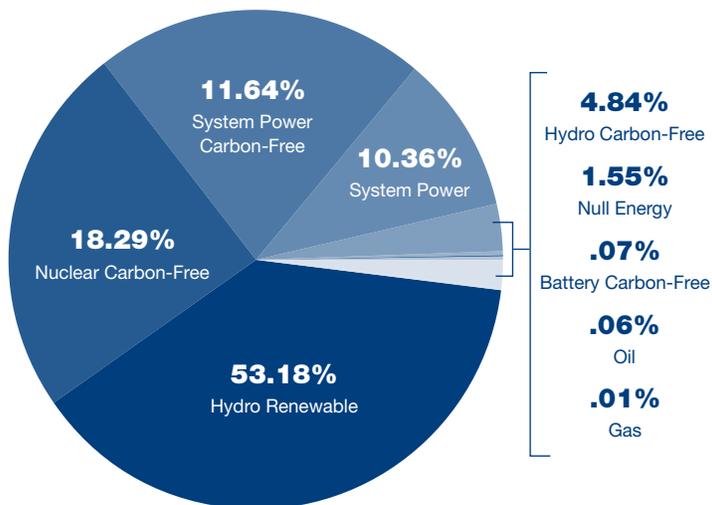
*** In Process of Retiring Assets

**** Load Reducer

Only 4.5% of Null Energy total production served to meet a small portion (1.55%) of HG&E's electrical load in 2019, while the excess was sold to the market.

The pie chart below shows Holyoke's supply by fuel type as percent (%) of electrical load from retail sales. In 2019, 53.18% is renewable and carbon-free, while an additional 34.84% is carbon-free (nuclear, battery, carbon-free system power and hydro). Hence, 88.02% of HG&E's Electrical load is considered carbon-free. For comparison, the carbon-free amount was 84.98% in 2018.

**HOLYOKE GAS & ELECTRIC DEPARTMENT
2019 ENERGY MIX AS % OF RETAIL SALES**



In 2019, 53.18% of HG&E's electric load was renewable and carbon-free, while an additional 34.84% was carbon-free, not renewable (nuclear, battery, carbon-free system power and hydro). Hence, 88.02% of HG&E's Electrical load is considered carbon-free.

The System Power represents various term length bilateral contracts comprising system mix within ISO-NE that were procured during the summer time frame. System Power Carbon-Free represents long-term, on-peak bilateral contracts with nuclear carbon-free certificates attached that will end December 2029.

During 2019, the Department proactively pursued and hosted low-cost carbon-free projects to secure and further enhance its energy portfolio. One utility-scale energy storage project totaling 3 MW / 6 MWh began official commercial operation in May 2019 and co-located with solar at the former Mt. Tom Coal Plant facility.

HG&E currently hosts 28 solar projects (17 utility-scale, nine residential, two commercial), with a corresponding output load of 17.886 MW-dc, allowing the Department to purchase power at a lower cost.

Utility-scale projects resulted in 19,661 MWh of load reduction, while residential and commercial customer solar resulted in 76,288 kWh of load reduction on the system in 2019. The harnessing of solar energy from these projects within Holyoke is offsetting the Department's demand and reducing future costs for all customers.

Beginning in February 2017, HG&E developed a Community Solar Program open to all residential customers who have chosen to participate (opt in) to the program. In 2019, 2,280 customers participated in this program. This program allows residential customers to receive the benefits of solar without the expense of installing a system at their location. The Mt. Tom Solar project, totaling 4.988 MW-ac (increased in output during 2019 from prior 4.50 MW-ac rating), and the Kelly Way 2 project, totaling 0.603 MW-ac, were designated as community solar projects. Load reduction from community shared solar generated a total savings of \$48,872 to those participating in the program. Additionally in 2019, a total of \$19,907 was provided to the Holyoke Housing Authority from three solar systems (Aegis, Gary Rome and Hadley Mills) that were set up under the Low or Moderate Income (LMI) Solar Program.

A total of 247,755 MWh of net generation was produced from the Department-owned hydro resources, which continued to help drive down the overall cost of power. During 2019, the hydro preference power credit to residential customers generated total savings of \$1,124,326 (\$990,254 from Department-owned hydro and \$134,072 from NYPA entitlements).

As mentioned in the Gas Division report, in January 2019, HG&E issued a natural gas moratorium, effectively discontinuing new or increased requests for natural gas services in HG&E's territory. In efforts to keep HG&E's carbon footprint low, and to encourage the installation of clean, efficient, electric heat pump sources, the Department launched a Cool Homes – High Efficiency Central AC and Heat Pump Rebate Program in November 2019.

To further encourage electrification, the Department has developed various rebate and incentive programs set to launch in early 2020. HG&E has enhanced its appliance rebate program, and significant progress was made on the Connected Homes Program. This program will allow HG&E to control Wi-Fi compatible thermostats, batteries, resistant water heaters, heat pump controls, EV chargers, as well as other smart devices and equipment within customers' homes during peak events, thus offsetting the Department's demand and reducing future costs for all customers.



HG&E Electric Lineman Angel Maldonado Jr.

Significant progress was made on the Electric Vehicle (EV) Level 2 Charger Rebate Program, set to launch in early 2020. EVs are cleaner and more efficient than conventional vehicles, and the electricity mix that powers them will continue to get cleaner over time, as more carbon-free resources come online. Customers agreeing to sign up for the Connected Homes Program will receive either a \$450 credit (if they currently own a charger) or a free charger.

The hydroelectric system, including the Hadley Falls Dam and the Holyoke Canal hydro facilities, maintains Massachusetts Class I and II status, in addition to Maine Existing certifications. 10.91% of Hadley Falls 1 and 2 is MA Class I certified. All of the canal units with the exception of City 4J (which is 100% MA Class I) are MA Class II certified, and six canal units are certified with small percentages as MA Class I. Sale of these certificates resulted in \$2,061,618 of revenue to the Department in 2019.

HG&E proactively works throughout the year to improve reliability by maintaining and making upgrades to its 9.25 circuit miles of pool transmission facilities (PTF). Ensuring that all transmission lines and processes are up to date allows HG&E to meet its future needs and reduce transmission costs. Transmission Regional Network Service (RNS) rates increased 1.37% from \$110.43/kW-year to \$111.94/ kW-year in June 2019. The Department's RNS annual charge of \$6,494,789 was offset by 9.25 circuit miles of transmission infrastructure, with three transmission substations. With PTF revenues of \$4,448,166 and peak shaving solar and hydro offsets of \$823,679,

in 2019 the Department's annual RNS charge was reduced to \$1,222,944.

Holyoke achieved Green Community status in 2010 and is committed to efficiency, conservation, and sustainability. The Department's replacement of high-pressure sodium lights with more efficient light emitting diode (LED) lighting technology has, on average, reduced the city's streetlight consumption by 60%. The city has realized almost \$300,000 in direct energy savings from these lights in 2019 compared to pre-LED street-lighting costs; although, when factoring in additional LED decorative and other lights added by the City over the past several years the total resulting savings was about \$105,000 in 2019.

HG&E has earned a Smart Energy Provider (SEP) designation from the American Public Power Association (APPA) for demonstrating commitment to and proficiency in energy efficiency, distributed generation, and environmental initiatives that support a goal of providing low-cost, quality, safe, and reliable electric service. The SEP designation, which lasts for two years (December 1, 2019, to November 30, 2021) recognizes public power utilities for demonstrating leading practices in four key disciplines: smart energy program structure, energy efficiency and distributed energy programs, environmental and sustainability initiatives, and the customer experience. This is the first year APPA has offered the SEP designation, and HG&E is one of only 60 from over 2,500 public power utilities in the nation to receive such designation.

A black and white photograph of a man with short hair and a light beard, wearing a dark polo shirt. He is standing in a server room with his arms crossed, looking directly at the camera. In the background, there are server racks filled with equipment and cables. A laptop is visible on a desk in the lower-left foreground. The overall scene is a professional, technical environment.

● HG&E's commercial network, now in its 21st year of operation, provides high-speed Internet and network connectivity via fiber optic lines to business-class customers located in Holyoke, Chicopee, downtown Springfield, and throughout the Pioneer Valley. Both the Department itself and the City receive services from the network. The service platforms are industry-standard Carrier Ethernet and Internet Protocol (IP), supporting speeds up to 10 Gbps (gigabits per second).

TELECOMMUNICATIONS

TELECOMMUNICATIONS HELP DESK

HG&E administers a centralized help desk, accepting support calls from customers and internal staff. As a telecom utility, HG&E offers 24x7 network monitoring services and an on-call support structure to ensure maximum network uptime, as well as the best possible customer experience.

The help desk received 2,054 tickets — 910 for HG&E department employees, 583 for the City of Holyoke, and 561 for commercial customers. Of the 2,054 trouble reports received, 2,027 tickets were resolved in 2019.

COMMERCIAL NETWORK UPGRADES

As customer needs grow and application requirements evolve, HG&E's network investments continue. In 2019, HG&E completed key improvements in the carrier transport network by adding two 100G capable core transport switches and updating critical network management platforms. Additionally, HG&E completed a pro-forma plan for a Holyoke Fiber-to-the-Home project.

COMMERCIAL NETWORK EXPANSION

In 2019, the Department continued fiber optic Wide Area Networking (WAN) services throughout the Pioneer Valley. Within this service territory, HG&E is focused on providing fiber optic WAN services for large, complex institutions. For example, HG&E provides support for a regional institution with six locations, offering 10 Gbps of bandwidth and carrier Ethernet over fiber connecting all locations. Local support, network performance and reliability are some of the factors that contribute to our customer loyalty.

CARRIER INTERCONNECTION

In 2019, HG&E further developed interconnection relationships with regional fiber Ethernet carriers, in order to service core customers with locations outside of the existing footprint. These interconnections allow HG&E the flexibility to provide additional services outside of the previous service boundaries. HG&E interconnected to a new fiber vendor in order to provide private LAN service to new customer locations throughout Northern Connecticut.

HG&E is a next-generation provider, having designed, engineered, and implemented full IPv6 Internet routing and peering with upstream Internet carriers. In 2019, the Telecom Division continued to scale into its two primary wholesale Internet feeds running at 5 Gbps each. Currently, HG&E has an Internet capacity of 10 Gbps with capacity to grow up to 20 Gbps with no additional capital investments.

UTILITY OPERATIONS NETWORK UPGRADE

In addition to maintaining commercial network customers, the Division continued its support for the design, operation, and maintenance of HG&E's internal operations network and information intelligence needs. In 2019, the Department refreshed the entire utility operations network; this was phase one of a three phase plan. Phase one includes the network core switching and routing at HG&E's Suffolk Street and Walnut Street facilities, with two 100 Gbps interconnects and a data center mesh using a combination of 100 Gbps and 40 Gbps interconnects. The total project is expected to be completed by the end of 2020.

In 2019, HG&E implemented an entirely new datacenter compute and storage architecture using Dell's Unity platform on top of the new network platform. The compute and storage platform is fully diverse across both the Suffolk and Walnut datacenters.

CYBERSECURITY

As cyber threats continue to evolve, both internal and external, HG&E remains committed to continually improving its cybersecurity posture. Pursuant to these goals, HG&E maintains an umbrella cyber threat detection and mitigation system at its Internet gateways. This system provides blanket attack protection, in real time, to all HG&E Internet subscribers and users. HG&E also performs regular user awareness training and vulnerability testing to ensure compliance with cybersecurity policies and best practices.

WHOLESALE BROADBAND SERVICES

HG&E continued its development and execution of a last-mile strategy and wholesale services offerings, including the continued scaling of the residential wholesale broadband platform. Leveraging its current network infrastructure, HG&E is scaling support for communities that seek to build their own networks, but need an experienced network operator. HG&E is in a unique position to help communities achieve their broadband goals. As of 2019, HG&E has a Network Operator or ISP presence in nine rural and local communities. HG&E utilizes the Massachusetts Broadband Institute (MBI) regional fiber optic network to connect with these rural communities.



GOODWILL

Community involvement is a central belief of the public power philosophy, and the Department is proud of the role it takes in making Holyoke a better place to call home.

In 2019, HG&E offered support to several major community events, including, but not limited to, the Hispanic Family Festival, the St. Patrick's Day Parade, and the Holyoke Fireworks, which are underwritten by the Department.

In total, \$147,897 in sponsorships and \$16,435 in labor was provided for nonprofit causes.



CORNELIUS J. MORIARTY JR.
SCHOLARSHIP FOR CADET ENGINEERS

The Cadet Engineer program is dedicated to the memory of our late commission chairperson, Cornelius J. Moriarty, Jr. He often noted that the admission of new students into the program was one of the most rewarding actions that the commission made each year.

The program offers aid to Holyoke students who are pursuing Bachelor of Science degrees in engineering. Rachael Shannon and Ian Beauregard were admitted as the 2019 cadets.

ECONOMIC DEVELOPMENT

In 2019, the Department provided \$64,034 in additional discounts to businesses that have relocated or expanded within the city under the Economic Development Discount Program. This program provides an additional 10% off participants' gas and electric bills for a three-year period.

The Department also offers a similar program for residential customers, under which first-time Holyoke homebuyers can receive 10% off of their first three years of gas and electric bills. In 2019, \$108,813 was provided under this program.

CONTRIBUTION	AMOUNT
Nonprofit Sponsorships	\$147,897
Nonprofit Labor	\$16,435
Cadet Engineer Scholarship	\$41,250
Payment in Lieu of Taxes	\$1,080,940
Municipal Payment Discounts	\$357,507
Discounted Street Lighting	\$378,511
Economic Development Discount	\$64,034
New Homeowner Discount	\$108,813
Energy Conservation Assistance	\$475,033
TOTAL COMMUNITY SUPPORT	\$2,670,420

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
City of Holyoke, Massachusetts)

FINANCIAL STATEMENTS

Including Independent Auditors' Report

As of and for the Years Ended December 31, 2019 and 2018

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
City of Holyoke, Massachusetts)

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As of and for the Years Ended December 31, 2019 and 2018

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To the Utility Commission
Holyoke Gas and Electric
Holyoke, Massachusetts

We have audited the accompanying financial statements of Holyoke Gas and Electric and Holyoke Gas and Electric OPEB Trust, enterprise and fiduciary funds, respectively, of the City of Holyoke, Massachusetts, as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, as listed in the table of contents. Hereafter the funds will collectively be referred to as "Holyoke Gas and Electric."

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Holyoke Gas and Electric's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Holyoke Gas and Electric's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Holyoke Gas and Electric as of December 31, 2019 and 2018, and the respective changes in financial position and cash flows, where applicable, for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As discussed in Note 1, the financial statements present only the Holyoke Gas and Electric enterprise and fiduciary funds and do not purport to, and do not, present fairly the financial position of the City of Holyoke, Massachusetts, as of December 31, 2019 and 2018 and the respective changes in financial position or cash flows, where applicable, for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinions are not modified with respect to this matter.

As discussed in Note 16, the 2018 financial statements have been restated to correct an error in the calculation of deferred outflows of resources and deferred inflows of resources related to pension. Our opinions are not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audits were conducted for the purpose of forming opinions on the financial statements as a whole. The supplemental information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental information is fairly stated in all material respects in relation to the financial statements as a whole.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
April 30, 2020

**MANAGEMENT'S DISCUSSION
AND ANALYSIS**

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS As of and for the years ended December 31, 2019, 2018, and 2017 UNAUDITED

The management of Holyoke Gas & Electric (HG&E) offers all persons interested in the financial position of the utility this narrative overview and analysis of the utility's financial performance during the years ending December 31, 2019, 2018, and 2017. You are invited to read this narrative in conjunction with the utility's financial statements.

FINANCIAL HIGHLIGHTS

- > Operating revenues for the utility decreased by \$2,556,798, or 3%, in 2019. Electric operating revenues decreased by \$1,875,414, or 4%, which was due to a 3% decrease in unit (kWh) sales as a result of mild weather and overall lower load during the year. Renewable energy certificate (REC) sales also decreased by 29% or \$835,160 due to lower REC production during 2019 as a result of less water flow and an overall lower price for REC sales during the year. Gas operating revenues decreased by \$681,384, or 3%. The decrease in gas revenues was primarily due to a 3% decrease in unit (Mcf) sales for the year.
- > Fuel expenses decreased by \$1,128,244, or 4% in 2019. Electric fuel expenses decreased by \$1,010,646, or 5%, which was primarily due to an \$845,621, or 17% decrease in capacity costs from 2018. Gas fuel expenses decreased by \$117,599 or 1% due to lower consumption. This decrease was offset by an overall higher cost of gas per unit during the year.
- > Non-fuel expenses increased by \$374,254, or 1%, in 2019. The non-fuel increase from 2018 was primarily due to a \$1,433,376, or 41% increase in the Department's actuarially calculated pension expense. The increase was offset by an \$869,018, or 40% decrease in transmission costs from 2018.
- > Depreciation expense increased by \$480,504, or 7% in 2019 as a result of an overall increase in capital assets due to the Holyoke 17L Substation project as well as other ongoing capital improvement and replacement projects undertaken by the Department.
- > Other revenue and expenses increased by \$11,724,899, or 245% in 2019. Favorable market performance in 2019 resulted in overall investment gains of \$6,535,167 compared with unfavorable market performance in 2018 that resulted in an overall reduction in the value of investments of \$5,481,022.
- > The Departments' total net position increased by \$14,224,282, or 17% in 2019 from the combined activities of HG&E, Holyoke Solar Cooperative, and the Massachusetts Clean Energy Cooperative. This increase was due to overall strong operating results combined with the strong performance of Department's investment accounts in 2019.

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS As of and for the years ended December 31, 2019, 2018, and 2017 UNAUDITED

OVERVIEW OF THE FINANCIAL STATEMENTS/USING THIS REPORT

The HG&E Commission is a three member board comprised of three local citizens. Nominated by the mayor and approved by the city council, each member has a six year term when approved. One member comes up for re-appointment every two years on a rotating schedule. HG&E provides Electric, Gas and Telecommunications services to the City of Holyoke.

The gas division has a distribution system that covers the City and the eastern portion of Southamptton, Massachusetts. There are approximately 12,000 meters and 185 miles of main pipes. The division also operates a Liquefied Natural Gas plant that is used to meet peak demand during the winter months. In addition to these services, gas and electric appliance repair is offered to the customers.

The electric division operates and maintains five substations, 162+ miles of pole lines, 46+ miles of underground distribution, 9.25 miles of overhead transmission, 2,580 transformers and 4,118 streetlights. There are approximately 18,000 electric customers.

HG&E also owns and operates over 50 MW of hydro-electric generation capacity within the City of Holyoke. The Holyoke Gas & Electric Hydroelectric system, including the Hadley Falls Dam and the Holyoke Canal hydro facilities, generated a total of 247,755 MWh of net generation which continued to help drive down the overall cost of power.

The Department is a member of the Massachusetts Municipal Wholesale Electric Company (MMWEC), a public corporation and a political subdivision of the Commonwealth of Massachusetts. Through MMWEC, HG&E has partial ownership (entitlements) to the following projects; Stony Brook Peaking Unit, Millstone Unit # 3 and Seabrook Nuclear Power Station.

In addition to offering some of the lowest electric rates in the Commonwealth, in 2019, 51.72% of HG&E's electricity sold at retail was renewable and 84.98% of HG&E's electricity sold at retail is considered carbon free.

Other

Please refer to the table of contents for the various sections included in this report. The utility is a self-supporting entity and follows enterprise fund reporting; accordingly, the financial statements are presented using the economic resources measurement focus and the accrual basis of accounting. Enterprise fund statements offer short- and long-term financial information about the activities and operations of the utility.

- > The Statement of Net Position includes all of the utility's assets, deferred outflows of resources, liabilities, and deferred inflows of resources and provides information about the nature and amount of investments in resources and the obligations to creditors. This statement provides the basis for evaluating the capital structure and assessing the liquidity and financial flexibility of the utility.
- > The Statements of Revenues, Expenses, and Changes in Net Position provide an indication of the utility's financial health.
- > The Statements of Cash Flows report the cash provided and used by operating activities, as well as other cash sources such as investment income and cash payments for repayment of bonds and capital additions.

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS As of and for the years ended December 31, 2019, 2018, and 2017 UNAUDITED

UTILITY FINANCIAL ANALYSIS

An analysis of the utility's financial position begins with a review of the Statements of Net Position, and the Statements of Revenues, Expenses and Changes in Net Position report information. These two statements report the utility's net position and changes therein. The utility's net position, the difference between assets, deferred outflows of resources, liabilities, and deferred inflows of resources, is key to measuring the financial health of the utility. Over time, increases or decreases in the net position value are an indicator of whether the financial position is improving or deteriorating. However, it should be noted that the financial position can also be affected by other non-financial factors, including economic conditions, customer growth, climate conditions and new regulations.

A summary of the utility's Statements of Net Position is presented below in Table 1.

Table 1
Condensed Statements of Net Position

	<u>2019</u>	<u>Restated 2018</u>	<u>2017</u>
Current and Other Assets	\$ 103,767,689	\$ 104,048,300	\$ 107,349,516
Capital Assets	<u>165,826,054</u>	<u>161,890,376</u>	<u>153,946,443</u>
TOTAL ASSETS	<u>269,593,743</u>	<u>265,938,676</u>	<u>261,295,959</u>
DEFERRED OUTFLOWS OF RESOURCES	<u>12,860,608</u>	<u>9,259,989</u>	<u>13,651,645</u>
Long-term Debt Outstanding	85,406,296	90,900,224	86,843,997
Other Liabilities	<u>55,469,067</u>	<u>55,201,311</u>	<u>55,213,611</u>
TOTAL LIABILITIES	<u>140,875,363</u>	<u>146,101,535</u>	<u>142,057,608</u>
DEFERRED INFLOWS OF RESOURCES	<u>44,896,040</u>	<u>46,611,463</u>	<u>43,245,381</u>
Net Investment in Capital Assets	87,911,628	81,123,246	75,636,861
Restricted for Debt Service	8,072,066	7,490,357	8,090,879
Unrestricted	<u>726,254</u>	<u>(6,127,937)</u>	<u>5,916,875</u>
TOTAL NET POSITION	<u>\$ 96,709,948</u>	<u>\$ 82,485,666</u>	<u>\$ 89,644,615</u>

Note: 2018 was restated to correct an error related to the calculation of the net pension liability and related deferrals.

2017 is reported above as originally presented

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS As of and for the years ended December 31, 2019, 2018, and 2017 UNAUDITED

UTILITY FINANCIAL ANALYSIS (cont.)

Current and other assets decreased by \$280,611, or .3% in 2019. The decrease was the result of the Department utilizing cash held in a construction escrow account for completion of the Holyoke 17L substation project. In 2018 there was a balance of \$2,111,063 in that escrow account. This decrease in cash was offset by increases in the Departments' rate stabilization and other investment accounts as result of favorable market performance during the year.

Capital assets increased by \$3,935,678, or 2% in 2019. This increase was the result of the completion of the Holyoke 17L Substation Replacement project as well as other ongoing capital improvement and replacement projects undertaken by the Department.

Long-term debt outstanding decreased by \$5,493,928, or 6% in 2019 due to scheduled debt repayments during the year.

Other liabilities increased by \$267,756, or .49% in 2019 due to an increase to the Department's actuarially determined net Pension liability. This increase was largely offset by the payoff of the margin line of credit liability in 2019 as well as a decrease in accounts payable balances at year end. The Department's net OPEB liability decreased as well due to the Department's continued funding strategy for that obligation.

Change in Net Position

Net investment in capital assets, which are discussed more in the capital assets section, increased by \$6,788,382 or 8% in 2019 as a result of continued plant replacements, additions and pay down of debt associated with the ongoing capital improvement plan

Net position restricted for debt service increased by \$581,709, or 8% due to unrealized investment gains incurred in the collateral accounts for the Department's bonds and notes payable.

Unrestricted net position is the net amount of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not "invested in capital assets" or "restricted for debt service". Unrestricted assets increased \$6,854,191 in 2019. This increase was due to a 2018 restatement of net position to correct cumulative errors in the calculation of amounts related to the pension. This restatement is discussed further in Note 16.

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS
As of and for the years ended December 31, 2019, 2018, and 2017
UNAUDITED

UTILITY FINANCIAL ANALYSIS (cont.)

Table 2
Condensed Statement of Revenue, Expenses, and Changes in Net Position

	<u>2019</u>	<u>Restated</u> <u>2018</u>	<u>2017</u>
OPERATING REVENUES	\$ 72,821,541	\$ 75,378,339	\$ 66,721,756
OPERATING EXPENSES	64,462,824	64,736,310	61,082,108
Operating Income	8,358,717	10,642,029	5,639,648
OTHER REVENUES (EXPENSES)	6,946,087	(4,778,812)	5,082,492
Change in Net Position before Transfers	15,304,804	5,863,217	10,722,140
TRANSFERS	(1,080,522)	(1,080,680)	(1,080,530)
Change in Net Position	<u>14,224,282</u>	<u>4,782,537</u>	<u>9,641,610</u>
NET POSITION - Beginning of Year	82,485,666	85,472,694	80,003,005
Cumulative Effect of a Change in Acct. Principle	-	(7,769,565)	-
NET POSITION - End of Year	<u>\$ 96,709,948</u>	<u>\$ 82,485,666</u>	<u>\$ 89,644,615</u>

Note: 2018 was restated to correct an error related to the calculation of the net pension liability and related deferrals. 2017 is reported above as originally presented

As previously noted, the Statement of Net Position shows the change in financial position. The specific nature or source of these changes then becomes more evident in the Statements of Revenues, Expenses and Changes in Net Position as shown above in Table 2.

During 2019, operating revenues decreased \$2,556,798 or 3%. This decrease in revenue was due to a combination of lower electric and gas consumption for the year and lower electric renewable energy sales during the year.

Operating expenses decreased by \$273,486 or 0.42% overall. This was due to decreased fuel costs (\$1,128,244), an increase in operating and maintenance costs (\$374,254) and higher depreciation expenses (\$480,504) discussed in the financial highlights section.

The Departments' total net position increased by \$14,224,282, or 17% in 2019 from the combined activities of HG&E, Holyoke Solar Cooperative, and the Massachusetts Clean Energy Cooperative discussed in more detail in the financial highlights section.

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS As of and for the years ended December 31, 2019, 2018, and 2017 UNAUDITED

UTILITY FINANCIAL ANALYSIS (cont.)

Table 3
Condensed Statements of Cash Flows

	<u>2019</u>	<u>2018</u>	<u>2017</u>
CASH FLOWS FROM OPERATING ACTIVITIES	\$ 15,160,508	\$ 20,377,685	\$ 10,895,812
CASH FLOWS FROM INVESTING ACTIVITIES	10,287,902	(1,758,788)	19,172,897
NET CASH USED IN NONCAPITAL FINANCING ACTIVITIES	(1,080,522)	(1,080,680)	(1,080,530)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	(21,528,729)	(14,487,489)	(17,638,754)
Increase in Cash and Cash Equivalents	2,839,159	3,050,728	11,349,425
CASH AND CASH EQUIVALENTS - Beginning of Year	71,776,115	68,725,387	57,375,962
CASH AND CASH EQUIVALENTS - END OF YEAR	<u>\$ 74,615,274</u>	<u>\$ 71,776,115</u>	<u>\$ 68,725,387</u>
NONCASH FINANCING ACTIVITY			
Change in Costs Recoverable in Future - Pollution	\$ -	\$ 50,466	\$ 146,452
Loss on Retirement of Fixed Assets	\$ 849,614	\$ 150,529	\$ 166,102
Amortization of Premium on Bonds Payable	\$ 846,374	\$ 843,983	\$ 851,963

Cash flows from operating activities decreased by \$5,217,177, primarily because of a decrease in cash received from customers of \$3,081,128 and an increase in cash paid to suppliers of \$1,888,905,

Cash flows from investing activities increased by \$12,046,690. Investment income was \$11,657,789 higher in 2019 than 2018 as a result of favorable market performance during the year.

Cash flows from capital and related financing activities decreased by \$7,041,240 in 2019. The decrease is mainly due to increased financing cash flows in 2018 from a \$9,500,000 loan taken out by the Department related to the Holyoke 17L substation project. The decrease is offset by normal cash payments on plant and equipment as well as payments on bonds and notes.

Cash and cash equivalents increased by \$2,839,159.

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS
As of and for the years ended December 31, 2019, 2018, and 2017
UNAUDITED

UTILITY FINANCIAL ANALYSIS (cont.)

Table 4
Capital Assets – Electric

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Capital Assets			
Land	\$ 4,405,918	\$ 4,804,065	\$ 4,773,373
Plant, Property, and Equipment	<u>210,185,015</u>	<u>203,105,275</u>	<u>189,525,887</u>
TOTAL CAPITAL ASSETS	214,590,933	207,909,340	194,299,260
Construction Work in Progress	566,833	120,251	1,712,183
Less: Accumulated Depreciation	<u>(76,350,857)</u>	<u>(72,042,300)</u>	<u>(67,159,881)</u>
NET CAPITAL ASSETS - ELECTRIC	<u>\$ 138,806,909</u>	<u>\$ 135,987,291</u>	<u>\$ 128,851,562</u>

Electric plant, property and equipment increased by \$7,079,740, or 3% in 2019 as a result of ongoing replacements of the electric division's substation, transmission and distribution infrastructure as well as the completion of phase 2 of the Holyoke 17L substation replacement project.

Construction work in progress increased by \$446,582 primarily due the ongoing work related to the upgrade of hydro chemical station, unit #2.

HOLYOKE GAS & ELECTRIC

MANAGEMENT'S DISCUSSION AND ANALYSIS As of and for the years ended December 31, 2019, 2018, and 2017 UNAUDITED

UTILITY FINANCIAL ANALYSIS (cont.)

**Table 5
Capital Assets – Gas**

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Capital Assets			
Land	\$ 214,304	\$ 214,304	\$ 214,304
Plant, Property, and Equipment	<u>56,695,316</u>	<u>54,313,384</u>	<u>52,163,744</u>
TOTAL CAPITAL ASSETS	56,909,620	54,527,688	52,378,048
Construction Work in Progress	143,880	41,474	49,967
Less: Accumulated Depreciation	<u>(30,034,355)</u>	<u>(28,666,077)</u>	<u>(27,333,134)</u>
NET CAPITAL ASSETS - GAS	<u>\$ 27,019,145</u>	<u>\$ 25,903,085</u>	<u>\$ 25,094,881</u>

Gas plant, property and equipment increased by \$2,381,932, or 4% in 2019 due to ongoing replacements of bare steel and cast iron services and mains. During 2019, net capital assets increased \$1,116,060 which was mostly maintenance capital in nature. Land values remained the same in 2019.

Further details on capital assets are included in Note 3.

LONG-TERM DEBT

As of December 31, 2019, Holyoke Gas & Electric had \$62,593,333 in bonds payable as well as \$16,457,171 in notes payable. The bonds and notes have decreased \$3,793,334 and \$813,164 since 2018. No new long term debt was issued during 2019.

Details of the existing debt are included in Note 8.

CURRENTLY KNOWN FACTS/ECONOMIC CONDITIONS

HG&E continues its aggressive maintenance and capital improvement program to upgrade its infrastructure in order to maintain system reliability performance objectives for all facets of the operation.

CONTACTING UTILITY'S FINANCIAL MANAGEMENT

This financial report is designed to provide our customers, investors and creditors with a general overview of the Utility's finances. If you have questions about this report, or need additional financial information, contact Holyoke Gas & Electric Department at 99 Suffolk St, Holyoke Massachusetts 01040 or (413) 536 9300.

HOLYOKE GAS AND ELECTRIC

STATEMENTS OF NET POSITION

As of December 31, 2019 and 2018

	2019	Restated 2018
ASSETS		
CURRENT ASSETS		
Cash and investments	\$ 18,065,585	\$ 13,216,662
Restricted Assets		
Collateralized investments for margin account	-	2,771,987
Redemption account	2,708,028	2,630,198
Customer accounts receivable - net	7,385,182	8,305,565
Accounts receivable - City of Holyoke	-	15,090
Note receivable - current portion	485,961	461,132
Materials and supplies	3,226,403	2,835,861
Fuel for electric generation and gas in storage	734,652	706,015
Prepaid expense	3,022,689	2,392,260
Other receivables	1,630,879	1,223,780
Total Current Assets	37,259,379	34,558,550
NONCURRENT ASSETS		
Restricted Assets		
Accounts required under bond indenture/note payable	8,729,577	9,285,247
Construction escrow account	-	2,111,063
Customers' deposits	1,467,273	1,538,881
Note receivable - after one year	7,420,633	7,906,621
Hi-Lite assistance loans	1,653,849	1,972,635
Other Assets		
Purchased power accounts	374,534	368,510
Rate stabilization accounts	45,757,388	45,134,811
Costs recoverable in future - pollution	120,000	120,258
Other investments	188,390	188,390
Intangible assets	796,666	863,333
Capital Assets		
Plant, property and equipment in service	271,500,553	262,437,028
Construction in progress	710,713	161,725
	272,211,266	262,598,753
Less: Accumulated depreciation	(106,385,212)	(100,708,377)
Total Capital Assets	165,826,054	161,890,376
Total Noncurrent Assets	232,334,364	231,380,125
Total Assets	269,593,743	265,938,675
DEFERRED OUTFLOWS OF RESOURCES		
OPEB related amounts	519,542	1,527,080
Pension related amounts	12,341,066	7,732,909
Total Deferred Outflows of Resources	12,860,608	9,259,989

	2019	Restated 2018
LIABILITIES		
CURRENT LIABILITIES		
Accounts payable	\$ 4,783,691	\$ 6,646,607
Customers' deposits	1,191,208	1,357,236
Accrued liabilities	949,294	900,032
Current portion - accrued compensated absences	253,732	252,883
Accrued environmental costs	120,000	120,000
Accrued charges - current	24,677	437,902
Liabilities Payable from Restricted Assets		
Margin credit account	-	2,771,987
Current portion - leases, bonds and notes payable	4,839,963	4,647,553
Accrued interest	1,324,404	1,391,925
Total Current Liabilities	<u>13,486,969</u>	<u>18,526,125</u>
LONG-TERM LIABILITIES AND CREDITS		
Bonds payable - long-term	58,640,000	62,593,334
Plus: Premium on bonds payable	<u>6,313,303</u>	<u>7,159,677</u>
Bonds payable, net	64,953,303	69,753,010
Notes payable - long-term	15,613,030	16,457,171
Leases payable - long term	-	42,489
Accrued compensated absences	3,310,708	3,076,190
Net OPEB liability	5,807,616	8,900,872
Unearned revenue	2,871,654	2,970,744
Reserve fund for note receivable	444,737	444,737
Net pension liability	<u>34,387,346</u>	<u>25,930,197</u>
Total Long-Term Liabilities and Credits	<u>127,388,394</u>	<u>127,575,410</u>
Total Liabilities	<u>140,875,363</u>	<u>146,101,535</u>
DEFERRED INFLOWS OF RESOURCES		
Regulatory deferral	1,259,255	725,885
Pension related amounts	1,700,130	4,615,729
OPEB related amounts	639,806	-
Rate stabilization reserve	<u>41,269,849</u>	<u>41,269,849</u>
Total Deferred Inflows of Resources	<u>44,869,040</u>	<u>46,611,463</u>
NET POSITION		
Net investment in capital assets	87,911,628	81,123,246
Restricted for debt service	8,072,066	7,490,357
Unrestricted	<u>726,254</u>	<u>(6,127,937)</u>
TOTAL NET POSITION	<u>\$ 96,709,948</u>	<u>\$ 82,485,666</u>

See accompanying notes to financial statements.

HOLYOKE GAS AND ELECTRIC

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

For the Years Ended December 31, 2019 and 2018

	2019	Restated 2018
OPERATING REVENUES		
Gas charges for service	\$ 22,624,031	\$ 23,305,415
Electric and telecommunications charges for service	<u>50,197,510</u>	<u>52,072,924</u>
Total Operating Revenues	<u>72,821,541</u>	<u>75,378,339</u>
OPERATING EXPENSES		
Gas operation and maintenance	18,977,971	18,317,935
Depreciation - gas plant and equipment	<u>1,637,012</u>	<u>1,573,195</u>
Total Gas Operating Expenses	<u>20,614,983</u>	<u>19,891,130</u>
Electric and telecommunications operation and maintenance	37,784,071	39,198,097
Depreciation - electric and telecom plant and equipment	<u>6,063,770</u>	<u>5,647,083</u>
Total Electric and Telecommunications Operating Expenses	<u>43,847,841</u>	<u>44,845,180</u>
Total Operating Expenses	<u>64,462,824</u>	<u>64,736,310</u>
OPERATING INCOME		
Gas	2,009,048	3,414,285
Electric and telecommunications	<u>6,349,669</u>	<u>7,227,744</u>
Total Operating Income	<u>8,358,717</u>	<u>10,642,029</u>
OTHER REVENUES (EXPENSES)		
Investment income - net of fees	3,269,429	3,627,829
Net gain (loss) on investments	6,535,167	(5,481,022)
Interest expense	(2,942,318)	(3,121,491)
Miscellaneous income (expense)	1,422,492	858,123
Amortization of intangible assets	(66,667)	(66,667)
Net gain (loss) - plant retirements	(1,259,680)	(568,443)
Net gain - merchandise jobbing	66,531	53,721
Taxes - other	<u>(78,867)</u>	<u>(80,862)</u>
Total Other Revenues (Expenses)	<u>6,946,087</u>	<u>(4,778,812)</u>
Change in Net Position Before Transfers	15,304,804	5,863,217
TRANSFERS		
Payment in lieu of taxes - City of Holyoke	<u>(1,080,522)</u>	<u>(1,080,680)</u>
Change in Net Position	14,224,282	4,782,537
NET POSITION - Beginning of Year (as restated)	<u>82,485,666</u>	<u>85,472,694</u>
Cumulative effect of a change in accounting principle	<u>-</u>	<u>(7,769,565)</u>
NET POSITION - END OF YEAR (as restated)	<u>\$ 96,709,948</u>	<u>\$ 82,485,666</u>

See accompanying notes to financial statements.

HOLYOKE GAS AND ELECTRIC

STATEMENTS OF CASH FLOWS For the Years Ended December 31, 2018 and 2017

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	\$ 74,778,675	\$ 77,859,803
Cash paid to suppliers	(44,448,951)	(42,560,046)
Cash paid to employees	(15,169,216)	(14,922,072)
Net Cash Flows From Operating Activities	15,160,508	20,377,685
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from sale of investments	3,014,979	5,162,336
Purchase of investments	(220,845)	-
Investment income (loss) - net of fees	9,804,596	(1,853,193)
Proceeds from (repayment of) margin credit account	(2,771,987)	(5,505,554)
Repayments on notes receivable	461,159	437,623
Net Cash Flows From Investing Activities	10,287,902	(1,758,788)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Payment in lieu of taxes and other property taxes	(1,080,522)	(1,080,680)
Net Cash Flows from Noncapital Financing Activities	(1,080,522)	(1,080,680)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Net investment in plant, property and equipment	(13,069,362)	(15,452,067)
Proceeds from note payable	-	9,500,000
Payments on bonds and notes payable	(4,647,554)	(4,559,814)
Interest paid on bonds, notes and leases payable	(3,811,813)	(3,975,608)
Net Cash Flows From Capital and Related Financing Activities	(21,528,729)	(14,487,489)
Increase in Cash and Cash Equivalents	2,839,159	3,050,728
CASH AND CASH EQUIVALENTS - Beginning of Year	71,776,115	68,725,387
CASH AND CASH EQUIVALENTS - END OF YEAR	\$ 74,615,274	\$ 71,776,115
SUPPLEMENTAL NONCASH FINANCING ACTIVITY		
Change in costs recoverable in future - pollution	\$ -	\$ 50,466
Loss on retirement of fixed assets	\$ 849,614	\$ 150,529
Amortization of premium on bonds payable	\$ 846,374	\$ 843,983

	2019	2018
SCHEDULE OF RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income	\$ 8,358,717	\$ 10,642,029
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities		
Depreciation	7,595,290	7,220,278
Amortization of Regulatory deferral	127,267	
Non-operating Income	1,343,489	764,315
Changes in operating assets and liabilities (Increase) decrease in		
Accounts receivable	920,383	(1,069,896)
Materials and supplies	(390,542)	29,281
Fuel for electric generation and gas in storage	(28,637)	(210,684)
Prepaid expense	(630,429)	(13,433)
Other receivables	(348,871)	634,884
Hi-Lite assistance and Constellation loans	333,876	1,486,922
Accounts payable	(1,169,660)	907,779
Customers' deposits	(166,028)	101,453
Accrued liabilities	(507,453)	439,838
Accrued compensated absences	235,367	145,252
Pension and OPEB related deferrals and liabilities	(512,519)	(750,799)
Accrued environmental costs	258	50,466
Total Adjustments	<u>6,801,791</u>	<u>9,735,656</u>
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>\$ 15,160,508</u>	<u>\$ 20,377,685</u>
RECONCILIATION OF CASH AND CASH EQUIVALENTS TO THE STATEMENTS OF NET POSITION		
Cash and investments	\$ 18,065,585	\$ 13,216,662
Collateralized investments for margin account	-	2,771,987
Redemption account	2,708,028	2,630,198
Accounts required under bond indenture/note payable	8,729,577	9,285,248
Construction escrow account	-	2,111,063
Customer deposits	1,467,273	1,538,881
Purchased power accounts	374,534	368,510
Rate stabilization accounts	45,757,388	45,134,811
Other investments	<u>188,390</u>	<u>188,390</u>
Total Cash and Investments	77,290,775	77,245,750
Less: Noncash equivalents	<u>(2,675,501)</u>	<u>(5,469,635)</u>
CASH AND CASH EQUIVALENTS	<u>\$ 74,615,274</u>	<u>\$ 71,776,115</u>

See accompanying notes to financial statements.

HOLYOKE GAS AND ELECTRIC OPEB TRUST

STATEMENTS OF FIDUCIARY NET POSITION

FIDUCIARY FUND

As of December 31, 2019 and 2018

	<u>2019</u>	<u>2018</u>
ASSETS		
Investments	\$ 13,280,806	\$ 9,435,034
Total Assets	<u>13,280,806</u>	<u>9,435,034</u>
NET POSITION		
Net Position Restricted for OPEB	<u>\$ 13,280,806</u>	<u>\$ 9,435,034</u>

See accompanying notes to financial statements.

HOLYOKE GAS AND ELECTRIC OPEB TRUST

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

FIDUCIARY FUND

For the Years Ended December 31, 2019 and 2018

	<u>2019</u>	<u>2018</u>
ADDITIONS		
Employer contributions	\$ 1,979,744	\$ 1,200,000
Investment income (loss)	1,906,420	(562,047)
Employee contributions - direct payment of member benefits	390,796	384,133
Employer contributions - direct payment of member benefits	<u>579,319</u>	<u>574,584</u>
Total Additions	<u>4,856,279</u>	<u>1,596,670</u>
DEDUCTIONS		
Benefit payments, including refunds of member contributions	970,115	958,717
Advisory fees	<u>40,392</u>	<u>31,647</u>
Total Deductions	<u>1,010,507</u>	<u>990,364</u>
Net Increase in Net Position	3,845,772	606,306
NET POSITION - Beginning of Year	<u>9,435,034</u>	<u>8,828,728</u>
NET POSITION - END OF YEAR	<u>\$ 13,280,806</u>	<u>\$ 9,435,034</u>

See accompanying notes to financial statements.

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
City of Holyoke, Massachusetts)

NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of Holyoke Gas and Electric (“Department”) conform to accounting principles generally accepted in the United States of America as applicable to governmental units. The accepted standard-setting body for establishing governmental accounting and financial reporting principles is the Governmental Accounting Standards Board (GASB).

REPORTING ENTITY

The financial statements present information on the activities of the Department, an enterprise fund of the City of Holyoke, Massachusetts (the “City”) and its component units, Holyoke Solar Cooperative and Massachusetts Clean Energy Cooperative Corporation. Component units are legally separate organizations for which the Department is financially accountable or other organizations for which the nature and significance of their relationship with the Department are such that their exclusion would cause the reporting entity’s financial statements to be misleading. The Department is financially accountable if: (1) it appoints a voting majority of the organization’s governing body and it is able to impose its will on that organization; (2) it appoints a voting majority of the organization’s governing body and there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government; and (3) the organization is fiscally dependent on and there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the Department. Certain legally separate, tax exempt organizations should also be reported as a component unit if all of the following criteria are met: (1) the economic resources received or held by the separate organization are entirely or almost entirely for the direct benefit of the Department, its component units, or its constituents; (2) the Department or its component units, is entitled to, or has the ability to access, a majority of the economic resources received or held by the separate organization; and (3) the economic resources received or held by an individual organization that the Department, or its component units, is entitled to, or has the ability to otherwise access, are significant to the Department.

Component units are reported using one of two methods, discrete presentation or blending. Generally, component units should be discretely presented in a separate column in the financial statements. A component unit should be reported as part of the Department using the blending method if it meets any one of the following criteria: (1) the Department and the component unit have substantively the same governing body and a financial benefit or burden relationship exists; (2) the Department and the component unit have substantively the same governing body and management of the primary government has operational responsibility for the component unit; (3) the component unit serves or benefits, exclusively or almost exclusively, the Department rather than its citizens; or (4) the total debt of the component unit will be paid entirely or almost entirely from resources of the Department.

The Department provides gas, electric, water and telecommunications services to its customers, substantially all of whom are local residents and commercial and industrial businesses. Approximately 69% of the Department’s revenues were derived from its electric division in both 2019 and 2018.

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
City of Holyoke, Massachusetts)

NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

REPORTING ENTITY (cont.)

Blended Component Units

The Holyoke Solar Cooperative “Solar Coop” is a cooperative organized in Massachusetts, in December 2010, and is owned by the Department (its original Member). Solar Coop engages in transactions associated with the purchase, acquisition, distribution, sale, resale, supply and disposition of energy or energy-related services to wholesale or retail customers. The Solar Coop is included in the enterprise fund. The Solar Coop does not issue separate financial statements.

The Massachusetts Clean Energy Cooperative Corporation (“Clean Energy Coop”) was organized in Massachusetts, in March 2013. The initial members are the Department and the Massachusetts Municipal Wholesale Electric Company (“MMWEC”). The business of the Clean Energy Coop is managed by the board of directors, a majority of which consist of members of the Department’s management or Commission. The Clean Energy Coop was formed to finance, purchase, own, lease or otherwise acquire, hold, and use property; transact any business associated with the property; and the purchase, acquisition, generation, transformation, distribution, sale, resale, supply and provision of energy and telecommunications products and services, which will include, but is not limited to, the purchase and sale of the electrical capacity of the Hadley Falls Station hydroelectric generator unit #1 in Holyoke. The Clean Energy Coop is included in the enterprise fund. Separately issued financial statements of the Clean Energy Coop may be obtained from the Department’s office.

The Cooperatives are organized under Chapters 157 and 164: Section 47C of the State of Massachusetts Statutes and are subject to the same federal and state laws and regulations applicable to municipal lighting plants or other public entities that provide those services.

All intercompany account balances and transactions have been eliminated in the basic financial statements.

Other Post-Employment Benefit (OPEB) Trust

The OPEB Trust fund is a fiduciary fund that is used to account for and report resources that are required to be held in trust for the members and beneficiaries of the OPEB plan. The OPEB Trust was established in October 2014.

Rate Regulation

The rates of the Department are approved by the Department’s Board of Commissioners. Rate schedules are filed with the Massachusetts Department of Public Utilities (DPU). While the DPU exercises general supervisory authority over the Department, the rates are not subject to DPU approval.

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
City of Holyoke, Massachusetts)

NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

MEASUREMENT FOCUS, BASIS OF ACCOUNTING AND FINANCIAL STATEMENT PRESENTATION

The Department is presented as an enterprise and fiduciary fund of the City. Enterprise and fiduciary funds are used to account for operations that are financed and operated in a manner similar to private business or when the governing body has decided that the determination of revenues earned, costs, incurred, and net income is necessary for management accountability. The OPEB trust fund is used to report resources that are held in trust by the Department for the members and beneficiaries of the defined benefit postemployment welfare plan. The financial statements have been presented using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis, revenues are recognized when earned, and expenses are recorded when an obligation has been incurred.

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*. This statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended*, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB*. This standard was implemented January 1, 2018. The cumulative impact of implementation is shown in Note 16.

In March 2018, the GASB issued Statement No. 88 - *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. This statement defines debt for purposes of disclosure in notes to financial statements and establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placements. The utility adopted this statement effective January 1, 2019.

USE OF ESTIMATES

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION

Deposits and Investments

Cash and Cash Equivalents

For purposes of the statement of cash flows, the Department considers all highly liquid investments with an initial maturity of three months or less when acquired to be cash equivalents.

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
City of Holyoke, Massachusetts)

NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Investments

Investments totaling \$20,390 represent the cost of the Department's equity in New England Hydro-Transmission Corporation and New England Hydro-Transmission Electric Company. These investments represent 00.2653% (percent) of the issued common stock of these untraded companies. In addition, the Department has invested \$168,000 with the Public Utility Mutual Insurance Company (PUMIC). See Note 15 for additional information related to PUMIC. These investments are carried at original cost.

Investments in debt and equity securities are recorded at fair value (See Note 2).

Investments of the fiduciary fund are limited to investing in assets as a prudent investor would, by considering purposes, terms, distribution requirements, and other circumstances of the trust.

Restricted Assets

Mandatory segregations of assets are presented as restricted assets. Such segregations are required by bond agreements and other external parties. Current liabilities payable from these restricted assets are so classified.

Designated Accounts

Purchased power funds are on deposit with Massachusetts Municipal Wholesale Electric Company (MMWEC) to pay for energy and related services as required under existing agreements.

The Department established a rate stabilization reserve which will be used for rate stabilization in the development of future rates and allow the Department to remain competitive under various market conditions by either purchasing replacement power or using reserves to mitigate the Department's exposure. Each year the Department determines the amount to be charged or credited to the reserve. The Department has set aside funds which will be used to offset these reserves. The reserve balance at December 31, 2019 and 2018 is \$41,269,849 and is reported as a deferred inflow of resources.

Accounts Receivable

Accounts receivable are stated net of an allowance for uncollectible accounts of \$515,204 at December 31, 2019 and 2018. Management provides for probable uncollectible amounts through a charge to earnings and a credit to the valuation allowance based on its collection history and its assessment of the current status of individual accounts. Balances that are still outstanding after management has used reasonable collection efforts are written off through a charge to the valuation allowance and a credit to accounts receivable.

Hi-Lite Assistance Loans

Hi-Lite assistance loans are receivables from residential and commercial customers for loans used to make energy efficient improvements to their property, secured by municipal liens. Loan amounts and terms vary based on the project type but are generally 3 to 5 years with 0% interest.

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

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NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Materials, Supplies and Fuel

Materials, supplies and fuel are valued at the lower of cost or market utilizing the average cost method. All materials are intended to be used in operations and are not intended for resale.

Prepaid Expense

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items. This includes the purchase of prepaid power.

Plant, Property, and Equipment

Capital assets are generally defined as assets with an initial, individual cost of more than \$5,000 and an estimated useful life in excess of five years. Additions to and replacements of plant, property and equipment are recorded at cost or the estimated acquisition value at the time of contribution. The cost of plant, property and equipment retired, less accumulated depreciation and salvage, is charged against revenue in the year retired. The cost of repairs and minor renewals is charged to maintenance expense.

During the year ended December 31, 2018, there was no interest capitalized. The Department adopted GASB Statement No. 89 – *Accounting for Interest Cost Incurred before the End of a Construction Period*, effective January 1, 2018, and therefore does not capitalize interest as a component of the cost of plant.

Intangible Assets

Intangible assets are recorded at cost. Intangible assets subject to amortization include a franchise area fee to sell the electrical output associated with the December 2001 hydroelectric project purchase. Franchise fees are being amortized on a straight-line basis over the remaining lives of the respective licenses.

Line of Credit - Margin Credit Account

The Department received funds through the use of a margin account with their investment advisor as of December 31, 2018. The investments held in the Department's investment account with their investment advisor are considered collateral for the borrowing. If the investments in the margin account decline in value, so does the value of the collateral supporting the borrowing, and, as a result, the investment advisor may take action, such as issue a margin call or sell investments or other assets held in any of the Department's accounts held with the investment advisor. These funds received are recorded as a current liability and the subsequent investment as a restricted asset. In 2019 the Department paid off the margin account resulting in a zero balance as of December 31, 2019. The margin line of credit is still open and available for the Department to use in the future.

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NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Environmental Matters

Expenditures that result from the remediation of an existing condition caused by past operations and that do not contribute to current or future revenues are expensed. Liabilities are recognized for remedial activities when the cleanup is probable, and the cost can be reasonably estimated. A related asset for pollution costs recoverable in future has been recorded according to the *General Standards of Accounting for the Effects of Regulation* included in GASB Statement No. 62.

Pensions

For purposes of measuring the net pension liability, and deferred outflows of resources related to pensions, and pension expense, information about the fiduciary net position of the City of Holyoke Retirement System (“the plan”) and additions to/deductions from the plan’s fiduciary net position have been determined on the same basis as they are reported by the plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms, investments are reported at fair value.

Net OPEB Liability

For purposes of measuring the net OPEB liability, deferred outflows and inflow of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the City of Holyoke’s OPEB Plan (“the plan”) administered to Department employees through the Department’s Trust, and additions to/deductions from the plan’s fiduciary net position have been determined on the same basis as they are reported by the plan. For this purpose, the plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Deferred Outflow of Resources

A deferred outflow of resources represents a consumption of net position that applies to a future period and will not be recognized as an outflow of resources (expense) until that future time.

Energy Tax

The Department is required to collect, on behalf of the State of Massachusetts, an energy tax based on 6.25% of gross sales to its commercial customers. The Department’s policy is to exclude these energy taxes from revenue when collected and expenses when paid, and instead, record the collection and payment of energy taxes through a liability account.

Compensated Absences

Substantially all employees receive compensation for vacations, holidays, illness, and certain other qualifying absences. The number of days compensated in the various categories of absence is based generally on length of services. Compensated absences, which have been earned but not paid, have been accrued in the accompanying consolidated financial statements, based on current rates of pay.

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NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Long-Term Obligations

Long-term debt and other obligations are reported as liabilities. Bond premiums are being amortized using the effective-interest method over the lives of the bonds. The balance at year end for premiums is shown as an increase in the liability section of the statement of net position.

Unearned Revenues

In 2018, the Department collected charges from customers that will be used to pay for future pollution remediation costs. In the event that fees collected are in excess of actual pollution remediation costs, these charges may require refunds to customers and are therefore classified as a liability on the statement of net position. The Department stopped collecting charges from customers on 1/1/2019 as management believes the amounts collected to date are sufficient to cover future pollution remediation costs.

Regulatory Deferral

Regulatory deferral amounts represent reimbursements on infrastructure projects and customer/developer contributions that will be depreciated and recognized as revenue in matching amounts over future periods.

Deferred Inflows of Resources

A deferred inflow of resources represents an acquisition of net position that applies to a future period and, therefore, will not be recognized as an inflow of resources (revenue) until that future time. Rate stabilization reserves are reported as deferred inflows of resources for regulated business-type activities.

Net Position

The difference between assets, deferred outflows of resources, liabilities, and deferred inflows of resources is net position. There are three components of net position: net investment in capital assets, restricted for debt service, and unrestricted.

Net investment in capital assets consists of capital assets, less accumulated depreciation, reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.

Net position is restricted when constraints placed on its use are either: (1) externally imposed by creditors [such as through debt covenants], grantors, contributors, or laws or regulations of other governments; or (2) imposed by law through constitutional provisions or enabling legislation. The Department's restricted net position as of December 31, 2019 and 2018 is related to the bond debt fund requirements, collateral required under note payable, and funds reserved for payments on note receivable.

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NOTES TO FINANCIAL STATEMENTS

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NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Net Position (cont.)

Unrestricted net position represents the net amount of assets and liabilities that are not "invested in property, plant and equipment" or "restricted for debt service."

When both restricted and unrestricted resources are available for use, it is the Department's policy to use restricted resources first, then unrestricted resources as they are needed.

REVENUES AND EXPENSES

Revenue Recognition

The Department distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Department's principal ongoing operations. The principal operating revenues of the Department are charges to customers for sales and services. Operating expenses for an enterprise fund includes the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not making this definition are reported as nonoperating revenues and expenses.

Operating revenues are recognized on the basis of cycle billings rendered monthly, net of discounts. Revenues are not accrued for services delivered beyond such cycle billing dates.

Discounts reported for the year ended December 31, 2019 and 2018 that have directly reduced Operating Revenue in the Statement of Revenue, Expenses and Changes in Net Position are as follows:

	<u>2019</u>	<u>2018</u>
Gas	\$ 2,219,609	\$ 2,215,219
Electric	<u>3,794,308</u>	<u>3,922,706</u>
Totals	<u>\$ 6,193,917</u>	<u>\$ 6,137,925</u>

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NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

REVENUES AND EXPENSES (cont.)

Expense Allocation

Expenses associated with a particular division of the Department are charged to that division. For the years ended December 31, 2019 and 2018, shared expenses including administrative and supporting costs are allocated to each division as follows:

Gas	35.0%
Electric and Telecommunications	65.0%

Depreciation

Depreciation is recorded on a straight-line basis using an annual rate of 3% of depreciable plant, property and equipment in service. The rate is in accordance with Massachusetts Department of Public Utilities regulations.

EFFECT OF NEW ACCOUNTING STANDARDS ON CURRENT PERIOD FINANCIAL STATEMENTS

GASB has approved GASB Statement No. 87, *Leases*, Statement No. 91, *Conduit Debt Obligations*, and Statement No. 92, *Omnibus 2020*.

When they become effective, application of these standards may restate portions of these financial statements.

COMPARATIVE DATA

Certain amounts presented in the prior year data may have been reclassified in order to be consistent with the current year's presentation.

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 2 – DEPOSITS AND INVESTMENTS

The Department participates in a cash and investment pool maintained by the city. In addition, the Department holds certain cash separately from the pool.

Custody and use of restricted assets are subject to requirements and restrictions imposed under contractual agreements, bond indentures, and the General Laws of the Commonwealth of Massachusetts, and are not available for normal operating purposes. Postemployment benefit funds have been segregated by the Department to cover certain healthcare and life insurance benefits (See Note 11).

The Department invests various funds in debt and equity securities held by Flynn Financial Partners Ltd. and US Bank. All investments must be made in securities or deposits as authorized by Massachusetts General Laws, Chapter 44, Sections 54, 55 and 55B. Investments are stated at fair value.

The Department's deposits and investments as of December 31, 2019 were comprised of the following:

	Statement Balances	Carrying Value	Associated Risks
Demand deposits	\$ 13,204,772	\$ 13,479,085	Custodial credit risk
U.S. agencies – implicitly guaranteed	2,085,801	2,085,801	Credit risk, Custodial credit risk, Interest rate risk, Concentration of credit risk
Mutual funds – bond funds	7,101,801	7,101,801	Credit risk, Interest rate risk
Mutual funds – other than bond funds	67,398,849	67,398,849	N/A
Certificates of deposit (CD) - negotiable	506,045	506,045	Credit risk, Custodial credit risk, Interest rate risk
Totals	<u>\$ 90,297,268</u>	<u>\$ 90,571,581</u>	

Reconciliation to Statement of Net Position

Cash and investments	\$ 18,065,585
Redemption account	2,708,028
Accounts required under bond indenture/notes payable	8,729,577
Customer deposits	1,467,273
Purchased power accounts	374,534
Rate stabilization accounts	45,757,388
Other investments	188,390
OPEB Trust –Statement of fiduciary net position (separate financial statement)	<u>13,280,806</u>
Total	<u>\$ 90,571,581</u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 2 – DEPOSITS AND INVESTMENTS (cont.)

The Department's deposits and investments at as of December 31, 2018 were comprised of the following:

	Statement Balances	Carrying Value	Associated Risks
Demand deposits	\$ 12,948,424	\$ 15,323,175	Custodial credit risk
U.S. agencies – implicitly guaranteed	3,999,962	3,999,962	Credit risk, Custodial credit risk, Interest rate risk, Concentration of credit risk
State & local bonds	476,434	476,434	Credit risk, Custodial credit risk, Interest rate risk
Mutual funds – bond funds	6,606,428	6,606,428	Credit risk, Interest rate risk
Mutual funds – other than bond funds	59,366,961	59,366,961	N/A
Corporate bonds	101,554	101,554	Credit risk, Custodial credit risk, Interest rate risk
Certificates of deposit (CD) - negotiable	806,265	806,270	Credit risk, Custodial credit risk, Interest rate risk
Totals	<u>\$ 84,306,028</u>	<u>\$ 86,680,784</u>	

Reconciliation to Statement of Net Position

Cash and investments	\$ 13,216,662
Collateralized investments for margin account	2,771,987
Redemption account	2,630,198
Accounts required under bond indenture/notes payable	9,285,248
Customer deposits	1,538,881
Construction escrow account	2,111,063
Purchased power accounts	368,510
Rate stabilization accounts	45,134,811
Other investments	188,390
OPEB Trust –Statement of fiduciary net position (separate financial statement)	<u>9,435,034</u>
Total	<u>\$ 86,680,784</u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 2 – DEPOSITS AND INVESTMENTS (cont.)

Deposits in each local and area bank are insured by the FDIC in the amount of \$250,000 for time and savings accounts (including NOW accounts) and \$250,000 for demand deposit accounts (interest-bearing and noninterest-bearing). In addition, if deposits are held in an institution outside of the state in which the government is located, insured amounts are further limited to a total of \$250,000 for the combined amount of all deposit accounts.

The Securities Investor Protection Corporation (SIPC), created by the Securities Investor Protection Act of 1970, is an independent government-sponsored corporation (not an agency of the U.S. government).

SIPC membership provides account protection up to a maximum of \$500,000 per customer, of which \$100,000 may be in cash. \$500,000 of the Department's investments and \$500,000 of the OPEB Trust investments are covered by SIPC. Additionally, through Lloyds of London, accounts have securities coverage subject to a \$575 million aggregate firm limit. Coverage limits per customer are not available. The value of investments subject to Lloyds of London coverage was \$1,511,100 in 2019 and \$2,346,888 in 2018 for the Department; and \$0 in 2019 and \$451,203 in 2018 for the OPEB trust.

FAIR VALUE

The Department categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The valuation methods for recurring fair value measurements as of December 31, 2019 and 2018 are as follows:

- > Institutional bond quotes for U.S. government agency securities, and state and local bonds
- > Quoted market prices for identical assets for mutual funds – bond funds and mutual funds – other than bond funds
- > Quoted market prices for similar assets for corporate bonds and certificates of deposits

The valuation levels for investments held as of December 31, 2019 are as follows:

<u>Investment Type</u>	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
S. agencies – implicitly guaranteed	\$ 2,085,801	\$ -	\$ 2,085,801	\$ -
Mutual funds – bond funds	7,101,801	7,101,801	-	-
Mutual funds – other than bond funds	67,398,849	67,398,849	-	-
Certificate of deposit	506,045	-	506,045	-
Totals	<u>\$ 77,092,496</u>	<u>\$ 74,500,650</u>	<u>\$ 2,591,846</u>	<u>\$ -</u>

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 2 – DEPOSITS AND INVESTMENTS (cont.)

FAIR VALUE (cont.)

The valuation levels for investments held as of December 31, 2018 are as follows:

<u>Investment Type</u>	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
U.S. agencies – implicitly guaranteed	\$ 3,999,962	\$ -	\$ 3,999,962	\$ -
State & local bonds	476,434	-	476,434	-
Mutual funds – bond funds	6,606,428	6,606,428	-	-
Mutual funds – other than bond funds	59,366,961	59,366,961	-	-
Corporate bonds	101,554	-	101,554	-
Certificate of deposit	806,270	-	806,270	-
Totals	<u>\$ 71,357,609</u>	<u>\$ 65,973,389</u>	<u>\$ 5,384,220</u>	<u>\$ -</u>

Custodial Credit Risk

Deposits

Custodial credit risk is the risk that the Department's deposits may not be returned to the Department. Uninsured, uncollateralized, deposits subject to custodial credit risk were \$5,111,619 in 2019 and \$8,454,745 in 2018.

Investments

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Department will not be able to recover the value of their investments or collateral securities that are in the possession of an outside party. The Department's investment policy addresses credit risk by defining allowable investments.

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NOTES TO FINANCIAL STATEMENTS
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NOTE 2 – DEPOSITS AND INVESTMENTS (cont.)

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Department does not have a formal investment policy that limits investment maturities.

At December 31, 2019, the Department's investments were as follows:

Investment Type	Fair Value	Maturity in Years		
		Less Than 1	1-4	5-10
U.S. agencies – implicitly guaranteed	\$ 2,085,801	\$ 591,408	\$ 1,238,282	\$ 256,111
Mutual funds – bond funds	7,101,801	7,101,801	-	-
CDs – negotiable	<u>506,045</u>	<u>197,322</u>	<u>308,723</u>	<u>-</u>
Totals	<u>\$ 9,693,647</u>	<u>\$ 7,890,531</u>	<u>\$ 1,547,005</u>	<u>\$ 256,111</u>

At December 31, 2018, the Department's investments were as follows:

Investment Type	Fair Value	Maturity in Years		
		Less Than 1	1-4	5-10
U.S. agencies – implicitly guaranteed	\$ 3,999,962	\$ 858,560	\$ 2,899,848	\$ 241,554
State and local bonds	476,434	349,864	-	126,570
Mutual funds – bond funds	6,606,428	6,606,428	-	-
Corporate bonds	101,554	101,554	-	-
CDs – negotiable	<u>806,270</u>	<u>431,999</u>	<u>374,271</u>	<u>-</u>
Totals	<u>\$ 11,990,648</u>	<u>\$ 8,348,405</u>	<u>\$ 3,274,119</u>	<u>\$ 368,124</u>

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 2 – DEPOSITS AND INVESTMENTS (cont.)

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Department does not have a separate formal policy regarding credit risk.

As of December 31, 2019, the Department's investments were rated as follows:

<u>Investment Type</u>	<u>Standard & Poor's</u>	<u>Moody's Investment Service</u>	<u>Composite</u>
U.S. Agencies – implicitly guaranteed	AA+	AAA	N/A
Mutual funds – bond funds	N/A	N/A	B to BBB
CDs – negotiable	N/A	N/A	N/A

As of December 31, 2018, the Department's investments were rated as follows:

<u>Investment Type</u>	<u>Standard & Poor's</u>	<u>Moody's Investment Service</u>	<u>Composite</u>
U.S. Agencies – implicitly guaranteed	AA+	AAA	N/A
State and local bonds	AA+ to AAA	AAA	N/A
Mutual funds – bond funds	N/A	N/A	B to BBB
Corporate bonds	A	A2	N/A
CDs – negotiable	N/A	N/A	N/A

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the Department's investment in a single issuer. In 2019 and 2018, there were no investments in any one issuer that represented greater than 5% of total investments.

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS
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NOTE 3 – PLANT, PROPERTY AND EQUIPMENT

Plant, property and equipment as of December 31, 2019 consist of the following:

	Balance 1/1/19	Increases	Decreases	Balance 12/31/19
Utility Plant not Being Depreciated				
Gas				
Land	\$ 214,304	\$ -	\$ -	\$ 214,304
Construction in progress	41,474	2,684,438	2,582,032	143,880
	<u>255,778</u>	<u>2,684,438</u>	<u>2,582,032</u>	<u>358,184</u>
Electric/Telecommunications				
Land	4,804,065	-	398,148	4,405,918
Construction in progress	120,251	3,405,999	2,959,417	566,833
	<u>4,924,316</u>	<u>3,405,999</u>	<u>3,357,565</u>	<u>4,972,751</u>
Total Utility Plant Not Being Depreciated	<u>5,180,094</u>	<u>6,090,437</u>	<u>5,939,597</u>	<u>5,330,935</u>
Utility Plant Being Depreciated				
Gas				
Plant investment	51,084,154	2,197,321	301,963	52,979,511
Office furniture and equipment	1,426,916	286,767	-	1,713,683
Transportation and communication equipment	1,478,603	174,439	25,884	1,627,158
Other	323,712	51,252	-	374,964
	<u>54,313,384</u>	<u>2,709,779</u>	<u>327,847</u>	<u>56,695,316</u>
Electric/Telecommunications				
Plant investment	193,920,128	8,539,749	2,231,191	200,228,686
Office furniture and equipment	3,191,743	515,819	-	3,707,562
Transportation and communication equipment	5,297,445	197,545	-	5,494,990
Other	695,959	57,819	-	753,777
	<u>203,105,274</u>	<u>9,310,932</u>	<u>2,231,191</u>	<u>210,185,015</u>
Total Utility Plant Being Depreciated	<u>257,418,659</u>	<u>12,020,711</u>	<u>2,559,039</u>	<u>266,880,331</u>

Note: Immaterial differences may exist due to rounding

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 3 – PLANT, PROPERTY AND EQUIPMENT (cont.)

	Balance 1/1/19	Increases	Decreases	Balance 12/31/19
Less: Accumulated depreciation				
Gas				
Plant investment	\$ (26,014,874)	\$ (1,426,937)	\$ 241,710	\$ (27,200,101)
Office furniture and equipment	(1,175,794)	(4,418)	-	(1,180,212)
Transportation and communication equipment	(1,217,766)	(170,036)	19,413	(1,368,389)
Other	(257,642)	(28,011)	-	(285,653)
	<u>(28,666,076)</u>	<u>(1,629,402)</u>	<u>261,123</u>	<u>(30,034,355)</u>
Electric/Telecommunications				
Plant investment	(64,954,015)	(5,434,992)	1,784,599	(68,604,408)
Office furniture and equipment	(2,524,588)	(19,700)	-	(2,544,288)
Transportation and communication equipment	(4,098,185)	(606,899)	-	(4,705,084)
Other	(465,513)	(31,565)	-	(497,077)
	<u>(72,042,300)</u>	<u>(6,093,156)</u>	<u>1,784,599</u>	<u>(76,350,857)</u>
Total Accumulated Depreciation	<u>(100,708,377)</u>	<u>(7,722,558)</u>	<u>2,045,722</u>	<u>(106,385,212)</u>
Total Utility Plant Being Depreciated, Net				
Gas	25,647,308	1,080,377	66,724	26,660,961
Electric	131,062,971	3,217,776	446,592	133,834,155
	<u>156,710,279</u>	<u>4,298,154</u>	<u>513,317</u>	<u>160,495,116</u>
Total Utility Plant, Net				
Gas	25,903,088	3,764,816	2,648,757	27,019,148
Electric	135,987,287	6,623,776	3,804,157	138,806,906
	<u>161,890,375</u>	<u>10,388,592</u>	<u>6,452,914</u>	<u>165,826,054</u>
Net Capital Assets	<u>\$ 161,890,376</u>	<u>\$ 10,388,591</u>	<u>\$ 6,452,914</u>	<u>\$ 165,826,054</u>

Note: Immaterial differences may exist due to rounding

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
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NOTES TO FINANCIAL STATEMENTS As of and for the Years Ended December 31, 2019 and 2018

NOTE 3 – PLANT, PROPERTY AND EQUIPMENT (cont.)

Plant, property and equipment as of December 31, 2018 consist of the following:

	Balance 1/1/18	Increases	Decreases	Balance 12/31/18
Utility Plant not Being Depreciated				
Gas				
Land	\$ 214,304	\$ -	\$ -	\$ 214,304
Construction in progress	49,967	2,013,006	2,021,498	41,474
	<u>264,271</u>	<u>2,013,006</u>	<u>2,021,498</u>	<u>255,778</u>
Electric/Telecommunications				
Land	4,773,373	30,692	-	4,804,065
Construction in progress	1,712,183	3,426,020	5,017,952	120,251
	<u>6,485,556</u>	<u>3,456,712</u>	<u>5,017,952</u>	<u>4,924,316</u>
Total Utility Plant Not Being Depreciated	<u>6,749,827</u>	<u>5,469,718</u>	<u>7,039,450</u>	<u>5,180,094</u>
Utility Plant Being Depreciated				
Gas				
Plant investment	49,129,879	2,245,739	291,464	51,084,154
Office furniture and equipment	1,407,584	19,332	-	1,426,916
Transportation and communication equipment	1,351,082	127,521	-	1,478,603
Other	275,199	48,513	-	323,712
	<u>52,163,744</u>	<u>2,441,104</u>	<u>291,466</u>	<u>54,313,384</u>
Electric/Telecommunications				
Plant investment	180,620,342	22,824,277	9,524,492	193,920,128
Office furniture and equipment	3,176,871	45,091	30,219	3,191,743
Transportation and communication equipment	5,098,883	198,562	-	5,297,445
Other	629,790	66,169	-	695,959
	<u>189,525,886</u>	<u>23,134,099</u>	<u>9,554,711</u>	<u>203,105,274</u>
Total Utility Plant Being Depreciated	<u>241,689,630</u>	<u>25,575,203</u>	<u>9,846,177</u>	<u>257,418,659</u>

Note: Immaterial differences may exist due to rounding

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS
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NOTE 3 – PLANT, PROPERTY AND EQUIPMENT (cont.)

	Balance 1/1/18	Increases	Decreases	Balance 12/31/18
Less: Accumulated depreciation				
Gas				
Plant investment	\$ (24,877,205)	\$ (1,369,639)	\$ 231,970	\$ (26,014,874)
Office furniture and equipment	(1,173,309)	(2,485)	-	(1,175,794)
Transportation and communication equipment	(1,048,137)	(169,629)	-	(1,217,766)
Other	(234,483)	(23,159)	-	(257,642)
	(27,333,134)	(1,564,912)	231,970	(28,666,076)
Electric/Telecommunications				
Plant investment	(60,678,628)	(5,033,224)	757,837	(64,954,015)
Office furniture and equipment	(2,521,245)	(18,452)	15,110	(2,524,588)
Transportation and communication equipment	(3,521,554)	(576,631)	-	(4,098,185)
Other	(438,453)	(27,060)	-	(465,513)
	(67,159,880)	(5,655,366)	772,947	(72,042,300)
Total Accumulated Depreciation	(94,493,014)	(7,220,279)	1,004,916	(100,708,377)
Total Utility Plant Being Depreciated, Net				
Gas	24,830,612	876,192	59,496	25,647,308
Electric	122,366,002	17,478,733	8,781,764	131,062,971
	147,196,614	18,354,925	8,841,260	156,710,279
Total Utility Plant, Net				
Gas	25,094,885	2,889,198	2,080,995	25,903,088
Electric	128,851,558	20,935,445	13,799,716	135,987,287
	153,946,443	23,824,642	15,880,711	161,890,376
Net Capital Assets	\$ 153,946,443	\$ 23,824,642	\$ 15,880,711	\$ 161,890,376

Note: Immaterial differences may exist due to rounding

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 4 – NOTE RECEIVABLE

	<u>2019</u>	<u>2018</u>
Note receivable from Holyoke Solar, LLC (separate non-related entity) due to the Solar Coop in monthly installments of \$74,191 including interest at 5.25%, secured by the Solar Installation Property, matures December 2031.	\$ 7,906,594	\$ 8,367,753
Less: amount due within one year	<u>(485,961)</u>	<u>(461,132)</u>
Note Receivable - Due After One Year	<u>\$ 7,420,633</u>	<u>\$ 7,906,621</u>

The Holyoke Solar, LLC note, and security agreement also requires the borrower to establish a Reserve Account to be held in an interest-bearing savings account equal to no less than 6 months of principal and interest debt service payments. The Solar Coop shall use the Reserve Account to cure any failure of the borrower to pay when due any principal or interest payment. If the Reserve Account is not used by the Solar Coop during the first 6 years, the Reserve Account shall be decreased to no less than 2 months of principal and interest debt service payments. The Reserve Account was established with a required balance of \$444,737. The account balance at December 31, 2019 and 2018 was \$453,021 and \$452,116, respectively.

NOTE 5 – OTHER RECEIVABLES

Other receivables, all due within one year, consist of the following as of December 31, 2019 and 2018:

	<u>2019</u>	<u>2018</u>
Springfield Water and Sewer	\$ 45,545	\$ 87,097
Massachusetts Department of Transportation	380,188	97,266
Accrued interest receivable	15,681	17,345
Miscellaneous other receivables	<u>1,189,465</u>	<u>1,022,072</u>
Totals	<u>\$ 1,630,879</u>	<u>\$ 1,223,780</u>

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 6 – INTANGIBLE ASSETS

	Life in Years	2019	
		Gross Carrying Amount	Accumulated Amortization
2001 franchise fees	30	\$2,000,000	\$ 1,203,334

	Life in Years	2018	
		Gross Carrying Amount	Accumulated Amortization
2001 franchise fees	30	\$ 2,000,000	\$ 1,136,667

Aggregate amortization expense was \$66,667 for the years ended December 31, 2019 and 2018.
Estimated annual aggregate amortization expense is \$66,667 for the five years subsequent to 2019.

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NOTES TO FINANCIAL STATEMENTS
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NOTE 7 – LONG-TERM OBLIGATIONS

General Obligation Bonds –
Issued through the City of Holyoke
Original issue amount: \$30,532,000
Date of issue: April 2012
Bonds mature annually 2013-2031
Interest rates range from 2.0% - 5.0% \$ 21,825,000

Revenue Bonds –
Massachusetts Clean Energy Cooperative Corporation - Series 2013
Original issue amount: \$49,885,000
Date of issue: April 2013
Bonds mature annually 2015-2032
Interest rates range from 3.0% - 5.0% 40,560,000

Clean Renewable Energy Bond –
Boatlock Hydroelectric Station Project - 2009 Series A
Original issue amount: \$2,500,000
Date of issue: January 2009
Bonds mature annually 2010-2020
Interest rate: 1.5%
Secured by revenues of the Department 208,334

Less: Amount due within one year (3,953,334)

Bonds Payable – Due After One Year \$ 58,640,000

Principal maturing and interest payments are anticipated to be as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 3,953,334	\$ 2,974,103	\$ 6,927,437
2021	3,930,000	2,783,676	6,713,676
2022	4,085,000	2,626,476	6,711,476
2023	4,275,000	2,437,876	6,712,876
2024	4,455,000	2,256,624	6,711,624
2025 – 2029	25,695,000	7,872,860	33,567,860
2030 – 2032	<u>16,200,000</u>	<u>1,530,250</u>	<u>17,730,250</u>
Totals	<u>\$ 62,593,334</u>	<u>\$ 22,481,865</u>	<u>\$ 85,075,199</u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 7 – LONG-TERM OBLIGATIONS (cont.)

The Department outstanding revenue bonds contain

1. a provision that in the event of default not remedied, the Trustee may declare the principal of all the Bonds then Outstanding and interest accrued thereon to be immediately due and payable
2. a provision that in the event of default not remedied, upon demand of the Trustee, all monies, securities and funds held by the Cooperative and pledged under the Bond Resolution and after receipt thereof, all revenues from the net capability of the Hadley Falls facility.

Revenue Bonds are payable solely from and secured solely by, the Revenues of MCEC derived from the sale of the Net Capability of the Hadley Falls Facility.

The Department outstanding General Obligation Bonds do not contain event of default and / or termination provisions with possible finance-related consequences.

The Department is required to satisfy certain bond covenant requirements in connection with the bonds payable. In addition, the notes payable from direct placement detailed on the following page also have funding requirements. The following funds are required as part of the bond and note agreements:

	<u>2019</u>	<u>2018</u>
<u>Revenue Bonds</u>		
Debt service reserve fund	\$ 4,575,461	\$ 4,535,645
Redemption account		
Reserve and contingency fund	551,153	473,923
Principal account	1,155,000	1,106,421
Bond interest fund	1,001,875	1,049,854
<u>Clean Renewable Energy Bond</u>		
Debt service reserve fund	<u>259,423</u>	<u>258,645</u>
Sub-Total Related to Bonds	<u>7,542,912</u>	<u>7,424,489</u>
<u>Notes Payable</u>		
Collateral account	4,554,678	4,038,841
Reserve fund	<u>453,021</u>	<u>452,116</u>
Sub-Total Related to Notes	<u>5,007,699</u>	<u>4,490,957</u>
Total Funds Required Under Bond Indenture/Note Payable	<u>\$ 12,550,611</u>	<u>\$ 11,915,445</u>

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NOTE 7 – LONG-TERM OBLIGATIONS (cont.)

Notes Payable

Note payable to bank, secured by all assets of the Holyoke Solar Cooperative, monthly payments of \$6,346 including interest at 4.47%, matures in September 2031.	\$ 694,551
Note payable to bank, secured by all assets of the Holyoke Solar Cooperative, monthly payments of \$29,820 including interest at 4.00%, matures in September 2031.	3,355,647
Note payable to bank, secured by all assets of the Holyoke Solar Cooperative, monthly payments of \$29,470 including interest at 3.40%, Matures in September 2031.	
A pledge of securities as collateral, with a value of \$3,665,947 at December 31, 2017 is also required under this note.	3,441,672
Note payable to bank, secured by revenues of the Department with a lien on all business assets on Holyoke Solar Cooperative and a pledge of the service contract between the Department and Holyoke Solar Cooperative, monthly payments of \$57,558 including interest at 3.94%, matures in April 2038.	8,965,301
Less: Amount due within one year	<u>(844,141)</u>
Notes Payable – Due After One Year	<u>\$ 15,613,030</u>

Principal maturing and interest payments are anticipated to be as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 844,141	\$ 639,842	\$ 1,483,983
2021	880,026	603,957	1,483,983
2022	915,529	568,453	1,483,982
2023	952,466	531,517	1,483,983
2024	989,469	494,514	1,483,983
2025 – 2029	5,586,080	1,833,833	7,419,913
2030 – 2034	4,137,279	770,575	4,907,854
2035 – 2038	<u>2,152,181</u>	<u>150,153</u>	<u>2,302,334</u>
Totals	<u>\$ 16,457,171</u>	<u>\$ 5,592,844</u>	<u>\$ 22,050,015</u>

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NOTE 7 – LONG-TERM OBLIGATIONS (cont.)

During 2018, Holyoke Solar Cooperative provided financing to the Department in the amount of \$9,500,000 related to the construction and management of a new substation. As a result of this event, a construction escrow account was created and represents remaining funds received that have not yet been drawn on for construction. These funds in escrow are requested for disbursement as project costs are incurred. As of December 31, 2019 and 2018, the balance in the construction escrow account was \$0 and 2,111,063, respectively.

The outstanding notes from direct placements contain

1. a provision that in an event of default, outstanding amounts become immediately due and payable and / or
2. a provision that in an event of default, the borrower shall reimburse the bank for any reasonable cost incurred by the Bank in connection to the collection and enforcement of the provisions of the loan agreement and / or
3. a provision that in the event of default, all deposits, securities and other property in the possession of the bank belonging to the borrower shall be treated as collateral to secure payment of the notes and /or
4. a provision that in the event of default, the entire outstanding principle balance of the notes shall bear interest, from the date of default at the default rate of 5%.

CHANGES IN LONG-TERM LIABILITIES

Long-term liability activities for the years ended December 31, 2019 are as follows:

	Balance 1/1/19	Additions	Reductions	Balance 12/31/19	Current Portion
Long-term bonds and loans					
Bonds payable	\$ 66,386,667	\$ -	\$ 3,793,333	\$ 62,593,334	\$ 3,953,334
Premium on bonds	7,159,677	-	846,374	6,313,303	-
Notes payable	17,270,335	-	813,164	16,457,171	844,141
Leases payable	83,545	-	41,057	42,488	42,488
	<u>90,900,224</u>	-	<u>5,493,928</u>	<u>85,406,296</u>	<u>4,839,963</u>
Other long-term liabilities					
Net pension liability	25,930,197	8,457,149	-	34,387,346	-
Compensated absences	3,329,073	488,250	252,884	3,564,439	253,732
Net OPEB liability	8,900,872	-	3,093,256	5,807,616	-
Environmental costs	120,000	-	-	120,000	120,000
Unearned revenue	2,970,744	-	99,090	2,871,654	-
Reserve fund for note receivable	444,737	-	-	444,737	-
Total Long-Term Liabilities	<u>\$ 132,595,847</u>	<u>\$ 8,945,400</u>	<u>\$ 8,939,157</u>	<u>\$ 132,602,089</u>	<u>\$ 5,213,695</u>

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NOTES TO FINANCIAL STATEMENTS
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NOTE 7 – LONG-TERM OBLIGATIONS (cont.)

CHANGES IN LONG-TERM LIABILITIES (cont.)

Long-term liability activities for the years ended December 31, 2018 are as follows:

	Balance 1/1/18	Additions	Reductions	Balance 12/31/18	Current Portion
Long-term bonds and loans					
Bonds payable	\$ 70,065,000	\$ -	\$ 3,678,333	\$ 66,386,667	\$ 3,793,333
Premium on bonds	8,003,660	-	843,983	7,159,677	-
Notes payable	8,651,816	9,500,000	881,481	17,270,335	813,164
Leases payable	123,521	-	39,976	83,545	41,056
	86,843,997	9,500,000	5,443,773	90,900,224	4,647,553
Other long-term liabilities					
Net pension liability	30,715,656	-	4,785,459	25,930,197	-
Compensated absences	3,183,821	337,034	191,782	3,329,073	252,883
Other postemployment benefits (asset) liability	(43,421)	8,944,293	-	8,900,872	-
Environmental costs	165,000	-	45,000	120,000	120,000
Unearned revenue	2,487,820	647,924	165,000	2,970,744	-
Reserve fund for note receivable	444,737	-	-	444,737	-
	30,715,656	9,329,251	5,082,239	44,477,033	252,883
Total Long-Term Liabilities	\$ 123,797,610	\$ 19,429,251	\$ 10,631,014	\$ 132,595,847	\$ 5,020,436

REVENUE DEBT

The Department has pledged future revenues, net of certain operating expenses to repay revenue bonds issued in 2013. Proceeds from the bonds provided financing for improvements to the Hadley Falls generating station. The bonds are payable solely from revenues generated by the power purchase agreement with MMWEC through 2032. Annual principal and interest payments on the bonds are expected to require 100% of the Clean Energy Coop future gross revenues from MMWEC. The principal and interest remaining to be paid on the bonds is \$56,068,250. Principal and interest paid in 2019 and 2018 were \$4,312,550 and \$4,312,950, respectively. Total customer net revenues in 2019 and 2018 were \$4,313,150 and \$4,312,750, respectively. Customer revenues began in 2015 to coincide with the first bond principal payment due.

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NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018

NOTE 8 – BLENDED COMPONENT UNITS

The following schedules provide details of the blended component units' balances, activities, and eliminations.

COMBINING SCHEDULE OF NET POSITION
As of December 31, 2019

ASSETS	<u>HGE</u>	<u>Holyoke Solar</u>	<u>Mass Clean Energy</u>	<u>Eliminations</u>	<u>Total</u>
Current Assets					
Cash and investments	\$ 11,839,667	\$ 6,099,569	\$ 126,349	\$ -	\$ 18,065,585
Restricted Assets					
Redemption account	-	-	2,708,028	-	2,708,028
Customer accounts receivable - net	7,378,063	7,119	-	-	7,385,182
Note receivable - current portion	-	485,961	-	-	485,961
Materials and supplies	3,226,403	-	-	-	3,226,403
Fuel for electric generation and gas in storage	734,652	-	-	-	734,652
Prepaid expense	3,022,689	-	38,147,356	(38,147,356)	3,022,689
Other receivables	1,623,621	7,258	-	-	1,630,879
Total Current Assets	<u>27,825,095</u>	<u>6,599,907</u>	<u>40,981,733</u>	<u>(38,147,356)</u>	<u>37,259,379</u>
Noncurrent Assets					
Restricted Assets					
Accounts required under bond indenture/note payable	259,423	3,894,693	4,575,461	-	8,729,577
Customers' deposits	1,467,273	-	-	-	1,467,273
Other receivables - after one year	-	7,420,633	-	-	7,420,633
Hi-Lite assistant loans	1,653,849	-	-	-	1,653,849
Advances to other funds	431,000	8,965,301	-	(9,396,301)	-
Other Assets					
Purchased power accounts	374,534	-	-	-	374,534
Rate stabilization accounts	45,757,388	-	-	-	45,757,388
Costs recoverable in future - pollution	120,000	-	-	-	120,000
Other investments	188,390	-	-	-	188,390
Intangible assets	796,666	-	-	-	796,666
Capital Assets					
Plant, property and equipment in service	271,500,553	-	-	-	271,500,553
Construction in progress	710,713	-	-	-	710,713
	<u>272,211,266</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>272,211,266</u>
Less: Accumulated depreciation	<u>(106,385,212)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(106,385,212)</u>
Total Capital Assets	<u>165,826,054</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>165,826,054</u>
Total Noncurrent Assets	<u>216,874,577</u>	<u>20,280,627</u>	<u>4,575,461</u>	<u>(9,396,301)</u>	<u>232,334,364</u>
Total Assets	<u>244,699,672</u>	<u>26,880,534</u>	<u>45,557,194</u>	<u>(47,543,657)</u>	<u>269,593,743</u>
DEFERRED OUTFLOWS OF RESOURCES					
OPEB related amounts	519,542	-	-	-	519,542
Pension related amounts	12,341,066	-	-	-	12,341,066

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NOTE 8 – BLENDED COMPONENT UNITS (cont.)

COMBINING SCHEDULE OF NET POSITION (cont.)
As of December 31, 2019

LIABILITIES	<u>HGE</u>	Holyoke <u>Solar</u>	Mass Clean <u>Energy</u>	<u>Eliminations</u>	<u>Total</u>
Current Liabilities					
Accounts payable	\$ 4,746,910	\$ 36,781	\$ -	\$ -	\$ 4,783,691
Customers' deposits	1,191,208	-	-	-	1,191,208
Accrued liabilities	949,294	-	-	-	949,294
Current portion - accrued compensated absences	253,732	-	-	-	253,732
Current portion - accrued environmental costs	120,000	-	-	-	120,000
Accrued charges - current	24,677	-	-	-	24,677
Liabilities Payable from Restricted Assets					
Current portion - bonds and notes payable	1,685,822	844,141	2,310,000	-	4,839,963
Accrued interest	322,529	-	1,001,875	-	1,324,404
Total Current Liabilities	<u>9,294,172</u>	<u>880,922</u>	<u>3,311,875</u>	<u>-</u>	<u>13,486,969</u>
Long-Term Liabilities					
Bonds payable - long-term	20,390,000	-	38,250,000	-	58,640,000
Plus: Unamortized premium on bonds payable	1,646,158	-	4,667,145	-	6,313,303
	22,036,158	-	42,917,145	-	64,953,303
Notes payable - long-term	-	15,613,030	-	-	15,613,030
Accrued compensated absences	3,310,708	-	-	-	3,310,708
Net OPEB liability	5,807,616	-	-	-	5,807,616
Unearned revenue	41,019,010	-	-	(38,147,356)	2,871,654
Advances from other funds	8,965,301	444,737	431,000	(9,396,301)	444,737
Net pension liability	34,387,346	-	-	-	34,387,346
Total Long-Term Liabilities	<u>115,526,139</u>	<u>16,057,767</u>	<u>43,348,145</u>	<u>(47,543,657)</u>	<u>127,388,394</u>
Total Liabilities	<u>124,820,311</u>	<u>16,938,689</u>	<u>46,660,020</u>	<u>(47,543,657)</u>	<u>140,875,363</u>
DEFERRED INFLOWS OF RESOURCES					
Regulatory deferral	1,259,255	-	-	-	1,259,255
Pension related amounts	1,700,130	-	-	-	1,700,130
OPEB related amounts	639,806	-	-	-	639,806
Rate stabilization reserve	41,269,849	-	-	-	41,269,849
Total Deferred Inflows of Resources	<u>44,869,040</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>44,869,040</u>
NET POSITION					
Net investment in plant, property and equipment	142,104,074	-	-	(54,192,446)	87,911,628
Restricted for debt service	(63,106)	4,163,558	3,971,614	-	8,072,066
Unrestricted (deficit)	(54,170,039)	5,778,287	(5,074,440)	54,192,446	726,254
TOTAL NET POSITION (DEFICIT)	<u>\$ 87,870,929</u>	<u>\$ 9,941,845</u>	<u>\$ (1,102,826)</u>	<u>\$ -</u>	<u>\$ 96,709,948</u>

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NOTES TO FINANCIAL STATEMENTS
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NOTE 8 – BLENDED COMPONENT UNITS (cont.)

COMBINING SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
For the Year Ended December 31, 2019

	HGE	Holyoke Solar	Mass Clean Energy	Eliminations	Consolidated Total
OPERATING REVENUES	\$ 72,821,541	\$ 301,821	\$ 4,313,150	\$ (4,614,971)	\$ 72,821,541
OPERATING EXPENSES					
Operation and maintenance	58,263,567	159,976	2,953,470	(4,614,971)	56,762,042
Depreciation - plant and equipment	7,700,782	-	-	-	7,700,782
Total Operating Expenses	<u>65,964,349</u>	<u>159,976</u>	<u>2,953,470</u>	<u>(4,614,971)</u>	<u>64,462,824</u>
Operating Income	<u>6,857,192</u>	<u>141,845</u>	<u>1,359,680</u>	<u>-</u>	<u>8,358,717</u>
NONOPERATING OTHER REVENUES (EXPENSES)					
Investment income - net of fees	2,639,163	951,043	44,432	(365,209)	3,269,429
Net gain (loss) on investments	5,783,051	677,682	74,434	-	6,535,167
Interest expense	(1,220,978)	(670,880)	(1,415,669)	365,209	(2,942,318)
Miscellaneous income (expense)	1,280,338	280,294	-	(138,140)	1,422,492
Amortization of intangible assets	(66,667)	-	-	-	(66,667)
Net gain (loss) - disposal of assets	(1,259,680)	-	-	-	(1,259,680)
Net gain - merchandise jobbing	66,531	-	-	-	66,531
Taxes - other	(217,007)	-	-	138,140	(78,867)
Total Other Revenues (Expenses)	<u>7,004,751</u>	<u>1,238,139</u>	<u>(1,296,803)</u>	<u>-</u>	<u>6,946,087</u>
Change in Net Position Before Transfers	13,861,943	1,379,984	62,877	-	15,304,804
TRANSFERS					
Payment in lieu of taxes - City of Holyoke	(1,080,522)	-	-	-	(1,080,522)
Change in Net Position	12,781,421	1,379,984	62,877	-	14,224,282
NET POSITION (Deficit) - Beginning of Year - Restated	75,089,508	8,561,861	(1,165,703)	-	82,485,666
NET POSITION (Deficit) - END OF YEAR	<u>\$ 87,870,929</u>	<u>\$ 9,941,845</u>	<u>\$ (1,102,826)</u>	<u>\$ -</u>	<u>\$ 96,709,948</u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS
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NOTE 8 – BLENDED COMPONENT UNITS (cont.)

CONDENSED COMBINING SCHEDULE OF CASH FLOWS For the Year Ended December 31, 2019

NET CASH FLOWS FROM (USED IN)	HGE	Holyoke Solar	Mass Clean Energy	Eliminations	Total
Operating activities	\$ 10,334,790	\$ 457,196	\$ 4,368,522	\$ -	\$ 15,160,508
Investing activities	5,953,633	2,223,317	2,110,952	-	10,287,902
Noncapital financing activities	(1,080,522)	-	-	-	(1,080,522)
Capital and related financing activities	<u>(13,948,696)</u>	<u>(3,267,483)</u>	<u>(4,312,550)</u>	<u>-</u>	<u>(21,528,729)</u>
Net Increase (Decrease) in Cash and Cash Equivalents	1,259,205	(586,970)	2,166,924	-	2,839,159
CASH AND CASH EQUIVALENTS - Beginning of Year	<u>57,632,875</u>	<u>8,900,326</u>	<u>5,242,914</u>	<u>-</u>	<u>71,776,115</u>
CASH AND CASH EQUIVALENTS - END OF YEAR	<u>\$ 58,892,080</u>	<u>\$ 8,313,356</u>	<u>\$ 7,409,838</u>	<u>\$ -</u>	<u>\$ 74,615,274</u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 8 – BLENDED COMPONENT UNITS (cont.)

The following schedules provide details of the blended component units' balances, activities, and eliminations.

COMBINING SCHEDULE OF NET POSITION As of December 31, 2018 - Restated

ASSETS	<u>HGE</u>	<u>Holyoke Solar</u>	<u>Mass Clean Energy</u>	<u>Eliminations</u>	<u>Total</u>
Current Assets					
Cash and investments	\$ 8,960,426	\$ 4,112,645	\$ 143,591	\$ -	13,216,662
Collateralized investments for margin account	2,771,987	-	-	-	2,771,987
Redemption account	-	-	2,630,198	-	2,630,198
Customer accounts receivable - net	8,293,933	11,632	-	-	8,305,565
Accounts receivable - City of Holyoke	15,090	-	-	-	15,090
Note receivable - current portion	-	461,132	-	-	461,132
Materials and supplies	2,835,861	-	-	-	2,835,861
Fuel for electric generation and gas in storage	706,015	-	-	-	706,015
Prepaid expense	2,392,260	-	41,081,764	(41,081,764)	2,392,260
Other receivables	1,217,408	6,372	-	-	1,223,780
Total Current Assets	<u>27,192,980</u>	<u>4,591,781</u>	<u>43,855,553</u>	<u>(41,081,764)</u>	<u>34,558,550</u>
Noncurrent Assets					
Restricted Assets					
Accounts required under bond indenture/note payable	258,646	4,490,957	4,535,645	-	9,285,247
Construction escrow account	-	2,111,063	-	-	2,111,063
Customers' deposits	1,538,881	-	-	-	1,538,881
Other receivables - after one year	-	7,906,621	-	-	7,906,621
Hi-Lite assistant loans	1,972,635	-	-	-	1,972,635
Advances to other funds	431,000	7,181,862	-	(7,612,862)	-
Other Assets					
Purchased power accounts	368,510	-	-	-	368,510
Rate stabilization accounts	45,134,811	-	-	-	45,134,811
Costs recoverable in future - pollution	120,258	-	-	-	120,258
Other investments	188,390	-	-	-	188,390
Intangible assets	863,333	-	-	-	863,333
Capital Assets					
Plant, property and equipment in service	262,437,028	-	-	-	262,437,028
Construction in progress	161,725	-	-	-	161,725
	<u>262,598,753</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>262,598,753</u>
Less: Accumulated depreciation	<u>(100,708,377)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(100,708,377)</u>
Total Capital Assets	<u>161,890,376</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>161,890,376</u>
Total Noncurrent Assets	<u>212,766,840</u>	<u>21,690,503</u>	<u>4,535,645</u>	<u>(7,612,862)</u>	<u>231,380,126</u>
Total Assets	<u>239,959,820</u>	<u>26,282,284</u>	<u>48,391,198</u>	<u>(48,694,626)</u>	<u>265,938,676</u>
DEFERRED OUTFLOWS OF RESOURCES					
OPEB related amounts	1,527,080	-	-	-	1,527,080
Pension related amounts	7,732,909	-	-	-	7,732,909

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NOTES TO FINANCIAL STATEMENTS
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NOTE 8 – BLENDED COMPONENT UNITS (cont.)

COMBINING SCHEDULE OF NET POSITION (cont.)
As of December 31, 2018 - Restated

LIABILITIES	HGE	Holyoke Solar	Mass Clean Energy	Eliminations	Total
Current Liabilities					
Accounts payable	\$ 6,641,256	\$ 5,351	\$ -	\$ -	6,646,607
Customers' deposits	1,357,236	-	-	-	1,357,236
Accrued liabilities	900,032	-	-	-	900,032
Current portion - accrued compensated absences	252,883	-	-	-	252,883
Current portion - accrued environmental costs	120,000	-	-	-	120,000
Accrued charges - current	437,902	-	-	-	437,902
Liabilities Payable from Restricted Assets					
Margin credit account	2,771,987	-	-	-	2,771,987
Current portion - bonds and notes payable	1,614,389	813,164	2,220,000	-	4,647,553
Accrued interest	345,650	-	1,046,275	-	1,391,925
Total Current Liabilities	<u>14,441,335</u>	<u>818,515</u>	<u>3,266,275</u>	<u>-</u>	<u>18,526,125</u>
Long-Term Liabilities					
Bonds payable - long-term	22,033,334	-	40,560,000	-	62,593,334
Plus: Unamortized premium on bonds payable	1,860,051	-	5,299,626	-	7,159,677
	23,893,384	-	45,859,626	-	69,753,010
Notes payable - long-term	-	16,457,171	-	-	16,457,171
Leases payable - long term	42,489	-	-	-	42,489
Accrued compensated absences	3,076,190	-	-	-	3,076,190
Net OPEB liability	8,900,872	-	-	-	8,900,872
Unearned revenue	44,052,508	-	-	(41,081,764)	2,970,744
Advances from other funds	7,181,862	444,737	431,000	(7,612,862)	444,737
Net pension liability	25,930,197	-	-	-	25,930,197
Total Long-Term Liabilities	<u>113,077,502</u>	<u>16,901,908</u>	<u>46,290,626</u>	<u>(48,694,626)</u>	<u>127,575,410</u>
Total Liabilities	<u>127,518,838</u>	<u>17,720,423</u>	<u>49,556,901</u>	<u>(48,694,626)</u>	<u>146,101,535</u>
DEFERRED INFLOWS OF RESOURCES					
Regulatory deferral	725,885	-	-	-	725,885
Pension related amounts	4,615,729	-	-	-	4,615,729
OPEB related amounts					
Rate stabilization reserve	41,269,849	-	-	-	41,269,849
Total Deferred Inflows of Resources	<u>46,611,463</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>46,611,463</u>
NET POSITION					
Net investment in plant, property and equipment	136,382,602	-	-	(55,259,356)	81,123,246
Restricted for debt service	(87,004)	3,677,793	3,899,568	-	7,490,357
Unrestricted (deficit)	(61,206,090)	4,884,068	(5,065,271)	55,259,356	(6,127,937)
TOTAL NET POSITION (DEFICIT)	<u>\$ 75,089,508</u>	<u>\$ 8,561,861</u>	<u>\$ (1,165,703)</u>	<u>\$ -</u>	<u>\$ 82,485,666</u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

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NOTE 8 – BLENDED COMPONENT UNITS (cont.)

COMBINING SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET POSITION For the Year Ended December 31, 2018 - Restated

	<u>HGE</u>	<u>Holyoke Solar</u>	<u>Mass Clean Energy</u>	<u>Eliminations</u>	<u>Consolidated Total</u>
OPERATING REVENUES	<u>\$ 75,378,339</u>	<u>\$ 283,152</u>	<u>\$ 4,312,750</u>	<u>\$ (4,595,902)</u>	<u>\$ 75,378,339</u>
OPERATING EXPENSES					
Operation and maintenance	58,991,541	173,193	2,947,200	(4,595,902)	57,516,032
Depreciation - plant and equipment	<u>7,220,278</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,220,278</u>
Total Operating Expenses	<u>66,211,819</u>	<u>173,193</u>	<u>2,947,200</u>	<u>(4,595,902)</u>	<u>64,736,310</u>
Operating Income	<u>9,166,520</u>	<u>109,959</u>	<u>1,365,550</u>	<u>-</u>	<u>10,642,029</u>
NONOPERATING OTHER REVENUES (EXPENSES)					
Investment income - net of fees	2,939,634	886,247	53,208	(251,260)	3,627,829
Net gain (loss) on investments	(4,911,242)	(537,002)	(32,778)	-	(5,481,022)
Interest expense	(1,293,178)	(582,257)	(1,497,316)	251,260	(3,121,491)
Miscellaneous income (expense)	870,197	80,019	-	(92,093)	858,123
Amortization of intangible assets	(66,667)	-	-	-	(66,667)
Net gain (loss) - disposal of assets	(568,443)	-	-	-	(568,443)
Net gain - merchandise jobbing	53,721	-	-	-	53,721
Taxes - other	<u>(172,955)</u>	<u>-</u>	<u>-</u>	<u>92,093</u>	<u>(80,862)</u>
Total Other Revenues (Expenses)	<u>(3,148,933)</u>	<u>(152,993)</u>	<u>(1,476,886)</u>	<u>-</u>	<u>(4,778,812)</u>
Change in Net Position Before Transfers	6,017,587	(43,034)	(111,336)	-	5,863,217
TRANSFERS					
Payment in lieu of taxes - City of Holyoke	<u>(1,080,680)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(1,080,680)</u>
Change in Net Position	<u>4,936,907</u>	<u>(43,034)</u>	<u>(111,336)</u>	<u>-</u>	<u>4,782,537</u>
NET POSITION (Deficit) - Beginning of Year - Restated	<u>77,922,166</u>	<u>8,604,895</u>	<u>(1,054,367)</u>	<u>-</u>	<u>85,472,694</u>
NET POSITION (Deficit) - END OF YEAR	<u>\$ 75,089,508</u>	<u>\$ 8,561,861</u>	<u>\$ (1,165,703)</u>	<u>\$ -</u>	<u>\$ 82,485,666</u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 8 – BLENDED COMPONENT UNITS (cont.)

CONDENSED COMBINING SCHEDULE OF CASH FLOWS For the Year Ended December 31, 2018

NET CASH FLOWS FROM (USED IN)	HGE	Holyoke Solar	Mass Clean Energy	Eliminations	Total
Operating activities	\$ 15,771,464	\$ 339,037	\$ 4,267,184	\$ -	\$ 20,377,685
Investing activities	(5,750,111)	3,439,622	551,701	-	(1,758,788)
Noncapital financing activities	(1,080,680)	-	-	-	(1,080,680)
Capital and related financing activities	(11,229,885)	1,055,346	(4,312,950)	-	(14,487,489)
Net Increase (Decrease) in Cash and Cash Equivalents	(2,289,212)	4,834,005	505,935	-	3,050,728
CASH AND CASH EQUIVALENTS - Beginning of Year	59,922,087	4,066,321	4,736,979	-	68,725,387
CASH AND CASH EQUIVALENTS - END OF YEAR	\$ 57,632,875	\$ 8,900,326	\$ 5,242,914	\$ -	\$ 71,776,115

NOTE 9 – RETIREMENT PLANS

GENERAL INFORMATION ABOUT THE PENSION PLAN

Substantially all full-time employees participate in the Holyoke Contributory Retirement System, a cost sharing multiple employer defined benefit public employee retirement system. The system is partially funded by employee contributions. The plan provides pension benefits, deferred allowances and death and disability benefits. Retirement allowance is based on the following factors: age, length of creditable service, level of salary, and group classification. Age at retirement and group classification determine a benefit rate. Percentages are specified in Chapter 32 of the Massachusetts General Laws. Participants may elect to receive their retirement in one of three optional forms of payment.

Member employers are required by state statutes to make contributions to the plan. Contributions are determined by the Commonwealth of Massachusetts Division of Public Employee Retirement Administration (PERA).

Covered employees are required by state statute to contribute a fixed percentage of their earnings into the plan. The percentage varies from 5 to 9 percent depending upon date of hire. All employees hired after January 1, 1979 contribute an additional 2% on all gross regular earnings over \$30,000 per year.

Members hired on or after April 2, 2012 are covered by the provisions of Chapter 32 as amended by Chapter 176 of the Acts of 2011 and Chapter 139 of the Acts of 2012.

The plan issues a publicly available financial report that includes financial statements and required supplementary information. This report may be obtained by writing or calling the plan as follows: Attn: Cheryl Dugre, Executive Director, Holyoke Retirement Board, City Hall Annex - Room 207, Holyoke, Massachusetts 01040, 413 534 2179.

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NOTES TO FINANCIAL STATEMENTS
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NOTE 9 – RETIREMENT PLANS (cont.)

PENSION LIABILITIES, PENSION EXPENSE, AND DEFERRED OUTFLOWS OF RESOURCES RELATED TO PENSIONS

At December 31, 2019, the Department reported a liability of \$34,387,346, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2018 and rolled forward to December 31, 2018. No material changes in the assumptions or benefit terms occurred between the actual valuation date and the measurement date. The Department's proportion of the net pension liability was based on the Department's share of appropriations of the pension plan relative to the appropriations of all participating employers. At December 31, 2018 the Department's proportion was 22.751617% which was an increase of 0.884845% from its proportion measured as of January 1, 2018.

At December 31, 2018, the Department reported a liability of \$25,930,197, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2017 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2018. No material changes in the assumptions or benefit terms occurred between the actual valuation date and the measurement date. The Department's proportion of the net pension liability was based on the Department's share of appropriations of the pension plan relative to the appropriations of all participating employers. At December 31, 2017, the Department's proportion was 21.866772% which was an increase of 0.800400% from its proportion measured as of January 1, 2017.

For the year ended December 31, 2019 and 2018, the Department recognized pension expense of \$6,632,051 and \$5,698,658, respectively.

At December 31, 2019, the utility reported deferred outflows and deferred inflows of resources from the following sources:

	2019	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Net differences between projected and actual earnings on pension plan	\$ 4,556,756	\$ -
Differences between projected and actual experiences	-	1,691,007
Changes of actuarial assumptions	1,693,714	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	2,132,223	9,123
Employer contributions subsequent to the measurement date	3,958,373	-
Total	\$ 12,341,066	\$ 1,700,130

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NOTE 9 – RETIREMENT PLANS (cont.)

PENSION LIABILITIES, PENSION EXPENSE, AND DEFERRED OUTFLOWS OF RESOURCES RELATED TO PENSIONS (cont.)

At December 31, 2018, the utility reported deferred outflows and deferred inflows of resources from the following sources:

	2018	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Net differences between projected and actual earnings on pension plan	\$ -	\$ 2,445,658
Differences between projected and actual experiences	-	2,161,832
Changes of actuarial assumptions	2,251,508	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	1,624,562	-
Employer contributions subsequent to the measurement date	<u>3,856,839</u>	<u>8,239</u>
Total	<u>\$ 7,732,909</u>	<u>\$ 4,615,729</u>

Deferred outflows related to pension resulting from the Department's employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2019. \$3,958,373 is reported for the Department. Other amounts reported as deferred outflows of resources, and deferred inflows of resources related to pension will be recognized in pension expense as follows:

<u>Year Ended December 31</u>	<u>Total</u>
2020	\$ 2,055,575
2021	1,346,625
2022	1,079,707
2023	2,010,489
2024	190,167
Thereafter	-
Total	<u>\$ 6,682,563</u>

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NOTES TO FINANCIAL STATEMENTS

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NOTE 9 – RETIREMENT PLANS (cont.)

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of January 1, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.25%
Salary Increases	4.00% - 4.50%
Investment Rate of Return	7.50%
Cost of Living Adjustments	3% of first \$12,000
Pre-retirement:	RP-2014 Blue Collar Employee Mortality Table set forward one year for females projected generationally using Scale MP-2017
Healthy Retiree:	RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year for females projected generationally using Scale MP-2017
Disabled Retiree:	RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward one year projected generationally using Scale MP-2017

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NOTE 9 – RETIREMENT PLANS (cont.)

PENSION LIABILITIES, PENSION EXPENSE, AND DEFERRED OUTFLOWS OF RESOURCES RELATED TO PENSIONS (cont.)

The long term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2019 and 2018 are summarized in the following table:

Asset Class	2019 Long-Term Expected Real Rate of Return	2018 Long-Term Expected Real Rate of Return
Domestic equity	6.16%	6.15%
International developed markets equity	6.69%	7.11%
International emerging markets equity	9.47%	9.41%
Core fixed income	1.89%	1.68%
Real estate	4.58%	4.90%
Hedge fund, GTAA, Risk parity	3.68%	3.94%
Private equity	10.00%	10.28%

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NOTE 9 – RETIREMENT PLANS (cont.)

PENSION LIABILITIES, PENSION EXPENSE, AND DEFERRED OUTFLOWS OF RESOURCES RELATED TO PENSIONS (cont.)

Discount Rate: The discount rate used to measure the total pension liability was 7.50% on both December 31, 2019 and December 31, 2018. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and the City of Holyoke Retirement system contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate: The following presents the net pension liability of the Department, calculated using the discount rate of 7.50%, as well as what the Department's net pension liability would be if it were calculated using a discount rate that is 1- percentage point lower or 1-percentage point higher than the current rate.

The sensitivity analysis as of December 31, 2019 follows:

	1% Decrease to Discount Rate (6.50%)	Current Discount Rate (7.50%)	1% Increase to Discount Rate (8.50%)
The Department's proportionate share of the net position liability	\$ 45,244,497	\$ 34,387,346	\$ 25,224,257

The sensitivity analysis as of December 31, 2018 follows:

	1% Decrease to Discount Rate (6.50%)	Current Discount Rate (7.50%)	1% Increase to Discount Rate (8.50%)
The Department's proportionate share of the net position liability	\$ 36,142,318	\$ 25,930,197	\$ 17,312,235

NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC

The Department implemented GASB No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, effective January 1, 2018. The cumulative effect of the change in net position due to the change in accounting standard is shown as a change in beginning net position for 2018. See Note 16 for further details. The prior year balances for deferred outflows of resources, deferred inflows of resources, and the net OPEB liability were not restated due to the measurement date used for the calculation of the balances and the timing of the information received by the Plan.

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NOTES TO FINANCIAL STATEMENTS

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NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC (cont.)

GENERAL INFORMATION ABOUT THE OPEB PLAN

Plan Description: As part of the Department's Fiduciary Funds, the Department's policy is to provide certain healthcare and life insurance benefits to eligible retirees, their dependents, or their survivors through the City of Holyoke's single employer postemployment welfare benefit plan.

The Department created a trust in 2014 to administer these benefits. The trust accounts for the portions of the active members retirees' premiums paid by the Department for health insurance, dental coverage, and life insurance.

Benefits Provided: Medical and prescription drug benefits are provided to all eligible retirees through a variety of plans offered by Blue Cross Blue Shield of Massachusetts and Health New England. The Holyoke Gas and Electric Department also pays 50% of the retiree life insurance premium and 50% of the dental premium (non-Medicare retirees only).

Employees covered by benefit terms At December 31, 2019 and 2018, the following employees were covered by the benefit terms:

	<u>2019</u>	<u>2018</u>
Inactive plan members or beneficiaries currently receiving benefit payments	189	189
Active plan members	<u>142</u>	<u>142</u>
Total Members	<u><u>331</u></u>	<u><u>331</u></u>

Contributions: For the year ended December 31, 2019 and 2018, the Department's average contribution rate was 19.51% and 14.17% of covered-employee payroll. Plan members are not required to contribute to the plan.

INVESTMENTS

Investment policy: It is the policy of the Department to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. Investments are limited to investing in assets as a prudent investor would, by considering purposes, terms, distribution requirements, and other circumstances of the trust. The following were the Department's investment allocations as of December 31, 2019 and 2018:

<u>Asset Class</u>	<u>2019 Allocation</u>	<u>2018 Allocation</u>
Mutual funds, ETFs and closed-end funds	99.82%	87.27%
Cash and cash equivalents	<u>0.18</u>	<u>12.73</u>
Total	<u><u>100%</u></u>	<u><u>100%</u></u>

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

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NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC (cont.)

NET OPEB LIABILITY

The Department's net OPEB liability was measured as of December 31, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2018.

The components of the net OPEB liability of the Department at December 31, 2019 and 2018, were as follows:

	2019	2018
Total OPEB liability	\$ 19,088,422	\$ 18,335,906
Plan fiduciary net position	13,280,806	9,435,034
Department's Net OPEB Liability	<u>\$ 5,807,616</u>	<u>\$ 8,900,872</u>
Plan fiduciary net position as a percentage of the total OPEB liability	<u>69.58%</u>	<u>51.46%</u>

Actuarial assumptions: The total OPEB liability was determined by an actuarial valuation as of January 1, 2019, using the following actuarial assumptions, applied to all periods included in the measurement:

Discount rate	6.25%
Salary increases	Service-related increases for Group 1: 6.0% per year decreasing over 9 years to 4.25% per year Service-related increases for Group 4: 7.0% per year decreasing over 6 years to 4.75% per year
Investment rate of return	6.25%
Non-Medicare medical/prescription drug cost Healthcare cost trend rates	6.00% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
Medicare medical/prescription drug cost Healthcare cost trend rates	6.00% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
Dental/Administrative Healthcare cost trend rates	6.00% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
Mortality rates	PubG.H-2010 Mortality Table with MP-2019 Mortality Scale

HOLYOKE GAS AND ELECTRIC

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NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC (cont.)

NET OPEB LIABILITY (cont.)

Below are the actuarial assumptions from the January 1, 2018 actuarial valuation.

Discount rate	6.25%
Salary increases	Service-related increases for Group 1: 6.0% per year decreasing over 9 years to 4.25% per year Service-related increases for Group 4: 7.0% per year decreasing over 6 years to 4.75% per year
Investment rate of return	6.25%
Non-Medicare medical/prescription drug cost Healthcare cost trend rates	6.50% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
Healthcare medical/prescription drug cost Healthcare cost trend rates	6.50% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
Dental/Administrative Healthcare cost trend rates	6.50% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
Mortality Rates	PubG.H-2010 Mortality Table with MP-2018 Mortality Scale

The long term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2019 and 2018 are summarized in the following table:

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

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NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC (cont.)

NET OPEB LIABILITY (cont.)

Asset Class	2019 Long-Term Expected Real Rate of Return	2018 Long-Term Expected Real Rate of Return
Closed-End Funds	6.25%	6.25%

Discount rate: The discount rate is a blend of the long-term expected rate of return on OPEB Trust assets and a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rate of AA/Aa or higher as shown in the Bond Buyer 20-Bond General Obligation Index (2.74% and 4.10% as of December 31, 2019 and 2018, respectively). The blending is based on the sufficiency of projected assets to make projected benefit payments.

CHANGES IN NET OPEB LIABILITY

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) – (b)
Balances at 12/31/2018	\$ 18,335,906	\$ 9,435,034	\$ 8,900,872
Changes for the Year			
Service cost	518,484	-	518,484
Interest	1,119,602	-	1,119,602
Differences between expected and actual experience	(222,610)	-	(222,610)
Changes in assumptions	(83,641)	-	(83,641)
Contributions – employer	-	2,559,063	(2,559,063)
Contributions – employee	390,796	390,796	-
Net investment income	-	1,906,420	(1,906,420)
Benefit payments	(970,115)	(970,115)	-
Administrative expense	-	(40,392)	40,392
Net changes	752,516	3,845,772	(3,093,256)
Balances at 12/31/2019	\$ 19,088,422	\$ 13,280,806	\$ 5,807,616

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC (cont.)

CHANGES IN NET OPEB LIABILITY (cont.)

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) – (b)
Balances at 12/31/2017	\$ 16,554,872	\$ 8,828,729	\$ 7,726,143
Changes for the Year			
Service cost	594,872	-	594,872
Interest	1,008,278	-	1,008,278
Differences between expected and actual experience	289,069	-	289,069
Changes in assumptions	463,399	-	463,399
Contributions – employer	-	1,774,584	(1,774,584)
Contributions – employee	384,133	384,133	-
Net investment income	-	(562,048)	562,048
Benefit payments	(958,717)	(958,717)	-
Administrative expense	-	(31,647)	31,647
Net changes	1,781,034	606,305	1,174,729
Balances at 12/31/2018	\$ 18,335,906	\$ 9,435,034	\$ 8,900,872

Sensitivity of the net OPEB liability to changes in the discount rate: The following presents the net OPEB liability of the Department, as well as what the Department's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower (5.25%) or 1-percentage-point higher (7.25%) than the current discount rate:

The sensitivity analysis as of December 31, 2019 follows:

	1% Decrease (5.25%)	Discount Rate (6.25%)	1% Increase (7.25%)
Net OPEB liability	\$ 8,445,334	\$ 5,807,616	\$ 3,654,161

The sensitivity analysis as of December 31, 2018 follows:

	1% Decrease (5.25%)	Discount Rate (6.25%)	1% Increase (7.25%)
Net OPEB liability	\$ 11,486,781	\$ 8,900,872	\$ 6,794,680

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

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NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC (cont.)

CHANGES IN NET OPEB LIABILITY (cont.)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates: The following presents the net OPEB liability of the Department, as well as what the Department's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

The sensitivity analysis as of December 31, 2019 follows:

	<u>1% Decrease</u>	<u>Healthcare Cost Trend Rates</u>	<u>1% Increase</u>
Net OPEB liability	\$ 1,820,502	\$ 5,807,616	\$ 10,827,580

The sensitivity analysis as of December 31, 2018 follows:

	<u>1% Decrease</u>	<u>Healthcare Cost Trend Rates</u>	<u>1% Increase</u>
Net OPEB liability	\$ 5,255,511	\$ 8,900,872	\$ 13,483,570

OPEB EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES RELATED TO OPEB

For the year ended December 31, 2019 and 2018, the Department recognized OPEB expense of \$1,113,151 and \$1,422,233. At December 31, 2019 and 2018, the Department reported deferred outflows of resources related to OPEB from the following sources.

	<u>2019</u>	
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net differences between projected and actual earnings on pension plan	\$ 199,587	\$ 185,159
Changes of actuarial assumptions	319,955	69,569
Net differences between projected and actual investment earnings on pension plan investment	-	385,078
Total	<u>\$ 519,542</u>	<u>\$ 639,806</u>

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NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS – HOLYOKE GAS AND ELECTRIC (cont.)

OPEB EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES RELATED TO OPEB (cont.)

	2018	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Net differences between projected and actual earnings on pension plan	\$ 244,328	\$ -
Changes of actuarial assumptions	391,677	-
Net differences between projected and actual investment earnings on pension plan investment	891,075	-
Total	<u>\$ 1,527,080</u>	<u>\$ -</u>

Deferred outflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended December 31:

2020	\$ 24,363
2021	24,363
2022	24,362
2023	(198,406)
2024	5,054
Thereafter	-
Total	<u>\$ (120,264)</u>

FUNDING POLICY

The Department is not required to provide funding for OPEB, other than the pay-as-you go amount necessary to provide current benefits to retirees and eligible beneficiaries/dependents. The cost of providing these benefits was \$958,717 for 182 retirees in 2018 and \$970,115 in 2019. In 2018 and 2019, the Department contributed assets into a separate legal trust, Holyoke Gas and Electric OPEB Trust, for the payment of future OPEB obligations. Contributions were \$1,200,000 in 2018, and \$1,979,744 in 2019.

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NOTE 11 – RELATED PARTY TRANSACTIONS

The Massachusetts Clean Energy Cooperative (Clean Energy Coop) signed a power sales contract in April 2013 with its member Massachusetts Wholesale Electric Company (MMWEC). Through this contract, MMWEC will purchase the net electrical capacity of the Hadley Falls Facility from the Clean Energy Coop at a monthly charge as defined in the contract. There were no sales to MMWEC during 2019 and 2018.

There is also an agency contract between the Clean Energy Coop and MMWEC, whereby MMWEC will act as agent for the Clean Energy Coop in the performance of its administrative obligations.

The Department transacted business with Tighe & Bond for engineering services in the amount of \$10,915 in 2019 and \$22,335 in 2018. One of the Department's commissioners has a financial interest in this company, requiring disclosure.

NOTE 12 – COMMITMENTS AND CONTINGENCES

PURCHASED POWER CONTRACTS

Short-term power – On a continuing basis, the Department enters into several short-term power supply contracts for either the purchase or sale of capacity, energy, renewable certificates, or ancillary services with various suppliers. This includes bilateral purchases to meet Department's shortfall position during the summer months of 2020 through 2026, where commitments were made by end of 2019 in the amount of \$379,178 for 2020 and \$614,623 for the period from 2021-2026.

Massachusetts Renewable Energy Certificates (RECs) – On a continuing basis, the Department enters into REC contracts for the sale of Massachusetts Class I, Massachusetts Class II and Maine Existing RECs from its hydro units. These commitments were made by the end of 2019. The summary of the resulting revenues to the Department by year and based on the total certificates sold is shown in the table below:

Contract Date	2020		2021		2022		2023	
	Revenues	Total Certificates	Revenues	Total Certificates	Revenues	Total Certificates	Revenues	Total Certificates
2019	1,594,075	69,300	720,625	27,500	821,438	28,750	383,813	13,750

Canal hydro power – In November 2013, the Department entered into an agreement to provide electricity to the Open Square facility and purchase any excess electricity from the operation of the Open Square D and G wheels at a monthly charge as defined in the agreement. The Department does not have any liability associated with these energy purchases as any excess energy beyond contract water rights is at Department discretion under terms with the customer are currently on a month to month basis with a new multi-year agreement planned between parties before year end of 2020.

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NOTES TO FINANCIAL STATEMENTS

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NOTE 12 – COMMITMENTS AND CONTINGENCES (cont.)

PURCHASED POWER CONTRACTS (cont.)

Solar power – In December 2010, the Department, through its subsidiary Holyoke Solar Cooperative, signed a 20-year solar Power Purchase Agreement (PPA) with Holyoke Solar, LLC. The Department has agreed to purchase the electricity produced by two grid-connected solar power facilities which will vary between \$265,000 and \$425,000 annually. After the initial term, this agreement can be renewed for two consecutive five-year terms. In conjunction with this PPA, the Department is leasing, to Holyoke Solar, LLC, the property on which the solar power facility is located at \$100 per usable acre per year for the first 20 years. After the initial term under the PPA, the rate shall be \$3,000 per usable acre per year subject to a 2.5% annual escalation.

In June 2011, the Department signed a 20-year solar Power Sales Agreement with Rivermoor-Citizens Holyoke, LLC. The Department agreed to purchase the electricity produced by the photovoltaic solar electric generation system for an annual payment of between \$48,000 - \$72,000 beginning in February 2013. After the initial term, this agreement shall automatically renew for successive one-year terms, up to a maximum of ten such renewal terms, unless terminated by either party.

In December 2014, the Department signed a 25-year solar Power Sales Agreement with Healthy Planet Partners, LLC. The annual energy payment will vary between \$54,200 and \$61,200 over a twenty-five (25) year contract term beginning October 2015.

The Department contracted for several 20-year solar PPA's during 2015 and 2016 with various solar developers and executed interconnection only agreements with a few others. Two C2 Special Solutions Group solar projects had COD of December 2016 under twenty (20) year PPA's signed in October 2015 – with annual total energy payments that will vary between \$101,000 and \$104,000. The Department contracted for several 20-year solar PPA's with various solar developers. Below is a summary for each solar project, which became commercial in 2017 or 2018.

<u>Date of PPA</u>	<u>System Name</u>	<u>Annual Energy Payment</u>	<u>Commercial Operation Date</u>
July 2016	Mt. Tom Solar	\$303,460 to \$335,460 over term	2-3-17
October 2016	AEGIS	\$48,366 to \$53,466 over term	1-4-17
October 2016	Gary Rome	\$37,943 to \$41,944 over term	1-6-17
December 2016	Conklin	\$47,745 to \$49,689 over term	2-24-17
January 2017	Riverside Roof	\$7,686 to \$10,012 over term	5-8-17
June 2017	Walnut Roof	\$7,686 to \$9,616 over term	11-22-17
June 2017	Hadley Mills	\$22,915 to \$28,902 over term	12-29-17
September 2017	Jackson Street	\$7,987 to \$8,786 over term	3-15-18
November 2017	Boys & Girls Club	\$11,531 to \$12,683 over term	4-20-18
October 2015 & reassigned December 2017	Kelly Way 2	\$50,547 to \$51,792 over term	6-4-18
March 2018	YMCA	\$12,907 to \$13,940 over term	12-21-18

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NOTE 12 – COMMITMENTS AND CONTINGENCES (cont.)

PURCHASED POWER CONTRACTS (cont.)

Long-Term Power Transactions – In December 2011, the Department signed a ten-year contract with Nextera Energy Power Marketing to purchase on-peak physical energy each year at an estimated cost of \$2,400,000. For the two (2) years remaining to the contract, the total future commitment is \$4,834,512. In August 2018, the Department extended this contract for another eight years at an estimated cost of \$16,211,846.

In September 2018, the Department executed a thirty-seven (37) month contract starting October 1, 2019 and ending October 31, 2022 with Nextera Energy Power Marketing for around-the-clock energy. The annual energy payment will be around \$1,427,927 and for the 34 months remaining to the contract, the total future commitment is \$4,037,828. At the same time, the Department executed a 37-month First Amendment to the above contract with the Massachusetts Green High Performance Computing Center, Inc. locking in the Energy Only piece of the rate and extending the term to cover this transaction.

In December 2013, the Department signed a twenty-five (25) year PPA for energy and capacity out of the Hancock Wind Project, located in Hancock County, Maine. The annual energy payment will be about \$813,200 for this project that had an estimated commercial operation date of December 2016.

In October 2015, the Department contracted with MMWEC to participate in a new MMWEC owned simple cycle 55 MW peaking unit located in Peabody, MA through the Predevelopment phase. All requirements have been completed in order to participate in the ISO-NE 2021/22 Forward Capacity Auction (FCA) which was held on February 5, 2018. The Department contracted with MMWEC in 2017 prior to the FCA to participate in this project for up to the life of unit with expected COD beginning June 2021. HG&E's estimated portion of construction costs is approximately \$9,100,000. As the project is MMWEC owned, the Department will not carry project debt on its books. The annual total costs will vary between \$355,784 and \$380,237 over the thirty (30) estimated year life of unit.

In December 2015, the Department contracted with Scuderi Clean Energy, LLC under a twenty (20) year PPA for output from a natural gas generating facility. Expected Commercial Operation is unknown at this time. The Department mitigated market and development risk by ensuring interconnection costs are born by other party and that rates under PPA are discounted to full wholesale energy and resulting load reduction cost savings (where and if applicable).

In September 2017, the Department contracted with Mt. Tom Solar, LLC under a twenty (20) year PPA for a lithium-ion battery-based energy storage system (ESS) located at the Mt Tom Solar facility. Testing and limited operation was completed in 2018 with fixed capacity payments beginning in June 2018. The Commercial Operation date was achieved in March 2019 after all city permitting. The annual fixed capacity payment will be \$360,000 and for the 18.5 years remaining to the contract, the total future commitment is \$6,660,000.

Long-Term Capacity Transaction – In January 2016, the Department contracted with PSEG through MMWEC under a five (5) year Capacity Load Obligation Transfer contract. This capacity hedge begins June 1, 2019 and ends May 31, 2024 and protects against rising capacity costs in ISO-NE's Rest of System capacity zone in which the Department is located. The annual capacity payment will be \$1,395,000 per year and for the 4.4 years remaining to the contract, the total future commitment is \$6,161,250.

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NOTE 12 – COMMITMENTS AND CONTINGENCES (cont.)

MASSACHUSETTS MUNICIPAL WHOLESALE ELECTRIC COMPANY

The Department is a Participant in certain Projects of the Massachusetts Municipal Wholesale Electric Company (MMWEC), a public corporation and a political subdivision of the Commonwealth of Massachusetts, created as a means to develop a bulk power supply for its Members and other utilities. MMWEC is authorized to construct, own or purchase ownership interests in, and to issue revenue bonds to finance, electric facilities (Projects). MMWEC has acquired ownership interests in electric facilities operated by other entities and also owns and operates its own electric facilities. MMWEC operates the Stony Brook Intermediate Project and the Stony Brook Peaking Project, both fossil-fueled power plants. MMWEC has the Nuclear Mix No 1 Project, Nuclear Project Three, Nuclear Project Four, Nuclear Project Five and Project Six, which comprise an 11.6% ownership interest in the Seabrook Station nuclear generating unit operated by NextEra Energy Seabrook, LLC and a 4.8% ownership interest in the Millstone Unit 3 nuclear unit, operated by Dominion Nuclear Connecticut, Inc. The operating license for Seabrook Station extends to March 15, 2050. The operating license for the Millstone Unit 3 nuclear unit extends to November 25, 2045.

On July 19, 2019, MMWEC sold its 3.7% interest in the W.F. Wyman Unit No. 4 plant, which is operated and owned by its majority owner, FPL Energy Wyman IV, LLC.

MMWEC sells all of the capability (Project Capability) of each of its Projects to its Members and other utilities (Project Participants) under Power Sales Agreements (PSAs). The Light Department has entered into PSAs with MMWEC. Under the PSAs the Department is required to make certain payments to MMWEC payable solely from Municipal Light Department revenues. Among other things, the PSAs require each Project Participant to pay its pro rata share of MMWEC's costs related to the Project, which costs include debt service on the revenue bonds issued by MMWEC to finance the Project. In addition, should a Project Participant fail to make any payment when due, other Project Participants of that Project may be required to increase (step-up) their payments and correspondingly their Participant's share of that Project's Project Capability. Project Participants have covenanted to fix, revise and collect rates at least sufficient to meet their obligations under the PSAs. Each Participant is unconditionally obligated to make payments due to MMWEC whether or not the Project(s) is completed or operating and notwithstanding the suspension or interruption of the output of the Project(s).

Pursuant to the PSAs, the MMWEC Project Participants are liable for their proportionate share of the costs associated with decommissioning the plants, which costs are being funded through monthly Project billings. Also, the Millstone and Seabrook Project Participants are liable for their proportionate share of the uninsured costs of a nuclear incident that might be imposed under the Price-Anderson Act (Act). Originally enacted in 1957, the Act has been renewed several times. In July 2005, as part of the Energy Policy Act of 2005, Congress extended the Act until the end of 2025.

As of July 1, 2019, MMWEC has no debt service obligations outstanding relating to the Projects. MMWEC is involved in various legal actions. In the opinion of management, the outcome of such litigation or claims will not have a material adverse effect on the financial position of the company.

The total capital expenditures and annual capacity, fuel and transmission costs (which include debt service, operations and maintenance, and decommissioning expenses as discussed above) associated with the Department's Project Capability of the Projects in which it participates for the years ended December 31, 2019 and 2018, respectively are listed in the table below:

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NOTE 12 – COMMITMENTS AND CONTINGENCES (cont.)

MASSACHUSETTS MUNICIPAL WHOLESALE ELECTRIC COMPANY (cont.)

Projects	Percentage Share	Total Capital Expenditures 2019	Capacity, Fuel & Transmission Billed 2019	Capacity, Fuel & Transmission Billed 2018
Stony Brook Peaking Project	2.8342%	\$ 1,692,689	\$ 103,414	\$ 131,616
Stony Brook Intermediate Project	0.0000%	-	-	-
Nuclear Mix No. 1- Seabrook	7.2615%	733,859	39,647	37,595
Nuclear Mix No. 1- Millstone	7.2615%	4,396,321	425,792	492,162
Nuclear Project No. 3- Millstone	6.3500%	9,400,730	748,399	867,685
Nuclear Project No. 4- Seabrook	6.1180%	18,311,838	894,356	873,412
Nuclear Project No. 5- Seabrook	2.9821%	2,417,944	111,842	109,517
Project No. 6-Seabrook	0.0000%	-	-	-
		<u>\$ 36,953,381</u>	<u>\$ 2,323,450</u>	<u>\$ 2,511,987</u>

TELECOMMUNICATIONS CONTRACTS

The Department has entered into long-term contracts for dedicated point to-point data lines and Internet Access services from several companies. These contracts have three-year terms.

In 2019, The Department entered into a five-year contract renewal with Cross Roads a division of Chicopee Electric Light to increase wholesale internet from 2 gigs to 3 gigs. The Department also entered into a five-year contract renewal with PeoplesBank to provide router management.

In 2018, the Department entered into a five-year contract with Cross Roads a division of Chicopee Electric Light and a one-year contract with Fiber Sonic a division of South Hadley Electric Light.

In 2017, the Department entered into a five-year contract with Fiber Connect, LLC to provide network operator services.

In 2002, the Department entered into a lease with Fiber Technologies Networks, LLC (Fibertech) for use of the Department's fiber optic lines. The lease provides for an annual payment per route mile for 20 years with an option to renew for an additional five years.

The Department has long-term contracts which range from one to five years with customers for telecommunications services.

HOLYOKE GAS AND ELECTRIC
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NOTE 12 – COMMITMENTS AND CONTINGENCES (cont.)

ENVIRONMENTAL PROTECTION AND OTHER ISSUES

In 1990, the Massachusetts Department of Environmental Protection (MDEP) sent a notice of responsibility to the Department and other parties regarding the presence of coal tar on property known as the gas works, adjacent to the Connecticut River. An investigation of the site has revealed concentrations of contaminants on the site and MDEP classified the area as a priority site. A second notice of responsibility was issued in September 1993 for gas tar deposits in the Connecticut River, effectively separating the gas works into a land site and a river site.

Effective February 2003, the Department increased the gas rates in order to collect additional dollars for clean-up of the gas works site and is accruing amounts, based on management's best estimate of the probable and reasonably estimable costs related to this clean-up. The current estimate for the remaining clean-up of only the land site is approximately \$120,000. No estimate is currently available for the river site. However, the cost of clean-up may be significant and material to the financial statements. The measurement of the accrual for remediation costs is subject to uncertainty, including the evolving nature of environmental regulations and the difficulty in estimating the extent and type of remediation activity that will be utilized. The utility is also in negotiations with another counterparty under a similar order to fund part of the clean-up efforts. A final agreement as to the cost-sharing methodology between the parties has not been reached. The impact of these negotiations may be material to the financial statements but cannot be estimated.

SOURCES OF LABOR SUPPLY

Fifty-seven percent of the Department's labor force is covered under a collective bargaining agreement between the City of Holyoke Gas and Electric Department and the Holyoke Municipal Gas, Light & Power Guild, Inc. The agreement expires March 31, 2021.

LINE OF CREDIT – MARGIN ACCOUNT

As of December 31, 2019, the Department had funds of \$0.00 on an open line of credit facility (securitized by portfolio assets on deposit) from our investment adviser, LPL Financial. During the FY 2019, the Department fully paid off the December 31, 2018 balance of \$2,771,987. While currently at \$0, the Department does, from time to time, access this line if and where beneficial. As of December 31, 2019, the Department held \$12,241,816 of its portfolio securities in type 2/marginable position with the capacity to access \$6,120,908 on demand. The current interest rate on the line of credit is 3.25%, which is a negotiated 4.5% discount off of LPL's base lending rate for balances over \$1,000,000. The base interest rate, while stable for the past 3 years, may be subject to change at any time and is based upon commercially recognized interest rates, industry conditions relating to extension of credit and general market conditions.

HOLYOKE GAS AND ELECTRIC

(Enterprise and Fiduciary Funds of the
City of Holyoke, Massachusetts)

NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 13 – RISK MANAGEMENT

CLAIMS AND JUDGMENTS

The utility is exposed to various risks of loss related to torts; theft of, damage to, or destruction of assets; errors, and omissions; workers compensations; and health care of its employees. The utility participates in a public entry risk pool called the PUMIC to provide coverage for the above-mentioned risks except for workers compensation. The following details the coverage through the PUMIC. Settled claims have not exceeded the risk pool coverage in any of the past three years. There were no significant reductions in coverage compared to the prior year.

PUBLIC ENTITY RISK POOL

Public Utility Mutual Insurance Company (PUMIC)

The PUMIC is a liability insurance company, which is owned by its members. The PUMIC was formed in 1997 to provide general insurance to members of the Public Utility Risk Management Association (PURMA). PURMA is a 501(c)(6) not-for-profit association whose members include municipal utilities and rural cooperatives.

The PUMIC is self-insured up to a maximum of \$1,000,000 of each insurance risk. Losses paid by the PUMIC plus administrative expenses will be recovered through premiums to the participating pool of municipal utilities and rural cooperatives.

Management of each organization consists of a board of directors comprised of representatives elected by the participants. The utility has an employee participating as a board member in each of the organizations.

Financial statements of PUMIC and PURMA can be obtained directly from PUMIC's offices.

The initial investment in PUMIC is refundable upon withdrawal from the organization and has been reported at the original amount of \$168,000.

For general liability purposes, the Department is self-insured up to \$50,000, has self-insurance trust coverage in the amount of \$500,000 and general liability insurance through the risk pool for \$500,000 to \$25,000,000 per occurrence. The Department was also self-insured for workers compensation up to \$250,000 per occurrence through December 31, 2014. The Department has since moved to commercial insurance for workers compensation.

HOLYOKE GAS AND ELECTRIC

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NOTES TO FINANCIAL STATEMENTS

As of and for the Years Ended December 31, 2019 and 2018

NOTE 14 – SUBSEQUENT EVENTS

The Department evaluated subsequent events through the date that the financial statements were available to be issued, for events requiring recording or disclosure in the financial statements. No events requiring disclosure were noted.

NOTE 15 – CUMULATIVE EFFECT OF A CHANGE IN ACCOUNTING PRINCIPLE

The Department adopted GASB 75 effective January 1, 2018. The cumulative effect of implementation is reflected as a change in beginning 2018 net position as follows:

Net OPEB Liability (Asset) as of January 1, 2018 under GASB 45	\$	(43,421)
Less: Net OPEB Liability as of January 1, 2018 under GASB 75		<u>7,726,144</u>
Net Difference – Cumulative Effect of a Change in Accounting Principle	\$	<u>(7,769,565)</u>

NOTE 16 – RESTATEMENT OF NET POSITION

Net position has been restated to correct cumulative errors in the calculation of deferred outflows of resources and deferred inflows of resources related to pension.

	As previously stated	As restated	Effect of corrections
Deferred outflow	\$ 12,483,895	\$ 7,732,909	\$ (4,750,986)
Deferred inflow	3,688,057	4,615,729	947,672
Net position – January 1, 2018	89,644,615	85,472,694	(4,171,921)
Net position – December 31, 2018	88,184,324	82,485,666	(5,698,658)
Gas operation and maintenance	17,875,351	18,317,936	442,585
Electric and telecommunications operation and maintenance	38,133,944	39,198,096	1,084,152
Operating income	12,168,766	10,642,029	(1,526,737)
Change in net position	6,309,274	4,782,537	(1,526,737)

REQUIRED SUPPLEMENTARY INFORMATION

HOLYOKE GAS AND ELECTRIC

SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY City of Holyoke Retirement System Last 10 Fiscal Years*

The required supplementary information presented below represents the proportionate information for the enterprise funds included in this report.

	2019	2018	2017	2016	2015
Holyoke Gas and Electric's proportion of the net pension liability	22.7516170%	21.8667720%	21.0663720%	20.7392330%	20.4671670%
Holyoke Gas and Electric's proportionate share of the net pension liability	\$ 34,387,346	\$ 25,930,197	\$ 30,715,656	\$ 30,700,334	\$ 27,426,467
Holyoke Gas and Electric's covered employee payroll	12,629,315	11,779,347	11,381,012	10,862,753	10,776,026
Plan fiduciary net position as a percentage of the total pension liability	64.90%	71.67%	64.26%	62.55%	64.47%

* The amounts presented for each fiscal year were determined as of the calendar year-end that occurred within the fiscal year.

SCHEDULE OF CONTRIBUTIONS - PENSION City of Holyoke Retirement System Last 10 Fiscal Years*

	2019	2018	2017	2016	2015
Contractually required contributions	\$ 3,958,373	\$ 3,856,839	\$ 3,711,165	\$ 3,596,091	\$ 3,526,919
Contributions in relation to the contractually required contributions	(3,958,373)	(3,856,839)	(3,711,165)	(3,596,091)	(3,526,919)
Contributions deficiency (excess)	-	-	-	-	-
Holyoke Gas and Electric's covered-employee payroll	12,976,188	12,629,315	11,779,347	11,381,012	10,862,753
Contributions as a percentage of covered-employee payroll	30.50%	30.54%	31.51%	31.60%	32.47%

* The amounts presented for each fiscal year were determined as of the calendar year-end that occurred within the fiscal year.

See accompanying notes to required supplementary information.

HOLYOKE GAS AND ELECTRIC

SCHEDULE OF CHANGES OF THE NET OPEB LIABILITY City of Holyoke Retirement System Last 10 Fiscal Years*

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Total OPEB Liability			
Service Cost	\$ 518,484	\$ 594,872	\$ 526,946
Interest Cost	1,119,602	1,008,278	998,426
Differences between expected and actual experience	(222,610)	289,069	-
Changes of assumptions	(83,641)	463,399	-
Benefit payments, including refunds of member contributions	<u>(579,319)</u>	<u>(574,584)</u>	<u>(824,241)</u>
Net Change in Total OPEB Liability	<u>752,516</u>	<u>1,781,034</u>	<u>701,131</u>
 Total OPEB Liability - Beginning	 <u>18,335,906</u>	 <u>16,554,872</u>	 <u>15,853,741</u>
 Total OPEB Liability - Ending	 <u>\$ 19,088,422</u>	 <u>\$ 18,335,906</u>	 <u>\$ 16,554,872</u>
 Plan Fiduciary Net Position			
Contributions - employer	\$ 2,559,063	\$ 1,774,584	\$ 2,024,241
Net investment income (loss)	1,866,028	(593,694)	840,362
Benefit payments, including refunds of member contributions	<u>(579,319)</u>	<u>(574,584)</u>	<u>(824,241)</u>
Net Change in Fiduciary Net Position	<u>3,845,772</u>	<u>606,306</u>	<u>2,040,362</u>
 Plan Fiduciary Net Position - Beginning	 <u>9,435,034</u>	 <u>8,828,728</u>	 <u>6,788,366</u>
 Plan Fiduciary Net Position - Ending	 <u>\$ 13,280,806</u>	 <u>\$ 9,435,034</u>	 <u>\$ 8,828,728</u>
 Net OPEB Liability			
Net OPEB liability	\$ 5,807,616	\$ 8,900,872	\$ 7,726,144
Plan's fiduciary net position as a percentage of the total OPEB liability	69.58%	51.46%	53.33%
Covered-employee payroll	13,115,000	12,520,427	12,187,515
Net OPEB liability as a percentage of covered-employee payroll	44.28%	71.09%	63.39%

* The amounts presented for each fiscal year were determined as of the calendar year-end that occurred within the fiscal year.
GASB Statement No. 74 was implemented effective January 1, 2017, and therefore only three years are available for disclosure.

See accompanying notes to required supplementary information.

HOLYOKE GAS AND ELECTRIC

SCHEDULE OF CONTRIBUTIONS - OTHER POST-EMPLOYMENT BENEFITS City of Holyoke Retirement System Last 10 Fiscal Years*

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Actuarially determined contribution	\$ 1,732,455	\$ 1,974,179	\$ 1,978,662
Contributions in relation to the actuarially determined contribution	<u>2,559,063</u>	<u>1,774,584</u>	<u>2,024,241</u>
Contribution Deficiency (Excess)	\$ <u>(826,608)</u>	\$ <u>199,595</u>	\$ <u>(45,579)</u>
Covered-employee payroll	13,115,000	12,520,427	12,187,515
Contributions as a percentage of covered-employee payroll	19.51%	14.17%	16.61%

* The amounts presented for each fiscal year were determined as of the calendar year-end that occurred within the fiscal year.
GASB Statement No. 74 was implemented effective January 1, 2017, and therefore only three years are available for disclosure.

See accompanying notes to required supplementary information.

HOLYOKE GAS AND ELECTRIC

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION - PENSIONS For the Year Ended December 31, 2019

Changes of benefit terms: There were no changes of benefit terms for any participating employer in the City of Holyoke Retirement System.

Changes of assumptions: There were no changes of assumptions for any participating employer in the City of Holyoke Retirement System.

HOLYOKE GAS AND ELECTRIC

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – OTHER POST-EMPLOYMENT BENEFITS For the Year Ended December 31, 2019

Factors significantly affecting trends in the amounts reported:

Inflation	3.50%
Salary increases	Service-related increases for Group 1: 6.0% per year decreasing over 9 years to 4.25% per year Service-related increases for Group 4: 7.0% per year decreasing over 6 years to 4.75% per year
Investment rate of return	6.25%
Healthy Mortality Rates	PubG.H-2010 Mortality Table with MP-2018 Mortality Scale

Significant Methods and assumptions used in calculating actuarially determined contributions:

Valuation Date	Actuarially determined contribution for fiscal year ending December 31, 2018 was determined with the December 31, 2018 actuarial valuation
Actuarial cost method	Entry Age Actuarial Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	6 years from December 31, 2018
Asset valuation method	Market value
Discount rate	6.25%
Inflation	3.50%
Health care trend rates*	6.00% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
<i>Non-Medicare medical/prescription drug</i>	6.00% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
<i>Medicare medical/prescription drug</i>	6.00% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
<i>Dental/Administrative</i>	6.00% per year graded down by the Getzen model to an ultimate rate of 3.84% per year
<i>Contributions</i>	Retiree contributions for medical and prescription drug coverage are expected to increase with medical trend

**Trends reflect known increases for the first year*

S U P P L E M E N T A R Y I N F O R M A T I O N

HOLYOKE GAS AND ELECTRIC

SCHEDULES OF OPERATING REVENUES AND EXPENSES - GAS DIVISION

For the Years Ended December 31, 2019 and 2018

	2019	Restated 2018
OPERATING REVENUES		
Residential	\$ 9,992,516	\$ 9,902,559
Commercial	9,532,673	10,090,846
Industrial	2,106,098	2,122,488
Municipal	746,206	782,649
Departmental sales	69,244	78,644
Sales for resale	280,649	380,335
Uncollectible accounts	(103,355)	(52,106)
Total Operating Revenues	\$ 22,624,031	\$ 23,305,415
COST OF GAS SOLD		
Purchases - natural gas	\$ 9,135,176	\$ 9,585,916
Liquid natural gas processed	862,926	512,365
Environmental response	99,087	165,000
Supplies and expenses	215,493	167,000
Total Cost of Gas Sold	\$ 10,312,682	\$ 10,430,281
DISTRIBUTION		
Salaries and Wages		
System control and load dispatch	\$ 355,607	\$ 345,509
Supervision and engineering	362,527	306,844
Customer installation	637,254	555,093
Operation	594,329	624,187
Maintenance	1,002,134	987,390
Supplies and expenses	1,275,404	1,060,757
Total Distribution	\$ 4,227,255	\$ 3,879,780
CUSTOMER ACCOUNTS		
Salaries and Wages		
Meter reading	\$ 64,458	\$ 65,410
Accounting and collection	136,487	134,573
Supplies and expenses	81,794	71,149
Total Customer Accounts	\$ 282,739	\$ 271,132
GENERAL AND ADMINISTRATIVE		
Salaries	\$ 918,036	\$ 969,177
Pensions and benefits	2,288,852	1,988,274
Insurance	142,741	108,686
General supplies and expenses	805,666	670,605
Total General and Administrative	\$ 4,155,295	\$ 3,736,742

HOLYOKE GAS AND ELECTRIC

SCHEDULES OF OPERATING REVENUES AND EXPENSES -
ELECTRIC AND TELECOMMUNICATIONS DIVISIONS
For the Years Ended December 31, 2019 and 2018

OPERATING REVENUES	2019	Restated 2018
Electric Sales		
Residential	\$ 13,761,888	\$ 14,131,712
Commercial	22,864,402	23,263,362
Industrial	5,608,409	5,872,405
Municipal	2,721,583	2,746,918
Interdepartmental	274,277	296,314
Water	6,300	6,300
Renewable energy revenue	2,061,618	2,896,778
Cobble Mountain operation - net	611,416	573,648
Telecommunication sales	2,529,281	2,406,321
Uncollectible accounts - electric/hydro	(241,664)	(120,109)
Uncollectible accounts - telecommunications	-	(725)
Total Operating Revenues	\$ 50,197,510	\$ 52,072,924
COST OF ELECTRICITY/STEAM/WATER SOLD		
Purchases - electricity	\$ 13,039,813	\$ 14,965,829
Salaries and Wages		
Production	1,265,944	1,282,691
Maintenance	1,514,180	1,422,156
Supplies and expenses	2,501,500	2,018,253
Cost of water sold	738,610	372,588
Total Cost of Electricity/Steam/Water Sold	\$ 19,060,047	\$ 20,061,517
ELECTRIC TRANSMISSION		
Salaries and wages	\$ 681,834	\$ 688,232
Supplies and expenses	166,027	817,619
Transmission by others	1,682,142	2,572,238
Total Electric Transmission	\$ 2,530,003	\$ 4,078,089
DISTRIBUTION		
Electric		
Salaries and Wages		
Lines, equipment and street lights	\$ 2,715,117	\$ 2,577,454
Customer installations	217,181	251,674
Supplies and expenses	3,105,706	3,006,717
Telecommunications distribution	1,611,214	1,532,813
Total Distribution	\$ 7,649,218	\$ 7,368,658
CUSTOMER ACCOUNTS		
Electric		
Salaries and Wages		
Meter reading	\$ 125,394	\$ 121,494
Accounting and collection	253,476	249,882
Supplies and expenses	163,066	125,234
Total Customer Accounts	\$ 541,936	\$ 496,610
GENERAL AND ADMINISTRATIVE		
Electric		
Salaries	\$ 1,736,824	\$ 1,808,773
Pensions and benefits	4,943,853	4,177,831
Insurance	508,401	441,376
General supplies and expenses	1,541,112	1,637,214
Telecommunications general and administrative	774,202	603,538

COVER PHOTO CREDIT:

Lafayette Sawyer

(HG&E Senior Electronic Technician)