



 **HGE** & E

**2012**

2012 ANNUAL REPORT





To the Honorable Mayor, Members of the City Council, and our Valued Customers:

Submitted herewith is the One Hundred and Tenth Annual Report of the City of Holyoke Gas & Electric Department (HG&E) for the year ending December 31, 2012.

In 2012, HG&E delivered strong financial performance while maintaining some of the lowest rates in the Commonwealth, demonstrating our commitment to reliability and protecting our environment. Over 65% of the electricity sold by the Department came from renewable resources and over 92% of the electricity sold was carbon-free, far exceeding the Commonwealth's renewable portfolio standard requirements for renewable energy. In addition, HG&E continues to offer an aggressive energy conservation assistance program, providing its customers the ability to reduce energy consumption through a variety of measures with interest-free assistance that is paid back on the monthly utility bills.

HG&E continued to implement its mission of balancing hydroelectric generation with protecting valuable natural, cultural, and scenic resources. Several canal hydroelectric generating units underwent capital upgrades during the year and construction of an ADA accessible fishing outlook at Slim Shad Point was completed in September.

The Electric Division continued to modernize the Department's distribution system for increased reliability with circuit upgrades, voltage conversions, and construction of the new North Canal Substation on Water Street. Additionally, HG&E completed the first phase of a three-year project to replace all streetlights with new light emitting diode (LED) streetlight fixtures, which produce more direct light and provide reduced HG&E maintenance costs and significant savings to the City through improved efficiency and lower energy consumption.

In 2012, the Gas Division was very busy installing new services and replacing aging infrastructure. As customers continue to take advantage of the cost advantage that natural gas provides compared to oil, a total of 156 gas service lines were installed for new customers—95 in Holyoke and 61 in Southampton. The Department also continued its ongoing program of replacing cast iron mains and bare steel services.

The Telecommunications Division continued its sales growth in fiber optic Internet and MetroE Transparent LAN commercial network services and executed the launch of business telephone services delivered over the HGE.net commercial network. This division also continued its support for the City of Holyoke information technology operations.

We thank the City officials and Department employees for their continued faithful service to HG&E. 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



*Thanks to the work of our talented crews, the Holyoke/Southampton natural gas distribution system consists of over 175 miles of mains, 7,665 service lines, and 10,500 active gas meters.*

## **NEW SERVICES**

In 2012, the Gas Division installed 156 service lines to new customers —95 in Holyoke and 61 in Southamptton. The Department also replaced a record 215 existing services in Holyoke by burying new plastic pipe or inserting it through older existing steel lines. In addition, 103 service lines that were no longer needed were abandoned.

## **NEW AND REPLACEMENT MAINS**

In Holyoke, gas main construction continues for replacing cast iron mains. The Department replaced a total of 4,550 feet of small diameter, wrought iron pipe with plastic pipe on River Terrace, Pleasant Street, Radcliffe Street, Fairfield Avenue, Jefferson Street, West Glen Street, Monroe Street, Sargeant Street, Chestnut Street, Oak Street, and Rene Drive. The new plastic mains are generally four or six inches in diameter.

The Department installed new 4-inch plastic gas mains on Dunn Avenue and Berkshire Street. A new 6-inch main on Cross Road will connect another 22 potential customers.

The Gas Division continued to expand in Southamptton by extending the gas main on Helen Drive, Pomeroy Meadow Road Extension, and Sara Lane providing access to 10 potential customers.

The Holyoke/Southampton natural gas distribution system now consists of over 175 miles of mains, 7,665 service lines, and 10,500 active gas meters.

In accordance with the 2011 Gas Division Distribution Integrity Management Plan (DIMP), the Department embarked on a 10-year bare steel service replacement program. There are approximately 2,700 bare steel gas services remaining in Holyoke. Bare steel services were installed from the early 1900s through the late 1960s. At the conclusion of this replacement program, all gas services will be constructed of either polyethylene plastic or coated steel.

## **LEAK SURVEYS**

The Department helps to ensure the safety and reliability of the gas distribution system through an extensive series of compulsory and voluntary 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 3,800 lines in 2012, or about one-half of the service pipes in the system.

## CORROSION MITIGATION

The Gas Division continued its aggressive program to mitigate corrosion on its coated steel piping systems. In 2012, inspections were made of all 74 of the cathodically protected systems and the 26 coated-steel services longer than 100 feet. At year's end, 88% of the systems exceeded the federal requirements for corrosion control, with the rest requiring some remedial action in 2013. Additionally, 41 isolated steel gas services (less than 100 feet in total length) were inspected and maintained. Additional repairs and inspections are scheduled for 2013.

## GAS SUPPLY AND FLOW CONTROL

The Gas Division delivered 1,867,130 MCF of gas in 2012, with a peak send-out of 14,787 MCF on January 15. Of that, 11,949 MCF was delivered over the pipeline and 2,838 MCF was supplemented by Liquefied Natural Gas (LNG). 2012 was a warm year with 5,465 degree days, which is well below the 10-year average of 6,183.

The Gas Division continues to operate its LNG storage and vaporizing system, providing the extra gas needed during the coldest winter days and as an emergency supply for the entire city if needed.

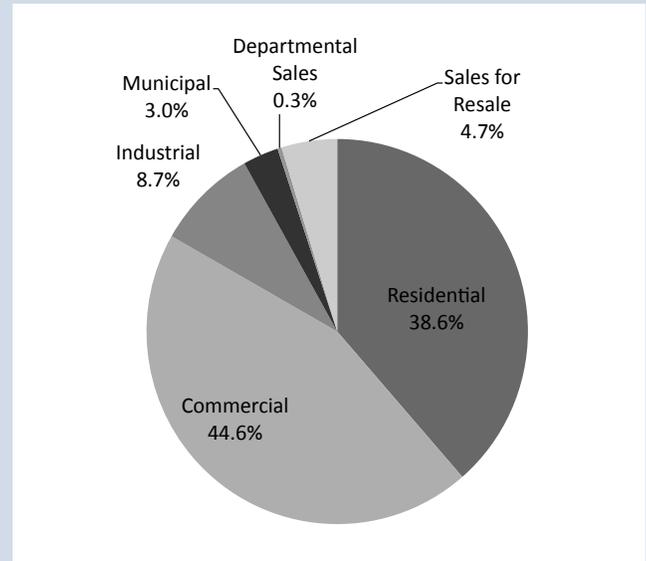
The telemetry system, which monitors and transmits gas system pressure data, began the first of a three-phase overhaul. The system was installed at five regulator stations and tied in to the Supervisory Control and Data Acquisition (SCADA) system through HG&E's fiber optic network.

The Department installed a new district regulator station at the corner of Sargeant Street and Commercial Street to supplement system demand. This station takes high pressure gas and regulates it to low pressure gas. The regulator station at Hampden and Northampton Streets was completely rebuilt to accommodate increased load.

## SERVICE

The Service Department completed 3,197 appliance repair service calls for customers in Holyoke and Southampton during 2012. These calls include boiler/furnace, water heater, and dryer repairs as well as thermostat installations. In addition, the service men completed 1,597 gas meter changes to comply with the state-mandated, 7-year meter exchange requirement. A total of 8,929 service orders were completed for gas and electric meter turn ons and turn offs.

2012 Gas Division Revenues



# ELECTRIC PRODUCTION HYDRO



*In 2013, the Hydro Division continued to implement its mission of balancing hydroelectric generation with protecting valuable natural, cultural, and scenic resources and providing public recreation facilities.*

## HYDROELECTRIC FACILITIES

A number of projects were completed which improved or will contribute to future generation capacity and reliability of the Department's Hydroelectric facilities. These projects included:

**Harris Projects:** As part of a Strategic Plan, the Hydro Division is working towards a reduction in generators in the abandoned Harris Mill complexes. In 2012, the Division surrendered the FERC License for the Gill Mill A Wheel plus the Crocker A/B and C units. The project consisted of concrete capping the penstocks for each of these units. The Department retains the water rights for the retired units and may apply the rights to new construction.

**Grant Award for Boatlock Station Unit 2 Runner:** On June 27, 2011, HG&E received a Notice of Award from the Massachusetts Clean Energy Center as a grant in an amount not to exceed \$300,000 towards the replacement of a turbine runner for Boatlock Station Unit 2. Plans are to acquire the runner in 2013.

**Hadley Station Unit 2:** A major Dewatering Inspection of Hadley Unit 2 was conducted in the summer of 2012 and included turbine runner and cavitation repairs. The service water and control systems were both upgraded.

**Hadley Falls Unit 1 Modernizing Plans:** HG&E is currently engaged in the design of the Hadley Falls intake structure modifications to implement downstream fish passage measures as required by the Comprehensive Settlement. The revised Comprehensive Operations Flow Plan (COFP) requires that additional flow be diverted to the bypass reach during fish migration and other critical periods (e.g. upstream spawning runs, downstream post-spawning movements, rearing, and peak foraging). This will result in reduced energy production at Hadley Falls since this additional bypass flow will not be available for generation.

Plans to upgrade Hadley Unit 1 were underway in 2012, considering both increased energy production and evaluation of the fish exclusion rack project, which is currently in progress. Alternatives for maximizing the operating efficiency of the existing units include installation of new turbine runner, generator rewinds, and upgrading the station switchgear. In 2012, the design and bid package for Hadley Falls Unit 1 overhaul was completed. A contract is in place with Voith Hydro and long-lead items (generator, turbine blades, runner hub, and wicket gates) have been ordered.

**Beebe Holbrook E&F Wheel:** Major outage where the turbine guide bearing was rehabilitated, the generator stator was cleaned, and other maintenance was performed.

**City Unit 2:** Installation of PT drawers with automation and synchronization upgrades.

**City Unit 4:** Concrete was placed on the floors of City 4J and City 4K to fortify the tailrace passageway.

**Riverside Units 4 & 5:** Automation and synchronization upgrades. In addition, Riverside 4 had its turbine guide bearing overhauled.

**Riverside Unit 7:** Upgrades included replacing the unit PLC as well as installation of additional unit protection devices. In addition to these upgrades, the thrust bearing oil cooler was overhauled.

**Other special projects included:**

**Annual Spring and Fall Canal Inspections:** Assessment of canals and canal walls including overflows, intakes, penstocks, powerhouses, and tailraces.

**Building infrastructure maintenance, repair and upgrades:**

Extensive building repairs were performed on Riverside Station, Riverside A/B Building, Boatlock Station, and Skinner Station. Riverside Station required brick pointing and roof repair. Riverside A/B Building underwent a face lift with modernized office space which included windows, HVAC upgrades (in Riverside A Building), flooring and insulation. Boatlock Station had concrete repairs to the scroll gate passageways and to the eastern face of the building. Skinner Station received a new roof, louvers, and paint job to mimic the new Massachusetts Green High Performance Computing Center.

**2012 HG&E SHAD DERBY**

The 2012 Shad Derby was held on the weekend of May 21-22. The event attracted 91 registrants in the Senior Division and 64 registrants in the Junior Division. With registration required only at the time of weighing, many more boat and bank anglers participate in the event than these numbers reflect.

Al Valiquette of Springfield, Massachusetts won the first place award in the 2012 Senior Division with a 5 lb. 7 oz. shad. Brian Hart of Westfield, Massachusetts led the Junior Division with a 4 lb. 9 oz. shad. The John Dinapoli Award for the first shad caught by a youth went to Aaron Bowling of Erving, Massachusetts.



**2012 FISH PASSAGE**

HG&E's fish lift at the Robert E. Barrett Fishway helps migrating fish reach spawning areas above the Holyoke Dam. Purchased from Northeast Utilities in 2001, it is the first and most successful fish lift on the Atlantic coast. Two fish elevators carry migrating fish safely 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:

<b>American Shad</b>	<b>490,431</b>
<b>Atlantic Salmon</b>	<b>29</b>
<b>Blueback Herring</b>	<b>39</b>
<b>Sea Lamprey</b>	<b>14,089</b>
<b>Striped Bass</b>	<b>336</b>
<b>Shortnose Sturgeon</b>	<b>5</b>
<b>Gizzard Shad</b>	<b>337</b>

In addition to the fish passage facilities, there are two eel ramp passages on both the Holyoke and South Hadley shores below the dam. The number of American Eels counted at the eel ramps in 2012 was 39,423.

In 2012, the public viewing facility at the Barrett Fishway was open from May 9th through June 17th and attracted 10,303 visitors. The opportunity to view fish on their annual spring spawning run is a rare opportunity and demonstrates HG&E's commitment to Connecticut River stewardship and educational initiatives.

# ELECTRIC DIVISION



*In November of 2012, HG&E's line crews kept the city of Holyoke up and running during Super Storm Sandy.*

*Electric Distribution Crew Members Right to Left: Brian Wall, Larry Larocque, Matt Atchison, Glen Cartwright, Ken Atchison, Matt Fitzgerald, Alan Kwasnik and Ryan McMahan*

## **ELECTRIC OPERATIONS**

In 2012, the main focus was constructing and commissioning the new 115 kV/34.5 kV/13.8 kV North Canal Substation. Significant progress began with construction starting in May and being completed in November. The substation includes a 115kV six (6) breaker ring bus, two (2) 115/34.5 kV power transformers, two (2) 115/13.8 kV power transformers, a line up of 34.5 kV switchgear, a line up of 13.8 kV switchgear, and all associated relay and control panels.

On December 7th, the 115 kV ring bus was energized completing the transmission path through the city. On December 28th, the 115/34.5 kV transformers and associated busses were placed into service and commissioned. This allowed us to energize the Massachusetts Green High Performance Computing Center's (MGHPCC) 34.5 kV service which was one of the major objectives of the project. The 115/13.8 kV transformers are scheduled to be energized in 2013, with load transferred from Prospect Substation in Chicopee shortly thereafter.

Another facet of the North Canal Substation project is transferring the Hadley Falls hydro generation to the North Canal 34.5 kV busses. This requires construction of a new generator step up (GSU) substation in order to transform the Hadley Falls generator voltage (6.9 kV and 13.8 kV) to 34.5 kV. Significant progress was made with this project as well. Construction started in August, and included a 34.5/13.8 kV transformer, 34.5/6.9 kV transformer, a line up of 34.5 kV switchgear and associated relay and control panels, and several structures required to relocate the generator leads to the new substation. In 2012, all work was completed except for the erection of the plant takeoff structure. This is planned to be completed in 2013 when an outage can be scheduled, along with the transfer of generation to the new substation.

Other major projects that were completed in 2012 include the implementation of four (4) distribution recloser Auto Loop Schemes, installation of a SCADA RTU at Walnut Substation, and the overhaul of the 17L-1S station service transformer at the Electric Station. Support and expertise was also provided during the Department's National Energy Regulatory Committee (NERC) audit, which the Department successfully passed.

## **ELECTRIC DISTRIBUTION**

Electric distribution system improvements in 2012 included the replacement of two sections of primary cable and secondary wire: an 800 foot section of underground primary cable on Appleton Street between Main Street and Bowers Street and a 700 foot

section of overhead secondary open wire with triplex wire that serves customers on Pleasant Street and Taylor Street. Two new above-grade termination cabinets were installed on Cabot Street and Kelly Way eliminating the use of feed thru devices inside the manholes while providing sectionalizing and isolation capabilities should circuit issues arise.

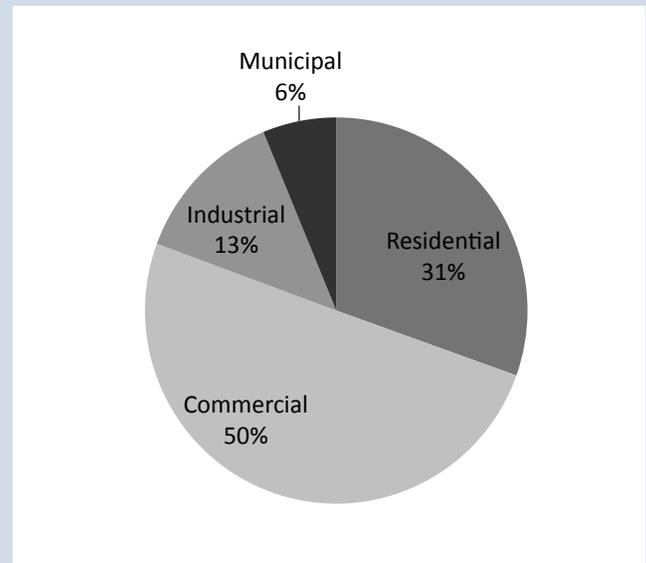
Two new 35kV distribution circuits from the new North Canal Substation were installed as part of the construction of the new Massachusetts Green High Performance Computer Center (MGHPCC) on Bigelow Street. A new mile-long duct bank originating from North Canal substation on Water Street along Appleton Street to the new Bigelow Street site was constructed. Each circuit can provide the 20 MVA capacity required by MGHPCC with backup capabilities as well as provide an additional capacity of up to 5 MVA for future growth on-site. Once in full operation, MGHPCC will be the largest customer on our distribution system.

The second phase of infrastructure improvements for our uptown network was completed. A new 700 foot conduit bank with two manholes extending from the Electric Station along the Second Level Canal onto Cabot Street to the entrance of Bigelow Street was installed to alleviate underground congestion along High Street and improve network reliability. Ten of the twenty-two network protectors were also refurbished and installed with SCADA-ready communications for future installation in 2013.

The Department began the first of a three year installation of new light emitting diode (LED) roadway fixtures. LED fixtures will be replacing all existing high pressure sodium (HPS) fixtures over a three year period. LED fixtures, on average, will reduce the City's street light consumption by approximately 60%, reduce Department maintenance costs, last 3-4 times longer than a typical HPS roadway fixture, and provide more uniform and direct lighting on city streets. There were a total of 1,698 LED roadway fixtures installed in the West Holyoke and Smiths Ferry area of the City.

There were two areas in the Highlands in which backyard overhead infrastructure was addressed. Approximately 2,300 feet of new conduit was installed along Pleasant Street between Harvard Street and River Terrace. New primary cable and three padmount transformers were installed replacing some of the backyard infrastructure. Services to six customers on Pleasant Street were also placed underground as part of the project. All of the work was performed in conjunction with the Pleasant Street State reconstruction project. Approximately 2,500 feet of new conduit was installed on Vassar Circle. New primary cable and three padmount transformers were also installed replacing some of the backyard infrastructure. Services to seven customers were placed underground as part of this project.

## 2012 Electric Division Revenues



Voltage conversion of the O4 4.8 kV circuit originating from Oakdale Substation to 13.8 kV was completed in 2012. The conversion area included Cherry Street between Homestead Avenue and Northampton Street; Homestead Avenue between Cherry Street and Nicholls Drive; Northampton Street between Cherry Street and Columbus Avenue; and Hillside Avenue between Cherry Street and Columbus Avenue including most connecting nearby laterals. Approximately 3.5 circuit miles of wire and 24 wood poles were replaced as part of the project. This work also included other reliability upgrades such as replacing all porcelain hardware with polymer and installing new crossarms, insulators, connectors, and fault indicators. A smaller 4.8 kV to 13.8 kV conversion was also performed on River Terrace, Montgomery Avenue, Bullard Avenue, and Wyckoff Avenue in conjunction with the Pleasant Street State reconstruction project. There was 100 kVA of connected load transferred from the H1 circuit to the 36H1 circuit as a result of this conversion.

Eighteen services on Hampden Street, Harvard Street, Northampton Street, Pleasant Street, Vassar Circle, Westfield Road, and Yale Street were relocated from heavily overgrown areas with difficult accessibility to the street. This will provide these customers with not only a more reliable electric service but also protection from potential safety hazards and safety code violations which will, in turn, reduce some of the tree trimming and outage costs of the Department.

Four new electric services, Girl Scouts of America on Kelly Way, Community Field Recreation Park at the top of Ridgewood Avenue, Hunter Tree Service on Berkshire Street, and the Holyoke Senior Center on Pine Street, resulted in a net additional connected load of 590 kVA. A significant service upgrade at Sullivan Scrap Metals on

*Electric Division, Left to Right: Jonathan Zwirko, Brian Beauregard, Sarah LaRose*



Appleton Street resulted in additional connected load of 500 kVA. There were also 7 new homes that required new electric services resulting in a connected load of 50 kVA. The new homes were constructed on available lots on Deer Run, Chestnut Street, Lower Westfield Road, and Michelle Lane.

In summary for 2012, HG&E set 110 poles and removed 86. A net 69 kVA connected load was removed from the distribution system. Some 22,180 circuit feet of underground cable was installed while 6,976 was removed. Similarly, 39,936 circuit feet of overhead wire was installed while 19,420 was removed. Approximately 10.7 miles of conduit was installed including 56,524 feet of PVC and 50 feet of steel. There was a net decrease of 2 in the total number of contract lights and 7 in the total number of street lights on the distribution system.

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 five statistics used to define the length and frequency of interruptions to customers, system availability, and the number of customers impacted by outages, as you can see in the Reliability Statistics chart.

## METERING

The metering group completed its gas and electric automatic meter reading (AMR) migration so that all residential and smaller commercial customer meters can now be read remotely. There are a total of 17,396 AMR electric meters installed which represents over 99% of all electric meters. The remaining installations predominantly represent larger commercial and industrial customer meters. There were 314 meters retrofitted with new register boards to accommodate an increased signal output for added reliability and future outage reporting. On the gas side, the metering group installed a total of 1,630 AMR-enabled gas meter indexes. All 12,070 gas meters installed can now be read remotely.

A total of 19 transformer, station service, and generation meters were tested to meet ISO-NE's OP-18 metering requirements which include meters at Prospect, Cabot, and new North Canal substations, and the City 3, Skinner, Boatlock, and Cobble Mountain generation stations.

In summary, there were a net total of 6 electric meters installed, 245 electric meters replaced, and 380 electric meters retired having an average age of 19.88 years. A total of 1,336 electric meters were tested and calibrated, 81 voltage tests, 620 turn ons and 438 turn offs, and 2,450 electric successions performed, and 124 no- or low-consumption reports investigated for metering problems and/or theft of service. A net total of 12 current transformers and 4 potential transformers were installed. On the gas side, 1,863 meters were removed and tested, 2,006 meters were installed, another 2,128 meters were sealed, and 163 meters were retired.

## Electric Distribution System Reliability Statistics

Statistic	2012	2011
<b>ASAI</b>	99.996%	99.993%
<b>CAIDI</b>	49.77 min	83.75 min
<b>SAIDI</b>	19.30 min	35.89 min
<b>SAIFI</b>	0.39 outages	0.43 outages
<b>MAIFI</b>	1.83 events	1.18 events

*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.

*Momentary Average Interruption Frequency Index (MAIFI)*—defines the average number of momentary outages a customer may experience in a year.

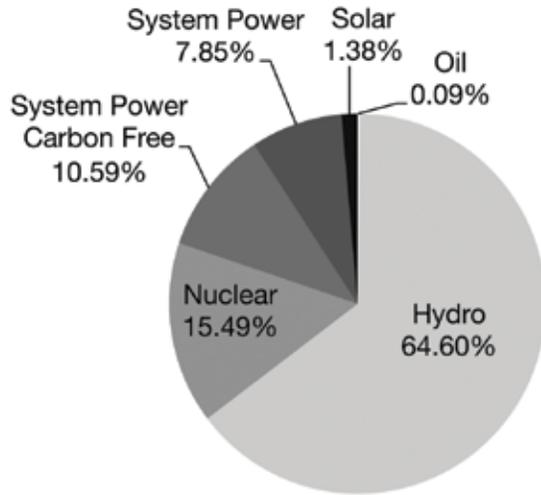
## WHOLESALE POWER

A total of 234,071 MWh of net generation was produced from the Department-owned hydro resources which continued to help drive down the overall cost of power. During 2012, the hydro preference power credits to our residential customers remained at 1.2¢/kWh throughout the year which generated total savings of \$1,175,014 — \$516,483 from Department-owned hydro and \$658,532 from NYPA entitlements.

The Holyoke Hydroelectric system, including the Hadley Falls Dam and the Holyoke-owned hydro facilities located on the canal system was certified by the Low Impact Hydropower Institute (LIHI) effective January 1, 2012 allowing the Department to register for Massachusetts Class I and II status. Three (3) Massachusetts Class II Statement of Qualification Applications were submitted and approved by the DOER by year end. All 2012 certificates were banked to allow for sale during 2013 while certification of balance of facilities are completed.

HG&E executed a twenty-year Power Purchase Agreement with Constellation Energy to purchase 100% of the solar output from two ground-mounted projects located within Holyoke on Mueller

### 2012 Sources of Annual Electric Supply



### 2012 Carbon Footprint

Fuel Type	Energy	CO <sup>2</sup> Emissions	
	(MWh)	(Tons)	(lbs CO <sub>2</sub> /MWh)
Oil	334	316	
Hydro	248,750	0	
Nuclear	59,693	0	
System Power Carbon Free	40,800	0	
System Power	30,248	13,603	
Solar	5,322	0	
<b>Total</b>	<b>385,148</b>	<b>13,919</b>	<b>72</b>

Road (3.497 MW DC) and Meadow Street (1.029 MW DC) for a total project size of 4.526 MW. This project produced 5,318 MWh of green power for the Department in 2012.

HG&E executed a ten-year Power Transaction and Nuclear Certificates with Nextera Energy Power Marketing, LLC. This transaction produced 40,800 MWh of carbon/emission-free power for the Department in 2012 and helped to stabilize rates for customers in the large industrial rate classification.

Renewable resources (hydro and solar) make up 65.98% of the Department's 2012 generation and 92.06% is carbon free (renewable and nuclear). See the graph which summarizes the Department's resource mix by energy type. Note that System Power represents short-term bilateral contracts representative of system mix within ISO-NE that were procured during the summer time frame, and Carbon-Free System Power represents a long-term, on-peak bilateral contract with nuclear certificates attached.

The Department's average annual carbon dioxide emissions per MWh for 2012 is 72 pounds, compared to an average of 856 pounds for the typical utility in New England.

# POWER SUPPLY

## 2012 Power Supply Resources

PROJECT NAME	FUEL TYPE	PROJECT	CONTRACT CAPACITY (kW)		CONTRACT
		START DATE	WINTER	SUMMER	END DATE
<b>BASE UNITS</b>					
NYPA FIRM	HYDRO	1985	2,662	2,662	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	3/31/30 *
SEABROOK - PROJ 4	NUCLEAR	1990	3,306	3,306	3/31/30 *
SEABROOK - PROJ 5	NUCLEAR	1990	408	408	3/31/30 *
<b>INTERMEDIATE UNITS</b>					
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	#2 OIL 1978	4,199	4,152	LOU *	
<b>PEAKING UNITS</b>					
HOLYOKE #6 & #8	#2 OIL, #6 OIL, GAS	1951	18,605	18,605	OWNED *
NYPA PEAK	HYDRO	1985	578	578	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 *
<b>RENEWABLE</b>					
HADLEY FALLS 1&2	HYDRO	1949	33,400	33,400	OWNED *
RIVERSIDE 8	HYDRO	1931	4,500	4,500	OWNED *
RIVERSIDE 4-7	HYDRO	1921	3,435	3,435	OWNED *
BOATLOCK	HYDRO	1924	3,094	3,094	OWNED *
HOLYOKE HYDRO / CABOT 1-4	HYDRO	1923	2,590	2,590	OWNED *
CHEMICAL	HYDRO	1935	1,480	1,480	OWNED *
BEEBE HOLBROOK	HYDRO	1948	205	205	OWNED *
SKINNER	HYDRO	1924	280	280	OWNED *
VALLEY HYDRO	HYDRO	2004	790	790	OWNED *
ALBION A	HYDRO	2004	281	281	OWNED *
ALBION D	HYDRO	2004	395	395	OWNED *
GILL D	HYDRO	2004	330	330	OWNED * ***
OPEN SQUARE	HYDRO	2004	525	525	YR TO YR
MT. TOM	HYDRO	2004	473	473	OWNED * ***
NONOTUCK	HYDRO	2004	472	472	OWNED * ***
CONSTELLATION - MUELLER RD	SOLAR	2012	2693	2693	12/20/31 ****
CONSTELLATION - MEADOW ST	SOLAR	2012	793	793	12/20/31 ****

All capacity contracts follow the ISO New England calendar system.

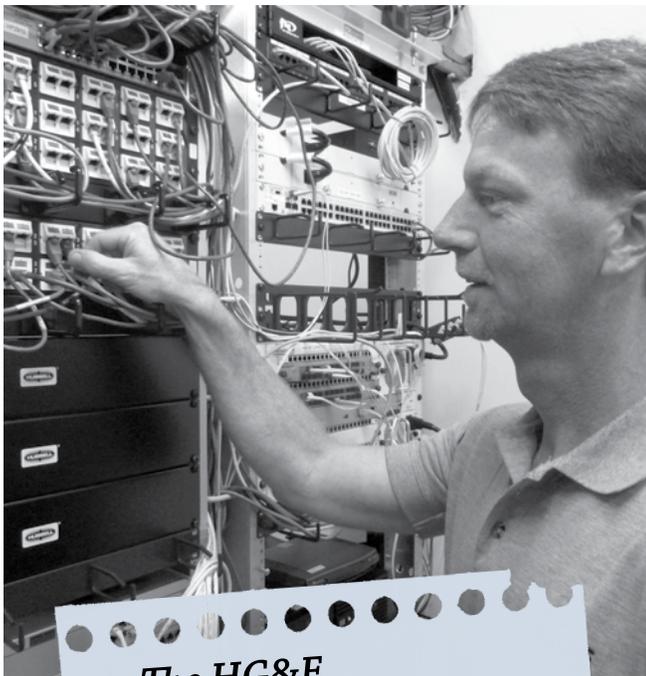
\* Investments continue for the life of the unit (LOU)

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

\*\*\* Unit offline pending retirement

\*\*\*\* Load Reducer

# TELECOMMUNICATIONS



*The HG&E telecommunications network, now in its fourteenth year of operation, provides high-speed network connectivity via fiber optic lines to commercial customers in Holyoke, Chicopee, and Downtown Springfield.*

## **TELECOMMUNICATIONS DIVISION SUMMARY**

In 2012, the Telecommunications Division continued sales growth in fiber optic Internet and MetroE Transparent LAN commercial network services. With partner OTT Communications of Portland, Maine, they also executed the launch of hosted business telephone service delivered over the HGE.net commercial network. The Division completed a major utility operations network overhaul to support continued and expanded electric and gas information intelligence and inter connectivity and also continued its support for the City of Holyoke information technology operations.

## **COMMERCIAL NETWORK EXPANSION**

In 2012, the Telecommunications Division completed the fiber optic plant installation for the Massachusetts Green High Performance Computing Center (MGHPCC) and worked with project partners to install 40 miles of fiber optic cable which connects the facility to their network.

The Division also continued its efforts with the Massachusetts Broadband Institute (MBI) to assist in the build out of the planned 1,300 route-mile fiber optic network throughout Western Massachusetts as directed by the State. The Division may partner with the MBI on several levels including providing dark optical fiber plant services for MBI within the City of Holyoke similar to that of the MGHPCC.

## **COMMERCIAL NETWORK UPGRADES**

This commercial network, now in its fourteenth year of operation, provides high-speed network connectivity via fiber optic lines to business-class customers located in Holyoke, Chicopee, and Downtown Springfield. Both the Department itself and the City receive services from this network. The platforms in service are industry standard MetroE (Metropolitan Ethernet) and IP (Internet Protocol) supporting speeds in excess of 1 Gbps (Gigabit per second). Ongoing investment in this network continues as customer needs grow and applications requirements evolve. Two key gateway routers were purchased in 2012, providing a pathway to 10 Gbps network speeds and boosting defenses against cyber interference.

The Division also tripled its retail Internet bandwidth at lower unit prices with a new provider resulting in a lowering of overall upstream bandwidth costs. Telecommunications also secured IPv6 public address space in order to begin IPv6 peering arrangements with upstream providers.

## **UTILITY OPERATIONS NETWORK UPGRADES**

In addition to provisioning and maintaining retail commercial network customers, the Telecommunications Division continued its support for the design, operation, and maintenance of the Department's internal operations network and information intelligence needs.

Improvements to the distribution elements of the operations network continued in 2012 with the replacement of ten of the Department's 50 edge switches throughout the City. Other major improvements included a complete video storage system replacement, and the company-wide installation of both secure and guest Wi-Fi access.

Major Department projects included the upgrade of the AS400 system to v7 and Lotus Notes server and clients to v.8.x. The Naviline billing system received significant enhancements including provide automatic banks drafts, credit card payments, and enhanced reporting features to compare budgeted and actual consumptions and revenues.

Divisional projects included new fiber optic cable and equipment installations at six gas distribution stations throughout Holyoke. The Hydro Division received a cellular replacement system for a failing copper system at its Montague monitoring station.

The Telecommunications Division continued its support for the Electric Division's NERC regulatory compliance efforts, SCADA information intelligence, and distribution system automation projects in 2012.

## **CITY OF HOLYOKE NETWORK CONSULTING**

The Telecommunications Division has responsibility for ongoing maintenance, installation, and operation of applications for the City's network. In 2012, the MUNIS, Geo TMS, and Lotus Notes software packages were updated. IT personnel replaced all of the City of Holyoke's core network switches and installed extensive Wi-Fi systems at the City Hall, the temporary library, and the Council on Aging's new Senior Center. PC support and hardware replacements continued through the year as well.

## **TELECOMMUNICATIONS HELP DESK**

The Telecommunications Division administers a centralized help desk, accepting support calls from Department, City, and Commercial network customers. In 2012 the help desk closed 2,928 tickets, solving 1,491 issues for Department employees, 1,133 for the City of Holyoke, and 304 for Internet and Networking customers.

*Kids at Sullivan Elementary School learn about gas, electric, and canal safety from HG&E linemen.*



# GOODWILL



*Holyoke Seniors enjoy the HG&E's Annual Winter Safety Talk at the new Senior Center on Pine Street.*

*In 2012, HG&E  
contributed  
over \$77,000 in  
sponsorships and  
over \$9,000 in  
labor for nonprofit  
causes.*

## **COMMUNITY 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 2012, HG&E offered support to several major community events including the Hispanic Family Festival, the St. Patrick's Day Parade, and the Holyoke Fireworks, which is underwritten by the Department. In total, over \$77,500 in sponsorships and over \$9,000 in labor was provided for nonprofit causes.

## **NEIL J. MORIARTY, JR. SCHOLARSHIP FOR CADET ENGINEERS**

The Cadet Engineer program is dedicated to the memory of our late Commission Chairperson, Neil 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 offered aid to two Holyoke students who are pursuing Bachelors of Science in Engineering. Jason T. Arble and Rachel M. Brochu were admitted as candidates for 2012.

## 2012 Community Support

<b>Contribution</b>	<b>Amount</b>
<b>Nonprofit Sponsorships</b>	77,790
<b>Nonprofit Labor</b>	9,167
<b>Cadet Engineer Program</b>	60,000
<b>Payment in Lieu of Taxes</b>	1,080,940
<b>Municipal Payment Discounts</b>	307,007
<b>Discounted Street Lighting</b>	444,539
<b>Economic Development Discounts</b>	142,416
<b>New Homeowner Discounts</b>	59,898
<b>Energy Conservation Assistance Programs</b>	1,267,701
<b>Total Community Support</b>	3,449,458

### **ECONOMIC DEVELOPMENT**

In 2012, the Department provided \$142,416 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 percent off their gas and electric bills for a three-year period.

The Department also offers a similar program for residential customers under which first-time Holyoke home buyers can receive 10 percent off of their first three years of gas and electric bills. In 2012, \$59,898 was provided under this program.

HG&E also promotes economic growth through our Commercial and Residential Energy Conservation Programs. These plans offer interest-free financial assistance to our customers while helping to make their homes and businesses more energy efficient. In 2012, the Department paid out over \$1,267,701 in zero-interest assistance to Holyoke home and business owners.

### **MUNICIPAL BENEFITS**

The Department contributed \$1,080,940 to the City of Holyoke's General Fund during 2012 as an in-lieu of tax payment. Payment discounts of \$307,007 were provided on the City's utility accounts.

Beyond these direct financial benefits, HG&E continues to provide other valuable services to the City including: offering low-cost street lighting, low-cost maintenance on city-owned gas and electric equipment, and low municipal rates to City departments on their gas and electric accounts.



*Lester Halpern & Company P.C.*  
Certified Public Accountants

Thomas A. Terry CPA • Betty Jane Bourdon CPA • Mary-Anne S. Stearns CPA • Robert B. McKay CPA • Lester L. Halpern CPA Retired

**INDEPENDENT AUDITOR'S REPORT**

To The Commissioners  
City of Holyoke, Massachusetts  
Gas and Electric Department  
and Subsidiary  
Holyoke, Massachusetts 01040

**Report on the Consolidated Financial Statements**

We have audited the accompanying consolidated financial statements of City of Holyoke, Massachusetts Gas and Electric Department and Subsidiary which comprise the consolidated statement of net assets as of December 31, 2012 and 2011, and the related consolidated statements of revenues, expenses and changes in net assets and cash flows for the years then ended, and the related notes to the consolidated financial statements.

As discussed in Note 1, the consolidated financial statements of the City of Holyoke, Massachusetts Gas and Electric Department and Subsidiary are intended to present the consolidated financial position and the consolidated changes in financial position and cash flows of only that portion of the City of Holyoke, Massachusetts that is attributable to the transactions of the Department and Subsidiary. They do not purport to, and do not, present fairly the financial position of the City of Holyoke, Massachusetts as of December 31, 2012 and 2011, the changes in its financial position or cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

**Management's Responsibility for the Consolidated Financial Statements**

Management is responsible for the preparation and fair presentation of these consolidated 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 consolidated financial statements that are free from material misstatement, whether due to fraud or error.

**Auditor's Responsibility**

Our responsibility is to express an opinion on these consolidated 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 consolidated financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entities' preparation and fair presentation of the consolidated 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 entities' 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 consolidated financial statements.

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

### **Opinion**

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of City of Holyoke, Massachusetts Gas and Electric Department and Subsidiary as of December 31, 2012 and 2011, and the consolidated changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### **Report on Supplementary Information**

Our audits were conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The consolidated schedules of operating revenues and expenses are presented for purposes of additional analysis and are not a required part of the consolidated 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 consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the consolidated financial statements as a whole.

Very truly yours,

*Lester Halpern & Company P.C.*

Certified Public Accountants

April 22, 2013



CITY OF HOLYOKE, MASSACHUSETTS  
 GAS AND ELECTRIC DEPARTMENT  
 AND SUBSIDIARY

**CONSOLIDATED  
 STATEMENT  
 OF NET ASSETS**

**DECEMBER 31, 2012  
 AND 2011**

See accompanying notes.

ASSETS	2012	2011
<b>Plant, Property and Equipment:</b>		
Plant, property and equipment in service	\$182,377,513	\$159,331,292
Construction in progress	8,821,612	6,808,735
	191,199,125	166,140,027
Less - accumulated depreciation	<u>74,813,709</u>	<u>70,948,906</u>
<b>Total Plant, Property and Equipment</b>	<u>116,385,416</u>	<u>95,191,121</u>
<b>Restricted Assets:</b>		
Funds required under bond indenture	253,892	12,906,139
Collateral required under note payable	5,328,685	5,134,876
Reserve fund for note receivable	446,321	
Customers' deposits	629,979	590,284
<b>Total Restricted Assets</b>	<u>6,658,877</u>	<u>18,631,299</u>
<b>Other Fund Reserves:</b>		
Purchased power funds	2,573,980	2,598,602
Rate stabilization funds	25,751,958	29,933,036
Post employment benefit funds	<u>2,917,526</u>	<u>2,682,214</u>
<b>Total Other Fund Reserves</b>	<u>31,243,464</u>	<u>35,213,852</u>
<b>Current Assets:</b>		
Cash	3,107,315	65,977
Operating cash invested	5,214,165	1,830,665
Due from other funds	260,758	
Accounts receivable - net of reserve for uncollectible accounts of \$515,204 in 2012 and 2011	6,429,172	6,059,292
Accounts receivable - City of Holyoke	366,323	346,183
Note receivable - current portion	336,780	319,195
Materials and supplies	3,082,806	2,292,204
Fuel for electric generation and gas in storage	1,096,643	1,377,466
Prepaid expense	841,393	693,079
Other receivables	<u>4,737,013</u>	<u>3,516,980</u>
<b>Total Current Assets</b>	<u>25,472,368</u>	<u>16,501,041</u>
<b>Other Assets:</b>		
Other investments	199,505	214,646
Preliminary investigation charges		2,837,561
Intangible assets	1,671,485	2,616,881
Note receivable - after one year	10,343,628	10,680,805
Other receivables - after one year	2,222,284	2,426,076
<b>Total Other Assets</b>	<u>14,436,902</u>	<u>18,775,969</u>
<b>TOTAL ASSETS</b>	<b>\$194,197,027</b>	<b>\$184,313,282</b>
LIABILITIES AND NET ASSETS	2012	2011
<b>Long-Term Liabilities:</b>		
Bonds payable	\$30,850,334	\$36,501,667
Plus: Premium on bonds payable	3,044,621	
	33,894,955	36,501,667
Notes payable	11,224,445	11,799,761
Leases payable	151,962	78,006
Accrued compensated absences	2,575,559	2,456,702
Accrued other post employment benefits	4,004,265	2,615,089
Deferred rate stabilization costs	41,269,849	38,853,290
Reserve fund for note receivable	<u>444,737</u>	
<b>Total Long-Term Liabilities</b>	<u>93,565,772</u>	<u>92,304,515</u>
<b>Current Liabilities:</b>		
Due to other funds		4,490,700
Accounts payable	10,322,941	7,160,126
Current portion bonds, notes and leases payable	2,032,682	2,304,946
Margin credit account	7,000,000	
Customers' deposits	517,657	526,643
Accrued liabilities	527,770	554,498
Accrued interest	423,437	156,772
Current portion - accrued compensated absences	227,979	168,804
Current portion - accrued environmental costs	174,182	
Current portion - deferred rate stabilization costs		3,300,000
Deferred credits - current	<u>77,442</u>	<u>241,503</u>
<b>Total Current Liabilities</b>	<u>21,304,090</u>	<u>18,903,992</u>
<b>Total Liabilities</b>	114,869,862	111,208,507
<b>Net Assets:</b>		
Invested in plant, property and equipment - net of related debt	72,644,676	55,445,540
Restricted for debt service	6,028,898	18,041,015
Unrestricted	<u>653,591</u>	<u>(381,780)</u>
<b>Total Net Assets</b>	<u>79,327,165</u>	<u>73,104,775</u>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>\$194,197,027</b>	<b>\$184,313,282</b>

CITY OF HOLYOKE, MASSACHUSETTS  
GAS AND ELECTRIC DEPARTMENT  
AND SUBSIDIARY

**CONSOLIDATED  
STATEMENT OF REVENUES,  
EXPENSES AND CHANGES  
IN NET ASSETS**

**DECEMBER 31, 2012  
AND 2011**

See accompanying notes.

	2012			2011		
	Gas	Electric/ Telecommunications	Total	Gas	Telecommunications	Total
<b>Operating Revenues</b>	\$20,423,867	\$43,895,962	\$64,319,829	\$22,580,851	\$44,060,291	\$66,641,142
<b>Operating Expenses:</b>						
Cost of power, gas and water sold	12,227,738	17,254,352	29,482,090	13,952,551	15,838,807	29,791,358
Transmission		3,087,317	3,087,317		3,570,046	3,570,046
Distribution	2,923,738	4,272,810	7,196,548	2,686,713	5,224,596	7,911,309
Customer accounts	317,245	656,964	974,209	324,975	870,629	1,195,604
General and administrative	3,385,767	8,147,940	11,533,707	3,220,906	7,515,186	10,736,092
Depreciation - plant and equipment	<u>1,105,334</u>	<u>3,563,234</u>	<u>4,668,568</u>	<u>1,052,303</u>	<u>3,920,562</u>	<u>4,972,865</u>
<b>Total Operating Expenses</b>	<u>19,959,822</u>	<u>36,982,617</u>	<u>56,942,439</u>	<u>21,237,448</u>	<u>36,939,826</u>	<u>58,177,274</u>
<b>Operating Income</b>	<u>\$464,045</u>	<u>\$6,913,345</u>	<u>7,377,390</u>	<u>\$1,343,403</u>	<u>\$7,120,465</u>	<u>8,463,868</u>
<b>Other Revenues (Expenses):</b>						
Investment income - net of fees			2,098,891			1,451,335
Net gain (loss) on investments			1,723,545			(400,606)
Bond interest expense			(2,480,875)			(1,910,201)
Other interest expense			(528,204)			(187,958)
Miscellaneous income - net			1,608,043			886,201
Amortization			(964,504)			(130,522)
Impairment loss - Harris water rights			(403,621)			(597,399)
Net loss - plant retirements			(158,488)			(7,064,383)
Net gain - merchandise jobbing			131,410			105,057
Mt. Tom property assessment expense			(1,020,489)			
Taxes - other			<u>(79,768)</u>			<u>(79,765)</u>
<b>Total Other Revenues (Expenses)</b>			<u>(74,060)</u>			<u>(7,928,241)</u>
<b>Change in Net Assets Before Operating Transfers</b>			7,303,330			535,627
Payment in lieu of taxes - City of Holyoke			<u>(1,080,940)</u>			<u>(1,058,320)</u>
<b>Change in Net Assets</b>			6,222,390			(522,693)
<b>Net Assets - Beginning of Year</b>			<u>73,104,775</u>			<u>73,627,468</u>
<b>Net Assets - End of Year</b>			<u>\$79,327,165</u>			<u>\$73,104,775</u>

CITY OF HOLYOKE, MASSACHUSETTS  
GAS AND ELECTRIC DEPARTMENT  
AND SUBSIDIARY

**STATEMENT OF  
CASH FLOWS**

**DECEMBER 31, 2012  
AND 2011**

See accompanying notes.

	2012	2011
<b>Cash Flows from Operating Activities:</b>		
Cash received from customers	\$63,846,492	\$68,409,983
Cash paid to suppliers	(41,694,354)	(43,217,853)
Cash paid to employees	(10,765,666)	(11,221,571)
In lieu of taxes paid	(1,080,940)	(1,058,320)
Interest paid	<u>(441,220)</u>	<u>(78,756)</u>
<u>Net Cash Provided by Operating Activities</u>	<u>9,864,312</u>	<u>12,833,483</u>
<b>Cash Flows from Investing Activities:</b>		
Proceeds from sale of investments	10,600,230	6,637,877
Purchase of investments	(8,089,471)	(14,095,727)
Net transfer from restricted assets and other fund reserves	11,220,721	22,601
Investment income - net of fees	2,174,358	1,367,701
Decrease in invested cash balances	566,516	1,201,378
Advance of note receivable		(11,000,000)
Repayments of notes receivable	319,592	
Deposit on notes receivable	444,737	
Net payments received from customers	<u>138,274</u>	<u>188,315</u>
<u>Net Cash Provided by (Used in) Investing Activities</u>	<u>17,374,957</u>	<u>(15,677,855)</u>
<b>Net Cash Provided by (Used in) Noncapital Financing Activities:</b>		
Decrease (increase) in due to/from other funds	<u>(4,751,458)</u>	<u>4,218,744</u>
<b>Cash Flows from Capital and Related Financing Activities:</b>		
Investment in plant, property and equipment	(20,071,308)	(9,218,186)
Proceeds from bonds and notes payable	33,712,782	11,000,000
Payments on bonds, notes and leases payable	(37,139,935)	(1,956,629)
Interest paid on bonds, notes and leases payable	(2,437,355)	(2,023,863)
Proceeds from margin account	7,000,000	
Debt issue costs	(422,729)	
Investment in preliminary investigation charges	(87,928)	(279,432)
Investment in MGPCC building project		<u>1,149,545</u>
<u>Net Cash Used in Capital and Related Financing Activities</u>	<u>(19,446,473)</u>	<u>(1,328,565)</u>
<b>Increase in Cash</b>	3,041,338	45,807
<b>Cash - Beginning of Year</b>	<u>65,977</u>	<u>20,170</u>
<b>Cash - End of Year</b>	<u>\$3,107,315</u>	<u>\$65,977</u>
<b>Supplemental Cash Flow Information:</b>		
Total interest paid	<u>\$2,878,575</u>	<u>\$2,102,619</u>
<b>Supplemental Noncash Financing Activity:</b>		
Equipment acquired under capital lease	<u>\$182,978</u>	<u>\$92,760</u>

CITY OF HOLYOKE, MASSACHUSETTS  
 GAS AND ELECTRIC DEPARTMENT  
 AND SUBSIDIARY

**CONSOLIDATED  
 SCHEDULE OF  
 RECONCILIATION OF  
 OPERATING INCOME TO  
 NET CASH PROVIDED BY  
 OPERATING ACTIVITIES**

**DECEMBER 31, 2012  
 AND 2011**

See accompanying notes.

	2012	2011
<b>Operating Income</b>	\$7,377,390	\$8,463,868
<b>Adjustments to Reconcile Operating Income to Net Cash    Provided by Operating Activities</b>		
Depreciation	4,668,568	4,972,865
Other interest expense	(441,220)	(78,756)
Other income	1,808,783	1,296,336
Payment in lieu of taxes and other property taxes	(1,160,708)	(1,138,085)
Changes in operating assets and liabilities -		
(Increase) decrease - accounts receivable	(390,020)	1,105,603
- materials and supplies	(790,602)	(171,574)
- fuel for electric generation and gas in storage	280,823	(196,454)
- prepaid expense	(148,314)	(237,521)
- other receivables	(1,299,312)	(1,237,045)
Increase (decrease) - accounts payable	(699,250)	(242,772)
- customers' deposits	(8,986)	3,018
- accrued liabilities	(26,728)	(882,070)
- accrued compensated absences	178,032	21,228
- accrued other post employment benefits	1,389,176	1,310,378
- deferred rate stabilization costs	(883,441)	
- accrued environmental costs	174,182	(169,627)
- deferred credits	(164,061)	14,091
<b>Total Adjustments</b>	<u>2,486,922</u>	<u>4,369,615</u>
<b>Net Cash Provided by Operating Activities</b>	<u>\$9,864,312</u>	<u>\$12,833,483</u>

**SCHEDULE OF OPERATING  
 REVENUES AND EXPENSES**

**GAS DIVISION**

**DECEMBER 31, 2012  
 AND 2011**

See accompanying notes.

	2012	2011
<b>Operating Revenues:</b>		
Residential	\$7,885,991	\$8,691,302
Commercial	9,115,816	10,117,416
Industrial	1,768,759	1,998,835
Municipal	618,842	738,383
Departmental Sales	70,709	60,965
Sales for Resale	<u>963,750</u>	<u>973,950</u>
<u>Total Operating Revenues</u>	<u>\$20,423,867</u>	<u>\$22,580,851</u>
<b>Cost of Gas Sold:</b>		
Purchases - Natural Gas	\$10,885,061	\$12,608,024
Liquid Natural Gas Processed	527,614	474,768
Environmental Response	575,250	575,250
Supplies and Expenses	<u>239,813</u>	<u>294,509</u>
<u>Total Cost of Gas Sold</u>	<u>\$12,227,738</u>	<u>\$13,952,551</u>
<b>Distribution:</b>		
Salaries and Wages		
System Control and Load Dispatch	\$261,287	\$265,915
Supervision and Engineering	302,660	260,495
Customer Installation	482,132	461,150
Operation	483,179	443,285
Maintenance	514,096	475,281
Supplies and Expenses	<u>880,384</u>	<u>780,587</u>
<u>Total Distribution</u>	<u>\$2,923,738</u>	<u>\$2,686,713</u>
<b>Customer Accounts:</b>		
Salaries and Wages		
Meter Reading	\$74,430	\$65,195
Accounting and Collection	150,593	132,559
Supplies and Expenses	29,786	18,777
Uncollectible Accounts	<u>62,436</u>	<u>108,444</u>
<u>Total Customer Accounts</u>	<u>\$317,245</u>	<u>\$324,975</u>
<b>General and Administrative:</b>		
Salaries	\$730,892	\$741,846
Pensions and Benefits	1,953,306	1,806,798
Insurance	87,265	116,905
General Supplies and Expenses	<u>614,304</u>	<u>555,357</u>
<u>Total General and Administrative</u>	<u>\$3,385,767</u>	<u>\$3,220,906</u>

CITY OF HOLYOKE, MASSACHUSETTS  
 GAS AND ELECTRIC DEPARTMENT  
 AND SUBSIDIARY

**SCHEDULE OF OPERATING  
 REVENUES AND EXPENSES**

**ELECTRIC AND  
 TELECOMMUNICATIONS  
 DIVISIONS**

**DECEMBER 31, 2012  
 AND 2011**

See accompanying notes.

	2012	2011
<b>Operating Revenues:</b>		
Electric sales		
Residential	\$12,620,847	\$12,766,929
Commercial	20,786,686	20,919,226
Industrial	5,451,224	5,217,511
Municipal	2,578,264	2,764,467
Interdepartmental	248,945	286,008
Water	6,347	5,871
Cobble Mountain Operation - Net	444,017	398,448
Telecommunication Sales	<u>1,759,632</u>	<u>1,701,831</u>
<u>Total Operating Revenues</u>	<u>\$43,895,962</u>	<u>\$44,060,291</u>
<b>Cost of Electricity/Steam/Water Sold:</b>		
Purchases - Electricity	\$10,451,416	\$9,255,027
Fuel for Electric Generation		26,484
Salaries and Wages		
Production	1,260,430	1,618,236
Maintenance	1,700,178	1,382,436
Supplies and Expenses	3,135,117	2,975,861
Cost of Water Sold	<u>707,211</u>	<u>580,763</u>
<u>Total Cost of Electricity/Water Sold</u>	<u>\$17,254,352</u>	<u>\$15,838,807</u>
<b>Electric Transmission:</b>		
Salaries and Wages	\$433,135	\$514,765
Supplies and Expenses	121,063	127,520
Transmission by Others	<u>2,533,119</u>	<u>2,927,761</u>
<u>Total Electric Transmission</u>	<u>\$3,087,317</u>	<u>\$3,570,046</u>
<b>Distribution:</b>		
Electric - Salaries and Wages		
Lines, Equipment and Street Lights	\$1,645,669	\$1,948,316
Customer Installations	215,498	198,869
Supplies and Expenses	<u>1,337,863</u>	<u>2,045,857</u>
Telecommunications Distribution	<u>1,073,780</u>	1,031,554
<u>Total Distribution</u>	<u>\$4,272,810</u>	<u>\$5,224,596</u>
<b>Customer Accounts:</b>		
Electric - Salaries and Wages		
Meter Reading	\$138,748	\$120,921
Accounting and Collection	279,673	246,182
Supplies and Expenses	55,487	35,615
Uncollectible Accounts	181,499	456,318
Telecommunications Customer Accounts	<u>1,557</u>	<u>11,593</u>
<u>Total Customer Accounts</u>	<u>\$656,964</u>	<u>\$870,629</u>
<b>General and Administrative:</b>		
Electric -		
Salaries	\$1,337,189	\$1,243,708
Pensions and Benefits	4,003,293	3,734,094
Insurance	382,620	432,807
General Supplies and Expenses	1,961,987	1,614,802
Telecommunications General and Administrative	<u>462,851</u>	<u>489,775</u>
<u>Total General and Administrative</u>	<u>\$8,147,940</u>	<u>\$7,515,186</u>

**SCHEDULE OF OPERATING  
 REVENUES AND EXPENSES**

**ELECTRIC DIVISION**

**DECEMBER 31, 2012  
 AND 2011**

See accompanying notes.

	2012	2011
<b>Operating Revenues:</b>		
Residential	12,620,847	12,766,929
Commercial	20,786,686	20,919,226
Industrial	5,451,224	5,217,511
Municipal	2,578,264	2,764,467
Interdepartmental Sales	<u>248,945</u>	<u>286,008</u>
<u>Total Operating Revenues</u>	<u>\$41,685,966</u>	<u>\$41,954,141</u>
<b>Cost of Electricity Sold:</b>		
Purchases - Electricity - Other	10,451,416	9,255,027
- Hydro division		
Replacement Power	0	0
Fuel for Electric Generation	0	26,484
Salaries and Wages - Production	91,500	340,242
- Maintenance	294,129	267,715
Supplies and Expenses	<u>594,896</u>	<u>720,132</u>
<u>Total Cost of Electricity Sold</u>	<u>\$11,431,941</u>	<u>\$10,609,600</u>
<b>Transmission:</b>		
Salaries and Wages	433,135	514,765
Supplies and Expenses	121,063	127,520
Transmission by Others	2,533,119	2,927,761
Total Transmission	\$3,087,317	\$3,570,046
<b>Distribution:</b>		
Salaries and Wages - Lines and Equipment	1,619,959	1,948,316
- Street Lights and Customer Installations	215,498	198,869
Supplies and expenses	<u>1,296,937</u>	<u>2,007,775</u>
<u>Total Distribution</u>	<u>\$3,132,394</u>	<u>\$4,154,960</u>
<b>Customer Accounts:</b>		
Salaries and Wages - Meter Reading	138,748	120,921
- Accounting and Collection	279,673	246,182
Supplies and Expenses	55,487	35,615
Uncollectible Accounts	<u>181,499</u>	<u>456,318</u>
<u>Total Customer Accounts</u>	<u>\$655,407</u>	<u>\$859,036</u>
<b>General and Administrative:</b>		
Salaries	1,304,335	1,171,381
Pensions and benefits	3,153,954	2,924,946
Insurance	181,207	239,112
Supplies and expenses	<u>1,434,702</u>	<u>1,227,472</u>
<u>Total General and Administrative</u>	<u>\$6,074,198</u>	<u>\$5,562,911</u>

CITY OF HOLYOKE, MASSACHUSETTS  
 GAS AND ELECTRIC DEPARTMENT  
 AND SUBSIDIARY

## SCHEDULE OF OPERATING REVENUES AND EXPENSES

### TELECOMMUNICATIONS DIVISION

**DECEMBER 31, 2012  
 AND 2011**

See accompanying notes.

	2012	2011
<b>Operating Revenues:</b>		
Internet Sales	1,258,318	1,200,757
ATM Service	2,208	1,208
Fiber Lines	25,979	30,844
Dark Fiber Lease	103,775	102,725
Resold Teleco Lines	110,713	114,998
Network Services	70,493	63,851
Dial Up Revenue	0	0
Installation	8,146	7,448
City of Holyoke IT O&M	<u>180,000</u>	<u>180,000</u>
<u>Total Operating Revenue</u>	<u>\$1,759,632</u>	<u>\$1,701,831</u>
<b>Distribution:</b>		
Salaries and Wages - Supervision and Engineering	319,725	348,213
- Drafting	0	0
- Maintenance	123,479	108,145
<b>Internet Expense</b>	204,703	211,989
Line Charges	143,839	144,101
Supplies and Expenses	<u>282,034</u>	<u>219,106</u>
<u>Total Distribution</u>	<u>\$1,073,780</u>	<u>\$1,031,554</u>
<b>Customer Accounts:</b>		
Salaries and wages - Accounting and Collection		
Supplies and Expenses	0	0
Uncollectible Accounts	<u>1,557</u>	<u>11,593</u>
<u>Total Customer Accounts</u>	<u>\$1,557</u>	<u>\$11,593</u>
<b>General and Administrative:</b>		
Salaries	127,170	126,913
Pensions and Benefits	259,170	243,374
Insurance	6,433	6,891
Supplies and Expense	23,537	51,838
General Expense	<u>46,541</u>	<u>60,759</u>
<u>Total General and Administrative</u>	<u>\$462,851</u>	<u>\$489,775</u>

**CITY OF HOLYOKE, MASSACHUSETTS GAS AND ELECTRIC DEPARTMENT AND SUBSIDIARY**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**DECEMBER 31, 2012 AND 2011**

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1. Summary of Significant Accounting Policies:

Reporting Entity - The consolidated financial statements present information on the activities of the Gas and Electric Department (the Department), an Enterprise Fund of the City of Holyoke, Massachusetts (the City) and its wholly owned subsidiary, Holyoke Solar Cooperative.

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 65% of the Department's revenues are derived from its electric division. The Department is subject to regulation by the Federal Energy Regulatory Commission (FERC), the Massachusetts Department of Public Utilities (DPU), and the Massachusetts Department of Telecommunication & Cable (DTC).

The Holyoke Solar Cooperative (the Cooperative) is a cooperative organized in Massachusetts, in December, 2010, and is owned by the Department (its original Member). The Cooperative will engage 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 Cooperative is 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 transactions have been eliminated in consolidation. All intercompany receivables, payables and equity have also been eliminated.

Basis of Accounting - The consolidated 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.

Net Assets - The difference between assets and liabilities is net assets. There are three components of net assets: invested in property, plant and equipment - net of related debt, restricted for debt service, and unrestricted.

Net assets invested in property, plant and equipment - net of related debt, 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 assets are restricted when constraints placed on net asset 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 Entities' restricted net assets as of December 31, 2012 and 2011 are related to the bond debt reserve funds, collateral required under note payable, and funds reserved for payments on note receivable.

Unrestricted net assets are those that are not "invested in property, plant and equipment - net of related debt" or "restricted for debt service".

Expense Allocation - Expenses associated with a particular division of the Department are charged to that division. For the years ended December 31, 2012 and 2011, shared expenses including administrative and supporting costs are allocated to each division as follows:

Gas	35.0%
Electric, Steam and Telecommunications	65.0%

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.

Plant, Property and Equipment - Additions to and replacements of plant, property and equipment are recorded at cost. 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.

Depreciation - Depreciation of \$4,668,568 in 2012 and \$4,972,865 in 2011 is computed using the straight-line method. The composite rate for 2012 and 2011 is 3% of depreciable property in service. The composite rate is in accordance with Massachusetts Department of Public Utilities regulations.

Preliminary Investigation Charges - This account represents expenditures for preliminary surveys, plans, investigations, etc. made for the purpose of determining the feasibility of utility projects under contemplation. At December 31, 2011 the balance consisted of costs associated with the Mt. Tom wind pre-permitting phase.

Materials, Supplies and Fuel - Materials, supplies and fuel are valued at average cost.

Revenue Recognition - 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 years ended December 31, 2012 and 2011 are as follows:

	<u>2012</u>	<u>2011</u>
Gas	\$1,689,850	\$1,912,968
Electric <u>3,632,257</u>	<u>3,604,935</u>	
	<u>\$5,322,107</u>	<u>\$5,517,903</u>

Income Taxes - Income of the Department and the Cooperative is excluded from taxation by Section 115 of the United States Internal Revenue Code.

Investments - Investments totaling \$31,505 and \$46,646 in 2012 and 2011, respectively, represent the Department's equity in New England Hydro-Transmission Corporation and New England Hydro-Transmission Electric Company. These investments represent .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). PUMIC was formed to provide general insurance to members of the Public Utility Risk Management Association (PURMA).

These investments are carried at original cost on the consolidated balance sheets. It was not practicable to estimate the fair value of these investments.

Investments in debt and equity securities are recorded at fair market value (See Note 5).

Interest Capitalized - The Department follows the policy of capitalizing interest as a component of the cost of plant, property and equipment in service constructed for its own use. During the years ended December 31, 2012 and 2011, there was no interest capitalized.

Intangible Assets - Intangible assets are recorded at cost. Intangible assets subject to amortization include debt issue costs, customer contracts, and franchise area fee associated with the December, 2001 hydroelectric project purchase, the FERC licenses associated with the hydroelectric generating facilities purchased in November, 2004, and debt issue costs associated with the 2012 bond issue. Debt issue costs are being amortized on a straight-line basis over the term of the issue. Customer contracts, franchise and FERC licenses are being amortized on a straight-line basis over the remaining lives of the respective licenses. Intangible assets not subject to amortization include water rights acquired with the hydroelectric generating facilities purchased in November, 2004. These costs are evaluated annually for impairment.

Cash - For purposes of the consolidated statement of cash flows, cash includes cash on hand and cash in checking and money market accounts.

Accounts Receivable - Accounts receivable are stated at the amount management expects to collect from outstanding balances. 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.

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. Estimated liabilities are not discounted to present value.

Bond Premium - The Department received more than the face value of the bonds issued in 2012, resulting in a bond premium. This is due to the stated interest rate on the bonds exceeding the market interest rate at the time of issue. The premium is being amortized using the effective-interest method over 232 months, until the bonds are fully paid off in 2031. The amortization of the premium reduces the amount that is charged to interest expense.

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.

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.

Advertising - The Department expenses the cost of advertising as incurred. Advertising expense was \$44,494 and \$36,765 for the years ended December 31, 2012 and 2011, respectively.

2. Plant, Property and Equipment:

Plant, property and equipment as of December 31, 2012 and 2011 consist of the following:

	Balance <u>December 31, 2011</u>	<u>Increases</u>	<u>Decreases</u>	Balance <u>December 31, 2012</u>
<u>Utility plant not being depreciated -</u>				
Gas -				
Land	\$ 288,804			\$ 288,804
Construction in progress	<u>1,082,048</u>	<u>\$ 1,397,365</u>	<u>\$ (2,420,441)</u>	<u>58,972</u>
	<u>1,370,852</u>	<u>1,397,365</u>	<u>(2,420,441)</u>	<u>347,776</u>
Electric/Telecommunications -				
Land	3,423,556	1,983,718		5,407,274
Construction in progress	<u>5,726,687</u>	<u>19,604,953</u>	<u>(16,568,999)</u>	<u>8,762,641</u>
	<u>9,150,243</u>	<u>21,588,671</u>	<u>(16,568,999)</u>	<u>14,169,915</u>
<u>Total utility plant not being depreciated</u>	<u>10,521,095</u>	<u>22,986,036</u>	<u>(18,989,440)</u>	<u>14,517,691</u>
<u>Utility plant being depreciated -</u>				
Gas -				
Plant investment	33,995,591	2,656,835	(145,884)	36,506,542
Office furniture and equipment	1,211,063	29,679		1,240,742
Transportation and communication equipment	1,062,420	242,290	(153,483)	1,151,227
Other	<u>299,304</u>	<u>42,186</u>	<u>(21,708)</u>	<u>319,782</u>
	<u>36,568,378</u>	<u>2,970,990</u>	<u>(321,075)</u>	<u>39,218,293</u>
Electric/Telecommunications -				
Plant investment	112,226,554	17,577,467	(370,686)	129,433,335
Office furniture and equipment	2,563,585	134,994		2,698,579
Transportation and communication equipment	3,536,859	1,288,875	(161,781)	4,663,953
Other	<u>723,556</u>	<u>8,039</u>	<u>(64,321)</u>	<u>667,274</u>
	<u>119,050,554</u>	<u>19,009,375</u>	<u>(596,788)</u>	<u>137,463,141</u>
<u>Total utility plant being depreciated</u>	<u>155,618,932</u>	<u>21,980,365</u>	<u>(917,863)</u>	<u>176,681,434</u>
<u>Less accumulated depreciation -</u>				
Gas -				
Plant investment	(19,081,455)	(953,869)	128,504	(19,906,820)
Office furniture and equipment	(869,345)	(54,949)		(924,294)
Transportation and communication equipment	(873,776)	(70,258)	153,483	(790,551)
Other	<u>(154,863)</u>	<u>(17,975)</u>	<u>21,708</u>	<u>(151,130)</u>
	<u>(20,979,439)</u>	<u>(1,097,051)</u>	<u>303,695</u>	<u>(21,772,795)</u>
Electric/Telecommunications -				
Plant investment	(44,757,174)	(3,162,148)	279,876	(47,639,446)
Office furniture and equipment	(1,723,583)	(138,300)		(1,861,883)
Transportation and communication equipment	(2,935,514)	(234,090)	161,781	(3,007,823)
Other	<u>(553,196)</u>	<u>(36,979)</u>	<u>58,413</u>	<u>(531,762)</u>
	<u>(49,969,467)</u>	<u>(3,571,517)</u>	<u>500,070</u>	<u>(53,040,914)</u>
<u>Total accumulated depreciation</u>	<u>(70,948,906)</u>	<u>(4,668,568)</u>	<u>803,765</u>	<u>(74,813,709)</u>
<u>Total utility plant being depreciated, net -</u>				
Gas	15,588,939	1,873,939	(17,380)	17,445,498
Electric	<u>69,081,087</u>	<u>15,437,858</u>	<u>(96,718)</u>	<u>84,422,227</u>
	<u>84,670,026</u>	<u>17,311,797</u>	<u>(114,098)</u>	<u>101,867,725</u>
<u>Total Utility Plant, Net -</u>				
Gas	16,959,791	3,271,304	(2,437,821)	17,793,274
Electric	<u>78,231,330</u>	<u>37,026,529</u>	<u>(16,665,717)</u>	<u>98,592,142</u>
	<u>\$ 95,191,121</u>	<u>\$40,297,833</u>	<u>\$(19,103,538)</u>	<u>\$116,385,416</u>

In 2012 and 2011, the Department transferred the following amounts from construction in progress to utility plant:

	<u>2012</u>	<u>2011</u>
Gas	\$ 2,420,441	\$ 491,459
Electric/Telecommunications	<u>16,568,999</u>	<u>2,410,003</u>
	<u>\$18,989,440</u>	<u>\$2,901,462</u>

3. Cash and Restricted Assets:

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. 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. Rate stabilization funds are amounts set aside to be used to stabilize current and future power costs. Post employment benefit funds have been segregated by the Department to cover certain healthcare and life insurance benefits (See Note 19).

4. Due To/From Other Funds:

"Due to/from other funds" represents the amount by which the Department's equity in pooled cash differs from the expenditures paid and receipts collected by the City.

5. Investments in Debt and Equity Securities:

The Department and the Cooperative (the Entities) invest various funds in debt and equity securities which are held in their respective names by Flynn Financial Partners Ltd. 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, which is the amount at which an investment could be exchanged in a current transaction between willing parties. Fair values are based on quoted market prices.

The Department's investment account is held as security for a margin loan account as described in Note 13, and one of the Cooperative's investment accounts is held as security for a note payable as described in Note 11.

Net unrealized gain on investments at December 31, 2012 and 2011 is \$2,743,719 and \$1,017,768, respectively.

Interest Rate Risk - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Entities do not have a formal investment policy that limits investment maturities.

At December 31, 2012, the Department's and the Cooperative's investments were as follows:

<u>Investment Type</u>	<u>Fair Value</u>	<u>Maturity in Years</u>			
		<u>Less Than 1</u>	<u>1-5</u>	<u>6-10</u>	<u>Over 10</u>
Debt Securities:					
U.S. Gov't Mortgage-Backed Bonds	\$ 8,730,331	\$228,330	\$2,149,819	\$5,902,563	
Corporate Bonds	8,643,005	161,722	6,996,993	1,484,290	\$449,619
Municipal Bonds	<u>357,958</u>			<u>93,109</u>	<u>264,849</u>
	17,731,294	<u>\$390,052</u>	<u>\$9,146,812</u>	<u>\$7,479,962</u>	<u>\$714,468</u>
Other Investment Types:					
Equity Mutual Funds	8,078,772				
Fixed Income Mutual Funds	13,368,684				
Preferred Securities	250,400				
Cash and Cash Equivalents	<u>61,596</u>				
	<u>\$39,490,746</u>				

At December 31, 2011, the Department's and the Cooperative's investments were as follows:

<u>Investment Type</u>	<u>Fair Value</u>	<u>Maturity in Years</u>		
		<u>1-5</u>	<u>6-10</u>	<u>Over 10</u>
Debt Securities:				
U.S. Gov't Mortgage-Backed Bonds	\$ 8,507,275	\$1,534,810	\$6,007,324	\$ 965,141
Corporate Bonds	8,671,956	4,970,119	3,701,837	
Municipal Bonds	<u>362,328</u>			<u>362,328</u>
	17,541,559	<u>\$6,504,929</u>	<u>\$9,709,161</u>	<u>\$1,327,469</u>
Other Investment Types:				
Equity Mutual Funds	9,261,206			
Fixed Income Mutual Funds	12,929,258			
Preferred Securities	469,200			
Cash and Cash Equivalents	<u>619,754</u>			
	<u>\$40,820,977</u>			

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, 2012 and 2011, the Entities' investments were rated as follows:

<u>Investment Type</u>	<u>2012</u>		<u>2011</u>	
	<u>Standard &amp; Poor's</u>	<u>Moody's Investment Service</u>	<u>Standard &amp; Poor's</u>	<u>Moody's Investment Service</u>
U.S. Gov't Mortgage-Backed Bonds	AA+ to A	AAA to AA2	AA+	AAA
Corporate Bonds	AAA to BBB	AAA to BAA2	AAA to BBB	AAA to BAA2
Municipal Bonds	AA to AA-	AA2 to AA3	AA to AA-	AA2 to AA3
Preferred Securities	BB+	Ba1	A- to BB+	BAA1 to BAA2

Custodial Credit Risk -

Deposits - Custodial credit risk is the risk that the Department's deposits may not be returned to the Department. As of December 31, 2012 and 2011, \$61,596 and \$585,162, respectively, were uninsured and uncollateralized and subject to custodial credit risk.

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

Concentration of Credit Risk - Concentration of credit risk is the risk of loss attributed to the magnitude of the Entities' investment in a single issuer. There were no investments in any one issuer that represented greater than 5% of total investments at December 31, 2012 and 2011.

The investments are included on the consolidated Statement of Net Assets as follows:

	<u>2012</u>	<u>2011</u>
Collateral required under note payable	\$ 5,328,685	\$ 5,134,876
Customers' deposits 627,578	577,659	
Rate stabilization funds	25,402,792	27,595,563
Post employment benefit funds	2,917,526	2,682,214
Operating cash invested	5,214,165	1,830,665
Funds required under bond indenture		3,000,000
	<u>\$39,490,746</u>	<u>\$40,820,977</u>

In addition, rate stabilization funds of \$349,166 at December 31, 2012 and \$2,337,473 at December 31, 2011 are on deposit with and are invested through the Massachusetts Municipal Wholesale Electric Company (MMWEC). These funds are reported on the consolidated Statement of Net Assets at fair value.

6. Note Receivable:

	<u>2012</u>	<u>2011</u>
Note receivable from Holyoke Solar, LLC due to the Cooperative in monthly installments of \$74,191 including interest at 5.25%, secured by the Solar Installation Property, matures December, 2031.	\$10,680,408	\$11,000,000
<u>Less - amount due within one year</u>	<u>336,780</u>	<u>319,195</u>
<u>Note Receivable - Due After One Year</u>	<u>\$10,343,628</u>	<u>\$10,680,805</u>

The note and security agreement also requires the borrower to establish a Reserve Fund to be held in an interest bearing savings account equal to no less than 6 months of principal and interest debt service payments. The Cooperative shall use the Reserve Fund to cure any failure of the borrower to pay when due any principal or interest payment. If the Reserve Fund is not used by the Cooperative during the first 6 years, the Reserve Fund shall be decreased to no less than 2 months of principal and interest debt service payments. The Reserve Fund was established with a required balance of \$444,737 and the account balance at December 31, 2012 was \$446,321.

7. Other Receivables:

Other receivables consist of the following:

	<u>2012</u>	<u>2011</u>
Hi-Lite Program - receivable from customers for loans used to make energy efficient improvements to their property, secured by municipal liens	\$3,439,553	\$3,577,827
Accrued interest receivable 184,078	259,545	
Miscellaneous other receivables	<u>3,335,666</u>	<u>2,105,684</u>
	6,959,297	5,943,056
<u>Less - amount due in one year</u>	<u>4,737,013</u>	<u>3,516,980</u>
<u>Other Receivables - After One Year (Hi-Lite Program)</u>	<u>\$2,222,284</u>	<u>\$2,426,076</u>

8. Intangible Assets:

Amortized Intangibles:

		<u>2012</u>		<u>2011</u>	
	<u>Life in Years</u>	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>
2001 Debt issue costs	30	\$1,297,211	\$1,297,211	\$1,297,211	\$ 434,566
2001 Customer contracts and franchise costs	30	2,000,000	736,667	2,000,000	670,000
2004 License fees	8	90,000	90,000	90,000	69,385
2012 Debt issue costs	19	<u>422,729</u>	<u>14,577</u>	<u>3,387,211</u>	<u>1,173,951</u>
		<u>\$3,809,940</u>	<u>\$2,138,455</u>		

Aggregate amortization expense was \$964,504 and \$130,522 for the years ended December 31, 2012 and 2011, respectively. The remaining balance associated with the 2001 debt issue costs were fully amortized in 2012 since the bonds were redeemed. Estimated annual aggregate amortization expense is \$88,532 for the five years subsequent to 2012.

Unamortized Intangibles:

	<u>2012</u>	<u>2011</u>
Water rights	<u>\$ -0-</u>	<u>\$ 403,621</u>

In accordance with generally accepted accounting principles, water rights were tested for impairment by comparing their fair value to their carrying value. The fair value was established based upon a combination of the discounted cash flows, projected output, and projected market value of output. Using this procedure, the carrying value of the water rights exceeded its fair value creating an impairment loss of \$403,621 and \$597,399 for the years ended December 31, 2012 and 2011, respectively, which is shown separately on the consolidated Statement of Revenues, Expenses and Changes in Net Assets.

9. Deferred Rate Stabilization Costs:

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 when (if) deregulation goes into effect. 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 balances at December 31, 2012 and 2011 are \$41,269,848 and \$42,153,290, respectively.

10. Bonds Payable:

	<u>2012</u>	<u>2011</u>
General Obligation Bonds - Issued through the City of Holyoke Date of issue: April 10, 2012 Bonds mature annually in the years 2013-2031 Interest rates range from 2.0% - 5.0%	\$30,532,000	
Revenue Bonds - Bonds payable - 2001 Series A Date of issue: December 13, 2001 Interest rates range from 4.0% - 5.375% Bonds were redeemed December 2012		\$35,895,000
Clean Renewable Energy Bond - Boatlock Hydroelectric Station Project - 2009 Series A Date of issue: January 15, 2009 Interest rate: 1.5% Secured by revenues of the Department	<u>1,666,667</u> 32,198,667	<u>1,875,000</u> 37,770,000
<u>Less</u> - amount due within one year	<u>1,348,333</u>	<u>1,268,333</u>
<u>Bonds Payable - Due After One Year</u>	<u>\$30,850,334</u>	<u>\$36,501,667</u>

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

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2013	\$ 1,348,333	\$ 1,285,020	\$ 2,633,353
2014	1,370,333	1,259,052	2,629,385
2015	1,408,333	1,221,022	2,629,355
2016	1,443,333	1,181,897	2,625,230
2017	1,478,333	1,141,637	2,619,970
2018-2022	7,830,002	4,817,731	12,647,733
2023-2027	8,780,000	3,211,725	11,991,725
2028-2031	<u>8,540,000</u>	<u>1,060,925</u>	<u>9,600,925</u>
	<u>\$32,198,667</u>	<u>\$15,179,009</u>	<u>\$47,377,676</u>

The Department is required to satisfy certain bond covenant requirements in connection with the bonds payable. The following funds are required as part of the Bond agreements:

	<u>2012</u>	<u>2011</u>
<u>2001 Series A -</u>		
The Department held a debt service fund, debt service reserve fund, operating expense fund and operation and maintenance reserve fund as required by the bond agreement. The funds were closed upon the redemption of the bonds in 2012.		\$12,653,388
<u>2009 Series A -</u>		
The debt service reserve fund represents amounts held by the Bond owner in an amount equal to one year's principal and interest payment.	\$ 253,892	252,751
	<u>\$ 253,892</u>	<u>\$12,906,139</u>
11. <u>Notes Payable:</u>		
	<u>2012</u>	<u>2011</u>
Note payable to bank, secured by revenues of the Department, monthly payments of \$20,587 including interest at 5.25% for the period November, 2008 through March, 2013, monthly payments and interest rate to be adjusted thereafter to \$20,868 and 5.75%, through maturity date of October, 2018.	\$ 1,236,468	\$ 1,412,389
Note payable to bank, secured by revenues of the Department, monthly payments of \$39,123 including interest at 4.39%, matured November, 2012.		415,641
Note payable to bank, secured by all assets of the Cooperative, monthly payments of \$6,346 including interest at 4.47%, matures September, 2021 with a balloon payment due.	963,284	994,874
Note payable to bank, secured by all assets of the Cooperative, monthly payments of \$29,820 including interest at 4.00%, matures September, 2021 with a balloon payment due.	4,706,677	4,869,501
Note payable to bank, secured by all assets of the Cooperative, monthly payments of \$29,470 including interest at 3.40%, matures September, 2021 with a balloon payment due. A pledge of securities as collateral, with a value of \$5,328,685 at December 31, 2012 is also required under this note.	4,893,341	5,074,424
	11,799,770	12,766,829
<u>Less - amount due within one year</u>	<u>575,326</u>	<u>967,068</u>
<u>Notes Payable - Due After One Year</u>	<u>\$11,224,444</u>	<u>\$11,799,761</u>

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

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2013	\$ 575,326	\$ 461,581	\$ 1,036,907
2014	600,524	437,494	1,038,018
2015	627,887	410,130	1,038,017
2016	655,462	382,557	1,038,019
2017	686,572	351,446	1,038,018
2018-2021	<u>8,653,999</u>	<u>1,110,052</u>	<u>9,764,051</u>
	<u>\$11,799,770</u>	<u>\$3,153,260</u>	<u>\$14,953,030</u>

12. Capital Leases Payable:

	<u>2012</u>	<u>2011</u>
Equipment leases payable with interest rates ranging from 3.86% to 20.43%. The leases expire between December, 2012 and December, 2017 and are collateralized by various equipment.	\$260,984	\$147,551
<u>Less - amount due within one year</u>	<u>109,022</u>	<u>69,545</u>
<u>Leases Payable - Due After One Year</u>	<u>\$151,962</u>	<u>\$ 78,006</u>

The following is a schedule of future minimum lease payments under capital leases together with the present value of the net minimum lease payments as of December 31, 2012:

2013	\$121,426
2014	85,994
2015	62,628
2016	7,728
2017	<u>7,728</u>
	285,504
<u>Less - amount representing interest</u>	<u>24,520</u>
Present value of future minimum lease payments	<u>\$260,984</u>

At December 31, 2012 and 2011, assets recorded under capital leases total \$400,501 and \$288,336, respectively, and accumulated depreciation on the leased assets total \$48,242 and \$93,289, respectively.

13. Margin Credit Account:

During 2012, the Department received funds through a margin account with LPL Financial LLC. The funds are secured by all securities and other property held in its investment account with Flynn Financial Partners Ltd. The fair value of the Department's investment account at December 31, 2012 was \$33,478,102. Interest is payable monthly and may be up to 3.00 percentage points above the LPL Base Lending Rate. The rate charged at December 31, 2012 was 3.25%. The outstanding balance of \$7,000,000 at December 31, 2012 is due on demand.

14. Changes in Long-Term Liabilities:

Long-term liability activities for the years ended December 31, 2012 and 2011 are as follows:

	<u>Balance</u> <u>December 31, 2011</u>	<u>Additions</u>	<u>Reductions</u>	<u>Balance</u> <u>December 31, 2012</u>	<u>Current</u> <u>Portion</u>
Long-term bonds and loans:					
Bonds payable	\$37,770,000	\$30,532,000	\$36,103,333	\$32,198,667	\$1,348,333
Premium on bonds		3,180,782	136,161	3,044,621	
Notes payable	12,766,829		967,057	11,799,772	575,327
Leases payable	<u>147,551</u>	<u>182,978</u>	<u>69,545</u>	<u>260,984</u>	<u>109,022</u>
	50,684,380	33,895,760	37,276,096	47,304,044	2,032,682
Compensated absences	2,625,506	346,836	168,804	2,803,538	227,979
Other post employment benefits	2,615,089	1,969,879	580,703	4,004,265	0
Deferred rate stabilization costs	42,153,290		883,441	41,269,849	0
Reserve fund for note receivable		<u>444,737</u>		<u>444,737</u>	<u>0</u>
<b><u>Total Long-Term Liabilities</u></b>	<b><u>\$98,078,265</u></b>	<b><u>\$36,657,212</u></b>	<b><u>\$38,909,044</u></b>	<b><u>\$95,826,433</u></b>	<b><u>\$2,260,661</u></b>
	<u>Balance</u> <u>December 31, 2010</u>	<u>Additions</u>	<u>Reductions</u>	<u>Balance</u> <u>December 31, 2011</u>	<u>Current</u> <u>Portion</u>
Long-term bonds and loans:					
Bonds payable	\$38,988,333		\$ 1,218,333	\$37,770,000	\$1,268,333
Notes payable	2,435,346	\$11,000,000	668,517	12,766,829	967,068
Leases payable	<u>124,571</u>	<u>92,760</u>	<u>69,780</u>	<u>147,551</u>	<u>69,545</u>
	41,548,250	11,092,760	1,956,630	50,684,380	2,304,946
Compensated absences	2,604,278	225,124	203,896	2,625,506	168,804
Other post employment benefits	1,304,711	1,895,092	584,714	2,615,089	0
Deferred rate stabilization costs	<u>42,153,290</u>			<u>42,153,290</u>	<u>3,300,000</u>
<b><u>Total Long-Term Liabilities</u></b>	<b><u>\$87,610,529</u></b>	<b><u>\$13,212,976</u></b>	<b><u>\$ 2,745,240</u></b>	<b><u>\$98,078,265</u></b>	<b><u>\$5,773,750</u></b>

15. Operating Leases:

In January, 2009, the Department entered into a five year lease for three copiers. Monthly payments are \$537. The lease expires December, 2013 and has a fair market value purchase option.

In December, 2009, the Department entered into a four year equipment lease which began February, 2010. Varying monthly payments are made in accordance with the rental agreement. The lease expires January, 2014 and may be extended for additional one year periods. The Department has the option to purchase the equipment at any time for the net book value of the equipment.

During 2010, the Department entered into a five year lease agreement for copiers. Monthly payments are \$408. The leases expire in 2015.

Lease expense for the years ended December 31, 2012 and 2011 was \$84,757 and \$87,724, respectively. Future minimum lease payments are as follows:

2013	\$ 84,729
2014	10,999
2015	<u>2,792</u>
	<b><u>\$ 98,520</u></b>

16. Electric Power Purchases:

Electric Power Purchases were as follows:

	<u>2012</u>	<u>2011</u>
Masspower		\$ 88,090
MWEC - NYPA	\$ 187,439	166,849
MWEC - Wyman No. 4	213,405	246,343
MWEC - Nuclear Mix No. 1	2,296,957	2,566,418
MWEC - Nuclear Project No. 3	2,473,822	2,716,844
MWEC - Stony Brook/Peaking	100,710	138,376
MWEC - Special Project 2006A	4,760	4,570
NEPEX - net of sales	105,279	673,697
Open Square	52,666	86,731
Holyoke Solar, LLC	141,021	3,703
Short-term power supply - net of Hydro sales	<u>4,875,357</u>	<u>2,563,406</u>
	<u>\$10,451,416</u>	<u>\$9,255,027</u>

17. Discontinued Operations:

As of September, 2010, the Department discontinued providing steam services to its customers. The Department provided assistance to its customers to obtain replacement heating systems. Plant, property and equipment, net of accumulated depreciation, which was written off as part of the discontinued operations totaled \$7,007,524 for the year ended December 31, 2011.

18. Retirement Plans:

Contributory Plan - Substantially all full-time employees participate in the Holyoke Contributory Retirement System, a cost sharing multiple employer public employee retirement system. The system is partially funded by employee contributions. The plan provides pension benefits, deferred allowances and death and disability benefits. A member may retire after reaching age 55 with 10 years of creditable service, or with no age requirement after 20 years of service. Members become vested after ten full years of creditable service. 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. This rate, multiplied by the length of creditable service, is multiplied by the average of the three highest (consecutive) years' compensation. 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). The Department's contributions charged to expense for the years ended December 31, 2012, 2011 and 2010 are \$3,269,319, \$3,215,298 and \$2,731,102, respectively. The Department's contributions for the years ended December 31, 2012, 2011 and 2010 was 19.84%, 20.09% and 19.4%, respectively, of the total contributions for all employers covered by the plan.

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. Employee contributions for the years ended December 31, 2012, 2011 and 2010 are \$951,134, \$833,016 and \$829,237, respectively.

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.

Noncontributory Plan - Employees hired prior to January 1, 1938, participate in the noncontributory pension plan. The Department is required by state statutes to pay benefits as the obligation arises. Benefits are established by state statutes. The Department's contributions for the years ended December 31, 2012, 2011 and 2010 are \$22,174, \$21,787 and \$21,427, respectively.

19. Other Postemployment Benefits:

GASB Statement No. 45, *Accounting and Financial Reporting by Employers for PostEmployment Benefits Other Than Pensions*, requires that other postemployment benefits (OPEB), primarily healthcare, be accounted for on an accrual basis rather than on a pay-as-you-go basis. The effect is the recognition of an actuarially required contribution as an expense on the consolidated statement of revenues, expenses and change in net assets when a future retiree earns their postemployment benefits, rather than when they use their postemployment benefit. To the extent that an entity does not fund their actuarially required contribution, a postemployment benefit liability is recognized on the consolidated statement of net assets over time.

Plan Description - 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 cost-sharing multiple-employer postemployment welfare benefit plan.

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 \$580,703 for 120 retirees in 2012 and \$584,714 for 126 retirees in 2011.

Annual OPEB Cost and Net OPEB Obligation - The Department's annual OPEB cost (expense) is calculated based on the annual required contribution (ARC) of the employer, an amount that was actuarially determined in accordance with the parameters of GASB Statement No. 45. The projected unit credit method was used in the actuarial valuation prepared as of June 30, 2009, which is the basis for the 2012 and 2011 ARC calculation.

The following table shows the elements of the Department's annual OPEB cost as of the City of Holyoke's fiscal 2012 and 2011 years, the amounts actually contributed, and changes in the Department's net OPEB obligation as of June 30, 2012 and 2011:

	<u>2012</u>	<u>2011</u>
Annual OPEB cost	\$1,969,879	\$1,895,092
Payments	(580,703)	(584,714)
Net OPEB obligation - beginning	<u>2,615,089</u>	<u>1,304,711</u>
Net OPEB obligation - ending	<u>\$4,004,265</u>	<u>\$2,615,089</u>

The Department's annual OPEB cost, the percentage of annual OPEB cost contributed, and the net OPEB obligation for the City of Holyoke's fiscal years ended June 30, 2012 and 2011 were as follows:

	<u>Annual OPEB Cost</u>	<u>Percentage of Annual OPEB Costs Contributed</u>	<u>Net OPEB Obligation</u>
June 30, 2012	\$1,969,879	29.48%	\$4,004,265
June 30, 2011	\$1,895,092	30.85%	\$2,615,089

Funded Status and Funding Progress - As of June 30, 2009, the most recent actuarial valuation date, the cost was 0.0% funded. The actuarial accrued liability for benefits was \$27,377,623, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$27,377,623.

As of December 31, 2012 and 2011, the Department has earmarked funds totaling \$2,917,526 and \$2,682,214, respectively, for its other postemployment benefit obligation, however, because these funds have not been irrevocably transferred to a trust they are not considered contributions in relation to the Department's annual required contribution (ARC).

Actuarial Methods and Assumptions - Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future, such as assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the Plan and the annual required contributions of the Department are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and the employees to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities, consistent with the long-term perspective of the calculations.

The actuarial methods and significant assumptions used to determine the annual required contribution are detailed in the City of Holyoke Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) Report as of June 30, 2009. The report is available in the City Auditor's office, City Hall Annex - Room 101, Holyoke, MA 01040.

The schedule of funding progress, shown as required supplementary information below, presents the results of OPEB valuations as of June 30, 2009, and looking forward, the schedule will eventually provide multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Required Supplementary Information (unaudited)

Schedule of Funding Progress

<u>Valuation Date</u>	<u>Value of Assets</u>	<u>Actuarial Accrued Liability (AAL)</u>	<u>Unfunded AAL (UAAL)</u>	<u>Funded Ratio</u>	<u>Covered Payroll</u>	<u>Percentage of Covered Payroll</u>
June 30, 2009	\$ -0-	\$27,377,623	\$27,377,623	\$ -0-	N/A	N/A

20. Concentrations of Credit Risk:

At December 31, 2012 and 2011, the Department had amounts on deposit with a bank which exceeded FDIC insurance limits by \$2,825,431 and \$2,472,072, respectively.

In the ordinary course of business, the Department extends unsecured credit to its regular customers. Amounts outstanding at December 31, 2012 and 2011 were \$7,310,699 and \$6,920,679, respectively.

Sources of Labor Supply - Fifty-nine 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 was extended through March 31, 2013.

21. Related Party Transactions:

The Department provides gas and electric sales and service, as well as, telecommunication services to the City of Holyoke. Total sales were \$3,648,771 and \$3,837,302 for the years ending December 31, 2012 and 2011, respectively. Amounts due from the City totaled \$366,323 and \$346,183 at December 31, 2012 and 2011, respectively.

The Department has also recorded contributions in lieu of taxes to the City of Holyoke of \$1,080,940 and \$1,058,320 for the years ended December 31, 2012 and 2011, respectively.

22. Commitments and Contingencies:

Purchased Power Contracts:

*Masspower* - During 1989, a contract was signed with Masspower, through MMWEC. Annual charges were to be approximately \$5 million depending on level of dispatch of the facility. During 2005, MMWEC filed a civil action against Masspower. During the years subsequent to 2005, several court rulings and appeals were issued. In March, 2012, a settlement was reached between Masspower and MMWEC in the amount of \$3,000,000. As part of this settlement, both parties have waived, released and discarded each other from any and all existing claims and hence all appeals have been dropped. The Department's contract share was 43.2309% of MMWEC's entitlement in Masspower, therefore the Department's portion of the settlement was \$1,296,927. MMWEC had held in reserve some amounts from a 2007 billing, which reduced the Department's amount owed under settlement to \$855,145, plus \$28,297 in additional legal costs.

*Short-term power* - On a continuing basis, the Department also 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 the Department's shortfall position during the summer months of 2013 through 2017, where commitments were made by the end of 2012 in the amount of \$794,797 for 2013 and \$1,022,804 for the four year period from 2014-2017.

In December, 2010, the Department signed a 20 year solar power purchase agreement (PPA) with Holyoke Solar, LLC (the Seller). The Department has agreed to purchase the electricity produced by the grid-connected solar power facility to be built, owned, operated and maintained by the Seller at 2.65 cents/kWh, which rate shall increase at a rate of 2.5% per year beginning after the first year. 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 to be 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 Seller). The Department has agreed to purchase the electricity produced by the photovoltaic solar electric generation system to be installed and operated by the Seller at 4.76 cents/kWh in year one and 6.10 cents/kWh in year eleven with an annual escalation factor of 1.5% applied for years two through ten and twelve through 20. After the initial term, this agreement shall automatically renew for successive one year terms, up to a maximum of ten such renewal terms.

In December, 2011, the Department signed a ten year contract with Nextera Energy Power Marketing to purchase 10 MW of on-peak physical energy each year at \$59.90 per MWh.

In July, 2012, the Department executed a Blanket Purchase Agreement with Precise Energy Capital LLC for up to 30 MW-dc of solar output throughout Massachusetts. Under this agreement, such solar facilities shall be identified and committed for construction prior to July 1, 2014 with estimated commercial operation dates. No projects have been identified as of December 31, 2012 and it is therefore not possible to quantify any potential commitments.

In December, 2012, the Department signed eight power purchase and sales transaction agreements which commit the Department to purchase various amounts of power at various prices during July, August and September for the years 2014 through 2017.

MMWEC - General - 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. Currently, the Department is a member of MMWEC on a month to month basis. Any decision regarding membership status will have no effect on the Department's commitments and contingencies on MMWEC projects in existence prior to the Department's membership termination.

MMWEC was created as a means to develop bulk power supply for its Members and Project Participants. 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 utilities and also operates its own electric facilities. MMWEC sells all of the capability of each of its Projects to its Members and other utilities (Project Participants) under Power Sales Agreements (PSAs). 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 bonds issued by MMWEC to finance the Project, plus 10% of MMWEC's debt service to be paid into a Reserve and Contingency Fund. In addition, should any Project Participant fail to make any payment, other Project Participants may be required to increase (step-up) their payments and correspondingly their Participants' share of Project Capability to an additional amount not to exceed 25% of their original Participants' share of the Project Capability. Project Participants have covenanted to fix, revise and collect rates at least sufficient to meet their obligations under the PSAs.

The Department has entered into Power Sales Agreements (PSAs) and Power Purchase Agreements (PPAs) with MMWEC. Under both the PSAs and PPAs, the Department is required to make certain payments to MMWEC payable solely from the Department's revenues. 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).

MMWEC operates the Stony Brook Intermediate Project and Stony Brook Peaking Project fossil-fueled power plants, (the latter which the Department has a 4.818 MW share). In addition, MMWEC has a 3.7% interest in the W.F. Wyman Unit No. 4 plant owned and operated by FPL Energy Wyman IV, LLC, subsidiary of NextEra Energy Resources LLC and a 4.8% ownership interest in the Millstone Unit 3 nuclear unit operated by Dominion Nuclear Connecticut, Inc. (DNCI) an indirect subsidiary of Dominion Resources, Inc. In addition to Millstone Unit 3, DNCI also is the owner of Millstone Unit 2. The operating license for Unit 3 was extended to November 25, 2045.

A substantial portion of MMWEC's plant investment and financing program is an 11.6% ownership interest in the Seabrook Station nuclear generating unit operated by NextEra Energy Seabrook, LLC, the majority owner and an indirect subsidiary of NextEra Energy Resources LLC. In December, 2005, the NRC issued an amendment to the operating license that extends the expiration date from October, 2026 to March, 2030 to recapture the period from 1986 to 1990 during which time Seabrook Station had an operating license but did not operate. NextEra Energy Seabrook, LLC has submitted an application to extend the Seabrook Station operating license for an additional 20 years. Pursuant to the PSAs, the MMWEC Seabrook and Millstone Project Participants are liable for their proportionate share of the costs associated with decommissioning the plants, which is being funded through monthly Project billings. The Project Participants are also liable for their proportionate share of the uninsured costs of a nuclear incident that might be imposed under the Price-Anderson Act. In July, 2005, as part of the Energy Policy Act of 2005, Congress extended the Price-Anderson Act through the end of 2025.

As of December 31, 2012, total capital expenditures by MMWEC amounted to \$1,593,344,000 of which \$45,901,000 represents the amount associated with the Department's Project Capability. MMWEC's debt outstanding for the Projects includes Power Supply System Revenue Bonds totaling \$284,005,000 of which \$8,417,000 is associated with the Department's share of Project Capability. As of December 31, 2012, MMWEC's total future debt service requirement on outstanding Bonds issued for the Projects is \$289,247,000, of which \$8,251,000 is anticipated to be billed to the Department in the future.

The estimated aggregate amount of the Department's required payments under the PSAs and PPAs, exclusive of the Reserve and Contingency Fund billings, to MMWEC at December 31, 2012 and estimated for future years is shown below:

For the years ended December 31, 2013	\$ 2,386,000
2014	2,027,000
2015	1,827,000
2016	1,364,000
2017	537,000
2018-2021	<u>110,000</u>
	<u>\$ 8,251,000</u>

In addition, the Department is required to pay its share of the operation and maintenance (O&M) costs of the Projects in which they participate. The Department's total O&M costs including debt service under the PSAs were \$5,473,000 and \$6,333,000 for the years ended December 31, 2012 and 2011, respectively.

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 five to ten year terms. In addition the Department has entered into one-year contracts with two companies for frame relay lines, dialup help desk support and dedicated line monitoring 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.

Hydroelectric Facility - As part of the Department's purchase of hydroelectric generating assets and a distribution franchise in 2001, FERC required certain modifications to the hydroelectric facility. The cost of these modifications over the next several years is likely to exceed ten million dollars.

Self Insurance - For general liability purposes, the Department is self-insured up to \$50,000, has self-insurance trust coverage in the amount of \$400,000 and general liability insurance for \$50,000 to \$10,000,000 per occurrence. The Department is also self insured for workers compensation up to \$250,000 per occurrence. A policy is in effect for excess workers compensation.

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 the land site is approximately \$250,000. No estimate is currently available for the river site. 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.

An individual is alleging injuries incurred during 2010 while working as a Department contractor. The Department denies liability and is vigorously defending this suit.

In February, 2013, Holyoke Water Power (HWP) demanded the Department indemnify HWP in a lawsuit filed by the estate of a deceased HWP employee who alleged he was exposed to asbestos. The Department denies liability.

Construction Programs - The Department has budgeted construction expenditures of approximately \$25 million to be incurred during 2013.

23. Subsequent Event:

The entities have evaluated events that have occurred subsequent to December 31, 2012, through April 22, 2013, the date these consolidated financial statements were available to be issued, and has determined there were no material events requiring recognition or disclosure.



